Handsets and handset chips | ASIA

TECHNOLOGY

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3G/smartphones: Asia takes the game

We think the move to 3G and smartphones will change the face of the handset market far more than many think. We find that the white-box makers have been pushed into a corner when it comes to the upgrade to 3G, meaning that the market will consolidate heavily to the brands. This, combined with a shift of smartphones to the mid- and lowtiers, will open up the Chinese smartphone market, in our opinion. We prefer handset brands and leading chipmakers to white-box makers and 2G chip vendors.

- 1 Handset market to change far more than many think
- White-box makers pushed into a corner
- ③ Smartphone market growth shifts to mid-market
- We favour branded handset makers and top-tier chip companies

Stocks for action

We reiterate BUY on LGE and HTC and REDUCE on MediaTek. 3G and smartphones are game changers favouring top brands and leading chipmakers over white-box makers and 2G chip vendors.

Stock	Rating	Closing price	Price target
HTC (2498 TT)	BUY	1,080	1,2501
MediaTek (2454 TT)	REDUCE	341	220↓
Mstar (3697 TT)	NEUTRAL	240	250
LGE (066570 KS)	BUY	106,500	147,000
Qualcomm (QCOM US)	NEUTRAL	53.9	51
STMicro (STM FP)	BUY	8.77	10.4
TCL (2618 HK)	BUY	7.56	12

 \uparrow lifting PT \downarrow cutting PT

Local currency; pricing as at 29 March, 2011

Analysts

Aaron Jeng, CFA Peter Liao James Kim Leping Huang, PhD Dr Richard Windsor, CFA Romit Shah (US) Dr Gunnar Plagge (Europe)

Nomura Anchor Reports examine the key themes and value drivers that underpin our sector views and stock recommendations for the next 6 to 12 months.

> Any authors named on this report are research analysts unless otherwise indicated. See the important disclosures and analyst certifications on pages 86 to 92.

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🖊 Catalysts

Estimate revisions derived from market share gains and resilience to margin pressure.

Anchor themes

3G and smartphones are game changers favouring technology leaders and first-tier brands. Second-tier players and white-box makers will languish, in our view.

3G/smartphones: Asia takes the game

① Same name, new game

We think the move to 3G and smartphones will change the face of both the handset market in Asia and the fortunes of those that serve it. Smartphones are about the user experience, meaning that a slow internet connection (2G) is simply not good enough. Hence, a move to smartphones must be accompanied by 3G. We think MediaTek will struggle for some time to supply a competitive 3G chipset, giving it little position in that market. By contrast, we see improving fortunes for both LGE and HTC, making them our top picks in the Asian smartphones segment.

White box – boxed in

We find that the white-box makers have been pushed into a corner when it comes to the upgrade to 3G. MediaTek can only sell its 3G solution to handset makers with a Qualcomm licence (40-50 in China for WCDMA). This means that the market is likely to substantially consolidate to those larger players and brands that have a relationship with Qualcomm. Furthermore, regardless of 3G licence, we believe even US\$100 smartphones are unlikely to save white-box handset makers (with implications for their chipmaker, Mediatek), even in 2012, on their poor brand recognition and, more importantly, weak consumer demand profile.

③ Market to grow, going low

In 2H11, we see a big increase in touch-screen supply alleviating one of the biggest constraints of the market. This should allow screen costs to fall, meaning that cheaper smartphones will be possible. This is what we think will drive smartphones into the mid- and low-tier. Consumers will have more choice and those phones that don't measure up will likely suffer pricing pressure. We are confident that neither of our two top choices (HTC and LGE) will suffer from this in 2011. We also see a reducing risk that the Tohoku earthquake causes a shock to the handset supply chain.

In the second second

We prefer smartphone brands (LGE and HTC), chip makers (QCOM and STM) and China first-tier handset makers (TCL, BYDE and ZTE) to white-box handset players and chip makers (MediaTek and MStar).



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Stocks for action

RUNNING

THEME

We reiterate BUY on LGE and HTC and REDUCE on MediaTek. 3G and smartphones are game changers favouring top brands and leading chipmakers over white-box makers and 2G chip vendors.

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1 April 2011

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Investment view

Executive summary

Following our Anchor report one year ago, *China handset IC and supply chain: it's about speed rather than size,* 25 February, 2010, in which we initiated our nonconsensus REDUCE call on MediaTek, we now publish our 2011-12 view on the Greater China handset IC and handset sectors, in which we expand our coverage to include MStar and HTC and elaborate on our structural view that the smartphone is a game changer that is still benefiting technology leaders and established brands, such as HTC, but hurting white-box handset makers and their chip providers including MediaTek, MStar and SPRD.

In the first section of this report, we elaborate on why 3G and smartphones are game changers — since user experience is critical for smartphones (but not feature phones). This is not only favouring existing established brands, but leading to some minimum requirements in smartphone specs (which may lead to a decline in the popularity of white-box smartphones before 2013). Android's nature continues to benefit technology leaders, as they are still leading in providing good phones with better user experience and power consumption.

In the second section, we look at the low-end smartphone market by comparing handset models following the Consumer Electronics Show (CES) and Mobile World Congress (MWC) and summarising the strategies of global handset brands. We believe HTC and Samsung will continue to stand out in the global mid-to-low-end smartphone market. We see limited white-box smartphone opportunities before 2013 after a detailed cost and consumer profile analysis — we believe even US\$100 is not cheap enough to drive white-box smartphone popularity.

In the third section, we provide an update on the China 3G/smartphone chip sector. We believe Qualcomm is well prepared for upcoming competition in the low-end UMTS smartphone market, which would be negative for MediaTek. In the TDSCDMA chip market, we expect Spreadtrum to gain share at the cost of ST-Ericsson, while MediaTek will lose share after breaking up with Leadcore.

In the fourth section, we look closer at the smartphone market in China and highlight HTC's opportunities and challenges there, and explain why we believe the market is too optimistic on MediaTek's smartphone-driven turnaround from a third-party researcher's point of view.

In the final section, we come back to the 2G chip market and conclude that the whitebox 2G chip story is likely over (or on pause, at least) in the transition from 2G to 3G and from feature phone to smartphone on structural changes including the lack of a 3G licence, the weak consumer profile to support smartphone demand, the saturation of emerging market demand and the persistent pricing war among chip vendors. We expect no winner in China's 2G chip market over the next year as the price war will continue until a balanced market share is reached or until at least one company cannot bear lower margin.

Recap of our global calls for Asia handset and handset chip sector

In the handset chip space, we like Qualcomm (NEUTRAL) and STMicroelectronics (BUY) better than MediaTek (REDUCE). We believe Qualcomm is a leader among peers from many perspectives, including chip integration, cooperation with OS vendors, and early deployment in the low-end smartphone segment. It also seems determined to secure market share in the low-end segment against newcomers like MediaTek. We also like STM on its improving wireless business on new products and new customers. STM remains a leader in the China home-grown TDSCDMA chip market in terms of market share and technology. Marvell, on the other hand, although having a head-start with OPhones (Android smartphone based on China

In the handset chip space, we like Qualcomm and STMicroelectronics but dislike MediaTek

We believe 3G and smartphones are game changers favouring (hurting) technology leaders (laggards) and first-tier brands (white-box handset makers) from a technology and consumer profile viewpoint Mobile's OS), seems to be lacking traction in Android-based phones. MediaTek is our least preferred handset chip company globally on its structural deterioration.

- In the handset OEM space, we continue to like global-tier brands such as HTC (BUY), LGE (BUY) and Samsung (BUY) as well as China first-tier brands, such as TCL (BUY), over European and US brands (NEUTRAL ratings on Nokia, RIM and Motorola), on the first two groups' market share gain potential. We believe margin for most vendors will fall in 2012 on the popularity of mid-to-low-end smartphone models, which suggests that winners would be those with market share gain potential. We believe HTC and Samsung can win in the US\$300 segment, while China handset OEMs have a good position in the US\$150-250 segment.
- In Taiwan's handset and handset chip supply chain, we continue to favour HTC over MediaTek and MStar on the structural impact with the transition from 2G to 3G and from feature phones to smartphones.
- Note that in the near term, there could be some noises that might offer MediaTek some upside risks (ie, potential announcement of a share buyback for employee bonuses) and HTC some downside risks (ie, component tightness after Japan earthquake), but we stick with our structural view and would use any strength to REDUCE MediaTek and use weakness to BUY HTC.

In the handset OEM space, we like HTC, LGE, Samsung and TCL

Exhibit 1. Global handset-related companies valuation table

			Mkt can	Price	EPS	S (LCY\$/	shr)	EPS gro	wth (%)	P/E	(x)	P/B	/ (x)	ROE	(%)
Code	Company	Rating	(US\$mn)	(LCY\$)	2010	2011F	2012F	2011F	2012F	2011F	2012F	2011F	2012F	2011F	2012F
Brand OEM															
2498 TT	HTC	BUY	29.96	1,080	49	83	88	67.5	6.2	13.0	12.3	7.8	6.8	71.8	58.8
066570 KS	LGE	BUY	13,853	106,500	7,581	5,676	12,082	(25.1)	112.8	18.8	8.8	1.3	1.1	7.0	13.4
005930 KS	Samsung	BUY	114,954	916,000	107,361	100,663	130,514	(6.2)	29.7	8.7	6.7	1.3	1.1	16.4	18.3
NOK1V FH	NOKIA	NEUTRAL	30,789	6.1	0.61	0.54	0.68	(11.5)	25.9	11.3	9.0	1.6	1.6	12.01	14.88
MMI US	Motorola Mobility	NEUTRAL	21,996	26.7	(0.28)	0.63	1.54	nm	144.4	42.3	17.3	4.5	4.4	13.94	15.22
RIMM US	RIM	NEUTRAL	34,793	66.5	6.29	6.81	6.90	8.2	1.3	9.8	9.6	4.0	2.8	32.64	25.51
AAPL US	APPLE	NR	331,660	360.0	22.99	26.17	29.05	13.8	11.0	13.8	12.4	4.8	3.6	29.37	27.64
Average (ex-	HTC/Samsung/Appl	e)								14.5	10.8	3.3	1.8	16.2	17.3
Handset Rela	ted IC														
2454 TT	MediaTek	REDUCE	12,612	341	28.4	16.2	16.7	(43.1)	3.4	21.1	20.4	3.8	3.8	16.1	17.1
3697 TT	MStar	NEUTRAL	3,945	240	14.1	15.6	18.2	11.0	16.7	15.4	13.2	4.0	3.4	27.6	27.9
QCOM US	Qualcomm	NEUTRAL	86,276	53.9	2.5	3.0	3.0	22.6	0.6	17.5	17.4	3.9	3.4	14.6	14.3
BRCM US	Broadcom	NEUTRAL	21,553	40.0	0.1	2.3	2.5	1619.0	9.6	17.7	16.1	4.2	3.4	21.5	19.4
MRVL US	Marvell	NEUTRAL	10,167	15.6	1.5	1.4	1.7	(6.8)	20.0	11.2	9.4	1.6	1.4	15.9	16.2
STM FP	STMicroelectronics	BUY	7,786	8.77	0.7	1.1	1.4	44.4	27.3	8.0	6.3	1.2	1.1	12.3	12.4
TXN US	TI	REDUCE	39,428	33.6	1.2	2.5	2.4	117.6	(6.0)	13.2	14.1	3.9	3.9	30.6	28.4
SPRD US	Spreadtrum	NR	930	19.3	2.0	2.1	2.7	4.4	24.5	9.1	7.3	3.5	3.0	41.90	33.46
RFMD US	RFMD	NR	1,693	6.1	0.6	0.4	0.5	(29.4)	23.3	14.0	11.4	2.2	1.8	19.05	18.33
SWKS US	Skyworks	NR	5,650	30.5	1.8	1.8	2.5	2.7	40.7	16.9	12.0	3.3	2.8	20.05	16.82
TQNT US	TriQuint	NR	2,004	12.3	1.0	1.0	1.1	5.0	8.7	12.2	11.2	2.2	1.8	17.90	na
Average										14.8	12.8	3.2	2.8	22.9	22.2

Note: Pricing as of 29 March, 2011

Source: Bloomberg consensus estimates for not rated stocks, company data, Nomura estimates

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(China 3G handset volume) 3G handset IC market

Smartphone/3G — game changers

Smartphones and 3G (WCDMA, unless otherwise specified) are game changers, in our view. We believe the popularity of smartphones and 3G (these two mostly coexist) will severely hit China's white-box handset makers on: 1) their lack of a 3G licence from Qualcomm; and 2) their weak customer profile. We expect China's handset market to experience severe industry consolidation over the next five years, with more than 70% of handset makers disappearing from the market. The beneficiaries could be global-tier smartphone brands and China's local handset brands (eg, ZTE, Huawei, Lenovo, Coolpad, TCL, Tianyu, Goenee, BBK, OPPO) with brand image to sell highend phones. We expect MediaTek, Spreadtrum and MStar to suffer from the 3G/smartphone trend, along with the majority of their customers. However, the TDSCDMA smartphone supply chain will be a different story (against WCDMA), in our view — China handset chip vendors can benefit on: 1) the lack of Qualcomm's dominance; and 2) subsidy support by China Mobile to TDSCDMA smartphones.

Why are smartphones and 3G are game changers?

We have a long-standing view (since our initiation on MediaTek) that 3G is a structural negative for MediaTek and other China chip vendors, since: 1) the 3G customer base is much smaller than the 2G customer base (only approximately 40 China handset makers have a WCDMA licence from Qualcomm, out of 500-600 PCBA makers and 3,000 system makers in China). Also, the customer base is unlikely to expand much, as Qualcomm only chooses qualified handset makers, not to mention that the listed licence fee is US\$5mn; and 2) MediaTek's 3G product portfolio is too weak versus Qualcomm's full product portfolio.

We believe smartphones will not help MediaTek (or other China chip vendors) much before 2013, as smartphones are essentially not a necessity, which means cost deduction along with deteriorating user experience is not meaningful (ie, such products are not sellable). Given the low possibility of being subsidised by operators, the cost structure of smartphones with the minimum user experience requirement is too high versus MediaTek's weak customer profile, in our view. Qualcomm's aggressive price competition is another incremental but important reason. We provide details below.

Structural difference one: user experience — critical for smartphones, but not feature phones

MediaTek has had a solid record of growing its handset chip shipments to more than 500mn units in 2010 from nil in 2004. However, we do not expect MediaTek to repeat its success in the smartphone market before 2013, as in our view smartphones are not a necessity, which is a structural difference from feature phones.

We think feature phones are a necessity with good mobility (in contrast to the disadvantage of fixed line), and even with the replacement of fixed line in China's rural areas and global emerging markets. Together with the simple requirement of phone call making, China white-box handset makers have brought the retail price of feature phones to a much lower level than they were five years ago and created demand for over 600mn chip units a year. Consumers won't be unhappy with the poor user experience of multimedia functions as long as the basic phone call making function can work since the retail price is very low at US\$50 or lower (vs global-tier handset brands' +US\$100 retail price for phones with similar functions). However, smartphones are different as they are not a necessity — consumers buy smartphones for Internet browsing, game playing, book reading and life experience sharing. User experience is critical for smartphone users.

We believe the popularity of smartphone and 3G will severely hit China's white-box handset makers due to lack of 3G license and weak customer profile

User experience is very critical to smartphone users, but difficult for MediaTek, in our view

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Over the past three years, global mainstream smartphone models have been rapidly upgraded to above 1GHz dual-core CPU, bigger than 4" display, 8MP camera, dual cameras and 8G NAND Flash (memory), while even mid- to low end models have the specs of a 700-800MHz CPU, 3-4" display, 3-5MP camera and 2G NAND Flash (memory). We expect the high-end model replacement cycle to continue as technology involvement is ongoing (moving up to +1.5GHz dual-core or quad-core CPUs to speed up web browsing, application processing and multi-function processing).

While we believe the global smartphone market will expand from the current high-end segment to the mid-to-low-end segment from no later than 2012 due to the saturation of the subsidy pool, the expansion of target customers and popularity in emerging markets, there is still a minimum requirement in the user experience for smartphones, in our view (eg, capacitive touch, bigger than 3" display, +2MP camera and 1Gb NAND Flash).

The requirement of user experience could to a large extent translate to brand recognition. As such, we believe brand value is important for smartphone vendors, which would be a challenge for newcomers to the smartphone market and a benefit to existing well-known smartphone brands, in our view.



Exhibit 2. Mobile processor roadmaps at different vendors - keep upgrading

Source: MIC

Structural difference two: Android technology — has made phone making easier, but making good phones remains difficult (still favours technology leaders over laggards)

We believe Android has made phone making easier, as Google has standardised the OS (upper layer software) and opened the door to new vendors in the smartphone market. However, we expect only a few new vendors to be successful, including Chinese first-tier handset companies such as ZTE and Huawei or TCL (on support from chip and OS vendors). Most new vendors will likely be consolidated due to small volumes. Why? Though phone making might be easier, making a good phone remains difficult. "User experience", "software stability" and "power consumption" are three major differences between a good Android phone and a bad Android phone despite both phones being similar in terms of function. This gap may widen further with Android's continuous version upgrade, as new vendors will likely encounter new problems even when their old problems have not yet been resolved. As such, we believe global-tier companies, such as HTC and LGE, will maintain their lead gap against tier-2 companies, not to mention the gap with white-box handset makers. We continue to favour HTC over MediaTek, also from this perspective.

One example supporting this argument is that the MT6516 phone demonstrated by MediaTek on its analyst day had a nice user experience while lots of other MT6516 phones we tried in China were not as good – software capability with the handset maker makes a difference, in our view. Two phones with the same baseband, AP and touch panel controller may give a different touch panel user experience. This situation is even worse in China, as most handset makers there don't have technology capability (see our post-analyst day report, "*Transition takes time*," dated 1 March).

Making good phones remains difficult despite the fact that Android has made phone making easier; as a result, we believe global-tier handset OEM such as HTC and LGE will stand out

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China 3G handset volume: 3G handset IC market

Low-end smartphone market

As for the global low-end smartphone market, we believe global-tier smartphone makers will win at the US\$300 retail price segment (beneficiaries include HTC, Samsung and LGE) and China tier-one brands will win at the US\$150-250 price segment, which is the segment with the least competition from either global vendors (at least for 2011) or from white-box handset makers (beneficiaries include ZTE, Huawei and TCL). On the other hand, we believe white-box handset makers have limited room before 2013 when the US\$100 smartphone should be viable. However, even the US\$100 smartphone will not be cheap enough to drive white-box smartphone popularity, in our view.

Global-tier smartphone makers to win in US\$300 segment; China tier-one brands to win in US\$150-250 segment

From a global perspective, we define a low-price smartphone as a smartphone with a retail price of around US\$300. For example, HTC's hot-selling model *Wildfire* (and upcoming *Wildfire S*) is in this segment. In our opinion, China's white-box handset makers have almost no possibility to gain exposure to this segment, as their technology capability is too poor, their consumer base and brand value are too weak and most of them have no 3G licence. As such, we continue to favour global-tier smartphone makers, such as HTC and Samsung, to China white-box handset makers in the low-price smartphone segment.

We believe China's tier-one handset brands, such as ZTE, Huawei and TCL, have a great chance to gain exposure in the low-price smartphone segment with retail prices at US\$150-250, as this segment will not be a main focus of global-tier brands over the next year (except Samsung has some more exposure with its Bada OS), in our view, while white-box handset makers are unable to reach this segment.

These three companies are the only three from China that have a GMS licence from Google (which means they can legally use Google Market Service with the Google mark on their phones, while all other China handset makers, including small brands and white-box brands, cannot). Also, these three companies have strong support from Qualcomm, which has given them a strong advantage against other smaller brands in China that are unable to get a Qualcomm licence.

Last but not least, those global-tier brands and China first-tier brands will have subsidy support from China operators, which can bring the cost of smartphones to consumers to a much lower level, making it harder for white-box handset makers to compete. Our analysis of the price segment echoes our positive view on the RMB1,000 smartphone sector as well as BUY ratings on ZTE and TCL (see our global tech team report led by Leping Huang, *Global insight anchor report: China smartphone – the RMB1000 revolution*⁷, 24 January, 2011).

Global-tier smartphone makers such as HTC, Samsung and LG will win in US\$300 segment and China tier-one brands such as TCL and Huawei will win in US\$150-250 segment



Exhibit 3. Global smartphone brands' portfolios and next step by retail price range

After CES and MWC: Mid-to-low-end model strategy by global vendor

In 1Q11, many smartphone models have been announced, mainly at CES and MWC. We position each model by CPU spec and screen size as shown in the next exhibit, and find more models competing in the high-end segment and a rising focus on mid-to-low-end smartphone models, which we regard as a sign of the coming trend in the smartphone market.

We expect Samsung , LGE and HTC to stand out in the mid-to-low-end smartphone market and to sustain or grow their market share in Android smartphones despite the mountains of newcomers, based on the following reasons: 1) Samsung and HTC provide more complete models compared with the others, as shown in the next exhibit. 2) Samsung, LGE and HTC have brand value, as they are the top two Android smartphone makers in terms of market share (ie, Samsung ranked No 1 with share of 30%, followed by HTC's 25% share in 4Q FY11, and LGE accounted for a 7% share, according to Gartner). 3) With the gradual maturity of Android software and similar hardware specs for mid-to-low-end smartphones, we believe differentiation and value-added content will be increasingly important in the mid-to-low-end smartphone market. HTC, Samsung and LGE have worked on their own user interface (UI) and expanded content beyond what Android provides.

We expect Samsung, LGE and HTC to stand out in the mid-tolow –end smartphone market

Source: Company data, Nomura estimates



Exhibit 4. Comparison of global smartphone models post CES and MWC

Source: Company data

"HTC Sense" to increase differentiation even for low-end models

The entry barriers of making a mid-to-low-end smartphone are lower, resulting in increasing difficulties in differentiation. HTC has kept improving its "HTC Sense" since launching its first HTC Sense smartphone, *HTC Hero*, in June FY09. We believe its efforts on the UI will not only bring added value to users but create differentiation among peers. HTC's *Incredible S, Desire S* and *Wildfire S*, all use the latest HTC Sense, which brings up their value, in our view.

What HTC Sense brings other than Android

- Integration with Facebook, pictures, e-mails, messages to contacts.
- Integration of social networks: knowing friends' latest updates from Facebook, Twitter, and Flicker.
- Weather and time automatically take the current location and offer the latest forecast for weather.
- Turning on mute mode by flipping down the mobile phone.
- Better viewing experience from the functions of "enlarge" and "zoom down".
- Showing map and answering phone calls at the same time.
- Maps are already downloaded in the smartphone, so there is no need to waste time downloading maps.
- Improved GPS with "location" tool.
- Home-grown video chat software

HTC shows differentiation with "HTC Sense"

Exhibit 5. Automatic update on time and weather



Exhibit 6. Automatically link contact with Facebook



Source: HTC

Source: HTC

Facebook phone: a new feature to attract Facebook fans

HTC's Salsa and Chacha, Facebook phones, allow Facebook users to play anytime. Both the ChaCha and Salsa have a dedicated Facebook button, hard-coded to instantly share content like photos, music links or Facebook Places location links. Facebook is one of the most successful social networking sites, with more than 600mn users worldwide, according to Facebook. We expect HTC to launch its Facebook phones in the mid-to-low-end price range, which could be attractive to young Facebook users, in our view.

HTCSense.com will be included in the mid-to-low-end smartphone in the future

HTCSense.com is free service allowing remote access to phone with a PC, with functions such as contact list backup, finding missing phone location, remote locking of the phone in case of theft, and getting all info such as contacts, text messages, and call history through a "cloud" service. HTC currently provides its cloud service (HTC Sense.com) to its high-end models only. In the future, we expect HTC to enlarge this service to the mid-to-low-end models to increase differentiation.

Facebook phones target more than 600mn Facebook users

HTCSense.com will create addedvalue to mid-to-low-end smartphone users if it is included

Exhibit 7. HTCSense.com allows remote access from a PC



Source: HTC

Nomura

Samsung (covered by CW Chung): numerous models to meet every price segment

In 1Q11, Samsung announced more than 10 models worldwide with CPUs ranging from the latest dual-core to 600MHz and below, and panels ranging from 4.3 inches to 3 inches and below, trying to fulfil every price/spec segment from the high to the low end. Samsung is one of the most aggressive handset OEMs to target the mid-to-low-end market.

According to our Samsung Electronics analysts CW Chung, due to the request from global operators, Samsung will increase the number of models by launching 60 smartphone models in FY11 (from only 20 models in FY10) with the lowest retail price at US\$200-300 (supported by its Bada OS). Sixty models could define Samsung as the most aggressive smartphone maker in the worldwide. It will also adopt AMOLED for its mid-end model from 2H11 after AMOLED capacity is increased.

LGE (covered by James Kim): coming back to the stage with a few successful models

According to James Kim, LGE entered the Android market in 4Q10 with its US\$200 *Optimus One* mid-low-end phone. In 4Q10, LGE sold 2.6mn units of *Optimus One*, which accounted for 67% of its total smartphone shipments. While the portion of midto-low-end phones is declining, LGE expects them to still account for 50% of total smartphone shipments this year. In late 2Q11F, LGE will launch another two mid-tolow-end models to keep its growth in the mid-low end market. James believes that LGE's smartphone strategy is gaining market share by entering the mid-low end market first and then expending its market share into the high end market. LGE is moving to the second stage in smartphone business at the moment. The company enhanced its position and market share in the mid-to-low-end market with second generation models, and is aggressively entering the high-end market with dual-core processor phones, 3D phones, and the world's lightest phones.

Motorola (covered by Stuart Jeffrey): success in international market is a question mark

Motorola has turned around its handset business with its leading hardware specs for Android smartphones. According to Stuart Jeffrey, US\$250-300 mid-to-low-end phones for the US are not a problem for the company. It can leverage existing marketing and distribution effectively. Motorola has also said that these phones will be keys to the European market, which is less high end than the US one. However, Stuart Jeffrey does not expect it to have great success internationally.

RIM (covered by Stuart Jeffrey): can Asian handset brands provide the same quality phone with lower cost?

According to Stuart Jeffrey, RIM's ASPs are still around US\$300, surprisingly high considering how boring the phones are. However, RIM has the very best emailing and instant messaging solution. By using its own servers and network, it provides the quickest and most reliable messaging solution, allows consumers to see if people are online as accurately as Bloomberg Messaging, and allows consumers to do this internationally and across a group. Kids love it, as do people with families overseas. RIM claims that BB users generate far more Facebook traffic than any other user group. The issue is cost. Can Asian vendors produce QWERTY phones (or touch screen) with a high enough messaging quality level to allow them to utilise their cost advantage. If yes -- which we need to monitor -- then RIM's opportunities in emerging markets will be limited. Distribution-wise they do rely on operators, but are increasingly using electronics distributors.

60 models could define Samsung as the most aggressive smartphone maker in the worldwide, in our view

LGE's smartphone strategy is gaining market share by entering the mid-to-low-end market first and then expending its market share into the high-end market, according to our Tech analyst, James Kim

Sony Ericsson (covered by Stuart Jeffrey): focus on margin rather than scale

According to Stuart, Sony Ericsson has some mid-range phones due to launch in April. He expects volumes to be small on a global basis and primarily targeted at developed markets. However, to Sony Ericsson, scale is not an issue as such, as long as the phones can support a decent gross margin.

Chinese Handset OEMs (covered by Leping Huang): position well in US\$150-250 segment

Chinese handset vendors see the Android-based smartphone trend as an important opportunity to penetrate into the middle-end handset market globally. Huawei, ZTE has shipped 3mn and 2.5mn Android-based smartphones in FY10 for the Europe and China markets, respectively, and targets to ship 12mn and 10mn units, respectively, in FY11. If we include the targets from smaller Chinese players such as TCL (under the Alcatel brand) and China Wireless, total smartphone volume by Chinese handset vendors will likely reach 35mn in FY11. This is a significant number for the global smartphone market. They are mainly focusing on the US\$150-250 segment now due to the difference in the affordability level between China and developed markets and the lower technology entrance barrier. Going forward, they will likely expand the price segment upward to the US\$300 level from the current US\$150-250.

China white-box handset makers have limited room before 2013 when a US\$100 smartphone is visible; however, even US\$100 is not cheap enough to drive white-box smartphone popularity

We believe most of the current customers of MediaTek, Spreadtrum and MStar are unable to sell phones with a retail price higher than US\$150 (or RMB1000) no matter whether they are smartphones or feature phones, since their consumer profile is too weak. By our estimate, only about 10% of handset shipments using their chips can sell at higher than a US\$100 retail price, while 90% of shipments are selling below US\$100 (mainly US\$30-50).

By our estimate, only about 10% of handset shipments using their chips can sell at higher than US\$100 retail price, while 90% of shipments are selling below US\$100 (mainly US\$30-50)



Exhibit 8. China 2G handset chip shipment breakdown by retail price range

Source: Nomura Research

Our estimation is supported by the bottom-up research of China research institution SINO-MR. According to its sell-through data in February 2011, we conclude that only about 7mn units of phone shipments by China local brands a year could sell at higher than RMB1,500 (or about US\$200), which includes the shipments from OPPO, BBK and Gionee (mostly using MediaTek's high end EDGE chips), only about 16mn units of shipments a year could be selling at higher than RMB1,000 (or about US\$150), and only about 27mn unit of shipments a year could be selling at higher than RMB1,000 (or about US\$150), and only about 27mn unit of shipments a year could be selling at higher than RMB700 (or about US\$100).

We recognise that SINO-MR only collects domestic sell-through data from top tier cities in China. Its estimated Chine domestic GSM handset sell-through number was about 130mn units in 2010. While a big portion of China's domestic handset shipments (from unidentified China small or white-box brands, which are all MediaTek, Spreadtrum and MStar's customers) are not recognised, we believe our conclusion will not be impacted, since these shipments are mainly going to the below US\$50 retail price segment.

Another missing part is handset shipments to emerging markets, which has accounted for 50% of demand for China 2G chips by our estimate, which cannot be traced by SINO-MR. However, we believe the consumer demand profile for emerging markets is even worse than China's domestic market, as consumption power for emerging markets is weaker than that for China. To make it simple, we assume consumer demand profile to be exactly the same as for China's domestic market, which means China local brands can only sell 10mn units of phones at a retail price higher than US\$200 a year, or sell 20mn units higher than US\$150 a year.

In 2010, MediaTek, Spreadtrum and MStar's total 2G chip shipments, excluding shipments to Motorola and LG, were as large as +600mn units, by our estimate. Even if we assume 10-20% chip shipments are inventory in the supply chain (not becoming sell-through), 14mn, 32mn and 54mn in annual unit shipments means only 2-3%, 5-6% and 10-11% of handsets using China 2G chips can be selling at above US\$200 US\$150 and US\$100, respectively (90% of handsets using China 2G chips are selling at below US\$100).

As a result, we conclude that China handset chip vendors will only likely have at most 5% shipments going to smartphones if their smartphones are selling at US\$150 and at most 10% of shipments going to smartphones if their smartphones are selling at US\$100 (we say "at most" since there would still be some high-end feature phones selling in this segment).

In 2010, MediaTek, Spreadtrum and MStar's total 2G chip shipments excluding shipments to Motorola and LG, were as large as +600mn units, by our estimate

:	Share by price															
(%)	segment	Nokia	Samsung I	Blackberry	Sharp	Motorola	HTC	Coolpad	Philips	Dell	LG	OPPO	BBK	Gionee	Others	Total
>RMB3000	0.2	73.3	7.8	7.0	5.9	2.6	1.6	1.8	0	0	0	0	0	0	0	100
RMB2500-2999	0.2	17.3	36.3	0	14.7	0	5.3	6.2	20.3	0	0	0	0	0	0	100
RMB2000-2499	1.3	18.5	30.4	0	14.7	3.0	4.4	0	0	1.9	0	23.4	0	0	3.7	100
RMB1500-1999	7.8	34.3	20.0	0	0	2.9	0	0	2.8	0	0	19.3	9.1	4.4	7.2	100
RMB1000-1499	17.7	27.7	11.1	0	0	3.7	0	0	0	0	4.5	14.4	10.3	9.8	18.5	100
RMB700-999	20.7	27.8	22.6	0	0	0	0	0	0	0	6.9	3.9	4.3	6.3	28.2	100
RMB400-699	22.6	34.6	8.4	0	0	0	0	0	0	0	0	0	0	7.3	49.7	100
<rmb399< td=""><td>29.4</td><td>41.5</td><td>27.7</td><td>0</td><td>0</td><td>3.9</td><td>0</td><td>0</td><td>0</td><td>0</td><td>6.2</td><td>0</td><td>0</td><td>0</td><td>20.7</td><td>100</td></rmb399<>	29.4	41.5	27.7	0	0	3.9	0	0	0	0	6.2	0	0	0	20.7	100
Total	100	33.8	18.7	0.0	0.2	2.1	0.1	0.0	0.3	0.0	4.0	5.2	3.4	5.0	27.0	100
2010 volume (mn ur	nits)															
>RMB1500	12	63	23	0	0	0	0	0	0	0	0	3	0	0	4	94
>RMB1000	35	75	26	0	0	0	0	0	0	0	0	4	1	1	10	118
>RMB700	62	87	31	0	0	0	0	0	0	0	1	4	1	1	20	146
Total	130	44	24	0	0	3	0	0	0	0	5	7	4	7	35	130

Exhibit 9. Breakdown of China handset shipments by vendor and retail price range (excluding white-box)

Note: 1. TAM is GSM handset sell-through in top-tier cities in China, which SINO-MR estimated as about 130mn units in 2010

2. Others include bigger brands such as Tianyu, Konka, Changhong, ZTE as well as lots of small brands. We assume most of them are using MediaTek, Spreadtrum

and MStar's chips.

Source: SINO-MR; Nomura Research

US\$100 smartphone (retail price): how to make it possible? When will it be possible?

After understating the consumer demand profile, the next question to us is: how much is the cost of a smartphone with a minimum user experience. In our view, a +3" display, capacitive touch, 512MB/1GB DRAM/Flash, a 2MP camera and a +600MHz CPU, are necessary for a low-end smartphone. Any spec weaker than this is doable, but not sellable – as we have highlighted, user experience is the key for a smartphone. If a smartphone spec is too low to offer a minimum user experience, consumers can just buy a feature phone, which is stable and cheap. According to our BOM cost breakdown, we believe BOM cost for a smartphone with a minimum user experience will have an FOB cost of US\$95-105, which means the retail price will be at least US\$150 assuming channels require a profit margin of only 30% (normal requirement of 30-50%).

Recall that the pyramid above (handset chip breakdown exhibit) shows that a US\$150 retail price phone will only hit at most 5% of China's 2G chip shipments. There must be some below US\$150 smartphones in the market this year, in our view. However, if they are using lower-spec components, we doubt they would sell, as user experience would be bad.

A smartphone with a retail price of US\$100 will double the demand – to hit at most 10% of shipments, in our view. In our opinion, a retail price US\$100 smartphone can only have FOB cost of US\$70, in our view, which suggests a 20-30% cost saving is necessary vs the current BOM cost structure.

In our opinion, assuming the minimum spec is maintained, there are two ways to get costs lower: 1) every layer of the supply chain requires a lower margin. For example, right now PCBA makers and system makers both require about US\$10 in profit, respectively, for MediaTek's MT6516 smartphone, for which margin is very high as volume is very small. We expect them to require a lower margin over time when volume ramps up; 2) component cost will be lower over time. We particularly highlight chipsets, display, touch panel and memory as four major cost contributors to the BOM structure. We believe a US\$20-30 cost reduction needs the combined effort of the two ways above, which in our view will take another 1-2 years – which suggests the US\$100 smartphone (with the minimum requirement of user experience) won't be popular until 2H12. However, recall that a US\$100 price point can also only hit 10% of China chip vendors' shipments, which means the real popularity for white-box smartphone is unlikely to happen until 2013.

In our opinion, a retail price US\$100 smartphone can only have FOB cost of US\$70, in our view, which suggests a 20-30% cost saving is necessary vs current BOM cost structure

Two ways to get costs lower: 1) lower margin for every layer of supply chain and 2) component cost will be lower over time

Exhibit 10. BOM cost structure comparison now and one year later

BOM structure (US\$, unless otherwise specified)	Cost-mid 2011	Mix (%)	Cost-2H12 (aggressive case)	How to save cost aggressively?
BB+AP	10-15	10-15	5-10	*Chip makers are likely making 60-70% margin on smartphone chip now, which suggests 30-40% chip price downside if chip makers only require 50% margin
PA	1-2	2	1-2	
WiFi module	3-4	4		*MediaTek's MT6620 (WiFi+GPS+BT+FM) module price is at US\$7-8 now, not much different from combined price of separate chips/modules
GPS	2-3	3	5-6	*Assuming 15% cost decline a year
BT	0.7	1		
FM	0.1	0		
Memory (4Gb NAND+2Gb DDR)	9-10	10	7-8	*Memory price falls averagely 20-30% a year assuming spec unchanged
PCB+passive components	9-10	10	8-9	*Assuming 15% cost decline a year
PCBA e-BOM	40-50		30-40	
Profits by PCBA makers	10	10	5	*PCBA makers require US\$10 profits now, which is substantially high due to small volume; Assuming they require US\$5 only when volume ramps
PCBA cost	50-60		35-45	
+3" display	10-20	10-20	10-15	*Cost at a wide range on different spec and quality; assuming 20% cost decline a year
+3" capacitive touch	9-10	10	8-9	*Cost decline % hard to predict, dependent on the demand of tablet, which will consume majority of new supply of TP capacity over the next two years; assuming 15% price decline a year
2MP module	2-3	3	2	*2MP is the minimum requirement for smartphone (global standard for low end smartphone is 5MP now) as even high end white box feature phone carry +2MP camera; assuming 15% decline a year
Battery	1.5	2	1-1.5	
Charger	1	1	1	
Earphone	1	1	1	
Data cable	0.3	0	0	
Mechanical parts (speaker, antenna, keypad, micphone, motor, etc)	6	6	5-6	
Assembly	1-1.5	1	1	
Total cost	85-95		65-75	
Profits by system makers	10	10	5	*System makers require US\$10 profits now, which is substantially high due to small volume; Assuming they require US\$5 only when volume ramps
FOB price	95-105	100%	70-80	
Channel profits	30-50		25-30	*Assuming 30% margin required by channel, which is in the low end of industry norm of 30-50%
Retail price	130-150		95-110	

Source: Nomura estimates

Investors probably overestimate low-end smartphone contribution to component makers and chip vendors, eg, MediaTek

We believe some investors overestimate the sales contribution from low-end smartphones to component makers or chip vendors such as MediaTek. While even the low end smartphone price is too high to hit the main popularity of white-box handset users for the time being, chip vendors, component makers, PCBA makers, system makers all need to sacrifice their profits in order to bring down the BOM cost. Low-end smartphone users would be very price sensitive, which is different from high-end smartphone users who typically care about innovative technology or product differentiation rather than cost.

Looking into the details, chipsets, memory chips, display module and touch panel modules are four major cost contributors to smartphone's e-BOM. They, together with the profits required by PCBA makers and system makers, are key cost factors to be reduced. By our estimate, MediaTek's smartphone chip carries at least 60% gross margin now based on a chip price of US\$10-15, which in our view is not sustainable, assuming it will contribute some effort to bring smartphone BOM costs lower. It could be a dilemma for MediaTek – the low-end smartphone market will probably not take off if it does not lower chip price to US\$5-10 (30-40% price decline in one year; at that time, its gross margin of MediaTek smartphone chip will fall to the 50% level), in our view.

Note that our analysis for BOM costs in mid-2012 above is an aggressive case scenario assuming everyone in the supply chain is willing to sacrifice margin, which could be too optimistic considering different profit margin targets by each company in the supply chain.

We believe some investors overestimate the sales contribution from low-end smartphones to component makers or chip vendors such as MediaTek

TDSCDMA smartphone could be a different story (vs WSCDMA smartphone)

However, the TDSCDMA smartphone could be a different story for China chip vendors, in our view, due to 1) no IP issue; and 2) China Mobile subsidy. For WCDMA standard, handset makers can not do business without Qualcomm's license. There is no such restriction for TDSCDMA handset makers, as Qualcomm doesn't do TDSCDMA chips. Also, for TDSCDMA standard, China local brands are more active than they are for WCDMA brands given that foreign brands have less resource for TDSCDMA mobile phones. As such, more China local brands are finding it easier to get a subsidy from China Mobile vs their difficulties in getting a subsidy from China Unicom. With a subsidy, the price consumers pay for a smartphone can easily drop to zero no matter how much the BOM cost is.

With a subsidy, the price consumers pay for a smartphone can easily drop to zero no matter how much the BOM cost is

NO<u>MURA</u>

China 3G handset volume: 3G handset IC market

China smartphone/3G chip sector – more participants; sharply falling ASP possible

As we mentioned in the previous section, 3G is a game changer from the perspective that there is licence issue (for the mainstream WCDMA), so that China 2G chip vendors, mainly MediaTek, could well suffer from a narrowing client base (Spreadtrum and MStar's WCDMA plans are not clear yet). As such, we believe Qualcomm will continue to be dominant in this market, while we notice that ST-Ericsson's activities are catching up faster than Broadcom's among foreign chip vendors. In the TDSCDMA chip market, we believe Spreadtrum will catch up on its industry-leading 40nm chip and will even likely threaten the existing market leader – ST-Ericsson, on Spreadtrum's design-in at Samsung in our view. MediaTek and Leadcore, after breaking up, have launched their chip and protocol stack solutions, respectively.

WCDMA smartphone chip – Qualcomm is dominant and committed, even for low-end segment

Qualcomm is the most active WCDMA chip vendor in China, particularly at China handset makers. We believe Qualcomm is the major notable competitor for China chip vendors such as MediaTek. While MediaTek's MT6573 chip, which many regard as a savior since its CPU clock speed will be further upgraded to 650MHz from 400MHz (MT6516), will start hitting the market from 2Q/3Q11 we note that Qualcomm will raise the bar for competition by launching cost-down, better-performance low-end smartphone chips from 3Q11.

Current low-end chips by Qualcomm are mainly 7225 (528MHz; QVGA display; 65nm) and 7227 (600MHz or 800MHz [by over-clocking]; WVGA display; 65nm). Those will migrate to 7225A (600MHz; HVGA display; 45nm) and 7227A (800MHz; WVGA display; 45nm) respectively from 3Q11. These upgrades demonstrate Qualcomm's commitment in low-price smartphone segment and makes MediaTek's new chip in competitive disadvantage again.

Again, we believe the major problem for MediaTek (as well as Spreadtrum and MStar, after they have 3G chips) is not that it doesn't have chips, but that its consumer profile is too weak. Unless MediaTek can change its consumer profile dramatically (eg becomes a smartphone chip supplier to global-tier smartphone makers), the shipments for its smartphone chips could be limited.

ST-Ericsson and Broadcom have different strategies in China. ST-Ericsson started to be more active in China's low-end smartphone market from last year. It is cooperating with two strong Android software companies (one in Beijing, one in Nanking), which has helped ST-Ericsson design in some well-known handset brands in China, such as Tianyu, Coolpad and Haier, by our checks. Broadcom only works with some first-tier handset companies in China such as Tianyu and TCL. We do not expect Broadcom's solution to be popular in China unless it also has so-called "turn-key" chip solutions.

In the WCDMA chip market, we believe Qualcomm will continue to be dominant, while we notice that ST-Ericsson's activities are catching up faster than Broadcom's among foreign chip vendors





Source: Nomura estimates

Exhibit 12. Smartphone chip solutions in China

Model	CPU Spec	DUAL SIM	Android	Chipset Cost	PCBA COST (NAND+DDR)	3G Royalty	Turn Key	Integrated Effort
Infomax iM9815	EDGE 260MHxz	YES	1.5/2.2	USD\$11	USD\$30 (2+1)	N/A	YES	EASY
Infomax iM9816	EDGE 520MHz	YES	2.2	USD\$14	USD\$35 (4+2)	N/A	YES	EASY
MTK MT6516	EDGE 416MHz	YES	2.1	USD\$16	USD\$40 (4+2)	N/A	YES	EASY
Huawei K3+SP 6600L	GPRS 360MHz	NO	2.1	USD\$6 +Modem USD\$4	USD\$45 (4+2)	N/A	NO	HEAVY
Rockchip RK2816+NXP5209	EDGE 600MHz	NO	2.1	USD\$6 +Modem USD\$6	USD\$47 (4+2)	N/A	NO	HEAVY
Qualcomm 7225	3G 528MHz	YES	2.1/2.1	USD\$15	USD\$75 (4+2)	YES	NO	HEAVY
STE 6715/U850	3G 468MHz	NO	2.1/2.2	USD\$14	USD\$65 (4+2)	YES	NO	VERY HEAVY
Marvell 920/935	3G 635MHz	NO	2.1/2.3	USD\$24	USD\$85	YES	NO	HEAVY

Source: Infomax

TDSCDMA chip – MediaTek and Leadcore become competitors from partners; Spreadtrum catches up to threat ST-Ericsson

In the Chinese market, the mobile network services providers (like China Mobile) have undergone a strategic shift, and increased their focus on the lower end of the market through phones with fewer features. This focus on "no-frills" handsets has led the wireless component demand to move towards low-end TD-SCDMA products. This shift towards the simpler, lower-end TD components started in mid 2010 and continued through the third and fourth quarters. The shift had two major consequences 1) local Chinese vendors such as ZTE and Huawei benefitted from the shift at the expense of top and mid-tier OEMS such as Samsung and Motorola (exhibit 18 and 20); 2) chip makers such as Spreadtrum, Leadcore, ST-Ericsson experienced a fall in ASPs of TDSCDMA components. We have observed some key trends for the TDSCDMA chip market for 2011 below.

Intensifying competition on more participants

As we expected one year ago, both MediaTek and Leadcore have launched their own complete TDSCDMA chip solutions (hardware chip + protocol stack). It appears that Leadcore has gained some traction from late 2010 with the maturity of its LC1808 chip.

In the TDSCDMA chip market, Spreadtrum will catch up on its industry-leading 40nm chip and will even likely threaten the existing market leader – ST-Ericsson – on Spreadtrum's design-in at Samsung in our view. MediaTek and Leadcore, after breaking up, have respectively launched their chip and protocol stack solutions Our industry checks suggest that it has started shipping to Coolpad, one of the top 5 TDSCDMA handset brands in China, with very attractive chip prices.

On the other hand, MediaTek started to promote its MT6236 (EDGE BB) + AST2001 (TDSCDMA BB) solution from late-2010. However, MediaTek's chip integration appears to lagging behind all competitors, as all other competitors have integrated TDSCDMA and GSM/EDGE BB into a single chip, while Spreadtrum even has integrated TSCDMA and GSM/EDGE RF into a single chip.

ST-Ericsson remained a leader in TDSCDMA handset chip solutions in 2010 since major TDSCDMA handset brands, particularly Samsung, which account for +30% share, are its customers. It also has the most comprehensive product roadmap among peers. According to Gunnar Plagge, our European semiconductor analyst, ST-Ericsson is committed to TD/LTE evolution and it will transition to TD/LTE once the standard is implemented in 2012. ST-Ericsson's wireless solutions business stands to benefit from the transition to TD/LTE and a progressive shift of TDSCDMA smartphones towards higher-end features

Spreadtrum is a leader in TDSCDMA fixed wireless chip solutions (+60% share in 2010) with small handset chip shipments in 2010. However, it has caught up with the technology by being the first among peers to use 40nm manufacturing node, which would be very helpful in chip cost saving and power consumption, in our view.

Marvell continues to work closely with China Mobile with the focus on TDSCDMA smartphones (China Mobile's *OPhone*). According to Romit Shah, our US semiconductor analyst, Marvell has more than 90% of the early design wins for OPhones from Chinese OEMs including Lenovo. Despite early investments and the majority of the design-wins, OPhone did not translate to success for Marvell in the China market. OPhone traction has been less than was expected due to the popularity of Android, delays in developing the software components, and a weak marketing effort by the ecosystem partners in China. MStar has also started to promote its TDSCDMA chip solutions to some key customers. However, we do not expect it to become a viable player before 2012 when its software is more stable.

TDSCDMA smartphone to be more popular from 2012

Almost all major TDSCDMA chip vendors have plans to roll out TDSCDMA smartphone solutions in 2011. Marvell has focused on TDSCDMA smartphones for a long time (with the close cooperation with China Mobile on its OPhone). Leadcore's next TDSCDMA chip is for smartphones (LC1809). MediaTek will also launch its TDSCDMA smartphone solution using MT6573 (HSPA BB+AP) and AST2001 in 4Q11. We also expect Spreadtrum's SC8805G (40nm TDSCDMA smartphone) to enter production from 4Q11.

Sharply falling ASP

One year ago the TDSCDMA handset chip price was at about US\$15-20. However chip prices have fallen quickly over the past year, as we expected. Now chip prices are below US\$10. We expect ASP to fall further into 2011 due mainly to Leadcore's aggressive pricing and Spreadtrum's launch of its 40nm chip. Our industry checks suggest that Leadcore has quoted below-US\$9 for its LC1818 with significant rebate for big volume orders. We believe the China government's subsidy for Leadcore's engineering cost is the key reason behind the low chip price. Additionally, after launching a 40nm chip with cost savings of 20-30% (by our estimate), we believe Spreadtrum will use aggressive pricing to gain market share – we believe even if the TDSCDMA chip price falls to US\$7, Spreadtrum's gross margin for its 40nm chip would still be higher than the corporate average of 40% level.

We expect ASP to fall further into 2011 due mainly to Leadcore's aggressive pricing and Spreadtrum's launch of its 40nm chip

Potentially significant market share shift

We expect Spreadtrum to gain share at TDSCDMA handset market in 2011 with its 40nm chips (on better performance and lower cost). Our industry survey has pointed out that Srpeadtrum has had design-in for Samsung TDSCDMA handsets with this 40nm chip, which could be a threat to ST-Ericsson. Samsung has about 30% share of the TDSCDMA phone market. On the other hand, we expect MediaTek to lose market share after breaking up with Leadcore.

We expect Spreadtrum to gain share at TDSCDMA, with MediaTek losing share after breaking up with Leadcore



Source: Nomura estimates

Exhibit 14. Leadcore: TD chip roadmap



Source: Nomura estimates



Source: Nomura estimates

Exhibit 16. ST Ericsson: TD chip roadmap



Source: Nomura estimates



Source: Spreadtrum

Exhibit 18. 2009 TDSCDMA handset market share



Source: Gartner, Nomura research

Exhibit 20. 2010 TDSCDMA handset market share



Source: Gartner, Nomura research





Source: Gartner, Nomura research

Exhibit 21. 2010 TD-SCDMA handset IC market share



Source: Gartner, Nomura research

Exhibit 22. TDSCDMA handset makers and their IC suppliers										
Leadcore/MTK	ST-Ericsson	Spreadtrum								
0	0									
0	0									
0		0								
0	0									
0		0								
0										
0										
	0									
		0								
	0	0								
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	t makers and the Leadcore/MTK 0 0 0 0 0 0 0	t makers and their IC suppliers Leadcore/MTK ST-Ericsson 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0								

Source: Nomura estimates

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3G handset IC market

A closer look at smartphone market in China

China is a young market for smartphones. China's smartphone penetration is lower than the global level. The number would be much lower if the TAM includes white-box handset shipments. Plus, Nokia has a much higher market share in China than in the global smartphone market. Yet we believe the popularity of RMB1,000 smartphones will trigger demand and lead China to be the second-largest smartphone market worldwide from 2012 in terms of shipment volume (see our global handset technology team's 24 January 2011 report, "*China smartphone: RMB1,000 revolution*"). However, despite this, we believe the market is too optimistic on white-box smartphone shipments in China.

China smartphone market – big growth despite lower penetration, complicated channels and lots of newcomers

We expect China domestic smartphone demand, including white-box phones, to grow to 40mn and 60mn units for 2011 and 2012, respectively, from 28mn units in 2010, which should mark China as the fastest-growing smartphone market in terms of volume in the world over the next few years, on the back of a large volume base (from feature phones) and quickly falling smartphone prices.

However, the smartphone penetration rate in China will likely remain lower than that of the developed market over the next few years, as China's consumption power is weaker than in developed markets while smartphones are not a necessity, in our view. Nokia had a 68% share of the China smartphone market in 2010, according to Gartner, which is much higher than Nokia's share worldwide, which further implies 1) Nokia's strong channels in China, which is a market with complicated channels; and 2) the Android smartphone's large potential, in our view.

RMB1,000-2,000 (US\$150-300) became the most popular retail price range for smartphones selling in China in 2010. With China operators' attempt to increase 3G smartphone subscribers (ARPU increase is the second priority), as well as the view from our Telecom and China tech analyst Leping Huang that RMB1,000-2,000 is the sweet spot for China operators to make a subsidy, we expect further population for this price segment. Meanwhile, we reiterate our view that sub-RMB1,000 would not be popular until 2013 as the cost of a smartphone with minimum user experience requirement is at US\$100 now (or retail price at US\$130-150, assuming some minimum margin required by channel).

China is a handset market with the most handset brands in the worldwide (several hundred of brands including lots of very small brands). We have no question that there will be lots of new comers trying to offer smartphone over the next two years. However, we believe most newcomers will fail to reach success as they lack brand recognition, which is important for smartphones considering that smartphones are not a necessity and user experience is critical. As such, we continue to favour global-tier smartphone brands and China first-tier handset brands over low-tier and white-box handset brands in the China smartphone market.

By our estimates, in 2009, total 3G handset shipments in China were about 5-6mn units

We continue to favour global-tier smartphone brands and China first-tier handset brands over lowtier and white-box handset brands in the China smartphone market

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Exhibit 23. China smartphone demand forecast by type of handset makers	i		
China smartphone shipments by company type	2010	2011	2012
Nokia	19	20	22
Other foreign brands (mainly Apple, Motorola, Samsung, LG, SonyEricsson and HTC, etc)	7	12	23
China local brands (mainly ZTE, Huawei, Coolpad and Lenovo, etc)	3	9	15
White-box brands	0	4	12
Total	28	44	72
Percentage			
Nokia	68	45	31
Other foreign brands (mainly Apple, Motorola, Samsung, LG, SonyEricsson and HTC, etc)	23	27	32
China local brands (mainly ZTE, Huawei, Coolpad and Lenovo, etc)	9	19	21
White-box brands	0	8	17
Total	100	100	100

Source: Nomura estimates

Exhibit 24. Smartphone market growth by region



Source: Gartner, Nomura estimates

Exhibit 26. China smartphone share by brand in FY10



Source: Gartner; Nomura Research

Exhibit 25. Smartphone penetration rate in China and worldwide



Source: Gartner, Nomura estimates

Exhibit 27. Global smartphone share by brand in FY10



Source: Gartner; Nomura Research

Exhibit 28. China smartphone market by OS in FY10



Source: Gartner; Nomura Research

Exhibit 30. China smartphone share by price segment (%)



Exhibit 29. Worldwide smartphone market by OS in FY10



Source: Gartner; Nomura Research

Exhibit 31. China smartphone share by wireless standard (%)



Source: GFK; Nomura Research

Source: GFK; Nomura Research

HTC in China smartphone market – complicated channel is a challenge, but brand recognition is strong

HTC used to use the Dopod brand for its handset business in China before HTC acquired Dopod and consolidated it as one brand "HTC" in 4Q10. According to Gartner, HTC (+Dopod) shipped 900k smartphones in 2010, which accounted for a 3.3% share only. However, by OS, it reached a 9% share for the Android OS market and a 23% share for the Windows Mobile OS market in 2010, similar to its global exposure.

We believe the challenge to HTC in China's handset market is the complicated channel. HTC has very good relationships with global operators on its capability to customise handsets for operators and its attempt to be "operator friendly". The US is a 100% operator-channel market, while in the Europe operator channel also accounts for about 50%. However, in China, the channel is very complicated and the operator channel only accounts for about 30% share. As such, HTC also needs to work with other different channels. Our industry checks also suggest that HTC will build its own handset stores across China from 2011 onwards to solidify the HTC brand and reach more people – we are likely to see 200-300 "HTC stores" in China in 1-2 years from fewer than 10 stores currently.

Our survey shows that most China handset companies are starting to turn positive on the TDSCDMA handset market and are willing to invest more in developing TDSCDMA handsets While HTC is not the biggest Android brand in China from a volume perspective (ie even HTC's Window Mobile shipments were much bigger than Android shipments in 2010), HTC is probably the strongest Android brand in China from consumers' impression. When we talk to China handset makers, including tier 1 brands and white-box handset makers, the feedback is that they hope to become China's HTC sometime, which, in our opinion, proves that HTC has strong brand recognition in the China smartphone market. The reason is that there has been lots of parallel imports of HTC phones to China over the past 1-2 years when HTC started to sharpen its brand value in developed markets, which has also helped its brand recognition in China according to our channel checks.

We expect HTC to reach 2-3mn units of smartphone shipments in China for 2011, more than double 2010 shipments of 900k on the back of 1) the rising importance of the operator channel (which has been HTC's strength) -- our industry survey suggests that more than 50% of smartphone would be subsidised in 2011 vs only 30% in 2010, which bodes well for HTC; and 2) the start of deployment of HTC stores after the consolidation of the HTC and Dopod brands.

Exhibit 32. HTC: 3% of China smartphone market in FY10



Exhibit 33. HTC: 8% of worldwide smartphone market in FY10



Source: Gartner; Nomura Research

Exhibit 34. HTC: 9% of China Android smartphone market in FY10



Source: Gartner; Nomura Research

Source: Gartner; Nomura Research

Exhibit 35. HTC: 30% of worldwide Android smartphone market in FY10



Source: Gartner; Nomura Research

Exhibit 36. HTC: 23% of China Windows smartphone market in FY10



Exhibit 37. HTC: 42% of worldwide Windows smartphone market in FY10



Source: Gartner; Nomura Research

Source: Gartner; Nomura Research

Exhibit 38. China handset shipment by channel - urban and rural (excluding operator channel)



Source: GFK, Nomura Research

Exhibit 39. China handset shipment by channel



Source: GFK, Nomura Research

MediaTek in China smartphone market – both volume and ASP likely very disappointing, even in 2012

Some investors might have unrealistic expectations for MediaTek's smartphone shipments even for 2012, in our view - some investors seem to expect 50-80mn units of smartphone shipments by MediaTek for 2012. However, we believe MediaTek's smartphone shipments, even for 2012, may only reach 30mn units, at best.

Gartner expects China smartphone shipments to reach 60mn units (excluding whitebox phones), which suggest that white-box smartphone volume would unlikely be more than 50mn units given our view and analysis that 1) Nokia will still account for about 40-50% of total shipments (excluding white-box phones) on its strong channel deployment, which means non-Nokia smartphone will only account for 50-60% of total shipments; 2) out of this non-Nokia shipments, more than 50% would still be foreign brands, including Apple, Samsung, Motorola and HTC, given our view that brand recognition is important for smartphone users; 3) the remaining 25% volume or less would be taken by China local tier-1 brands, such as ZTE, Huawei, Coolpad and Lenovo, on the back of their improving technology (on the early investment and support by Qualcomm) and operators' subsidy; and 4) if China tier 1 brands can only gain 21% share at most (or 15mn units by our estimate), we doubt whether white-box smartphone shipments can be higher than this number given their lack of brand recognition and subsidy.

Even if we assume white-box smartphone shipments can reach 12mn units in China and another 10-20mn unit outside China in 2012, the total shipments are only 20-30mn units. However, Qualcomm will probably have a higher market share than MediaTek out of this 20-30mn unit shipment given that all MediaTek's 3G customers need to have Qualcomm's license and many of them will also design in Qualcomm's chips. As such, we believe market expectation on MediaTek's smartphone chip shipments of more than 50mn units even for 2012 is way too high.

From a bottom-up point of view, there are only a few high-profile China brands able to sell smartphones well, including ZTE, Huawei, Coolpad, Lenovo, TCL (Acatel), Tianyu, Gionee, BBK and Opal. The small customer base is a big problem for MediaTek.

Following our analysis in the previous section of this report, we believe component makers, PCBA makers, system makers, channels, and chip makers all need to sacrifice their price and gross margin before the market takes off, which means the market might overestimate smartphone chip prices in addition to volume.

Exhibit 40. China smartphone shipment forecasts by wireless standard



Source: Gartner, Nomura estimates

Our survey shows that most China handset companies are starting to turn positive on the TDSCDMA handset market and are willing to invest more in developing TDSCDMA handsets

2G handset IC market

China feature phone/2G chip sector — pricing competition no sign of easing

One year ago, we initiated our non-consensus view that 2G chip competition would intensify, as MediaTek's PCBA cost premium was 30-40% higher than competitors', such as Spreadtrum, which was not reasonable when Spreadtrum's stability and quality of its chips had caught up. Over the past one year, we have seen MediaTek's gross margin to fall by more than 10ppts from the peak while Spreadtrum's gross margin has only fallen by less than 5ppts in the meantime, which has confirmed our view and also suggested that right now PCBA costs by using either MediaTek or Spreadtrum's chips are not all that much different (less than 10%). However, despite this, we expect the pricing competition to continue, which should continue to pull down all handset chip makers' margin, given our view that the market shares by the three handset chip makers have not yet reached a balance.

More downside ahead for China 2G chips ASP and margin

We believe ASP and margin for China 2G chips will continue to go down for the next year or longer before the market reaches a balance, given our view that 1) MediaTek's current market share of about 75% remains too high (albeit down from its 90% peak) particularly given the fact that +60% of China 2G handset chip demand is highly pricesensitive, where MediaTek doesn't have a strong competitive advantage; 2) the major competitor, Spreadtrum, has guided its 1Q11 gross margin to reach 41.5-42.5%, which suggests that it still has lots of buffers for pricing competition as its long-term target is low-40% to high-30%; 3) competition in the high-end 2G segment, which accounts for 20-30% of chip demand, will intensify from 2012 onward on Spreadtrum's entry into this segment and MStar's improvement in its chip stability; and 4) China handset chip makers' weak positions and progress in the 3G segment will lead to rising pressure in securing share in 2G chip market, in our view.



We expect pricing competition to continue, which should continue to pull down all handset chip makers' margins, given our view that the market shares by the three handset chip makers have not yet reached a balance

Source: Bloomberg





Exhibit 43. China handset IC market share: MTK, SPRD, and MStar



Source: Nomura estimates

2G TAM: volume growth slows down with first-ever revenue decline in 2011

China 2G chip shipments (our definition in this report for China 2G chip shipments is sell-in numbers for China handset chip companies to known brands and white-box brands, domestic and export market) reached a record 650-660mn units in 2010, up 55% from 430mn units in 2009, due largely to the surging demand from global emerging markets. From 2011 onward, we expect the growth to slow down to 20%, if not lower, (20% y-y for 2011 and 10% y-y for 2012, by our estimates) given our view that the replacement cycle does not favour white-box handset makers, as most had expected. According to our discussion with many white-box handset consumers, they tend to buy Nokia's feature phone to replace their first phone which is white-box phone as they think Nokia's feature is more solid with good quality and white-box phones are not good to use albeit are fancy (in terms of functions). In addition, China white-box handset makers' share gain in global emerging markets seem to have reached saturation (eg, by our estimate, handsets made by China handset makers have accounted for more than 50% in India in 2010 - 50% is a saturation point, as we have seen in China for white-box handset market share).

Shipment growth of 20% for China 2G chip shipments is not exciting vs 10-15% growth recorded by global handset demand. What's worse, we expect 2011 to be the first year of zero or negative sales growth for this market, as ASP pressure for China 2G chips could be as high as 20% or more y-y for 2011, by our estimate.

We expect China 2G chip shipments to grow 20% in FY11 but ASP to decline by more than 20% due to severe competition





Source: Nomura estimates

3G popularity continues to be a structural negative — to further squeeze 2G market size and chip price

The popularity of 3G in China continues to be a structural negative, in our view, as we pointed out in our 25 January, 2010 sector report (*China handset IC and supply chain: it's about speed rather than size*). It will not only directly squeeze 2G handset TAM, but intensify 2G chip price pressure.

According to SINO-MR, China 3G handset shipments will challenge 100mn units in 2011, up sharply from 50mn units in 2010, on falling 3G phone price and operators' subsidies, and 2G GSM shipment will fall by 25mn unit in 2011, which is about 4-5% to China handset chip vendors' TAM a year, if we assume white-box 2G volume is unchanged.

The transition into 3G has also further squeezed the 2G chip price, as Qualcomm has continued to lower its lowest-end 3G chip (QSC6240/6270) price over the past year (as we forecasted in our 25 January, 2010 report) to squeeze the price and profits of MediaTek's MT6268, which has further depressed the price of other 2G chips from MediaTek. For example, Qualcomm's QSC6240 chip price has fallen to US\$6 now from US\$8 one year ago, so that the MT6268 price can only quote at US\$6 at most now (vs US\$8 one year ago and its original plan of +US\$10).

Exhibit 45. China handset shipments by wireless standard (excluding whitebox handsets)



Source: SINO, Nomura research

Qualcomm continues to lower its lowest-end 3G chip price, which squeezes the profits of MediaTek

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Competitive strategy by vendor

MediaTek: integration, integration, integration

MediaTek has the most comprehensive product portfolio, ranging from high-end smartphone MT6516 and low-end ULC MT6251 (mass production from 3Q11). Also, the company has the deepest pockets among the three competitors in our view. By our observation, MediaTek has now targeted to fight for market share rather than margin maintenance, which implies further downside to the margin of all vendors before either market share reaches a balance or at least one competitor cannot bear lower margins. "Integration" will likely be the key strategy by MediaTek for upcoming 2G chip market competition. For example, MediaTek will start to integrate memory into baseband from MT6252 (sip) and MT6251 (soc) for the segment with PCBA cost below US\$10. In the edge segment (PCBA cost higher than US\$10), MediaTek has integrated Bluetooth into baseband from mt6236 and will integrate both Bluetooth and FM into MT6255 in our view.

Spreadtrum: offering the most cost-efficient chips with expansion from low-end to high-end segment

Spreadtrum's success has been from its cost-efficient chip solutions (lower chip cost with lower ASP by saving some functions not necessary for handset makers). For example, according to Spreadtrum, its chip size (baseband and RF together) of SC6600L2A is 25% lower than MT6253 despite that MT6253 has integrated RF into a single chip. We expect the company to continue this strategy.

Exhibit 46. Die size comparison											
	SC6600L2 +QS518	SC6600L2A +QR528	SC6800H +SR528	MT6253							
Die size (%)	90	75	95	100							
Process(um)	0.152	0.152	0.152	0.11							
Package	LFBGA, QFN	LFBGA, QFN	LFBGA, QFN	aQFN							
Cost	Low	Low	Low	High							

Source: Spreadtrum

MStar: targeting high end segment with differentiated functions

As we highlighted in our MStar initiation report, MStar is trying to use its strength in hardware chips to increase differentiation in the high-end segment (MStar initiation: *Full expectation and valuation*, 6 January, 2011). However, we believe its impact on the competition, if any, would not be only at the high end, given our view that 1) the high-end segment is small at less than 20% volume exposure; 2) our checks suggest that in the low-end segment, MStar's product launch is also aggressive. However, given our view that it will still take time for MStar to make its chips stable and user-friendly and build customers' confidence, we believe its major impact on the market will be after 2012F.

Short conclusion - no winner

China 2G chip price and margin will continue to deteriorate until either market share reaches a balance or at least one competitor cannot bear even lower margins, in our opinion. We believe that China's 2G chip market will be a market without winners in the foreseeable future.

By our observation, MediaTek has now targeted to fight for market share rather than margin maintenance, which implies further downside to the margin of all vendors
Exhibit 47. MediaTek product roadmap

			Clock speed	Status	1H09	2H09	1H10	2H10	1H11	2H11	1H12	2H12
	HSPA smartphone (Cortex)	6575	1GHz	New chip: MP from 2012								
	HSPA smartphone (ARM 11 x 2)	6573	650MHz	New chip: MP from 3Q11								
	HSPA (ARM 11)	6276	650MHz									
	WCDMA (ARM9)	6268										
	EDGE smartphone (ARM7+ARM9)	6516	416MHz									
	EDGE (ARM11, BB+RF SOC)	6256	520MHz	New chip: MP from 2012								
	EDGE (ARM9, BB+BT+FM SOC)	6255	312MHz	New chip: MP from 2012								
	EDGE (ARM9, BB+BT SOC)	6236	312MHz									
	EDGE (ARM9)	6238	208MHz									
	EDGE (ARM9)	6235	208MHz	10-15% of shipments in 1Q11								
	GSM/GPRS (ARM7, BB+RF SOC)	6253	104MHz	35-40% of shipments in 1Q11								
	GSM/GPRS (ARM 7)	6225	104MHz	Phasing out								
	GSM/GPRS (ARM 7, BB+RF SOC)	6252	104MHz	New chip: next gen of MT6223; MP from 2Q11								
	GSM/GPRS (ARM 7)	6223	52MHz	40-45% of shipment in 1Q11; will phase out from early-2012								
	GSM (ARM 7, ULC level BB+RF SOC)	6251		New chip: MP from 3Q11								
Source:	Nomura estimates											
Note:	Mass production time	PCBA> US\$20	P	CBA:US\$10~US\$20 PCBA <us\$10< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></us\$10<>								

Exhibit 48. Spreadtrum product roadmap

		C	lock speed	Status	1H09	2H09	1H10	2H10	1H11	2H11	1H12	2H12
	TDSCDMA (Cortex)	SC8810	N.A	New chip: 40nm TD smartphone; MP from 1H12								
	TDSCDMA (ARM9; BB+AP SOC)	SC8805G	400MHz	New chip: 40nm TD smartphone; (the same spec w SC6810); MP from 4Q11								
	TDSCDMA (ARM9)	SC8800G	400MHz	New chip: 40nm TD feature phonep; MP from 2Q11								
	EDGE (ARM9; BB+AP SOC)	SC6810	400MHz	New chip: 40nm Edge smartphone; MP from 4Q11; to compete with MT6516								
	GPRS (ARM9)	SC6800H	200MHz	New chip: spec btw MT6253 and MT6235 but to compete with MT6253; MP from 2Q11								
	GPRS (ARM7)	SC6600L6	104MHz									
	GPRS (ARM7)	SC6600L7	86MHz	Triple SIM card								
	GPRS (ARM7)	SC6600L2	86MHz									
	GPRS (ARM7)	SC6620	86MHz?	New chip: To compete with MT6252								
	GPRS (ARM7)	SC6610	86MHz?	New chip: spec between MT6252 and ULC								
	GPRS (ARM7)	SC6500	86MHz?	New chip: RF-integrated SOC or SIP; next gen of 6610; MP from 2012								
Source:	Nomura estimates											
Note:	Mass production time	PCBA> US\$2	0 P(CBA:US\$10~US\$20 PCBA <us\$10< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></us\$10<>								

Exhibit 49. MStar product roadmap

			Clock speed	Status	1H09	2H09	1H10	2H10	1H11	2H11	1H12	2H12
	WCDMA	N.A.	N.A	New chip: MP from 4Q11								
	TDSCDMA	N.A.	N.A	New chip: MP from 2Q11								
	EDGE (ARM9)	MSW8535N	208MHz	Smartphone-like feature phone								
	EDGE (ARM9)	MSW8535	156MHz	Phased out								
	GPRS (ARM9)	MSW8533N	286MHz									
	GPRS (ARM9)	MSW8533C	156MHz	Phasing out								
	GPRS (ARM9)	MSW8533C1	156MHz	Mainstream segment chip								
	GPRS (ARM9)	MSW8533D	156MHz	New chip: MP from 2Q11								
	GPRS (ARM9)	MSW8532	156MHz	New chip: MP from 3Q11								
Source:	Nomura estimates											
Note:	Mass production time	PCBA> US\$20	PC	BA:US\$10~US\$20 PCBA <us\$10< td=""><td>0</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></us\$10<>	0							



Exhibit 51. Chip 2G competition by segment

	MediaTek	Spreadtrum	MStar
PCBA	MT6516	SC6810 (4Q11)	
US\$40 	МТ6268		
PCBA US\$20			MSW8535 N
	MT6238		
PCBA	MT6236 (1Q11)		
US\$15	MT6235		MSW8533 N
	MT6253	SC6800H (1Q11)	
03910	MT6253DV MT6223	SC6600L6 SC6600L2	NSW8533 C1 (1Q11) MSW8533 D (2Q11)
	MT6252 (early 2Q11)	SC6620 (Late 2Q11)	MSW8532 (3Q11)
	MT6251 (3Q11)	SC6610 (Late 2Q11)	

Source: Nomura estimates

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Competition by price segment

PCBA cost below US\$10 (80-85% of demand) – MT6252 strength is short-lived; MT6251 only targets a small TAM

This is the segment with the most severe competition given its huge volume (80% of demand is in this segment) and the nature of price sensitivity (ie customers pursuing lower costs and better functions). Over the past year, all of Spreadtrum's share gains from MediaTek have been from this segment – Spreadtrum's 6600L series has successfully taken share from MediaTek's MT6223 and MT6253. The next battlefield could be initiated by MediaTek launching its MT6252 – the successor of the MT6223 with spec and functions as good as the MT6253. More importantly, it will integrate 32Mb SDRAM by packaging, which will help customers save PCBA cost by US\$0.5-0.7, or 5-10% of PCBA cost. By our supply chain survey, the MT6252 will enter mass production from April 2011.

On the other hand, both Spreadtrum and MStar are lagging MediaTek by 1-3 months in launching memory-integrated chip solutions (ie Spreadtrum's MT6620 and MT6610 and MStar's MSW8252). Spreadtrum's MT6620 and MT6610 will enter mass production from late-2Q11 while MStar's MSW8252 is scheduled to enter mass production from 3Q11.

According to our channel checks, the late launch of memory-integrated chips by competitors will give MediaTek a short break period (1-3 months, by our estimate), since the price competition started from 4Q09 initiated by Spreadtrum, which might help MediaTek either take some market share back or stabilise its ASP/margin downward trend in late 2Q11 and early 3Q11. However, the leading advantage will soon disappear after Spreadtrum and MStar launch similar chip solutions, in our opinion.

2G chips are becoming price sensitive with little differentiation, which means any technology advance would be short lived. Market competition won't stabilise until at least one of them can't suffer lower margin.

Our industry survey shows that another new battlefield is the ultra-low-cost (ULC) segment, which has been dominated by Infineon (which supplies chips to NOKIA, ZTE and Huawei) for years. MediaTek will launch the mt6251 from 3Q11 with the target customers of ZTE and Huawei. While this is a new segment and a likely new sales source for China's handset chip vendors, we do not expect too much contribution. In 2010, ZTE and Huawei shipped 55mn and 40mn units of phones, respectively (of which, 50-60mn units are ULC phones, by our estimate). Even if we assume all ULC phone shipments were taken by China's handset vendors, the shipment contribution would be only 10%, not to mention that ULC chip ASP is likely much lower.

PCBA cost between US\$10-20 (15% of demand) – MStar knocking the door

This is a segment so far dominated by MediaTek but targeted by MStar (8533N) according to our channel checks. Spreadtrum has no chip targeting this segment. In the peak month, demand for this segment can reach 10mn units, by our estimate (vs MediaTek's monthly shipments of almost 50mn, Spreadtrum's 15mn units and MStar's 2-3 mn units). Since we believe this segment is less price-sensitive and requires higher chip quality and chip stability, we believe MediaTek's high market share can stand still for another 6-9 months before MStar proves the quality and stability of its chips.

MT6252 will help customers save PCBA costs by US\$0.5-0.7. Both Spreadtrum and MStar are lagging MediaTek by 1-3 months launching memory-integrated chip solutions, which may help MediaTek gain market share in 2Q11. However, the advantage will be short-lived

In the PCBA cost between US\$10-20 market, we believe MediaTek's high market share can stand still for another 6-9 months before MStar proves the quality and stability of its chips

NOMURA

PCBA cost higher than US\$20 (2-3% of demand) – MediaTek would still dominate

This is a segment including smart feature phones (smartphone-like feature phones) or edge smartphones (with Android or Windows OS). MediaTek dominates this segment. Spreadtrum has indicated that it will launch SC6810 40nm edge smartphone chips by 4Q11 while MStar has already had chips for the smart feature phone segment (MSW8535N) and also indicated it will launch edge smartphone chips by end-2011. While handset makers have higher margin in this segment, we believe both MStar and Spreadtrum's impact on MediaTek more likely be felt from 2012 onwards.

Financial strength comparison – MediaTek has abundant cash

While the 2G chip market will continue to be a battlefield, the non-2G chip business and financial strength become two critical factors judging upside potential and downside risk, by our obervation. In terms of financial strength, Spreadtrum seems to be the weakest from the perspective that it has the lowest net cash-to-market cap ratio. However, it has the support in R&D expense from the China government, which is an advantage MediaTek and MStar do not have.

MStar has the lowest handset chip margin (20-30% vs MediaTek's +45% and Spreadtrum's +40%) on its marketing strategy (using higher-spec chips to compete with lower-spec chips by competitors) and small production volume. However, this weakness can be covered by its TV chip business, which accounts for over 70% of MStar's sales, with 40% gross margin. MediaTek has abundant cash, which is the biggest advantage it has among the peers (good for both pricing war and M&A) (see exhibit below). However, its competitive position is the weakest as over the next 1-2 years it will continue to lose market share or profits or both, in our view.

MediaTek has abundant cash, which is the biggest advantage it has among the peers (good for both pricing war and M&A)

Exhibit 52. Financial comparison: MediaTek, MStar and Spreadtrum

	MStar	MediaTek	Spreadtrum
Key products	TV: 70-75%	Handset: 70-75%	Handset: 95%
	MNT: 15-20%	TV: 5-10%	
	Handset: <5%	PC ODD: 10-15%	
		DVD: 5-10%	
Gross margin by product	Display: 40-45%	Handset: 45-50%	Handset: 40-45%
	Handset: 25-35%	TV: 40-45%	
		ODD: 50-55%	
		DVD: 45%-50%	
Valuation (1 yr forward)			
PER (x)	15.6x	17.4x	10.8x
PBR (x)	4.0x	3.4x	3.5x
Cash to market cap ratio	16%	20%	5%
Ex-cash PER (x)	13.1x	14.3x	10.4x
Profitability (%) in 4Q10			
Gross margin (%)	41.2	49.2	43.8
Operating margin (%)	17.1	16.9	22.4
Net margin (%)	19.0	16.9	5.4
ROF (%) - annualized	24.0	13.5	15.8
ROA (%) - annualized	18.0	10.9	6.9
	MStar	MediaTek	Spreadtrum
Stability (%) in 4Q10	MStar	MediaTek	Spreadtrum
Stability (%) in 4Q10 Cash (US\$mn)	MStar 640	MediaTek 3,174	Spreadtrum 82
Stability (%) in 4Q10 Cash (US\$mn) Net cash (US\$mn)	MStar 640 610	MediaTek 3,174 3,174	Spreadtrum 82 37
Stability (%) in 4Q10 Cash (US\$mn) Net cash (US\$mn) Cash to sales ratio (%)	MStar 640 610 57.5	MediaTek 3,174 3,174 103.0	Spreadtrum 82 37 16.3
Stability (%) in 4Q10 Cash (US\$mn) Net cash (US\$mn) Cash to sales ratio (%) Gross Debt/Equity (%)	MStar 640 610 57.5 35.8	MediaTek 3,174 3,174 103.0 23.0	Spreadtrum 82 37 16.3 154.5
Stability (%) in 4Q10 Cash (US\$mn) Net cash (US\$mn) Cash to sales ratio (%) Gross Debt/Equity (%) Current Ratio (%)	MStar 640 610 57.5 35.8 374.0	MediaTek 3,174 3,174 103.0 23.0 455.0	Spreadtrum 82 37 16.3 154.5 148.8
Stability (%) in 4Q10 Cash (US\$mn) Net cash (US\$mn) Cash to sales ratio (%) Gross Debt/Equity (%) Current Ratio (%) Activity in 4Q10	MStar 640 610 57.5 35.8 374.0	MediaTek 3,174 3,174 103.0 23.0 455.0	Spreadtrum 82 37 16.3 154.5 148.8
Stability (%) in 4Q10Cash (US\$mn)Net cash (US\$mn)Cash to sales ratio (%)Gross Debt/Equity (%)Current Ratio (%)Activity in 4Q10Asset Turnover (x)	MStar 640 610 57.5 35.8 374.0 1.1	MediaTek 3,174 3,174 103.0 23.0 455.0	Spreadtrum 82 37 16.3 154.5 148.8 0.8
Stability (%) in 4Q10Cash (US\$mn)Net cash (US\$mn)Cash to sales ratio (%)Gross Debt/Equity (%)Current Ratio (%)Activity in 4Q10Asset Turnover (x)Days Receivable (days)	MStar 640 610 57.5 35.8 374.0 1.1 55	MediaTek 3,174 3,174 103.0 23.0 455.0 1.0 24	Spreadtrum 82 37 16.3 154.5 148.8 0.8 12
Stability (%) in 4Q10Cash (US\$mn)Net cash (US\$mn)Cash to sales ratio (%)Gross Debt/Equity (%)Current Ratio (%)Activity in 4Q10Asset Turnover (x)Days Receivable (days)Days Inventory (days)	MStar 640 610 57.5 35.8 374.0 1.1 55 95	MediaTek 3,174 3,174 103.0 23.0 455.0 1.0 24 76	Spreadtrum 82 37 16.3 154.5 148.8 0.8 12 170
Stability (%) in 4Q10Cash (US\$mn)Net cash (US\$mn)Cash to sales ratio (%)Gross Debt/Equity (%)Current Ratio (%)Activity in 4Q10Asset Turnover (x)Days Receivable (days)Days Inventory (days)Days Payable (days)	MStar 640 610 57.5 35.8 374.0 1.1 55 95 54	MediaTek 3,174 3,174 103.0 23.0 455.0 1.0 24 76 70	Spreadtrum 82 37 16.3 154.5 148.8 0.8 12 170 43
Stability (%) in 4Q10 Cash (US\$mn) Net cash (US\$mn) Cash to sales ratio (%) Gross Debt/Equity (%) Current Ratio (%) Activity in 4Q10 Asset Turnover (x) Days Receivable (days) Days Inventory (days) Days Payable (days)	MStar 640 610 57.5 35.8 374.0 1.1 55 95 54	MediaTek 3,174 3,174 103.0 23.0 455.0 1.0 24 76 70	Spreadtrum 82 37 16.3 154.5 148.8 0.8 12 170 43
Stability (%) in 4Q10 Cash (US\$mn) Net cash (US\$mn) Cash to sales ratio (%) Gross Debt/Equity (%) Current Ratio (%) Activity in 4Q10 Asset Turnover (x) Days Receivable (days) Days Inventory (days) Days Payable (days) RD and employees by 4Q10 RD engineers	MStar 640 610 57.5 35.8 374.0 1.1 55 95 54	MediaTek 3,174 3,174 103.0 23.0 455.0 1.0 24 76 70 3,640	Spreadtrum 82 37 16.3 154.5 148.8 0.8 12 170 43
Stability (%) in 4Q10 Cash (US\$mn) Net cash (US\$mn) Cash to sales ratio (%) Gross Debt/Equity (%) Current Ratio (%) Activity in 4Q10 Asset Turnover (x) Days Receivable (days) Days Inventory (days) Days Payable (days) RD and employees by 4Q10 RD engineers Total employees	MStar 640 610 57.5 35.8 374.0 1.1 55 95 54 1,430 2,200	MediaTek 3,174 3,174 103.0 23.0 455.0 1.0 24 76 70 3,640 4.082	Spreadtrum 82 37 16.3 154.5 148.8 0.8 12 170 43 517 682
Stability (%) in 4Q10Cash (US\$mn)Net cash (US\$mn)Cash to sales ratio (%)Gross Debt/Equity (%)Current Ratio (%)Activity in 4Q10Asset Turnover (x)Days Receivable (days)Days Inventory (days)Days Payable (days)RD and employees by 4Q10RD engineersTotal employeesRD to total employees	MStar 640 610 57.5 35.8 374.0 1.1 55 95 54 1,430 2,200 65%	MediaTek 3,174 3,174 103.0 23.0 455.0 1.0 24 76 70 3,640 4,082 89%	Spreadtrum 82 37 16.3 154.5 148.8 0.8 12 170 43 517 682 76%
Stability (%) in 4Q10 Cash (US\$mn) Net cash (US\$mn) Cash to sales ratio (%) Gross Debt/Equity (%) Current Ratio (%) Activity in 4Q10 Asset Turnover (x) Days Receivable (days) Days Inventory (days) Days Payable (days) RD and employees by 4Q10 RD engineers Total employees RD to total employees	MStar 640 610 57.5 35.8 374.0 1.1 55 95 54 1,430 2,200 65%	MediaTek 3,174 3,174 103.0 23.0 455.0 1.0 24 76 70 3,640 4,082 89%	Spreadtrum 82 37 16.3 154.5 148.8 0.8 12 170 43 517 682 76%
Stability (%) in 4Q10 Cash (US\$mn) Net cash (US\$mn) Cash to sales ratio (%) Gross Debt/Equity (%) Current Ratio (%) Activity in 4Q10 Asset Turnover (x) Days Receivable (days) Days Inventory (days) Days Payable (days) RD and employees by 4Q10 RD engineers Total employees RD to total employees Efficiency in 4Q10 Sales per employees (US\$'000)	MStar 640 610 57.5 35.8 374.0 1.1 55 95 54 1,430 2,200 65%	MediaTek 3,174 3,174 103.0 23.0 455.0 1.0 24 76 70 3,640 4,082 89%	Spreadtrum 82 37 16.3 154.5 148.8 0.8 12 170 43 517 682 76%
Stability (%) in 4Q10 Cash (US\$mn) Net cash (US\$mn) Cash to sales ratio (%) Gross Debt/Equity (%) Current Ratio (%) Activity in 4Q10 Asset Turnover (x) Days Receivable (days) Days Inventory (days) Days Payable (days) RD and employees by 4Q10 RD engineers Total employees RD to total employees Efficiency in 4Q10 Sales per employee (US\$'000) Profite per amployee (US\$'000)	MStar 640 610 57.5 35.8 374.0 1.1 55 95 54 1,430 2,200 65% 126 24	MediaTek 3,174 3,174 103.0 23.0 455.0 1.0 24 76 70 3,640 4,082 89% 188 22	Spreadtrum 82 37 16.3 154.5 148.8 0.8 12 170 43 517 682 76% 185 44

Source: Bloomberg, Nomura estimates

2G chip market share forecast — balance yet to be reached

In our opinion, China's 2G chip market will be a game with no winner over the next two years. Our model scenario is that MediaTek will continue to lose share until end-2012 when its share falls to 60% from the current low-70% area despite a possible short period of stabilization (in late 2Q11 to early 3Q11) when its MT6252 hits the market and competitors' solutions are not ready. Spreadtrum's market share gain will likely slow into 2012 given our anticipation that MStar's chips will become stable and be largely adopted by handset makers. Though MStar is likely to gain market share into 2012, its margin is likely to stay low at 20-30%, in our view, as it is a newcomer that not only needs to prove its chip stability but provide better prices to attract customers.

Another scenario is that MediaTek tries to maintain its current share (using aggressive pricing) with margin falling sharply into the next few quarters to the level either Spreadtrum or MStar cannot bear. Either way we conclude that China's 2G chip market will be a market without winners for the foreseeable future.

Exhibit 53. China 2G handset IC s	hipmer	nts by	vendo	r			
	2008	2009	2010	1H10	2H10	2011	2012
Shipments by vendors (mn units)							
MediaTek	230	400	550	270	280	580	577
Spreadtrum	20	30	105	30	75	180	220
MStar	0	0	10	2	8	40	90
Total	250	430	665	302	363	800	887
у-у (%)		72	55			20	11
Market share by vendors (%)							
MediaTek	92	93	83	89	77	73	65
Spreadtrum	8	7	16	10	21	23	25
MStar	0	0	2	1	2	5	10
Total	100	100	100	100	100	100	100
Growth by vendors (y-y %)							
MediaTek		74	38			5	(1)
Spreadtrum		50	250			71	22
MStar						300	125
Breakdown by export/domestic shipment							
Export (mn units)	70	190	365			470	541
Domestic (mn units)	180	240	300			330	347
y-y (%) - Export		171	92			29	15
y-y (%) - Domestic		33	25			10	5
Portion (%) - Export	28	44	55			59	61
Portion (%) - Domestic	72	56	45			41	39

Source: Nomura estimates

HTC Corporation 2498 TT

TECHNOLOGY/HANDSETS | TAIWAN

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O Action

We maintain our BUY rating on HTC, given our view that further upside could come from market share gains driven by the company's leading technology in hardware and software, as well as rising brand awareness. We believe the company is well positioned to benefit from the trend of device convergence, and we like its strategy of strengthening the "Sense experience" for users, which, in our view, could become an important differentiator as the market matures in 2012F.

✗ Catalysts

Rollout of more high-end innovative products in 1H11F, market share upside and further consensus earnings upward revisions.

Anchor themes

Converging devices are a prominent and long-term trend, in our view. We favour companies with proven knowledge in both hardware and software design for advanced mobile devices.

Right trend, right strategy II

① Reiterate BUY; new price target of NT\$1,250

We reiterate our BUY rating on HTC, and raise our price target to NT\$1,250, based on an unchanged multiple of 14x our FY12 EPS forecast (from FY11F). Despite our belief that competition is rising, we regard HTC as the best proxy for the prevailing converging device trend, particularly as HTC is the most aggressive company in the Android camp in terms of differentiation, which is likely to offer price and margin premiums for HTC, even for mid-to-low end products.

2 Android momentum remains strong, benefiting HTC

Android keeps surprising the market on the upside on both market share and the number of Android apps. Nokia's collaboration Microsoft further increases the upside potential of Android, in our view. We raise our Android volume forecasts largely to capture this momentum, and we expect HTC to gain share in tandem with the growth of the Android market.

③ Technology remains superior – HTC a leader in 4G

In terms of hardware technology, while we believe competitors are catching up in AP (Application Processor) technology by using Nvidia's dual-core chip, HTC remains a leader in modems, as evidenced by its comprehensive 4G handset model portfolio shipping to four operators in the US, attributable to its close relationship with Qualcomm.

④ Brand value, software differentiation and investments in content to add value even in mid- to low-end market

One market concern is whether HTC can keep its margin for low-end smartphone models. We believe HTC is aware of this risk and will leverage its "Sense experience" (Sense UI+ Sence.com) to differentiate itself. Its increasing investment in content should also help differentiation, in our view. We also believe brand recognition HTC has accumulated in the high-end market will help it gain volume share in the low-end market.

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BUY

Maintained

Closing price on 29 Mar	NT\$1,080
Price target	NT\$1,250
	(from NT\$1,000)
Upside/downside	15.7%
Difference from consensus	19.0%
FY11F net profit (NT\$mn)	67,687
Difference from consensus	24.7%
Source: Nomura	

Nomura vs consensus

Consensus has caught up with our numbers since our initiation in November 2010. We are now nearly in line with consensus numbers.

Key financials & va	luation	S		
31 Dec (NT\$mn)	FY09	FY10F	FY11F	FY12F
Revenue	144,881	278,506	497,738	584,112
Reported net profit	22,583	39,525	67,687	71,880
Normalised net profit	22,583	39,525	67,687	71,880
Normalised EPS (NT\$)	28.7	49.4	82.8	87.9
Norm. EPS growth (%)	(24.4)	72.4	67.5	6.2
Norm. P/E (x)	37.7	21.8	13.0	12.3
EV/EBITDA(x)	32.1	17.7	10.2	9.3
Price/book (x)	13.0	11.8	7.8	6.8
Dividend yield (%)	2.2	3.7	6.0	6.2
ROE (%)	35.8	56.3	71.8	58.8
Net debt/equity (%)	net cash	net cash	netcash	netcash
Earnings revisions				
Previous norm. net profit		38,336	57,943	62,263
Change from previous (%)		3.1	16.8	15.4
Previous norm. EPS (NT\$)		47.9	70.9	76.1
Source: Company, Nomura estimates				

Share price relative to MSCITW



Android continues to gain share

Android keeps gaining share

According to comScore, about 66mn subscribers owned a smartphone by the end of January 2011, accounting for 28% of total mobile phone users in the US. Within the smartphone platform, Android beat RIM as the leading platform in US, and its share increased very quickly to 31.2% by the end of January 2011 from 9% in February 2010. We think 1) the fast-growing application software numbers, 2) the numerous fancy and leading models launched by HTC, Samsung, Motorola, SonyEricsson and LG, and 3) support from the US operators have resulted in the brilliant success of the Android smartphone.

Over the past year, we saw the Android smartphone consistently beat market expectations and deliver excellent results. According to Gartner, by 4Q10 Symbian's and RIM's share had declined to 33% and 14%, respectively, from 49% and 20% in 1Q09. On the other hand, Android's share grew strongly to 31% in 4Q10 from 2% in 1Q09.





Source: comScore

Exhibit 55. Smartphone market share by OS worldwide



Source: Gartner

We expect Android to keep gaining share, given that: 1) the number of Android applications keeps increasing and is far ahead that of RIM, Windows and Symbian; 2) support from telecom carriers remains; and 3) Android is featured in a complete range of smartphone models, from high end to low end.

Android keeps gaining market share thanks to support from software developers and handset makers

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Android apps increasing rapidly

The amount of application software available is an attractive value-added service of smartphones, as users are allowed to expand their smartphones' features and functions through an applications market. The amount of software available in the Android Market has grown quickly and reached over 250,000 units in March 2011, according to Google, second only to Apple's over 350,000 units, but well ahead of RIM Blackberry's 20,000 and Windows Phone 7's 9,000 units. In October FY10, Apple's store was 185,000 apps ahead at a time when the Android market had only 100,000 apps in total. Over the past six months, however, the Android Market added about 150,000 apps to its virtual shelves, while the Apple App Store managed 65,000 new items. On the other hand, both Blackberry and Windows Phone 7 still have a long way to go.

We believe Google's open attitude and the growing Android smartphone lineup will sustain the strong growth in numbers of Android app software over the next two years, which should result in the increasing attractiveness of Android smartphones.

Android App Market has grown quickly and reached over 250,000 units in March 2011, followed after Apple's 350,000 units





Source: Company data

Android smartphone remains leader on carriers' shelves

For US carriers, Android smartphone models on total carriers' shelves account for about 50% of total smartphone models in March 2011. For all of the top 4 wireless carriers, the Android operating system accounts for the lion's share. Besides, US telecom operators have all been aggressive in promoting their 4G service this year, and all currently available 4G smartphones are Android smartphones. Android operating system accounts for 50% of total smartphone models at top 4 US carriers

Exhibit 57	Exhibit 57. US carriers' smartphone models by OS in March FY11											
Carriers	Android	RIMM	WMP	Apple	Symbian	Others	Total					
AT&T	9	5	4	3	1	1	23					
Verizon	9	3	2	1	0	1	16					
T-Mobile	10	2	2	0	2	0	16					
Sprint	8	6	2	0	0	2	18					
Total	36	16	10	4	3	4	73					

Source: Company data

Complete model portfolios in the Android space

Thanks to the open attitude of Google regarding its Android software, the operating system has been adopted by numerous handset makers, including leaders such as Samsung, HTC, Motorola, Sony Ericsson and LG, low-end providers such as ZTE and Huawei, and newcomers such as ACER, ASUS and some China brand names. As such, a complete smartphone model pool has been provided by the numerous handset OEMs.

Retail and contract prices for mid- to low-end smartphones are now close to or even lower than those for high-end feature phones, and as a result, we expect mid- to low-end smartphones to sustain Android smartphones' share gain in FY11 and FY12. In addition, Nokia and Microsoft announced on February 11 a partnership whereby Nokia will adopt the Windows Phone as its primary smartphone platform. Nokia will gradually wind down its current mainstream Symbian platform, transitioning to Windows, while Meego will become a project platform. (For more details please see *Nokia-Microsoft collaboration: implications to Asia handset supply chain*, 14 February 2011). The share loss for Symbian will benefit Android, in our view, as Android has a more complete model portfolio from high-end to super-low cost compared to other OS smartphones. We expect HTC and Samsung, the main Android leaders, to benefit from the ongoing Android growth trend.

Volume to speed up with the pickup of 4G

HTC will benefit from US carriers' aggressiveness in 4G

HTC launched the first worldwide 4G smartphone – Evo 4G, for Sprint in 2Q10, and the LTE smartphone Thunderbolt for Verizon in 1Q11. The US carriers were aggressive in promoting 4G in FY10, and six carriers rolled out networks based on WiMax, HSPA+, and LTE.

Sprint was the first 4G carrier to the market with a WiMax network, and its WiMax covers about 110mn points of presence (PoPs) in the US. Sprint's lead in WiMax and promotion of 4G has resulted in the good sell-through of HTC's Evo 4G. Currently, Sprint provides two HTC 4G smartphone models and one Samsung 4G model to its subscribers.

AT&T joined the 4G market competition in early FY11 with HSPA+. There are two 4G models available in AT&T including HTC Inspire 4G and Motorola ATRIX 4G. Verizon launched their first LTE smartphone in March 2011 – HTC ThunderBolt, the only 4G model in Verizon. T-mobile also adopt HSPA+ network and there are two 4G smartphone models available in their shelf: Samsung Galaxy S 4G and T-Mobile myTouch 4G (which is made by HTC).

As 4G network infrastructure extends further in the US, we expect 4G smartphone demand will increase. As such, we expect HTC to benefit from the growing 4G trend based on its lead in 4G smartphones as well as its position as the only brand available from all of the top four US carriers.

Carriers	4G smartphone models	4G status
AT&T	HTC Inspire 4G Motorola ATRIX 4G	Current 4G network: HSPA+; LTE will be rolled out to 70- 75mn points of presence (PoPs) in 2H11.
Verizon	HTC ThunderBolt	Current LTE covers over 110mn PoPs and plans to have two-thirds of its network upgarded to LTE by mid-FY12.
T-Mobile	Samsung Galaxy S 4G, T-Mobile myTouch 4G (made by HTC)	Plans to cover 140mn PoPs by mid-FY11 with HSPA+ 42
Sprint	HTC EVO Shift 4G, HTC EVO 4G, Samsung Epic 4G	Covers 110 mn PoPs with WiMax now.

Exhibit 58. US top 4 carriers' 4G status and available 4G smartphone models

Source: Company data

Nomura

HTC will benefit from US carriers' aggressiveness in 4G, in our view

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Expansion into mid-to-low-end smartphones

Ready to embrace mid- to low-end smartphone growth

Over the past three years as smartphones grew strongly, HTC was at the forefront. The company launched the first Android smartphone (Nexus One) in 2008, the first smartphone with a 1GHz processor (HD2) in 3Q09 and the first 4G smartphone (Evo 4G) in 2Q10. These "firsts" demonstrated HTC's leading position in both hardware and software.

At the 2011 Mobile World Congress (MWC), HTC announced five new smartphone models, including *HTC Incredible S, Desire S, Wildfire S, Salsa* and *Chacha*, which we regard as mid- to high-end and mid- to low-end smartphones rather than high-end smartphones in terms of hardware specs. However, we think HTC's is focusing more on friendly user interface (HTC Sense), value-added content and service in its smartphones in order to differentiate its products from those of its competitors.

In 4Q10, smartphones' share of sales rose to 52% and 43% in Western Europe and North America, respectively, according to Gartner. We believe this trend will continue into FY11 and FY12, and that the main upside in the smartphone market will be driven by mid- to low-end smartphones. We think HTC is well positioned with its complete product portfolio, friendly interface and value-added services. As such, HTC is ready for the booming mid- to low-end smartphone market, in our view.

Exhibit 59. Smartphone share of total handset shipments



Source: Gartner, Nomura estimates

When mid-to-low-end smartphones pick up in FY11, we expect HTC to benefit on its hardware and software Exhibit 60. Comparison of smartphone models announced in 1Q11



Source: Company data

NOMURA

HTC models and tablets

Hot models in the pipeline

We provide an update on some of HTC's key models to be launched during the next 1-2 quarters. At MWC, HTC announced three low-end phones (*Wildfire S, Chacha and Salsa*) and two mid-market models (*Desire S and Incredible S*), which demonstrated HTC's expanding coverage into these segments. Of these five models, we believe *Incredible S, Desire S, Wildfire S and Chacha* (in the sequence of launch time) will sell well based on the high cost-performance index of these products. We estimate each model above may account for more than 10% of HTC's shipments in 2Q11.

Over the next 1-2 quarters, we expect HTC to launch more high-end models, including *Pyramid* (the first Qualcomm dual-core AP phone), *Shooter* (dual core + 3D) and *Holiday* (dual core + LTE) – with retail prices of US\$600 or higher. If they sell well, we believe HTC will continue to see sustainable ASP at the high end into 2Q11-3Q11.

On the flip side, we have been cautious on HTC's tablet, and remain so for 2011 on tablet volume, as the Android tablet ecosystem is not yet mature and the tablet business model has been made more difficult by Apple's aggressive pricing for iPad/iPad2. After *Flyer*, which was launched at MWC, we expect HTC to launch *Express*, another 7" tablet, likely running on WiMax, in 2Q11, and *Verdi*, the HTC's first 10" tablet, in early 3Q11. However, we expect tablet volume to reach 1mn units for 2011, or only 2% of HTC's total shipments. However, we do appreciate HTC's efforts in differentiation.

HTC will launch some high-end models, including Pyramid, Shooter and Holiday

	4Q10		1Q11			2Q11		30	ຊ11
Key models (big volume) in 1H11	Dec	Jan	Feb	Mar	April	Мау	June	July	Aug
High end (Retail price +US\$600 level)							Shooter (dual cor	e+3D)	
	ACE (Desire HD)		Mecha (1st LTE	phone)	Flyer (1st tablet)	Pyramid (1st dual core)	Verdi (2nd tablet)	Holiday (dual core⊣ LTE)
	Bravo (Desire)		VIVO (worldpho	one)					
	Supersonic (EVO	4G)							
Mid end (Retail price US\$400-600 level)						·			
		Knight (Speedy)		SAGA (Des	ire S)				
Low end (Retail price US\$200-400 level)								<u>.</u>	
	Buz (wildfire)					Marvel (Wildfire S)	Chacha		

Source: Nomura estimates

Tablet: user experience and content count

While the hardware specs for HTC's *Flyer* tablet are not as advanced as some others, we note the company's efforts on differentiation – including its focus on content addition, customized functions and its Sense UI rather than only hardware.

Regarding the platform, it takes longer for those adopting Honeycomb to customize the UI, which could delay launch (that's why HTC did not choose Honeycomb). Flyer can be upgraded to Honeycomb, once available, which means Flyer users can enjoy HTC Sense UI on Honeycomb in 2Q/3Q11, while other Honeycomb tablets are more "me too" in UI.

HTC provides "HTC Watch" and "HTC Onlive" to its Flyer users, while others may rely on the Android market and Google's mail/social networking services, which Flyer owns as well. "HTC Watch" is an online movie service platform allowing users to download hundreds of HD movies, while "HTC Onlive" is an online game system providing several popular games. We believe HTC is positioning HTC Flyer as a multimedia mobile device with Internet communication, and is focusing its efforts on content extension rather than hardware competition.

In short, in both the smartphone and tablet markets, we find HTC continuously enlarge its content offerings and adding value to its products (differentiation). As Android Gingerbread and Honeycomb have improved the operating system's UI and embedded functions, it is becoming very difficult for consumers to find the differences among numerous Android smartphones. We believe HTC's efforts on content expansion (such as HTC Watch and HTC Onlive), improving UI (HTC Sense) and cloud service (Sense.Com) will differentiate it from its competitors and bring added value to its customers.

Exhibit 62. HTC Watch provides online movie service



Source: Company data





Source: Company data

HTC model assumption

Rising shipments, but falling ASP and margins

We expect HTC to reach 51mn and 72mn units of smartphone shipments in FY11 and FY12, respectively, given 1) the growing Android smartphone trend; 2) benefit from the pickup in mid-to-low-end smartphones and 3) its continuous efforts on differentiation in friendly UI, cloud services and growing content.

From a top-down point of view, we expect smartphones to grow by 44% and 27% y-y in FY11F and FY12F to 452mn and 591mn units, respectively, owing to the growth of mid- to-low-end smartphones. Android will sustain its growth trend at the expense of Symbian, in our view. Nomura forecasts Android's share to be up to 37% and 44% in FY11F and FY12F, respectively. We expect HTC to benefit from Android's boom trend even though HTC's share in Android smartphone market may fall to 24% and 21% in FY11-12 from 27% in FY10, as more players enter this space. We also expect HTC's Android smartphone ASP to fall by 3% and 15% y-y in FY11F and FY12F, respectively, as the portion of mid- to low-end smartphones will pick up in mid-FY12, which will increase HTC's top line as well as earnings but would lower its ASP and margins, in our view. We believe HTC will continue to deliver record-high earnings over the next two years as declining ASP and gross margin will be offset by booming shipments, and there should be operating leverage benefit in its operating profits.

Exhibit 64. HTC: market share, shipment and ASP trends

	2007	2008	2009	2010	2011F	2012F
Worldwide handset shipments (mn units)	1,153	1,222	1,211	1,597	1,819	2,004
Growth (% y-y)	16	6	(1)	32	14	10
Worldwide smartphone shipments (mn units)	110	139	172	297	452	591
Growth (% y-y)	37	26	24	69	44	27
Smartphone share of total phones (%)	10	11	14	19	25	29
OS share of smartphone market (%)						
Symbian	70	52	47	37	24	15
RIM	11	17	20	16	15	13
Android	0	0	4	23	37	44
iPhone OS	3	8	15	16	16	15
Windows Mobile / Phone 7	13	12	9	4	4	9
Others	2	11	6	4	4	4
Smartphone shipments by OS (mn units)						
Symbian	78	73	81	110	109	88
RIM	12	23	34	47	66	77
Android	0	0	7	67	169	262
iPhone OS	3	11	25	47	75	92
Windows Mobile / Phone 7	15	16	15	12	18	51
Others	3	15	10	13	16	21
Market share by OS (%)						
Android			72	27	24	21
Windows Mobile / Phone 7	55	63	44	48	38	17
Shipments by product segment (mn units)						
Android		0.8	4.9	17.9	40.2	54.0
Windows Mobile / Phone 7	8.1	10.4	6.5	6.0	7.0	8.9
Brew				0.8	0.5	0.5
Tablet					1.0	3.1
ASP by product segment (US\$)						
Android		298	311	347	335	284
Windows Mobile / Phone 7	339	400	388	362	377	320
Brew				168	146	131
Tablet					395	371
FX assumption (NT\$/US\$)	32.8	31.5	33.1	31.7	29.5	29.5
Revenue by product segment (NT\$mn)						
Android	0	7,802	50,305	196,718	396,757	452,593
Windows Mobile / Phone 7	90,664	130,678	83,977	68,316	77,527	84,342
Brew	0	0	0	4,266	2,047	1,841
Tablet	0	0	0	0	11,647	33,884
Others	27,916	14,078	10,598	9,206	9,760	11,453
Total	118,580	152,559	144,881	278,506	497,738	584,112

Source: Company data, Gartner, Nomura estimates

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Earnings revisions

We raise our FY11F and FY12F EPS forecasts by 17% and 15%, respecitvely, to factor in strong Android smartphone demand. We have revised up our forecast for HTC's FY11-12F unit shipments to 51mn and 72mn, from 44mn and 61mn, respectively, as smartphone demand, particularly for Android, has been beating market expectations over the past year, and we expect Android will keep growing on the rise of mid-to-low end smartphones.

We raise our FY11-12F EPS forecasts by 17% and 15%, respectively, to factor in strong Android smartphone demand

Exhibit 65. HTC: earnings revisions

		FY10			FY11F			FY12F	
(NT\$mn)	Previous	Revised	Change (%)	Previous	Revised	Change (%)	Previous	Revised	Change (%)
Sales	272,697	278,506	2.1	445,779	497,738	11.7	523,162	584,112	11.7
Gross profit	80,064	83,406	4.2	130,560	144,158	10.4	148,657	161,548	8.7
Operating income	41,900	43,716	4.3	63,693	74,470	16.9	70,183	81,059	15.5
Net profit	38,336	39,525	3.1	57,943	67,687	16.8	62,263	71,880	15.4
EPS (NT\$)	47.95	49.43	3.1	70.86	82.78	16.8	76.15	87.91	15.4
Gross margin (%)	29.4	29.9	0.6 p.p	29.3	29.0	-0.3 p.p	28.4	27.7	-0.8 p.p
Operating margin (%)	15.4	15.7	0.3 p.p	14.3	15.0	0.7 p.p	13.4	13.9	0.5 p.p
Net margin (%)	14.1	14.2	0.1 p.p	13.0	13.6	0.6 p.p	11.9	12.3	0.4 p.p

Source: Nomura estimates

Valuation

Our target price of NT\$1,250 is based on 14x our 2012 EPS forecast. Our unchanged target 14x PE multiple is at the high-end of historical P/E range, which, we believe should be reachable on its continuous record-high earnings and strong earnings growth in FY11-12.

Our target P/E of 14x is at the high end of the historical P/E range, reflecting strong earnings growth prospects for FY11-12F

Risks

In our view, HTC will see upside surprises in shipments, market-share gains and earnings in FY11F, but key risks include: 1) technology evolution slowdown; 2) weak acceptance in the mid- to low-end smartphone market, and; 3) too-high expectations for smartphones.



Exhibit 67. HTC: P/BV bands



Source: Bloomberg, Nomura research

Source: Bloomberg, Nomura research

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Exhibit 68. HTC:	quarterl	y incom	ne stater	nent								
(NT\$mn)	1Q09	2Q09	3Q09	4Q09	1Q10	2Q10	3Q10	4Q10E	1Q11F	2Q11F	3Q11F	4Q11F
Net sales	31,590	38,202	34,007	41,082	37,697	60,960	75,849	104,000	98,463	118,202	130,901	150,172
COGS	22,090	25,966	23,017	27,946	26,291	42,835	52,919	73,056	69,519	83,602	93,218	107,241
Gross profit	9,501	12,236	10,990	13,136	11,406	18,125	22,930	30,944	28,944	34,600	37,683	42,931
SG&A	2,557	2,891	2,511	5,154	3,851	5,584	7,462	9,880	9,846	11,229	12,305	15,017
R&D expenses	2,080	2,393	2,230	1,898	2,044	3,188	3,069	4,612	4,332	4,964	5,236	6,758
Op income	4,864	6,952	6,249	6,084	5,511	9,354	12,400	16,451	14,765	18,406	20,142	21,156
Net non-op income	547	220	129	142	209	393	273	339	283	326	591	384
Pre-tax income	5,410	7,172	6,378	6,226	5,721	9,746	12,673	16,790	15,048	18,732	20,733	21,540
Tax expenses	517	609	751	726	722	1,121	1,572	1,990	1,655	2,060	2,281	2,369
Minority interest												
Net income	4,893	6,563	5,627	5,500	4,998	8,625	11,101	14,800	13,393	16,671	18,453	19,170
EPS (NT\$)	6.54	8.30	7.24	7.03	6.25	10.79	13.88	18.51	16.38	20.39	22.57	23.45
Profitability (%)												
Gross margin	30.1	32.0	32.3	32.0	30.3	29.7	30.2	29.8	29.4	29.3	28.8	28.6
Op margin	15.4	18.2	18.4	14.8	14.6	15.3	16.3	15.8	15.0	15.6	15.4	14.1
Pre-tax margin	17.1	18.8	18.8	15.2	15.2	16.0	16.7	16.1	15.3	15.8	15.8	14.3
Net margin	15.5	17.2	16.5	13.4	13.3	14.1	14.6	14.2	13.6	14.1	14.1	12.8
q-q (%)												
Sales	(33)	21	(11)	21	(8)	62	24	37	(5)	20	11	15
Gross profit	(33)	29	(10)	20	(13)	59	27	35	(6)	20	9	14
Op income	(44)	43	(10)	(3)	(9)	70	33	33	(10)	25	9	5
Net income	(39)	34	(14)	(2)	(9)	73	29	33	(10)	24	11	4
у-у (%)												
Sales	(3)	10	(10)	(13)	19	60	123	153	161	94	73	44
Gross profit	(18)	2	(15)	(7)	20	48	109	136	154	91	64	39
Op profit	(34)	1	(14)	(30)	13	35	98	170	168	97	62	29
Net profit	(29)	(1)	(20)	(32)	2	31	97	169	168	93	66	30

Source: Company data, Nomura estimates

Appendix – handset and tablet models announced in MWC

Exhibit 69. Smartphone models announced in MWC

Data I	UTO	UTO	1170	1170	1170
Brand	HIC	HIC	HIC	HIC	HIC
Model	Incredible S	Desire S	Wildfire S	Salsa	Chacha
OS	Andorid Froyo	Andorid Gingerbread	Andorid Gingerbread	Andorid Gingerbread	Andorid Gingerbread
Processor	Qualcomm MSM8255 1GHz	Qualcomm MSM8255 1GHz	Qualcomm 600MHz	Qualcomm 600MHz	Qualcomm 600MHz
Network	HSPA/WCDMA	HSPA/WCDMA	HSPA/WCDMA	HSPA/WCDMA	HSPA/WCDMA
Size					
Dimentions	120*64*11.7 mm	115*59.8*11.6 mm	101.3*59.4*12.4 mm	109.1*58.9*12.3 mm	114.4*64.6*10.7 mm
Weight	135.5g	130g	105g	120g	120g
Display	4" 480*800	3.7" 480*800	3.2" 320*480	3.4" 320*480	2.6" 480*320
touch	Capacitive	Capacitive	Capacitive	Capacitive	Capacitive
Memory					
NAND	NO	NO	NO	NO	NO
ROM	1.1GB	1.1GB	512MB	512MB	512MB
RAM	768MB	768MB	512MB	512MB	512MB
Camera	8MP	5MP	5MP	5MP	5MP
Camera-Front	1.3MP	VGA	NO	VGA	VGA
Battery	1450mAh	1450mAh	1230m∆h	1520mAh	1520mAh
Stand-by	290H(2G)/370H(3G)	430H(2G)/455H(3G)	360H(2G)/570H(3G)	145H(2G)/530H(3G)	145H(2G)/530H(3G)
Talk	580m(2G)/380m(3G)	500m(2G)/435m(3G)	430m(2G)/350m(3G)	540m(2G)/474m(3G)	540m(2G)/474m(3G)
Othors	500m(20)/500m(50)	530m(20)/435m(30)	43011(20)/33011(30)	540m(20)/474m(50)	040III(20)/474III(00)
	22	20	20	20	22
3D	na	na	na	na	na
NEC					
VVIFI	802.11b/g/n	802.11b/g/n	802.11b/g/n	802.11b/g/n	802.11b/g/n
BI	BT 2.1	BT 2.1	BT 3.0	BT 3.0	B1 3.0
Brand	Samsung	LG	LG	Motorola	Motorola
Brand Model	Samsung Galaxy S II	LG Optimus 3D P920	LG Optimus Black	Motorola ATRIX	Motorola Pro
Brand Model OS	Samsung Galaxy S II Andorid Gingerbread	LG Optimus 3D P920 Andorid Froyo	LG Optimus Black Andorid Froyo	Motorola ATRIX Andorid Froyo	Motorola Pro Andorid Froyo
Brand Model OS Processor	Samsung Galaxy S II Andorid Gingerbread Dual-core 1GHz	LG Optimus 3D P920 Andorid Froyo Dual-core 1GHz	LG Optimus Black Andorid Froyo TI OMAP 3630 1GHz	Motorola ATRIX Andorid Froyo Tegra 2, dual core 1GHz	Motorola Pro Andorid Froyo TI OMAP 3630 1GHz
Brand Model OS Processor Network	Samsung Galaxy S II Andorid Gingerbread Dual-core 1GHz HSPA/WCDMA	LG Optimus 3D P920 Andorid Froyo Dual-core 1GHz HSPA/WCDMA	LG Optimus Black Andorid Froyo TI OMAP 3630 1GHz HSPA/WCDMA	Motorola ATRIX Andorid Froyo Tegra 2, dual core 1GHz HSPA/WCDMA	Motorola Pro Andorid Froyo TI OMAP 3630 1GHz HSPA/WCDMA
Brand Model OS Processor Network Size	Samsung Galaxy S II Andorid Gingerbread Dual-core 1GHz HSPA/WCDMA	LG Optimus 3D P920 Andorid Froyo Dual-core 1GHz HSPA/WCDMA	LG Optimus Black Andorid Froyo TI OMAP 3630 1GHz HSPA/WCDMA	Motorola ATRIX Andorid Froyo Tegra 2, dual core 1GHz HSPA/WCDMA	Motorola Pro Andorid Froyo TI OMAP 3630 1GHz HSPA/WCDMA
Brand Model OS Processor Network Size Dimentions	Samsung Galaxy S II Andorid Gingerbread Dual-core 1GHz HSPA/WCDMA 125.3*66.1*8.5 mm	LG Optimus 3D P920 Andorid Froyo Dual-core 1GHz HSPA/WCDMA 128.8*68*11.9 mm	LG Optimus Black Andorid Froyo TI OMAP 3630 1GHz HSPA/WCDMA 122*64*9.2 mm	Motorola ATRIX Andorid Froyo Tegra 2, dual core 1GHz HSPA/WCDMA 117.8*63.5*10.1 mm	Motorola Pro Andorid Froyo TI OMAP 3630 1GHz HSPA/WCDMA 119*61*11.7 mm
Brand Model OS Processor Network Size Dimentions Weight	Samsung Galaxy S II Andorid Gingerbread Dual-core 1GHz HSPA/WCDMA 125.3*66.1*8.5 mm 116g	LG Optimus 3D P920 Andorid Froyo Dual-core 1GHz HSPA/WCDMA 128.8*68*11.9 mm 168g	LG Optimus Black Andorid Froyo TI OMAP 3630 1GHz HSPA/WCDMA 122*64*9.2 mm 109g	Motorola ATRIX Andorid Froyo Tegra 2, dual core 1GHz HSPA/WCDMA 117.8*63.5*10.1 mm 135g	Motorola Pro Andorid Froyo TI OMAP 3630 1GHz HSPA/WCDMA 119*61*11.7 mm 134g
Brand Model OS Processor Network Size Dimentions Weight Display	Samsung Galaxy S II Andorid Gingerbread Dual-core 1GHz HSPA/WCDMA 125.3*66.1*8.5 mm 116g 4.3* 480*800	LG Optimus 3D P920 Andorid Froyo Dual-core 1GHz HSPA/WCDMA 128.8*68*11.9 mm 168g 4.3" 480*800	LG Optimus Black Andorid Froyo TI OMAP 3630 1GHz HSPA/WCDMA 122*64*9.2 mm 109g 4* 480*800	Motorola ATRIX Andorid Froyo Tegra 2, dual core 1GHz HSPA/WCDMA 117.8*63.5*10.1 mm 135g 4" 540*960	Motorola Pro Andorid Froyo TI OMAP 3630 1GHz HSPA/WCDMA 119*61*11.7 mm 134g 3.1" 320*480
Brand Model OS Processor Network Size Dimentions Weight Display touch	Samsung Galaxy S II Andorid Gingerbread Dual-core 1GHz HSPA/WCDMA 125.3*66.1*8.5 mm 116g 4.3" 480*800 Capacitive	LG Optimus 3D P920 Andorid Froyo Dual-core 1GHz HSPA/WCDMA 128.8*68*11.9 mm 168g 4.3" 480*800 Capacitive	LG Optimus Black Andorid Froyo TI OMAP 3630 1GHz HSPA/WCDMA 122*64*9.2 mm 109g 4" 480*800 na	Motorola ATRIX Andorid Froyo Tegra 2, dual core 1GHz HSPA/WCDMA 117.8*63.5*10.1 mm 135g 4" 540*960 Capacitive	Motorola Pro Andorid Froyo TI OMAP 3630 1GHz HSPA/WCDMA 119*61*11.7 mm 134g 3.1" 320*480 Capacitive
Brand Model OS Processor Network Size Dimentions Weight Display touch Memory	Samsung Galaxy S II Andorid Gingerbread Dual-core 1GHz HSPA/WCDMA 125.3*66.1*8.5 mm 116g 4.3" 480*800 Capacitive	LG Optimus 3D P920 Andorid Froyo Dual-core 1GHz HSPA/WCDMA 128.8*68*11.9 mm 168g 4.3" 480*800 Capacitive	LG Optimus Black Andorid Froyo TI OMAP 3630 1GHz HSPA/WCDMA 122*64*9.2 mm 109g 4" 480*800 na	Motorola ATRIX Andorid Froyo Tegra 2, dual core 1GHz HSPA/WCDMA 117.8*63.5*10.1 mm 135g 4" 540*960 Capacitive	Motorola Pro Andorid Froyo TI OMAP 3630 1GHz HSPA/WCDMA 119*61*11.7 mm 134g 3.1" 320*480 Capacitive
Brand Model OS Processor Network Size Dimentions Weight Display touch Memory NAND	Samsung Galaxy S II Andorid Gingerbread Dual-core 1GHz HSPA/WCDMA 125.3*66.1*8.5 mm 116g 4.3" 480*800 Capacitive 16GB/32GB	LG Optimus 3D P920 Andorid Froyo Dual-core 1GHz HSPA/WCDMA 128.8*68*11.9 mm 168g 4.3" 480*800 Capacitive 8GB	LG Optimus Black Andorid Froyo TI OMAP 3630 1GHz HSPA/WCDMA 122*64*9.2 mm 109g 4" 480*800 na 2GB	Motorola ATRIX Andorid Froyo Tegra 2, dual core 1GHz HSPA/WCDMA 117.8*63.5*10.1 mm 135g 4" 540*960 Capacitive 16GB	Motorola Pro Andorid Froyo TI OMAP 3630 1GHz HSPA/WCDMA 119*61*11.7 mm 134g 3.1" 320*480 Capacitive
Brand Model OS Processor Network Size Dimentions Weight Display touch Memory NAND ROM	Samsung Galaxy S II Andorid Gingerbread Dual-core 1GHz HSPA/WCDMA 125.3*66.1*8.5 mm 116g 4.3" 480*800 Capacitive 16GB/32GB na	LG Optimus 3D P920 Andorid Froyo Dual-core 1GHz HSPA/WCDMA 128.8*68*11.9 mm 168g 4.3" 480*800 Capacitive 8GB na	LG Optimus Black Andorid Froyo TI OMAP 3630 1GHz HSPA/WCDMA 122*64*9.2 mm 109g 4" 480*800 na 2GB na	Motorola ATRIX Andorid Froyo Tegra 2, dual core 1GHz HSPA/WCDMA 117.8*63.5*10.1 mm 135g 4" 540*960 Capacitive 16GB na	Motorola Pro Andorid Froyo TI OMAP 3630 1GHz HSPA/WCDMA 119*61*11.7 mm 134g 3.1" 320*480 Capacitive na 2GB
Brand Model OS Processor Network Size Dimentions Weight Display touch Memory NAND ROM RAM	Samsung Galaxy S II Andorid Gingerbread Dual-core 1GHz HSPA/WCDMA 125.3*66.1*8.5 mm 116g 4.3" 480*800 Capacitive 16GB/32GB na 1GB	LG Optimus 3D P920 Andorid Froyo Dual-core 1GHz HSPA/WCDMA 128.8*68*11.9 mm 168g 4.3" 480*800 Capacitive 8GB na 512MB	LG Optimus Black Andorid Froyo TI OMAP 3630 1GHz HSPA/WCDMA 122*64*9.2 mm 109g 4" 480*800 na 2GB na 512MB	Motorola ATRIX Andorid Froyo Tegra 2, dual core 1GHz HSPA/WCDMA 117.8*63.5*10.1 mm 135g 4" 540*960 Capacitive 16GB na 1GB	Motorola Pro Andorid Froyo TI OMAP 3630 1GHz HSPA/WCDMA 119*61*11.7 mm 134g 3.1" 320*480 Capacitive na 2GB 1GB
Brand Model OS Processor Network Size Dimentions Weight Display touch Memory NAND ROM RAM Camera	Samsung Galaxy S II Andorid Gingerbread Dual-core 1GHz HSPA/WCDMA 125.3*66.1*8.5 mm 116g 4.3" 480*800 Capacitive 16GB/32GB na 1GB 8MP	LG Optimus 3D P920 Andorid Froyo Dual-core 1GHz HSPA/WCDMA 128.8*68*11.9 mm 168g 4.3" 480*800 Capacitive 8GB na 512MB 5MP	LG Optimus Black Andorid Froyo TI OMAP 3630 1GHz HSPA/WCDMA 122*64*9.2 mm 109g 4" 480*800 na 2GB na 512MB 5MP	Motorola ATRIX Andorid Froyo Tegra 2, dual core 1GHz HSPA/WCDMA 117.8*63.5*10.1 mm 135g 4" 540*960 Capacitive 16GB na 1GB 5MP	Motorola Pro Andorid Froyo TI OMAP 3630 1GHz HSPA/WCDMA 119*61*11.7 mm 134g 3.1" 320*480 Capacitive na 2GB 1GB 5MP
Brand Model OS Processor Network Size Dimentions Weight Display touch Memory NAND ROM RAM Camera Camera-Front	Samsung Galaxy S II Andorid Gingerbread Dual-core 1GHz HSPA/WCDMA 125.3*66.1*8.5 mm 116g 4.3* 480*800 Capacitive 16GB/32GB na 1GB 8MP 2MP	LG Optimus 3D P920 Andorid Froyo Dual-core 1GHz HSPA/WCDMA 128.8*68*11.9 mm 168g 4.3* 480*800 Capacitive 8GB na 512MB 5MP 2MP	LG Optimus Black Andorid Froyo TI OMAP 3630 1GHz HSPA/WCDMA 122*64*9.2 mm 109g 4" 480*800 na 2GB na 512MB 5MP 2MP	Motorola ATRIX Andorid Froyo Tegra 2, dual core 1GHz HSPA/WCDMA 117.8*63.5*10.1 mm 135g 4" 540*960 Capacitive 16GB na 1GB 5MP VGA	Motorola Pro Andorid Froyo TI OMAP 3630 1GHz HSPA/WCDMA 119*61*11.7 mm 134g 3.1" 320*480 Capacitive na 2GB 1GB 5MP VGA
Brand Model OS Processor Network Size Dimentions Weight Display touch Memory NAND ROM RAM Camera Camera-Front Battery	Samsung Galaxy S II Andorid Gingerbread Dual-core 1GHz HSPA/WCDMA 125.3*66.1*8.5 mm 116g 4.3" 480*800 Capacitive 16GB/32GB na 1GB 8MP 2MP 1650mAh	LG Optimus 3D P920 Andorid Froyo Dual-core 1GHz HSPA/WCDMA 128.8*68*11.9 mm 168g 4.3" 480*800 Capacitive 8GB na 512MB 5MP 2MP 1500mAh	LG Optimus Black Andorid Froyo TI OMAP 3630 1GHz HSPA/WCDMA 122*64*9.2 mm 109g 4" 480*800 na 2GB na 512MB 512MB 5MP 2MP	Motorola ATRIX Andorid Froyo Tegra 2, dual core 1GHz HSPA/WCDMA 117.8*63.5*10.1 mm 135g 4" 540*960 Capacitive 16GB na 1GB 5MP VGA 1930mAh	Motorola Pro Andorid Froyo TI OMAP 3630 1GHz HSPA/WCDMA 119*61*11.7 mm 134g 3.1" 320*480 Capacitive na 2GB 1GB 5MP VGA 1420mAh
Brand Model OS Processor Network Size Dimentions Weight Display touch Memory NAND ROM RAM Camera Camera-Front Battery Stand-by	Samsung Galaxy S II Andorid Gingerbread Dual-core 1GHz HSPA/WCDMA 125.3*66.1*8.5 mm 116g 4.3" 480*800 Capacitive 16GB/32GB na 1GB 8MP 2MP 1650mAh pa	LG Optimus 3D P920 Andorid Froyo Dual-core 1GHz HSPA/WCDMA 128.8*68*11.9 mm 168g 4.3" 480*800 Capacitive 8GB na 512MB 5MP 2MP 1500mAh pa	LG Optimus Black Andorid Froyo TI OMAP 3630 1GHz HSPA/WCDMA 122*64*9.2 mm 109g 4" 480*800 na 2GB na 512MB 512MB 5MP 2MP 1500mAh pa	Motorola ATRIX Andorid Froyo Tegra 2, dual core 1GHz HSPA/WCDMA 117.8*63.5*10.1 mm 135g 4" 540*960 Capacitive 16GB na 1GB 5MP VGA 1930mAh 264H(2G)(250H(3G)	Motorola Pro Andorid Froyo TI OMAP 3630 1GHz HSPA/WCDMA 119*61*11.7 mm 134g 3.1" 320*480 Capacitive na 2GB 1GB 5MP VGA 1420mAh 330H
Brand Model OS Processor Network Size Dimentions Weight Display touch Memory NAND ROM RAM Camera Camera-Front Battery Stand-by Talk	Samsung Galaxy S II Andorid Gingerbread Dual-core 1GHz HSPA/WCDMA 125.3*66.1*8.5 mm 116g 4.3" 480*800 Capacitive 16GB/32GB na 1GB 8MP 2MP 1650mAh na pa	LG Optimus 3D P920 Andorid Froyo Dual-core 1GHz HSPA/WCDMA 128.8*68*11.9 mm 168g 4.3" 480*800 Capacitive 8GB na 512MB 5MP 2MP 1500mAh na pa	LG Optimus Black Andorid Froyo TI OMAP 3630 1GHz HSPA/WCDMA 122*64*9.2 mm 109g 4" 480*800 na 2GB na 512MB 512MB 5MP 2MP 1500mAh na na	Motorola ATRIX Andorid Froyo Tegra 2, dual core 1GHz HSPA/WCDMA 117.8*63.5*10.1 mm 135g 4" 540*960 Capacitive 16GB na 1GB 5MP VGA 1930mAh 264H(2G)/250H(3G) 520m(2G)/540m(3G)	Motorola Pro Andorid Froyo TI OMAP 3630 1GHz HSPA/WCDMA 119*61*11.7 mm 134g 3.1" 320*480 Capacitive na 2GB 1GB 5MP VGA 1420mAh 330H 480m
Brand Model OS Processor Network Size Dimentions Weight Display touch Memory NAND ROM RAM Camera Camera-Front Battery Stand-by Talk	Samsung Galaxy S II Andorid Gingerbread Dual-core 1GHz HSPA/WCDMA 125.3*66.1*8.5 mm 116g 4.3" 480*800 Capacitive 16GB/32GB na 1GB 8MP 2MP 1650mAh na na	LG Optimus 3D P920 Andorid Froyo Dual-core 1GHz HSPA/WCDMA 128.8*68*11.9 mm 168g 4.3" 480*800 Capacitive 8GB na 512MB 5MP 2MP 1500mAh na na	LG Optimus Black Andorid Froyo TI OMAP 3630 1GHz HSPA/WCDMA 122*64*9.2 mm 109g 4" 480*800 na 2GB na 512MB 512MB 5MP 2MP 1500mAh na na	Motorola ATRIX Andorid Froyo Tegra 2, dual core 1GHz HSPA/WCDMA 117.8*63.5*10.1 mm 135g 4" 540*960 Capacitive 16GB na 1GB 5MP VGA 1930mAh 264H(2G)/250H(3G) 520m(2G)/540m(3G)	Motorola Pro Andorid Froyo TI OMAP 3630 1GHz HSPA/WCDMA 119*61*11.7 mm 134g 3.1" 320*480 Capacitive na 2GB 1GB 5MP VGA 1420mAh 330H 480m
Brand Model Model OS Processor Network Size Dimentions Weight Display touch Memory NAND ROM RAM Camera Camera-Front Battery Stand-by Talk Others	Samsung Galaxy S II Andorid Gingerbread Dual-core 1GHz HSPA/WCDMA 125.3*66.1*8.5 mm 116g 4.3" 480*800 Capacitive 16GB/32GB na 1GB 8MP 2MP 1650mAh na na	LG Optimus 3D P920 Andorid Froyo Dual-core 1GHz HSPA/WCDMA 128.8*68*11.9 mm 168g 4.3" 480*800 Capacitive 8GB na 512MB 5MP 2MP 1500mAh na na na	LG Optimus Black Andorid Froyo TI OMAP 3630 1GHz HSPA/WCDMA 122*64*9.2 mm 109g 4" 480*800 na 2GB na 512MB 512MB 5MP 2MP 1500mAh na na	Motorola ATRIX Andorid Froyo Tegra 2, dual core 1GHz HSPA/WCDMA 117.8*63.5*10.1 mm 135g 4" 540*960 Capacitive 16GB na 1GB 5MP VGA 1930mAh 264H(2G)/250H(3G) 520m(2G)/540m(3G)	Motorola Pro Andorid Froyo TI OMAP 3630 1GHz HSPA/WCDMA 119*61*11.7 mm 134g 3.1" 320*480 Capacitive na 2GB 1GB 5MP VGA 1420mAh 330H 480m
Brand Model Model OS Processor Network Size Dimentions Weight Display touch Memory NAND ROM RAM Camera Camera-Front Battery Stand-by Talk Others 3D	Samsung Galaxy S II Andorid Gingerbread Dual-core 1GHz HSPA/WCDMA 125.3*66.1*8.5 mm 116g 4.3" 480*800 Capacitive 16GB/32GB na 1GB 8MP 2MP 1650mAh na na na	LG Optimus 3D P920 Andorid Froyo Dual-core 1GHz HSPA/WCDMA 128.8*68*11.9 mm 168g 4.3" 480*800 Capacitive 8GB na 512MB 5MP 2MP 1500mAh na na 3D UI	LG Optimus Black Andorid Froyo TI OMAP 3630 1GHz HSPA/WCDMA 122*64*9.2 mm 109g 4" 480*800 na 2GB na 512MB 512MB 55MP 2MP 1500mAh na na na	Motorola ATRIX Andorid Froyo Tegra 2, dual core 1GHz HSPA/WCDMA 117.8*63.5*10.1 mm 135g 4" 540*960 Capacitive 16GB na 1GB 5MP VGA 1930mAh 264H(2G)/250H(3G) 520m(2G)/540m(3G)	Motorola Pro Andorid Froyo TI OMAP 3630 1GHz HSPA/WCDMA 119*61*11.7 mm 134g 3.1" 320*480 Capacitive na 2GB 1GB 5MP VGA 1420mAh 330H 480m
Brand Model Model OS Processor Network Size Dimentions Weight Display touch Memory NAND ROM RAM Camera Camera-Front Battery Stand-by Talk Others 3D NFC	Samsung Galaxy S II Andorid Gingerbread Dual-core 1GHz HSPA/WCDMA 125.3*66.1*8.5 mm 116g 4.3" 480*800 Capacitive 16GB/32GB na 1GB 8MP 2MP 1650mAh na na na	LG Optimus 3D P920 Andorid Froyo Dual-core 1GHz HSPA/WCDMA 128.8*68*11.9 mm 168g 4.3" 480*800 Capacitive 8GB na 512MB 5MP 2MP 1500mAh na na 3D UI na	LG Optimus Black Andorid Froyo TI OMAP 3630 1GHz HSPA/WCDMA 122*64*9.2 mm 109g 4" 480*800 na 2GB na 512MB 5MP 2MP 1500mAh na na na na	Motorola ATRIX Andorid Froyo Tegra 2, dual core 1GHz HSPA/WCDMA 117.8*63.5*10.1 mm 135g 4" 540*960 Capacitive 16GB na 1GB 5MP VGA 1930mAh 264H(2G)/250H(3G) 520m(2G)/540m(3G) na na	Motorola Pro Andorid Froyo TI OMAP 3630 1GHz HSPA/WCDMA 119*61*11.7 mm 134g 3.1" 320*480 Capacitive na 2GB 1GB 5MP VGA 1420mAh 330H 480m na na
Brand Model Model OS Processor Network Size Dimentions Weight Display touch Memory NAND ROM RAM Camera Camera-Front Battery Stand-by Talk Others 3D NFC	Samsung Galaxy S II Andorid Gingerbread Dual-core 1GHz HSPA/WCDMA 125.3*66.1*8.5 mm 116g 4.3" 480*800 Capacitive 16GB/32GB na 1GB 8MP 2MP 1650mAh na na na na 802.11b/g/n	LG Optimus 3D P920 Andorid Froyo Dual-core 1GHz HSPA/WCDMA 128.8*68*11.9 mm 168g 4.3" 480*800 Capacitive 8GB na 512MB 5MP 2MP 1500mAh na na 3D UI na 802.11b/g/n	LG Optimus Black Andorid Froyo TI OMAP 3630 1GHz HSPA/WCDMA 122*64*9.2 mm 109g 4" 480*800 na 2GB na 512MB 55MP 2MP 1500mAh na na na na na 802.11b/g/n	Motorola ATRIX Andorid Froyo Tegra 2, dual core 1GHz HSPA/WCDMA 117.8*63.5*10.1 mm 135g 4" 540*960 Capacitive 16GB na 1GB 5MP VGA 1930mAh 264H(2G)/250H(3G) 520m(2G)/540m(3G) na na 802.11b/g/n	Motorola Pro Andorid Froyo TI OMAP 3630 1GHz HSPA/WCDMA 119*61*11.7 mm 134g 3.1" 320*480 Capacitive na 2GB 1GB 5MP VGA 1420mAh 330H 480m na na 802.11b/g/n

Exhibit 69. Smartphone models announced in MWC (cont'd)

NO/MURA

Brand	Sony Ericsson	Sony Ericsson	Sony Ericsson	HP	RIM
Model	XPERIA Play	XPERIA Neo	XPERIA Arc	Pre3	Storm3
OS	Andorid Gingerbread	Andorid Gingerbread	Andorid Gingerbread	Web OS 2.2	BlackBerry OS (6.1)
Processor	Qualcomm MSM8255 1GHz	Qualcomm MSM8255 1GHz	Qualcomm MSM8255 1GHz	Qualcomm 1.4GHz	Qualcomm 1.2GHz
Network	HSPA/WCDMA	HSPA/WCDMA	HSPA/WCDMA	HSPA/WCDMA	HSPA/WCDMA
Size					
Dimentions	119*62*16 mm	116*57*13 mm	125*63*8.7 mm	111*64*16 mm	120*62*11.5 mm
Weight	175g	126g	117g	156g	na
Display	4" 480*854	3.7" 480*854	4.2" 480*854	3.6" 480*800	3.7" 480*800
touch	Capacitive	Capacitive	Capacitive	Capacitive	Capacitive
Memory					
NAND	8GB	8GB	8GB	16GB	4GB
ROM	400MB	na	na	na	na
RAM	380MB	320MB	512MB	512MB	768MB
Camera	5MP	5MP	8MP	5MP	5MP
Camera-Front	VGA	VGA	NO	VGA	na
Battery	1500mAh	1500mAh	1500mAh	1400mAh	1200mAh
Stand-by	425H(2G)/413H(3G)	430H(2G)/400H(3G)	430H(2G)/400H(3G)	na	na
Talk	680m(2G)/500m(3G)	415m(2G)/420m(3G)	420m(2G)/420m(3G)	na	na
Others					
3D	na	na	na	na	na
NFC	na	na	na	na	na
WiFi	802.11b/a/n	802.11b/a/n	802.11b/a/n	802.11b/a/n	802.11b/a/n
вт	BT 2.1	BT 2.1	BT 2.1	BT 2.1	BT 2.1
Brand	Huawei	ZTE			
Brand Model	Huawei IDEOS X3	ZTE Skate			
Brand Model OS	Huawei IDEOS X3 Andorid Gingerbread	ZTE Skate Andorid Gingerbread			
Brand Model OS Processor	Huawei IDEOS X3 Andorid Gingerbread Qualcomm 1GHz	ZTE Skate Andorid Gingerbread 800MHz			
Brand Model OS Processor Network	Huawei IDEOS X3 Andorid Gingerbread Qualcomm 1GHz HSPA/WCDMA	ZTE Skate Andorid Gingerbread 800MHz			
Brand Model OS Processor Network Size	Huawei IDEOS X3 Andorid Gingerbread Qualcomm 1GHz HSPA/WCDMA	ZTE Skate Andorid Gingerbread 800MHz			
Brand Model OS Processor Network Size Dimentions	Huawei IDEOS X3 Andorid Gingerbread Qualcomm 1GHz HSPA/WCDMA na	ZTE Skate Andorid Gingerbread 800MHz na			
Brand Model OS Processor Network Size Dimentions Weight	Huawei IDEOS X3 Andorid Gingerbread Qualcomm 1GHz HSPA/WCDMA na na	ZTE Skate Andorid Gingerbread 800MHz na 120g			
Brand Model OS Processor Network Size Dimentions Weight Display	Huawei IDEOS X3 Andorid Gingerbread Qualcomm 1GHz HSPA/WCDMA na na 3.2" 320*480	ZTE Skate Andorid Gingerbread 800MHz na 120g 4.3" 480*800			
Brand Model OS Processor Network Size Dimentions Weight Display touch	Huawei IDEOS X3 Andorid Gingerbread Qualcomm 1GHz HSPA/WCDMA na na 3.2" 320*480 Capacitive	ZTE Skate Andorid Gingerbread 800MHz na 120g 4.3" 480*800 Capacitive			
Brand Model OS Processor Network Size Dimentions Weight Display touch Memory	Huawei IDEOS X3 Andorid Gingerbread Qualcomm 1GHz HSPA/WCDMA na na 3.2" 320*480 Capacitive	ZTE Skate Andorid Gingerbread 800MHz na 120g 4.3" 480*800 Capacitive			
Brand Model OS Processor Network Size Dimentions Weight Display touch Memory NAND	Huawei IDEOS X3 Andorid Gingerbread Qualcomm 1GHz HSPA/WCDMA na na 3.2" 320*480 Capacitive na	ZTE Skate Andorid Gingerbread 800MHz na 120g 4.3" 480*800 Capacitive na			
Brand Model OS Processor Network Size Dimentions Weight Display touch Memory NAND ROM	Huawei IDEOS X3 Andorid Gingerbread Qualcomm 1GHz HSPA/WCDMA na na 3.2" 320*480 Capacitive na 512MB	ZTE Skate Andorid Gingerbread 800MHz na 120g 4.3" 480*800 Capacitive na na			
Brand Model OS Processor Network Size Dimentions Weight Display touch Memory NAND ROM RAM	Huawei IDEOS X3 Andorid Gingerbread Qualcomm 1GHz HSPA/WCDMA na a.2" 320*480 Capacitive na 512MB 256MB	ZTE Skate Andorid Gingerbread 800MHz na 120g 4.3" 480*800 Capacitive na na na			
Brand Model OS Processor Network Size Dimentions Weight Display touch Memory NAND ROM RAM Camera	Huawei IDEOS X3 Andorid Gingerbread Qualcomm 1GHz HSPA/WCDMA na na 3.2" 320*480 Capacitive na 512MB 256MB 3.2MP	ZTE Skate Andorid Gingerbread 800MHz na 120g 4.3" 480*800 Capacitive na na na 5MP			
Brand Model OS Processor Network Size Dimentions Weight Display touch Memory NAND ROM RAM Camera Camera-Front	Huawei IDEOS X3 Andorid Gingerbread Qualcomm 1GHz HSPA/WCDMA na na 3.2" 320*480 Capacitive na 512MB 256MB 3.2MP na	ZTE Skate Andorid Gingerbread 800MHz na 120g 4.3" 480*800 Capacitive na na na 5MP na			
Brand Model OS Processor Network Size Dimentions Weight Display touch Memory NAND ROM RAM Camera Camera-Front Battery	Huawei IDEOS X3 Andorid Gingerbread Qualcomm 1GHz HSPA/WCDMA na na 3.2" 320*480 Capacitive na 512MB 256MB 3.2MP na na	ZTE Skate Andorid Gingerbread 800MHz na 120g 4.3" 480*800 Capacitive na na na 5MP na na			
Brand Model OS Processor Network Size Dimentions Weight Display touch Memory NAND ROM RAM Camera Camera-Front Battery Stand-by	Huawei IDEOS X3 Andorid Gingerbread Qualcomm 1GHz HSPA/WCDMA na na 3.2" 320*480 Capacitive na 512MB 256MB 3.2MP na na na	ZTE Skate Andorid Gingerbread 800MHz na 120g 4.3" 480*800 Capacitive na na na 5MP na na na na			
Brand Model OS Processor Network Size Dimentions Weight Display touch Memory NAND ROM RAM Camera Camera-Front Battery Stand-by Talk	Huawei IDEOS X3 Andorid Gingerbread Qualcomm 1GHz HSPA/WCDMA na na 3.2" 320*480 Capacitive na 512MB 256MB 3.2MP na na na na	ZTE Skate Andorid Gingerbread 800MHz na 120g 4.3" 480*800 Capacitive na na na 5MP na na na na na na			
Brand Model OS Processor Network Size Dimentions Weight Display touch Memory NAND ROM RAM Camera Camera-Front Battery Stand-by Talk Others	Huawei IDEOS X3 Andorid Gingerbread Qualcomm 1GHz HSPA/WCDMA na a.2" 320*480 Capacitive na 512MB 256MB 3.2MP na na na na na	ZTE Skate Andorid Gingerbread 800MHz na 120g 4.3" 480*800 Capacitive na na na 5MP na na na na na na na na			
Brand Model OS Processor Network Size Dimentions Weight Display touch Memory NAND ROM RAM Camera Camera-Front Battery Stand-by Talk Others 3D	Huawei IDEOS X3 Andorid Gingerbread Qualcomm 1GHz HSPA/WCDMA na na 3.2" 320*480 Capacitive na 512MB 256MB 3.2MP na na na na na	ZTE Skate Andorid Gingerbread 800MHz na 120g 4.3" 480*800 Capacitive na na na 5MP na na na na na na na			
Brand Model OS Processor Network Size Dimentions Weight Display touch Memory NAND ROM RAM Camera Camera-Front Battery Stand-by Talk Others 3D NFC	Huawei IDEOS X3 Andorid Gingerbread Qualcomm 1GHz HSPA/WCDMA na na 3.2" 320*480 Capacitive na 512MB 256MB 3.2MP na na na na na na	ZTE Skate Andorid Gingerbread 800MHz na 120g 4.3" 480*800 Capacitive na na na 5MP na na na na na na na na			
Brand Model OS Processor Network Size Dimentions Weight Display touch Memory NAND ROM RAM Camera Camera-Front Battery Stand-by Talk Others 3D NFC WiFi	Huawei IDEOS X3 Andorid Gingerbread Qualcomm 1GHz HSPA/WCDMA na na 3.2" 320*480 Capacitive na 512MB 256MB 3.2MP na na na na na na na na na na	ZTE Skate Andorid Gingerbread 800MHz na 120g 4.3" 480*800 Capacitive na na na 5MP na na na na na na na na na na na na na			
Brand Model OS Processor Network Size Dimentions Weight Display touch Memory NAND ROM RAM Camera Camera-Front Battery Stand-by Talk Others 3D NFC WiFi BT	Huawei IDEOS X3 Andorid Gingerbread Qualcomm 1GHz HSPA/WCDMA na na 3.2" 320*480 Capacitive na 512MB 256MB 3.2MP na na na na na na na sau sau na na	ZTE Skate Andorid Gingerbread 800MHz na 120g 4.3" 480*800 Capacitive na na na 5MP na na na na na na na na na na na na na			

Source: company data

NO/MURA

Exhibit 70.	Tables announced i	in MWC			
Brand	HTC	Samsung	LG	Moto	HP
Model	Flyer	Galaxy Tab	Optimus Pad	Xoom	TouchPad
OS platform	Android Gingerbread	Android Honeycomb	Android Honeycomb	Android Honeycomb	WebOS (3.0)
Processor	1.5GHz	1GHz Dual core	Tegra 2 (1GHz Dual core)	Tegra 2 (1GHz Dual Core)	Qualcomm Snapdragon APQ8060 (1.2GHz Dual Core)
3D	na	na	Yes	na	Yes
Memory					
Internal storage	32GB	16GB/32GB	32GB	32GB	32GB
RAM	1GB	na	na	1GB DDR2	na
Size					
Dimensions	195.4*122*13.2mm	246.2*170.4*10.9mm	na	249.1*167.8*12.9mm	240*189*14mm
Weight	415a	599a	630g	730a	740g
Display	7" 1024*600	10.1" 1280*800	8.9" 1280*768	10.1" 1280*800	9.7" 768*1024
Touch screen	Capacitive	Capacitive	Capacitive	Capacitive	Capacitive
Connectivity					
3G	YES	YES	YES	4G/3G	YES (WiFi first then 3G latter)
Bluetooth	BT 3.0	BT 2.1	na	BT 2.1	
WiFi	802.11 b/a/n	802.11 b/a/n	802.11 b/g/n	802.11 b/a/n	802.11 b/a/n
USB	USB 2.0	USB 2.0	USB 2.0	USB 2.0	USB 2.0
Camera	5 megapixel	8 megapixel	5 megapixel	5 megapixel	8 megapixel
Camera-front	1.3 megapixel	2 megapixel	2 megapixel	2 megapixel	1.3 megapixel
	······································				
Battery	4000mAh	6860mAh	6400mAh	Up to 10 hour video play	6300mAh
Brand	DELL	ACER	ASUS	RIM	Huawei
Model	Streak	Iconia Tab A100	Eee Pad	PlayBook	S7 Pro
OS platform	Android Froyo	Android Honeycomb	Android Honeycomb	BB Tablet OS	Andorid Gingerbread
Processor	Tegra T20 (1GHz Dual Core)	Tegra 250 (1GHz Dual Core)	Tegra 2 (1GHz Dual Core)		Qualcomm 1.2GHz
3D	. . ,	na	na	na	na
Memory					
Internal storage	16GB	8GB	32GB	na	na
RAM	512MB	512MB	512MB	1GB	na
0					
Size	400 0*440 0*40 4		074*470*40		
Dimensions	199.9°119.8°12.4mm	na	271-176-13mm	100	na
Vveignt	450g	na 71 400 4*000	886g	400g	na
Display	7 800 480	7 1024 600	10.1 1280 800	7 1024 600	
Connectivity	Capacitive	Capacitive	Capacitive		
36	VES				
Bluetooth	RT 2 1	BT 2 1	BT 2 1	BT 2 1	
WiFi	802 11 b/g	802 11 b/g/n	802 11 b/g/n	802 11 b/a/n	802 11 b/a/n
LISB	na	USB 2.0	LISB 2.0	002.11 D/9/11	002.11 b/g/11
Camera	5 meganiyel	5 meganixel	5 meganiyel	5 meganiyel	
Camera-front	1 3 megapixel	2 megapixel	na	3 megapixel	
Camora-ITUIIt	подарілої		1104	o mogapixoi	
Battery	na	3260mAh	na	na	na

Source: company data

Financial statements

Year-and 31 Dec FV08 FV109 FY11F	Income statement (NT\$mn)					
Revenue 152,550 144,831 278,506 447,738 584,112 Cost opods sold (101,917) (99,018) (195,101) (33,3,60) (42,2561) Gross profit 50,642 45,662 83,406 144,158 161,548 SG&A (13,699) (16,402) (30,404) (53,786) (65,022) (16,687) Operating profit 30,215 24,149 43,716 74,470 81,059 EBITOA 30,820 24,823 44,616 75,506 82,135 Depreciation (568) (634) (809) (922) (960) Amortisation (35) (40) (12) (114) (116) EBIT 30,215 24,149 43,716 74,470 81,029 Associates & JCEs 603 781 1,105 1,257 1,168 Otherincome (637) (92) (129) - - Revindel Netaterax 22,584 22,583 39,525 67,687 71,880 <	Year-end 31 Dec	FY08	FY09	FY10F	FY11F	FY12F
Cost of goods sold (101.917) (99.018) (195.101) (353,580) (422,564) Gross profit 50,642 45,662 83,406 144,158 161,548 SGRA (13,689) (16,402) (30,404) (53,780) (16,387) Operating profit 30,215 24,149 43,716 74,470 81,059 EBITDA 30,820 24,623 44,616 75,506 82,135 Depreciation (568) (634) (809) (922) (960) Amortisation (36) (40) (92) (114) (115) Depreciation (568) (633) 716 74,470 81,059 Associates & ALCEs 6033 781 1,105 1,225 1,168 Otherinome (637) (92) (192) - - - Income tax (2,2561) (2,644) (2,430) 76,053 82,620 Income tax (2,2562) (2,644) 22,583 39,525 67,667 71,880	Revenue	152.559	144.881	278.506	497.738	584.112
Gross profit 50,642 45,862 83,400 144,158 161,548 SGAA (13,059) (16,402) (30,404) (53,766) (63,002) Depresing profit 30,215 24,149 43,716 74,470 81,059 EBITDA 30,820 24,623 44,616 75,506 82,135 Depreciation (568) (634) (809) (922) (114) (116) EBITDA 30,215 24,149 43,716 74,470 81,059 Arontisation (36) (40) (922) (114) (116) EBIT 30,215 24,149 43,716 74,470 81,059 Actintaristation (36) (40) (20,60) (20,60) (20,60) (20,60) (20,60) (20,60) (20,60) (20,60) (20,60) (20,60) (20,60) (20,60) (20,60) (24,60) (23,620) (26,40) (25,67) (26,60) (26,60) (26,60) (26,67) (26,67) (26,67) (26,67)	Cost of goods sold	(101.917)	(99,018)	(195.101)	(353.580)	(422.564)
SG&A (13,699) (16,402) (30,404) (53,786) (63,002) Employee share expense (6,727) (5,312) (9,286) (15,902) (16,887) Operating profit 30,820 24,823 44,616 75,506 82,135 Depreciation (568) (634) (809) (922) (960) Amortisation (36) (40) (92) (114) (116) EBIT 30,215 24,149 43,716 74,470 81,059 Net interest expense 1,368 349 301 326 333 Associates & ACEs 603 781 1,105 1,227 1,188 Associates & ACEs 633 784 2,930 76,53 26,860 Income tax (2,955) (2,604) (5,405) (8,366) (10,741) Net profit after tax 28,594 22,583 39,525 67,687 71,800 Dividends - - - - - - -	Gross profit	50.642	45.862	83.406	144.158	161.548
Employee share expense (6,727) (5,312) (9,286) (15,902) (16,897) Operating prdit 30,215 24,149 43,716 74,470 81,059 EBITDA 30,225 24,149 43,716 74,470 81,059 Charlow Constraints (36) (40) (92) (10) (11) Depreciation (363) (40) (92) (114) (116) EBIT 30,215 24,149 43,716 74,470 81,059 Net Interest expense 1,368 349 301 326 333 Associates & JCEs 603 781 1,105 1,257 1,168 Otherrincome (637) (2) (15,015) (2,665) (2,664) (5,636) (10,741) Net profit after tax 28,594 22,583 39,525 67,687 71,800 Dividend S - - - - - - Reported NPAT 28,594 22,583 39,525 67,687 <td< td=""><td>SG&A</td><td>(13.699)</td><td>(16,402)</td><td>(30,404)</td><td>(53,786)</td><td>(63.602)</td></td<>	SG&A	(13.699)	(16,402)	(30,404)	(53,786)	(63.602)
Operating profit 30,215 24,149 43,716 74,470 91,059 EBITDA 30,820 24,823 44,616 75,506 82,135 Depreciation (568) (634) (809) (922) (960) Amortisation (36) (40) (92) (114) (116) EBIT 30,215 24,149 43,716 74,470 81,059 Net interest expense 1,368 349 301 326 333 Associates & ACEs 603 751 1,105 1,257 1,168 Cher income (637) (92) (132) - - Emrings before tax 31,549 25,587 43,030 76,053 82,620 Income tax (2,955) (2,604) (5,3,147) (5,4,78) 71,800 Etraordinary items - - - - - - Preferred dividends - - - - - - - Tansfer tor	Employee share expense	(6,727)	(5,312)	(9,286)	(15,902)	(16,887)
EliTDA 30,820 24,823 44,616 75,506 82,135 Depreciation (36) (40) (92) (114) (116) BIT 30,215 24,149 43,716 74,470 81,059 Net interest expense 1,368 349 301 326 393 Associates & JCEs 603 781 1,105 1,257 1,168 Other income (637) (92) (192) - - Earning before tax 31,549 25,187 74,930 76,053 82,620 Income tax (2,955) (2,604) (5,405) (8,066) (10,741) Normalised NPAT 28,594 22,583 39,525 67,687 71,880 Minorly interests -	Operating profit	30.215	24.149	43.716	74.470	81.059
EBITDA 30.820 24,823 44,616 75,506 82,135 Depreciation (668) (634) (809) (922) (960) Amortisation (36) (40) (92) (114) (115) EBIT 30,215 24,149 43,716 74,470 81,059 Net interest expense 1,388 349 301 326 338 Associates & JCEs 603 781 1,105 1,257 1,168 Cherincome (637) (22) (192) - - - Earnings before tax 31,549 22,583 39,525 67,687 71,880 Minority interests - - - - - - Prefered dividends - - - - - - Reported NPAT 28,594 22,583 39,525 67,687 71,800 Dividends (20,396) (18,731) (32,706) (53,147) (54,783) Transfer tor	of	;	,	,	,	
Depreciation (568) (634) (809) (922) (960) Amotisation (36) (40) (92) (114) (116) EBIT 30,215 24,149 43,716 74,470 81,059 Net interest expense 1,388 349 301 326 333 Associates & JCEs 603 781 1,105 1,257 1,188 Other income (637) (92) (192) - - Income tax (2,955) (2,604) (5,405) (6,366) (10,741) Net profit after tax 28,594 22,583 39,525 67,687 71,880 Minority interests - - - - - - Normalised NPAT 28,594 22,583 39,525 67,687 71,880 Extraordinary items - - - - - - Normalised NPAT 28,594 22,583 39,525 67,687 71,880 Dividends	EBITDA	30.820	24,823	44.616	75.506	82,135
Amortisation (36) (40) (92) (114) (116) EBIT 30,215 24,149 43,716 74,470 81,059 Net interest expense 1,368 349 301 326 333 Associates & JCEs 603 781 1,105 1,257 1,168 Other income (637) (92) (142) - - Earnings before tax 31,549 25,187 44,930 76,053 82,620 Income tax (2,855) (2,604) (5,405) (8,366) (10,741) Net profit after tax 28,594 22,583 39,525 67,687 71,880 Extraordinary items - - - - - - Normalised NPAT 28,594 22,583 39,525 67,687 71,880 Dividends (20,396) (18,71) (32,706) (53,147) (54,783) Transfer to reserves 8,199 3,852 617,837 14.540 17.097 <t< td=""><td>Depreciation</td><td>(568)</td><td>(634)</td><td>(809)</td><td>(922)</td><td>(960)</td></t<>	Depreciation	(568)	(634)	(809)	(922)	(960)
EBIT 30,215 24,149 43,716 74,470 61,059 Net interest expense 1,368 349 301 326 333 Associates & ACEs 603 781 1,105 1,257 1,186 Chterinoome (637) (92) (192) - - Earnings before tax 31,549 25,187 44,930 76,053 82,520 Income tax (2,255) (2,604) (5,405) (6,366) (10,741) Normalised NPAT 28,594 22,583 39,525 67,687 71,800 Normalised NPAT 28,594 22,583 39,525 67,687 71,800 Normalised NPAT 28,594 22,583 39,525 67,687 71,800 Dividends (20,396) (18,731) (32,706) (53,147) (54,783) Tansfer to reserves 8,199 3,852 6,819 14,540 17,997 Valuation and ratio analysis - - - - - FD no	Amortisation	(36)	(40)	(92)	(114)	(116)
Net interest expense 1,368 349 301 326 333 Associates & JCEs 603 781 1,105 1,257 1,168 Cher income (637) (92) (192) - - Earnings before tax 2,565 (2,044) (5,405) (8,366) (10,741) Net profit after tax 28,594 22,583 39,525 67,687 71,880 Minority interests - - - - - - Prefered dividends - - - - - - Normalised NPAT 28,594 22,583 39,525 67,687 71,880 Dividends (20,396) (18,731) (32,706) (53,147) (54,783) Transfer to reserves 8,199 3.0 43.6 25.3 15.1 14.2 Ponomalised P/E (x) 28.5 37.7 21.8 13.0 12.3 Pinoenalised P/E (x) 28.5 37.7 21.8 13.0 12.3 </td <td>EBIT</td> <td>30.215</td> <td>24.149</td> <td>43.716</td> <td>74.470</td> <td>81.059</td>	EBIT	30.215	24.149	43.716	74.470	81.059
Associates & JCEs 603 781 1,105 1,257 1,168 Otherincome (637) (92) (192) - - - Earnings before tax 31,549 25,187 44,930 76,053 82,620 Income tax (2,955) (2,604) (5,405) (8,366) (10,741) Net profit after tax 28,594 22,583 39,525 67,687 71,880 Innorthy interests -<	Net interest expense	1.368	349	301	326	393
Other income (637) (92) (192) - - Earnings before tax 31,549 25,187 44,830 76,053 62,260 Income tax (2,955) (2,604) (5,405) (6),741 Net profit after tax 22,583 39,525 67,687 71,880 Minority interests -	Associates & JCEs	603	781	1.105	1.257	1.168
Earnings before tax 31,549 25,187 44,930 76,053 82,620 Income tax (2,955) (2,604) (5,405) (8,366) (10,741) Net profit after tax 28,594 22,583 39,525 67,687 71,880 Minority interests - - - - - - Preferred dividends - - - - - - Normalised NPAT 28,594 22,583 39,525 67,687 71,880 Extraordinary items - - - - - - Reported NPAT 28,594 22,583 39,525 67,687 71,880 Dividends (20,396) (18,731) (32,706) (53,147) (54,783) Transfer to reserves 8,199 3,852 6,819 14,540 17,097 Valuation and ratio analysis - - - - - - FD normalised P/E (x) 28.5 37.7 21.8 13.0	Otherincome	(637)	(92)	(1.92)	- ,201	-
Income tax (2,955) (2,604) (5,405) (8,366) (10,741) Net profit after tax 28,594 22,583 39,525 67,687 71,880 Minority interests - </td <td>Earnings before tax</td> <td>31.549</td> <td>25.187</td> <td>44.930</td> <td>76.053</td> <td>82.620</td>	Earnings before tax	31.549	25.187	44.930	76.053	82.620
Net profit after tax 28,594 22,583 39,525 67,687 71,880 Minority interests - <td>Income tax</td> <td>(2,955)</td> <td>(2.604)</td> <td>(5.405)</td> <td>(8.366)</td> <td>(10.741)</td>	Income tax	(2,955)	(2.604)	(5.405)	(8.366)	(10.741)
Minority interests -	Net profit after tax	28.594	22.583	39.525	67.687	71.880
Other items - <th< td=""><td>Minority interests</td><td></td><td>,000</td><td>-</td><td>-</td><td>-</td></th<>	Minority interests		,000	-	-	-
Preferred dividends -	Otheritems	-	-	-	-	-
Normalised NPAT 28,594 22,583 39,525 67,687 71,880 Extraordinary items -	Preferred dividends	-	-	-	-	-
Litter Litter <thliter< th=""> <thliter< th=""> Liter</thliter<></thliter<>	Normalised NPAT	28,594	22,583	39.525	67.687	71.880
Reported NPAT 28,594 22,583 39,525 67,687 71,880 Dividends (20,396) (18,731) (32,706) (53,147) (54,783) Transfer to reserves 8,199 3,852 6,819 14,540 17,097 Valuation and ratio analysis FD normalised P/E at price target (x) 28,5 37,7 21.8 13.0 12.3 FD normalised P/E (x) 28,5 37,7 21.8 13.0 12.3 Dividend yield (%) 2.5 2.2 3,7 6.0 6.2 Price/coshflow (x) 13.4 13.0 11.8 7.8 6.8 EV/EBITDA (x) 26.1 32.1 17,7 10.2 9.3 EV/EBIT (x) 26.6 32.9 18.0 10.4 9.4 Gross margin (%) 33.2 31,7 29.9 29.0 27,7 BITDA margin (%) 18.7 15.6 14.2 13.6 12.3 Net margin (%) 18.7 15.6 14.2 13.6 12.3	Extraordinary items		,000			
Dividends (20,396) (18,731) (32,706) (53,147) (54,783) Transfer to reserves 8,199 3,852 6,819 14,540 17,097 Valuation and ratio analysis FD normalised P/E at price target (x) 33.0 43.6 25.3 15.1 14.2 Reported P/E (x) 28.5 37.7 21.8 13.0 12.3 Dividend yield (%) 2.5 2.2 3.7 6.0 6.2 Price/cashflow (x) 21.7 30.9 21.4 13.8 11.8 Price/book (x) 26.1 32.1 17.7 10.2 9.3 EV/EBIT (x) 26.6 32.9 18.0 10.4 9.4 Gross margin (%) 33.2 31.7 29.9 29.0 27.7 EBIT margin (%) 19.8 16.7 15.7 15.0 13.9 Net margin (%) 19.8 16.7 15.7 15.0 13.9 Dividend payout (%) 71.3 82.9 82.7 78.5 76.2 Capex to sales (%) 3.0 1.0 0.9 0.	Reported NPAT	28,594	22,583	39,525	67,687	71,880
Direction (ES(303) (ES(30) (ES(30) <th)< td=""><td>Dividends</td><td>(20,396)</td><td>(18 731)</td><td>(32,706)</td><td>(53 1 47)</td><td>(54 783)</td></th)<>	Dividends	(20,396)	(18 731)	(32,706)	(53 1 47)	(54 783)
Valuation and ratio analysis FD normalised P/E (x) 28.5 37.7 21.8 13.0 12.3 FD normalised P/E (x) 28.5 37.7 21.8 13.0 12.3 Pinochold (%) 2.5 2.2 3.7 6.0 6.2 Price/coshflow (x) 21.7 30.9 21.4 13.8 11.8 Price/coshflow (x) 13.4 13.0 11.8 7.8 6.8 EV/EBITDA (x) 26.1 32.1 17.7 10.2 9.3 EV/EBIT (x) 26.6 32.9 18.0 10.4 9.4 Gross margin (%) 33.2 31.7 29.9 29.0 27.7 EBITDA margin (%) 20.2 17.1 16.0 15.2 14.1 EBIT margin (%) 19.8 16.7 15.7 15.0 13.9 Net margin (%) 18.7 15.6 14.2 13.6 12.3 Effective tax rate (%) 9.4 10.3 10.0 10.0 13.0 Divid	Transfer to reserves	8,199	3 852	6.819	14.540	17.097
Valuation and ratio analysis FD normalised P/E (x) 28.5 37.7 21.8 13.0 12.3 FD normalised P/E at price target (x) 33.0 43.6 25.3 15.1 14.2 Reported P/E (x) 28.5 37.7 21.8 13.0 12.3 Dividend yield (%) 2.5 2.2 3.7 6.0 6.2 Price/cashflow (x) 21.7 30.9 21.4 13.8 11.8 Price/book (x) 13.4 13.0 11.8 7.8 6.8 EV/EBITDA (x) 26.6 32.9 17.7 10.2 9.3 EV/EBIT (x) 26.6 32.9 18.0 10.4 9.4 Gross margin (%) 33.2 31.7 29.9 29.0 27.7 EBITDA margin (%) 19.8 16.7 15.7 15.0 13.9 Net margin (%) 18.7 15.6 14.2 13.6 12.3 EBITDA margin (%) 13.7 2.9 82.7 78.5 76.2		0,100	0,002	0,010	,	,
FD normalised P/E (x)28.537.721.813.012.3FD normalised P/E at price target (x)33.043.625.315.114.2Reported P/E (x)28.537.721.813.012.3Dividend yield (%)2.52.23.76.06.2Price/cashflow (x)21.730.921.413.811.8Price/cashflow (x)13.413.011.87.86.8EV/EBITDA (x)26.132.117.710.29.3EV/EBITDA (x)26.632.918.010.49.4Gross margin (%)33.231.729.929.027.7EBITDA margin (%)19.816.715.715.013.9Net margin (%)19.816.715.715.013.9Net margin (%)18.715.614.213.612.3Effective tax rate (%)9.410.312.011.013.0Dividend payout (%)71.382.982.778.576.2Capex to sales (%)3.01.00.90.30.3Capex to sales (%)69.445.051.854.847.9Growth (%)11.1(20.1)81.070.38.8ROA (pretax %)69.445.051.854.847.9BITD(1.1)(20.1)81.070.38.8Rot (%)(24.9)(24.4)72.467.56.2Normalised FPS(24.9)(24.4) <t< td=""><td>Valuation and ratio analysis</td><td></td><td></td><td></td><td></td><td></td></t<>	Valuation and ratio analysis					
FD normalised P/E at price target (x)33.043.626.316.114.2Reported P/E (x)28.537.721.813.012.3Dividend yield (%)2.52.23.76.06.2Price/coashflow (x)21.730.921.413.811.8Price/cook (x)13.413.011.87.86.8EV/EBITDA (x)26.132.117.710.29.3EV/EBITDA (x)26.632.918.010.49.4Gross margin (%)20.217.116.015.214.1EBIT DA margin (%)19.816.715.715.013.9Net margin (%)18.715.614.213.612.3Effective tax rate (%)9.410.312.011.013.0Dividend payout (%)71.382.982.778.576.2Capex to sales (%)3.01.00.90.30.3Capex to sales (%)3.01.00.90.30.3Capex to sales (%)69.445.051.854.847.9BITDA(0.9)(19.5)79.769.28.8EBIT(1.1)(20.1)81.070.38.8Normalised EPS(24.9)(24.4)72.467.56.2Normalised EPS (NT\$)37.928.749.482.887.9Normalised EPS (NT\$)37.928.749.482.887.9Norm EPS (NT\$)37.928.7<	FD normalised $P/F(x)$	28.5	37.7	21.8	13.0	12.3
Reported P/E (x) 28.5 37.7 21.8 13.0 12.3 Dividend yield (%) 2.5 2.2 3.7 6.0 6.2 Price/coashflow (x) 21.7 30.9 21.4 13.8 11.8 Price/book (x) 13.4 13.0 11.7 10.2 9.3 EV/EBITDA (x) 26.6 32.9 18.0 10.4 9.4 Gross margin (%) 33.2 31.7 29.9 29.0 27.7 EBITDA margin (%) 19.8 16.7 15.7 15.0 13.9 Net margin (%) 18.7 15.6 14.2 13.6 12.3 Effective tax rate (%) 9.4 10.3 12.0 11.0 13.0 Dividend payout (%) 71.3 82.9 82.7 78.5 76.2 Capex to depreciation (x) 8.0 2.2 3.1 16 1.8 ROE (%) 49.0 35.8 56.3 71.8 58.8 ROA (pretax %) 69.4 45.0 <	FD normalised P/E at price target (x)	33.0	43.6	25.3	15.1	14.2
Dividend yield (%) 2.5 2.2 3.7 6.0 6.2 Price/cashflow (x) 21.7 30.9 21.4 13.8 11.8 Price/cashflow (x) 13.4 13.0 11.8 7.8 6.8 EV/EBITDA (x) 26.6 32.9 18.0 10.4 9.4 Gross margin (%) 33.2 31.7 29.9 29.0 27.7 EBITDA margin (%) 20.2 17.1 16.0 15.2 14.1 EBIT margin (%) 18.7 15.6 14.2 13.6 12.3 Effective tax rate (%) 9.4 10.3 12.0 11.0 13.0 Dividend payout (%) 71.3 82.9 82.7 78.5 76.2 Capex to sales (%) 3.0 1.0 0.9 0.3 0.3 Capex to depreciation (x) 8.0 2.2 3.1 1.6 1.8 ROE (%) 49.0 35.8 56.3 71.8 58.8 87.9 ROA (pretax %) 69.4	Reported P/E (x)	28.5	37.7	21.8	13.0	12.3
Price/cashflow (x) 21.7 30.9 21.4 13.8 11.8 Price/cashflow (x) 13.4 13.0 11.8 7.8 6.8 EV/EBITDA (x) 26.1 32.1 17.7 10.2 9.3 EV/EBIT (x) 26.6 32.9 18.0 10.4 9.4 Gross margin (%) 20.2 17.1 16.0 15.2 14.1 EBITDA margin (%) 20.2 17.1 16.0 15.2 14.1 EBIT margin (%) 19.8 16.7 15.7 15.0 13.9 Net margin (%) 18.7 15.6 14.2 13.6 12.3 Effective tax rate (%) 9.4 10.3 12.0 11.0 13.0 Dividend payout (%) 71.3 82.9 82.7 78.5 76.2 Capex to depreciation (x) 8.0 2.2 3.1 1.6 1.8 ROE (%) 49.0 35.8 56.3 71.8 58.8 ROA (pretax %) 69.4 45.0 <t< td=""><td>Dividend vield (%)</td><td>2.5</td><td>2.2</td><td>3.7</td><td>6.0</td><td>6.2</td></t<>	Dividend vield (%)	2.5	2.2	3.7	6.0	6.2
Price/book (x) 13.4 13.0 11.8 7.8 6.8 EV/EBITDA (x) 26.1 32.1 17.7 10.2 9.3 EV/EBIT (x) 26.6 32.9 18.0 10.4 9.4 Gross margin (%) 20.2 17.1 16.0 15.2 14.1 EBIT margin (%) 20.2 17.1 16.0 15.2 14.1 EBIT margin (%) 18.7 15.6 14.2 13.6 12.3 Effective tax rate (%) 9.4 10.3 12.0 11.0 13.0 Dividend payout (%) 71.3 82.9 82.7 78.5 76.2 Capex to sales (%) 3.0 1.0 0.9 0.3 0.3 Capex to sales (%) 3.0 1.0 0.9 0.3 0.3 Capex to depreciation (x) 8.0 2.2 3.1 1.6 1.8 ROE (%) 69.4 45.0 51.8 54.8 47.9 Growth (%) (0.9) (19.5) 79.7 69.2 8.8 EBIT (1.1) (20.1) 81.0	Price/cashflow (x)	21.7	30.9	21.4	13.8	11.8
EV/EBITDA (x) 26.1 32.1 17.7 10.2 9.3 EV/EBIT (x) 26.6 32.9 18.0 10.4 9.4 Gross margin (%) 33.2 31.7 29.9 29.0 27.7 EBITDA margin (%) 19.8 16.7 15.7 15.0 13.9 Net margin (%) 19.8 16.7 15.7 15.0 13.9 Net margin (%) 9.4 10.3 12.0 11.0 13.0 Dividend payout (%) 71.3 82.9 82.7 78.5 76.2 Capex to sales (%) 3.0 1.0 0.9 0.3 0.3 Capex to depreciation (x) 8.0 2.2 3.1 1.6 1.8 ROE (%) 49.0 35.8 56.3 71.8 58.8 ROA (pretax %) 69.4 45.0 51.8 54.8 47.9 Growth (%) 11.1 (20.1) 81.0 70.3 8.8 EBIT (1.1) (20.1) 81.0 70.3 8.8 EBIT (1.1) (20.1) 81.0 70.3<	Price/book (x)	13.4	13.0	11.8	7.8	6.8
EV/EBIT (x) 26.6 32.9 18.0 10.4 9.4 Gross margin (%) 33.2 31.7 29.9 29.0 27.7 EBITDA margin (%) 19.8 16.7 15.7 15.0 13.9 Net margin (%) 19.8 16.7 15.7 15.0 13.9 Net margin (%) 18.7 15.6 14.2 13.6 12.3 Effective tax rate (%) 9.4 10.3 12.0 11.0 13.0 Dividend payout (%) 71.3 82.9 82.7 78.5 76.2 Capex to sales (%) 3.0 1.0 0.9 0.3 0.3 Capex to depreciation (x) 8.0 2.2 3.1 1.6 1.8 ROE (%) 49.0 35.8 56.3 71.8 58.8 ROA (pretax %) 69.4 45.0 51.8 54.8 47.9 Growth (%) Revenue 28.7 (5.0) 92.2 78.7 17.4 EBITD (1.1) (20.1) 81.0 70.3 8.8 EBITDA (EV/EBITDA (x)	26.1	32.1	17.7	10.2	9.3
Gross margin (%) 33.2 31.7 29.9 29.0 27.7 EBITDA margin (%) 20.2 17.1 16.0 15.2 14.1 EBIT margin (%) 19.8 16.7 15.7 15.0 13.9 Net margin (%) 18.7 15.6 14.2 13.6 12.3 Effective tax rate (%) 9.4 10.3 12.0 11.0 13.0 Dividend payout (%) 71.3 82.9 82.7 78.5 76.2 Capex to sales (%) 3.0 1.0 0.9 0.3 0.3 Capex to sales (%) 3.0 1.0 0.9 0.3 0.3 Capex to sales (%) 8.0 2.2 3.1 1.6 1.8 ROE (%) 49.0 35.8 56.3 71.8 58.8 ROA (pretax %) 69.4 45.0 51.8 54.8 47.9 Growth (%) 78.5 76.0 92.2 78.7 17.4 EBITDA (0.9) (19.5) 79.7 69.2 8.8 EBIT (1.1) (20.1) 81.0 <	FV/FBIT(x)	26.6	32.9	18.0	10.4	9.4
BBITDA margin (%) 20.2 17.1 16.0 15.2 14.1 EBIT margin (%) 19.8 16.7 15.7 15.0 13.9 Net margin (%) 18.7 15.6 14.2 13.6 12.3 Effective tax rate (%) 9.4 10.3 12.0 11.0 13.0 Dividend payout (%) 71.3 82.9 82.7 78.5 76.2 Capex to sales (%) 3.0 1.0 0.9 0.3 0.3 Capex to depreciation (x) 8.0 2.2 3.1 1.6 1.8 ROE (%) 49.0 35.8 56.3 71.8 58.8 ROA (pretax %) 69.4 45.0 51.8 54.8 47.9 Growth (%) 11.1 (20.1) 81.0 70.3 8.8 EBIT (1.1) (20.1) 81.0 70.3 8.8 EBIT (1.1) (20.1) 81.0 70.3 8.8 Normalised EPS (24.9) (24.4) 72.4 67.5 6.2 Per share Reported EPS (NT\$) 37.9 2	Gross margin (%)	33.2	31.7	29.9	29.0	27.7
EBIT margin (%)19.816.715.715.013.9Net margin (%)18.715.614.213.612.3Effective tax rate (%)9.410.312.011.013.0Dividend payout (%)71.382.982.778.576.2Capex to sales (%)3.01.00.90.30.3Capex to depreciation (x)8.02.23.11.61.8ROE (%)49.035.856.371.858.8ROA (pretax %)69.445.051.854.847.9Growth (%)Revenue28.7(5.0)92.278.717.4EBITDA(0.9)(19.5)79.769.28.8EBIT(1.1)(20.1)81.070.38.8Normalised EPS(24.9)(24.4)72.467.56.2Normalised FDEPS(24.9)(24.4)72.467.56.2Normalised FDEPS(24.9)(24.4)72.467.56.2Normalised FDEPS37.928.749.482.887.9Norm EPS (NT\$)37.928.749.482.887.9Book value per share (NT\$)37.928.749.482.887.9Book value per share (NT\$)37.928.749.482.887.9Book value per share (NT\$)37.928.749.482.887.9Book value per share (NT\$)37.923.740.065.067.0 <td>EBITDA margin (%)</td> <td>20.2</td> <td>17.1</td> <td>16.0</td> <td>15.2</td> <td>14.1</td>	EBITDA margin (%)	20.2	17.1	16.0	15.2	14.1
Net margin (%) 18.7 15.6 14.2 13.6 12.3 Net margin (%) 9.4 10.3 12.0 11.0 13.0 Dividend payout (%) 71.3 82.9 82.7 78.5 76.2 Capex to sales (%) 3.0 1.0 0.9 0.3 0.3 Capex to sales (%) 3.0 1.0 0.9 0.3 0.3 Capex to depreciation (x) 8.0 2.2 3.1 1.6 1.8 ROE (%) 49.0 35.8 56.3 71.8 58.8 ROA (pretax %) 69.4 45.0 51.8 54.8 47.9 Growth (%) Revenue 28.7 (5.0) 92.2 78.7 17.4 EBITDA (0.9) (19.5) 79.7 69.2 8.8 EBIT (1.1) (20.1) 81.0 70.3 8.8 Normalised EPS (24.9) (24.4) 72.4 67.5 6.2 Normalised FDEPS (24.9) (24.4) 72.4 67.5 6.2 Norm EPS (NT\$) 37.9 28.7	EBIT margin (%)	19.8	16.7	15.7	15.0	13.9
Effective tax rate (%) 9.4 10.3 12.0 11.0 13.0 Dividend payout (%) 71.3 82.9 82.7 78.5 76.2 Capex to sales (%) 3.0 1.0 0.9 0.3 0.3 Capex to depreciation (x) 8.0 2.2 3.1 1.6 1.8 ROE (%) 49.0 35.8 56.3 71.8 58.8 ROA (pretax %) 69.4 45.0 51.8 54.8 47.9 Growth (%) Revenue 28.7 (5.0) 92.2 78.7 17.4 EBITDA (0.9) (19.5) 79.7 69.2 8.8 EBIT (1.1) (20.1) 81.0 70.3 8.8 Normalised EPS (24.9) (24.4) 72.4 67.5 6.2 Normalised FDEPS (24.9) (24.4) 72.4 67.5 6.2 Normalised FDEPS (24.9) (24.4) 72.4 67.5 6.2 Norm EPS (NT\$) 37.9 28.7 49.4 82.8 87.9 Norm EPS (NT\$) 37.9 <td< td=""><td>Net margin (%)</td><td>18.7</td><td>15.6</td><td>14.2</td><td>13.6</td><td>12.3</td></td<>	Net margin (%)	18.7	15.6	14.2	13.6	12.3
Dividend payout (%) 71.3 82.9 82.7 78.5 76.2 Capex to sales (%) 3.0 1.0 0.9 0.3 0.3 Capex to depreciation (x) 8.0 2.2 3.1 1.6 1.8 ROE (%) 49.0 35.8 56.3 71.8 58.8 ROA (pretax %) 69.4 45.0 51.8 54.8 47.9 Growth (%) Revenue 28.7 (5.0) 92.2 78.7 17.4 EBITDA (0.9) (19.5) 79.7 69.2 8.8 EBIT (1.1) (20.1) 81.0 70.3 8.8 Normalised EPS (24.9) (24.4) 72.4 67.5 6.2 Normalised FDEPS (24.9) (24.4) 72.4 67.5 6.2 Normalised FDEPS (24.9) (24.4) 72.4 67.5 6.2 Norm EPS (NT\$) 37.9 28.7 49.4 82.8 87.9 Norm EPS (NT\$) 37.9 28.7 49.4 82.8 87.9 Book value per share (NT\$	Effective tax rate (%)	9.4	10.3	12.0	11.0	13.0
Capex to sales (%) 3.0 1.0 0.9 0.3 0.3 Capex to sales (%) 8.0 2.2 3.1 1.6 1.8 ROE (%) 49.0 35.8 56.3 71.8 58.8 ROA (pretax %) 69.4 45.0 51.8 54.8 47.9 Growth (%) 8.0 2.2 78.7 17.4 Revenue 28.7 (5.0) 92.2 78.7 17.4 EBITDA (0.9) (19.5) 79.7 69.2 8.8 EBIT (1.1) (20.1) 81.0 70.3 8.8 Normalised EPS (24.9) (24.4) 72.4 67.5 6.2 Normalised FDEPS (24.9) (24.4) 72.4 67.5 6.2 Normalised FDEPS (24.9) (24.4) 72.4 67.5 6.2 Normalised FDEPS 37.9 28.7 49.4 82.8 87.9 Norm EPS (NT\$) 37.9 28.7 49.4 82.8 87.9 Book value per share (NT\$) 80.3 83.2 91.4 139.3	Dividend payout (%)	71.3	82.9	82.7	78.5	76.2
Capex to depreciation (x) 8.0 2.2 3.1 1.6 1.8 ROE (%) 49.0 35.8 56.3 71.8 58.8 ROA (pretax %) 69.4 45.0 51.8 54.8 47.9 Growth (%) Revenue 28.7 (5.0) 92.2 78.7 17.4 EBITDA (0.9) (19.5) 79.7 69.2 8.8 EBIT (1.1) (20.1) 81.0 70.3 8.8 Normalised EPS (24.9) (24.4) 72.4 67.5 6.2 Normalised FDEPS (24.9) (24.4) 72.4 67.5 6.2 Normalised FDEPS (24.9) (24.4) 72.4 67.5 6.2 Normalised FDEPS (24.9) (24.4) 72.4 67.5 6.2 Norm EPS (NT\$) 37.9 28.7 49.4 82.8 87.9 Norm EPS (NT\$) 37.9 28.7 49.4 82.8 87.9 Book value per share (NT\$) 80.3 83.2 91.4 139.3 159.8 DPS (NT\$)<	Capex to sales (%)	3.0	10	0.9	0.3	0.2
ROE (%) 49.0 35.8 56.3 71.8 58.8 ROA (pretax %) 69.4 45.0 51.8 54.8 47.9 Growth (%) Revenue 28.7 (5.0) 92.2 78.7 17.4 EBITDA (0.9) (19.5) 79.7 69.2 8.8 EBIT (1.1) (20.1) 81.0 70.3 8.8 Normalised EPS (24.9) (24.4) 72.4 67.5 6.2 Normalised FDEPS (24.9) (24.4) 72.4 67.5 6.2 Per share Reported EPS (NT\$) 37.9 28.7 49.4 82.8 87.9 Norm EPS (NT\$) 37.9 28.7 49.4 82.8 87.9 Fully diluted norm EPS (NT\$) 37.9 28.7 49.4 82.8 87.9 Book value per share (NT\$) 80.3 83.2 91.4 139.3 159.8 DPS (NT\$) 27.0 23.7 40.0 65.0 67.0	Capex to depreciation (x)	8.0	2.2	3.1	1.6	1.8
ROA (pretax %) 40.0 50.0 50.0 50.0 71.0 50.0 Growth (%) 69.4 45.0 51.8 54.8 47.9 Growth (%) Revenue 28.7 (5.0) 92.2 78.7 17.4 EBITDA (0.9) (19.5) 79.7 69.2 8.8 EBIT (1.1) (20.1) 81.0 70.3 8.8 Normalised EPS (24.9) (24.4) 72.4 67.5 6.2 Normalised FDEPS (24.9) (24.4) 72.4 67.5 6.2 Per share Reported EPS (NT\$) 37.9 28.7 49.4 82.8 87.9 Norm EPS (NT\$) 37.9 28.7 49.4 82.8 87.9 Fully diluted norm EPS (NT\$) 37.9 28.7 49.4 82.8 87.9 Book value per share (NT\$) 80.3 83.2 91.4 139.3 159.8 DPS (NT\$) 27.0 23.7 40.0 65.0 67.0	ROF (%)	<u>4</u> 9 0	35.8	56.3	71 8	58.8
Growth (%) Revenue 28.7 (5.0) 92.2 78.7 17.4 EBITDA (0.9) (19.5) 79.7 69.2 8.8 EBIT (1.1) (20.1) 81.0 70.3 8.8 Normalised EPS (24.9) (24.4) 72.4 67.5 6.2 Normalised FDEPS (24.9) (24.4) 72.4 67.5 6.2 Per share Reported EPS (NT\$) 37.9 28.7 49.4 82.8 87.9 Norm EPS (NT\$) 37.9 28.7 49.4 82.8 87.9 Fully diluted norm EPS (NT\$) 37.9 28.7 49.4 82.8 87.9 Book value per share (NT\$) 80.3 83.2 91.4 139.3 159.8 DPS (NT\$) 27.0 23.7 40.0 65.0 67.0	ROA (pretax %)	-10.0 60.4	45.0	51.8	54.8	47.0
Growth (%) Revenue 28.7 (5.0) 92.2 78.7 17.4 EBITDA (0.9) (19.5) 79.7 69.2 8.8 EBIT (1.1) (20.1) 81.0 70.3 8.8 Normalised EPS (24.9) (24.4) 72.4 67.5 6.2 Normalised FDEPS (24.9) (24.4) 72.4 67.5 6.2 Per share Reported EPS (NT\$) 37.9 28.7 49.4 82.8 87.9 Norm EPS (NT\$) 37.9 28.7 49.4 82.8 87.9 Fully diluted norm EPS (NT\$) 37.9 28.7 49.4 82.8 87.9 Book value per share (NT\$) 80.3 83.2 91.4 139.3 159.8 DPS (NT\$) 27.0 23.7 40.0 65.0 67.0	non protax 70	03.4	-U. CF	51.0	04.0	71.3
Revenue 28.7 (5.0) 92.2 78.7 17.4 EBITDA (0.9) (19.5) 79.7 69.2 8.8 EBIT (1.1) (20.1) 81.0 70.3 8.8 Normalised EPS (24.9) (24.4) 72.4 67.5 6.2 Normalised FDEPS (24.9) (24.4) 72.4 67.5 6.2 Per share Reported EPS (NT\$) 37.9 28.7 49.4 82.8 87.9 Norm EPS (NT\$) 37.9 28.7 49.4 82.8 87.9 Fully diluted norm EPS (NT\$) 37.9 28.7 49.4 82.8 87.9 Book value per share (NT\$) 80.3 83.2 91.4 139.3 159.8 DPS (NT\$) 27.0 23.7 40.0 65.0 67.0	Growth (%)					
EBITDA (0.9) (19.5) 79.7 69.2 8.8 EBIT (1.1) (20.1) 81.0 70.3 8.8 Normalised EPS (24.9) (24.4) 72.4 67.5 6.2 Normalised FDEPS (24.9) (24.4) 72.4 67.5 6.2 Per share Reported EPS (NT\$) 37.9 28.7 49.4 82.8 87.9 Norm EPS (NT\$) 37.9 28.7 49.4 82.8 87.9 Fully diluted norm EPS (NT\$) 37.9 28.7 49.4 82.8 87.9 Book value per share (NT\$) 80.3 83.2 91.4 139.3 159.8 DPS (NT\$) 27.0 23.7 40.0 65.0 67.0	Revenue	28.7	(5.0)	92.2	78 7	174
EBIT (1.1) (20.1) 81.0 70.3 8.8 Normalised EPS (24.9) (24.4) 72.4 67.5 6.2 Normalised FDEPS (24.9) (24.4) 72.4 67.5 6.2 Per share Reported EPS (NT\$) 37.9 28.7 49.4 82.8 87.9 Norm EPS (NT\$) 37.9 28.7 49.4 82.8 87.9 Fully diluted norm EPS (NT\$) 37.9 28.7 49.4 82.8 87.9 Book value per share (NT\$) 37.9 28.7 49.4 82.8 87.9 Book value per share (NT\$) 37.9 28.7 49.4 82.8 87.9 Book value per share (NT\$) 37.9 28.7 49.4 82.8 87.9 Book value per share (NT\$) 80.3 83.2 91.4 139.3 159.8 DPS (NT\$) 27.0 23.7 40.0 65.0 67.0	FBITDA	(0.9)	(19.5)	79.7	69.2	8.8
EBIT (1.1) (20.1) 81.0 70.3 8.8 Normalised EPS (24.9) (24.4) 72.4 67.5 6.2 Normalised FDEPS (24.9) (24.4) 72.4 67.5 6.2 Per share Reported EPS (NT\$) 37.9 28.7 49.4 82.8 87.9 Norm EPS (NT\$) 37.9 28.7 49.4 82.8 87.9 Fully diluted norm EPS (NT\$) 37.9 28.7 49.4 82.8 87.9 Book value per share (NT\$) 80.3 83.2 91.4 139.3 159.8 DPS (NT\$) 27.0 23.7 40.0 65.0 67.0	EDITEA	(0.5)	(10.0)	13.1	70.0	0.0
Normalised EPS (24.9) (24.4) 72.4 67.5 6.2 Normalised FDEPS (24.9) (24.4) 72.4 67.5 6.2 Per share (24.9) (24.4) 72.4 67.5 6.2 Normalised FDEPS (24.9) (24.4) 72.4 67.5 6.2 Per share Reported EPS (NT\$) 37.9 28.7 49.4 82.8 87.9 Norm EPS (NT\$) 37.9 28.7 49.4 82.8 87.9 Fully diluted norm EPS (NT\$) 37.9 28.7 49.4 82.8 87.9 Book value per share (NT\$) 80.3 83.2 91.4 139.3 159.8 DPS (NT\$) 27.0 23.7 40.0 65.0 67.0	EBII	(1.1)	(20.1)	81.0	70.3	8.8
Normalised FDEPS (24.9) (24.4) 72.4 67.5 6.2 Per share Reported EPS (NT\$) 37.9 28.7 49.4 82.8 87.9 Norm EPS (NT\$) 37.9 28.7 49.4 82.8 87.9 Fully diluted norm EPS (NT\$) 37.9 28.7 49.4 82.8 87.9 Book value per share (NT\$) 37.9 28.7 49.4 82.8 87.9 Book value per share (NT\$) 37.9 28.7 49.4 82.8 87.9 Book value per share (NT\$) 27.0 23.7 40.0 65.0 67.0	Normalised EPS	(24.9)	(24.4)	72.4	67.5	6.2
Per share Reported EPS (NT\$) 37.9 28.7 49.4 82.8 87.9 Norm EPS (NT\$) 37.9 28.7 49.4 82.8 87.9 Fully diluted norm EPS (NT\$) 37.9 28.7 49.4 82.8 87.9 Book value per share (NT\$) 37.9 28.7 49.4 82.8 87.9 Book value per share (NT\$) 37.9 28.7 49.4 82.8 87.9 DPS (NT\$) 27.0 23.7 40.0 65.0 67.0	Normalised FDEPS	(24.9)	(24.4)	72.4	67.5	6.2
Per snare Reported EPS (NT\$) 37.9 28.7 49.4 82.8 87.9 Norm EPS (NT\$) 37.9 28.7 49.4 82.8 87.9 Fully diluted norm EPS (NT\$) 37.9 28.7 49.4 82.8 87.9 Book value per share (NT\$) 37.9 28.7 49.4 82.8 87.9 DPS (NT\$) 37.9 28.7 49.4 82.8 87.9 Book value per share (NT\$) 80.3 83.2 91.4 139.3 159.8 DPS (NT\$) 27.0 23.7 40.0 65.0 67.0	Bar al ana					
Reported EPS (NT\$) 37.9 28.7 49.4 82.8 87.9 Norm EPS (NT\$) 37.9 28.7 49.4 82.8 87.9 Fully diluted norm EPS (NT\$) 37.9 28.7 49.4 82.8 87.9 Book value per share (NT\$) 37.9 28.7 49.4 82.8 87.9 DPS (NT\$) 27.0 23.7 40.0 65.0 67.0	Personal EDS (NITC)	07.0	00 7	40.4	00.0	07.0
Norm EPS (N1\$) 37.9 28.7 49.4 82.8 87.9 Fully diluted norm EPS (NT\$) 37.9 28.7 49.4 82.8 87.9 Book value per share (NT\$) 80.3 83.2 91.4 139.3 159.8 DPS (NT\$) 27.0 23.7 40.0 65.0 67.0		37.9	28.7	49.4	82.8	87.9
Fully diluted norm EPS (N1\$) 37.9 28.7 49.4 82.8 87.9 Book value per share (NT\$) 80.3 83.2 91.4 139.3 159.8 DPS (NT\$) 27.0 23.7 40.0 65.0 67.0		37.9	28.7	49.4	82.8	87.9
BOOK value per share (N1\$) 80.3 83.2 91.4 139.3 159.8 DPS (NT\$) 27.0 23.7 40.0 65.0 67.0	Fully diluted norm EPS (NT\$)	37.9	28.7	49.4	82.8	87.9
DPS (N1\$) 27.0 23.7 40.0 65.0 67.0	Book value per share (NT\$)	80.3	83.2	91.4	139.3	159.8
the same a first start of the s	DPS (NT\$)	27.0	23.7	40.0	65.0	67.0

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Cashflow (NT\$mn)					
Year-end 31 Dec	FY08	FY09	FY10F	FY11F	FY12F
EBITDA	30,820	24,823	44,616	75,506	82,135
Change in working capital	8,849	1,555	870	(13,705)	(5,214)
Other operating cashflow	(2,074)	1,164	(5,208)	2,218	(1,982)
Cashflow from operations	37,594	27,542	40,278	64,019	74,939
Capital expenditure	(4,570)	(1,423)	(2,489)	(1,493)	(1,680)
Free cashflow	33,025	26,119	37,788	62,527	73,259
Reduction in investments	(2,229)	(3,861)	7,826	(65)	(35)
Net acquisitions	-	-	-	-	-
Reduction in other LT assets	(856)	(1,880)	(285)	(43)	(44)
Addition in other LT liabilities	6	(5)	(0)	-	-
Adjustments	946	2,015	(6,436)	43	44
Cashflow after investing acts	30,892	22,387	38,893	62,461	73,224
Cash dividends	(19,487)	(20,126)	(20,122)	(33,255)	(57,853)
Equity issue	(3,410)	(2,407)	(7,700)	(3,800)	(4,000)
Debt issue	-	-	(79)	-	-
Convertible debt issue	-	0	0	-	-
Others	(1,204)	(5)	2,232	(1,500)	(1,500)
Cashflow from financial acts	(24,101)	(22,538)	(25,669)	(38,555)	(63,353)
Net cashflow	6,791	(150)	13,224	23,906	9,871
Beginning cash	55,036	61,827	61,676	74,900	98,806
Ending cash	61,827	61,676	74,900	98,806	108,677
Ending net debt	(61,827)	(61,676)	(74,900)	(98,806)	(108,677)
Source: Nomura estimates					

Balance sheet (NT\$mn)					
As at 31 Dec	FY08	FY09	FY10F	FY11F	FY12F
Cash & equivalents	61,827	61,676	74,900	98,806	108,677
Marketable securities	-	2,516	401	401	401
Accounts receivable	29,799	27,571	61,610	91,755	104,754
Inventories	7,418	4,739	26,410	40,291	47,061
Other current assets	2,228	4,524	10,111	10,111	10,111
Total current assets	101,272	101,025	173,432	241,364	271,004
LT investments	5,161	6,506	794	860	895
Fixed assets	7,376	8,314	11,894	13,387	15,067
Goodwill	-	-	-	-	-
Other intangible assets	-	-	676	624	575
Other LT assets	1,418	3,298	3,583	3,626	3,670
Total assets	115,226	119,143	190,380	259,860	291,211
Short-term debt	-	-	-	-	-
Accounts payable	27,907	24,882	66,513	97,281	112,275
Other current liabilities	26,651	28,619	49,156	48,708	48,269
Total current liabilities	54,558	53,502	115,669	145,989	160,544
Long-term debt	-	-	-	-	-
Convertible debt	-	-	-	-	-
Other LT liabilities	6	1	1	1	1
Total liabilities	54,565	53,503	115,670	145,990	160,545
Minority interest	-	-	-	-	-
Preferred stock	-	-	-	-	-
Common stock	7,554	7,889	8,177	8,177	8,177
Retained earnings	56,454	57,738	71,109	105,694	122,489
Proposed dividends	-	-	-	-	-
Other equity and reserves	(3,346)	13	(4,575)	-	-
Total shareholders' equity	60,661	65,640	74,710	113,870	130,666
Total equity & liabilities	115,226	119,143	190,380	259,860	291,211
Liquidity (x)					
Current ratio	1.86	1.89	1.50	1.65	1.69
Interest cover	na	na	na	na	na
Leverage					
Net debt/EBITDA (x)	net cash				
Net debt/equity (%)	net cash				
Activity (days)					
Davs receivable	59.1	72.3	58.4	56.2	61.6
Davs inventory	24.3	22.4	29.1	34.4	37.8
Davs pavable	89.6	97.3	85.5	84.5	90.8
Cash cvcle	(6.2)	(2.6)	2.1	6.1	8.6
Source: Nomura estimates	(0.2)	(=.5)		0.1	0.0

Zero debt operation

MediaTek 2454 TT

TECHNOLOGY/IC DESIGN | TAIWAN

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O Action

We maintain our REDUCE rating and cut our PT to NT\$220 following our analysis of the nature of Android technology, cost of smartphones and consumer profile for white-box handset users. While in the near term we see share price upside risk from 1) the launch of MT6252; 2) possible announcement of a share buyback and 3) a seasonal volume pickup, we advise using any strength to REDUCE.

🖊 Catalysts

Continuation of a consensus earnings downward-revision cycle triggered by intensifying ASP pressure, falling market share and slow new product launch.

Anchor themes

With competition intensifying in China's 2G integrated circuit market and the rapid transition to the 3G wireless system, companies that can benefit from (or avoid) pricing competition in 2G chips and increase market share are likely to have the advantage in the supply chain.

US\$100 smartphone — so what?

Reiterate REDUCE with new price target of NT\$220

MediaTek is now trading at 21-22x forward P/E, which implies the strong anticipation by investors on its smartphone shipments and earnings recovery into 2012. However, we reiterate our contrarian view that its earnings won't recover until 2013, at the earliest, as we believe even a US\$100 smartphone can not save the company, not to mention that such a smartphone won't even be viable until 2H12. We have cut our 2012 smartphone shipment forecasts to 25-30mn units, much lower than market consensus of 50-80mn units, following our indepth demand and cost analysis.

② 3G/smartphones are game changers; even US\$100 smartphone cannot save the company

We do not question MediaTek's chip design capability. It is a globaltier fabless company with strong R&D capability. However, 3G and smartphones have changed the game — the 3G license with Qualcomm has restricted the "white box opportunity" for Chinese handset makers. MediaTek's weak consumer profile has limited the possibility of smartphone popularity given the smartphone's nature and cost structure, and we believe even a US\$100 retail price cannot make the white-box smartphone popular.

3 What would change our long-standing bearish view?

There are only two scenarios that could save MediaTek from a structural downturn, in our view: directly shipping smartphone chips to global-tier handset brands and for US\$70-80 smartphones to become viable. Both are unlikely before 2013, at the earliest, in our view.

④ Near-term upside risk offers good opportunity to exit

Near term (2Q11), MediaTek's share price might stabilise on 1) the launch of MT6252, which will give MediaTek a short break, in our view; 2) a possible share buyback plan (for employee bonus), which investors could read as a positive sign and 3) a seasonal volume pickup before the 1 May long holiday.

Maintained

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IOMURA INTERNATIONAL (HK) LIMITED

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1	Closing price on 29 Mar		NT\$341.0
	Price target	NT	\$220.0
		(from	NT\$250.0)
	Upside/dow nside		-35.5%
	Difference from consensus	5	-45.0%
	FY11F net profit (NT\$mn)		17,619
	Difference from consensus	5	-19.1%
	Source: Nomura		

Nomura vs consensus

Our FY11 and FY12 EPS forecasts are 19% and 25%, respectively, below market consensus on our structurally Bearish view.

Key financials & valuations										
31 Dec (NT\$mn)	FY09	FY10F	FY11F	FY12F						
Revenue	115,512	113,522	95,620	104,246						
Reported net profit	36,706	30,961	17,619	18,213						
Normalised net profit	36,706	30,961	17,619	18,213						
Normalised EPS (NT\$)	34.17	28.40	16.16	16.71						
Norm. EPS growth (%)	87.6	(16.9)	(43.1)	3.4						
Norm. P/E (x)	10.0	12.0	21.1	20.4						
EV/EBITDA (x)	6.9	8.1	13.6	13.0						
Price/book (x)	3.4	3.3	3.5	3.4						
Dividend yield (%)	7.6	6.5	3.8	3.8						
ROE (%)	38.5	27.8	16.1	17.1						
Net debt/equity (%)	net cash	net cash	net cash	net cash						
Earnings revisions										
Previous norm. net profit		30,961	18,128	21,797						
Change from previous (%)		-	(2.8)	(16.4)						
Previous norm. EPS (NT\$)		28.40	16.63	20.00						
Source: Company, Nomura actimates										

Share price relative to MSCITW



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Valuation and risks

Our price target is based on an unchanged 8x (ex-cash) target P/E multiple, equivalent to a 10% discount on its average ex-cash P/E range of 5-13x during the past cycle, as we expect MediaTek to record two consecutive years of earnings declines (the worst performance in the company's history), followed by only moderate recovery in FY12F. We set our price target at NT\$220 by adding end-FY10F cash value of about NT\$90/share to its non-cash market value of NT\$130 (derived from 8x our FY12F EPS estimate).

We believe upside risks include: 1) better-than-expected handset IC shipment growth, particularly from emerging market demand; 2) earlier-than-expected launch of nextgeneration 3G and smartphone chips; and 3) better-than-expected acceptance of MediaTek's EDGE Android smartphone.

Our price target of NT\$220 is derived from non-cash market value of NT\$130, plus net cash of NT\$90/share



Source: Bloomberg, Nomura research

Earnings revisions

We have cut our FY11F and FY12F EPS forecasts by 3% and 16% for both years, mainly to factor in a slower-than-expected smartphone volume pickup.

We cut FY11-12F EPS by 3% and 16% to factor in slower smartphone pick up

Exhibit 73. Media	xhibit 73. MediaTek: earnings forecast revisions										
	FY10F				FY11F		FY12F				
(NT\$mn)	Previous	Revised	Change (%)	Previous	Revised	Change (%)	Previous	Revised	Change (%)		
Sales	113,522	113,522	0.0	95,522	95,620	0.1	105,984	104,246	(1.6)		
Gross profit	60,908	60,908	0.0	45,271	44,748	(1.2)	50,350	47,488	(5.7)		
Operating income	31,079	31,079	0.0	18,461	17,933	(2.9)	22,405	18,660	(16.7)		
Net profit	30,961	30,961	0.0	18,128	17,619	(2.8)	21,797	18,213	(16.4)		
EPS (NT\$)	28.40	28.40	0.0	16.63	16.16	(2.8)	20.00	16.71	(16.4)		

Source: Nomura estimates

Exhibit 74. MediaTek: quarterly income statement												
(NT\$mn)	1Q09	2Q09	3Q09	4Q09	1Q10	2Q10	3Q10	4Q10F	1Q11F	2Q11F	3Q11F	4Q11F
Net sales	23,906	28,149	34,357	29,100	32,707	29,954	28,181	22,680	20,045	22,804	26,991	25,779
COGS	10,488	11,511	13,677	12,019	14,158	13,470	13,464	11,522	10,683	12,129	14,356	13,704
Gross profit	13,418	16,639	20,680	17,081	18,549	16,484	14,717	11,158	9,362	10,676	12,635	12,075
SG&A	1,201	1,588	1,948	2,508	1,975	1,768	1,368	1,407	1,303	1,459	1,727	1,676
R&D expenses	5,607	5,759	6,945	5,874	5,510	5,443	6,434	5,924	5,000	5,100	5,300	5,250
Op income	6,610	9,292	11,787	8,698	11,064	9,273	6,915	3,827	3,060	4,116	5,608	5,149
Net non-op income	298	311	214	213	319	432	333	143	79	90	80	77
Pre-tax income	6,907	9,602	12,001	8,911	11,383	9,705	7,248	3,969	3,138	4,206	5,687	5,225
Tax expenses	(93)	443	207	168	256	682	270	142	110	147	199	183
Minority interest	(4)	(1)	(2)	(3)	(7)	(7)	8	0	(1)	(0)	1	(1)
Net income	7,004	9,161	11,795	8,746	11,134	9,030	6,969	3,828	3,029	4,059	5,487	5,043
EPS (NT\$)	6.52	8.53	10.98	8.14	10.21	8.28	6.39	3.51	2.78	3.72	5.03	4.63
Profitability (%)												
Gross margin	56.1	59.1	60.2	58.7	56.7	55.0	52.2	49.2	46.7	46.8	46.8	46.8
Op margin	27.6	33.0	34.3	29.9	33.8	31.0	24.5	16.9	15.3	18.1	20.8	20.0
Pre-tax margin	28.9	34.1	34.9	30.6	34.8	32.4	25.7	17.5	15.7	18.4	21.1	20.3
Net margin	29.3	32.5	34.3	30.1	34.0	30.1	24.7	16.9	15.1	17.8	20.3	19.6
q-q (%)												
Sales	16	18	22	(15)	12	(8)	(6)	(20)	(12)	14	18	(4)
Gross profit	19	24	24	(17)	9	(11)	(11)	(24)	(16)	14	18	(4)
Op income	40	41	27	(26)	27	(16)	(25)	(45)	(20)	35	36	(8)
Net income	143	31	29	(26)	27	(19)	(23)	(45)	(21)	34	35	(8)
у-у (%)												
Sales	23	26	22	41	37	6	(18)	(22)	(39)	(24)	(4)	14
Gross profit	36	36	36	52	38	(1)	(29)	(35)	(50)	(35)	(14)	8
Op profit	72	53	54	84	67	(0)	(41)	(56)	(72)	(56)	(19)	35
Net profit	73	80	64	204	59	(1)	(41)	(56)	(73)	(55)	(21)	32

Source: Company data, Nomura estimates

Financial statements

Income statement (NT\$mn)					
Year-end 31 Dec	FY08	FY09	FY10F	FY11F	FY12F
Revenue	90,402	115,512	113,522	95,620	104,246
Cost of goods sold	(41,819)	(47,694)	(52,614)	(50,871)	(56,758)
Gross profit	48,583	67,817	60,908	44,748	47,488
SG&A	(19,871)	(18,207)	(22,056)	(22,388)	(24,204)
Employee share expense	(6,404)	(13,223)	(7,774)	(4,427)	(4,625)
Operating profit	22,308	36,387	31,079	17,933	18,660
EBITDA	25,603	39,632	34,049	20,974	21,749
Depreciation	(3,295)	(3,245)	(1,101)	(1,182)	(1,229)
Amortisation	-	-	(1,869)	(1,860)	(1,860)
EBIT	22,308	36,387	31,079	17,933	18,660
Net interest expense	174	198	150	(7)	(6)
Associates & JCEs	(2,315)	242	257	330	417
Other income	931	592	820	-	-
Earnings before tax	21,098	37,420	32,305	18,256	19,070
Income tax	(1,924)	(725)	(1,350)	(639)	(858)
Net profit after tax	19,174	36,695	30,955	17,617	18,212
Minority interests	16	10	6	2	1
Other items	-	-	-	-	-
Preferred dividends	-	-	-	-	-
Normalised NPAT	19,190	36,706	30,961	17,619	18,213
Extraordinary items	-	-	0	-	-
Reported NPA I	19,190	30,700	30,901	17,619	18,213
Dividends	(15,024)	(28,343)	(23,983)	(14,172)	(14,172)
Iransfer to reserves	4,166	8,363	6,979	3,447	4,042
Valuation and ratio analysis					
FD normalised $P/F(x)$	18 7	10.0	12.0	21.1	20.4
FD normalised P/E at price target (x)	12.1	6.4	7.7	13.6	13.2
Reported P/E (x)	18.7	10.0	12.0	21.1	20.4
Dividend vield (%)	4 1	7.6	6.5	3.8	3.8
Price/cashflow (x)	10.1	6.6	11 7	23.7	22.0
Price/book (x)	4.5	3.4	3.3	3.5	.3.4
FV/FBITDA(x)	13.7	6.9	8.1	13.6	13.0
EV/EBIT(x)	15.9	7.6	8.9	15.8	15.1
Gross margin (%)	53.7	58.7	53.7	46.8	45.6
EBITDA margin (%)	28.3	34.3	30.0	21.9	20.9
EBIT margin (%)	20.0	31.5	27.4	18.8	17.9
Net margin (%)	21.2	31.8	27.3	18.4	17.5
Effective tax rate (%)	9.1	1 9	4.2	3.5	4.5
Dividend payout (%)	78.3	77.2	77.5	80.4	77.8
Capex to sales (%)	1.8	14	1.6	0.3	0.3
Capex to depreciation (x)	0.5	0.5	1.6	0.3	0.3
	22.0	28.5	27.9	16.1	17.1
ROA (pretax %)	42.4	81.4	69.2	37.5	36.8
()/					- 0.0
Growth (%)					
Revenue	12.1	27.8	(1.7)	(15.8)	9.0
EBITDA	(24.7)	54.8	(14.1)	(38.4)	3.7
EBIT	(30.0)	63.1	(14.6)	(42.3)	4.1
Normalised EPS	(117)	87.6	(16.0)	(43.1)	3 /
Normalised FDFPS	(44.7)	87.6	(16.9)	(43.1)	3.4
	(• • • •)	01.0	(10.0)	(10.1)	0.7
Per share					
Reported EPS (NT\$)	18.2	34.2	28.4	16.2	16.7
Norm EPS (NT\$)	18.2	34.2	28.4	16.2	16.7
Fully diluted norm EPS (NT\$)	18.2	34.2	28.4	16.2	16.7
Book value per share (NT\$)	76.0	99.9	104.1	96.5	99.3
DPS (NT\$)	14.0	26.0	22.0	13.0	13.0
Source: Nomura estimates					

We don't expect MediaTek's FY12F EPS to pick up strongly

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Cashflow (NT\$mn)					
Year-end 31 Dec	FY08	FY09	FY10F	FY11F	FY12F
EBITDA	25,603	39,632	34,049	20,974	21,749
Change in w orking capital	10,557	8,663	(8,678)	1,924	(1,591)
Other operating cashflow	(561)	6,946	6,352	(7,240)	(3,294)
Cashflow from operations	35,599	55,240	31,722	15,658	16,864
Capital expenditure	(1,666)	(1,572)	(1,795)	(319)	(332)
Free cashflow	33,933	53,668	29,928	15,339	16,533
Reduction in investments	2,965	4,085	857	(318)	(331)
Net acquisitions	(1,400)	(99)	(328)	-	-
Reduction in other LT assets	(11,591)	1,370	4,730	(3,793)	335
Addition in other LT liabilities	16	165	536	32	33
Adjustments	1,193	(2,181)	(6,069)	3,762	(368)
Cashflow after investing acts	25,116	57,009	29,653	15,021	16,202
Cash dividends	(22,906)	(14,915)	(30,057)	(25,868)	(15,250)
Equity issue	-	-	-	-	-
Debt issue	-	-	-	-	-
Convertible debt issue	-	-	55	-	-
Others	223	(467)	(663)	123	127
Cashflow from financial acts	(22,682)	(15,383)	(30,665)	(25,745)	(15,124)
Net cashflow	2,434	41,626	(1,012)	(10,724)	1,078
Beginning cash	50,588	53,022	94,648	93,636	82,912
Ending cash	53,022	94,648	93,636	82,912	83,990
Ending net debt	(53,022)	(94,648)	(93,636)	(82,912)	(83,990)
Source: Nomura estimates					

Balance sheet (NT\$mn)					
As at 31 Dec	FY08	FY09	FY10F	FY11F	FY12F
Cash & equivalents	53,022	94,648	93,636	82,912	83,990
Marketable securities	4,573	2,199	2,285	2,285	2,285
Accounts receivable	5,429	7,267	7,487	6,558	7,085
Inventories	5,547	8,173	9,518	9,799	10,661
Other current assets	2,656	1,751	5,408	5,727	6,073
Total current assets	71,226	114,038	118,334	107,281	110,093
LT investments	8,970	6,662	7,838	8,156	8,487
Fixed assets	6,504	6,889	7,848	8,166	8,498
Goodwill	-	-	-	-	-
Other intangible assets	-	0	-	-	-
Other LT assets	12,375	11,005	6,274	10,068	9,733
Total assets	99,074	138,593	140,294	133,672	136,811
Short-term debt	-	-	-	-	-
Accounts payable	4,907	11,794	8,740	11,015	11,812
Other current liabilities	12,326	17,660	17,257	16,577	15,924
Total current liabilities	17,232	29,454	25,998	27,593	27,736
Long-term debt	-	-	-	-	-
Convertible debt	-	-	-	-	-
	83	248	784	816	849
I otal liabilities	17,316	29,703	26,782	28,409	28,586
Professional atopic	148	21	27	27	27
Common stock	-	-	-	-	-
Common Stock	71,732	10,901	10,999	10,999	10,999
Proposed dividende	71,209	96,379	104,926	96,679	99,042
	(220)	(444)	(0.440)	(0.440)	(0.440)
Other equity and reserves	(329)	(411)	(2,442)	(2,442)	(2,442)
Total shareholders equity	01,011	100,009	113,403	105,230	106,199
Total equity & liabilities	99,074	138,593	140,294	133,672	136,811
Liquidity (x)					
Current ratio	4.13	3.87	4.55	3.89	3.97
Interest cover	na	na	na	2,701.4	2,965.7
Levenene					
	notocob	not occh	not occh	not ooob	not ocob
Net debt/EBITDA (X)	net cash				
Net debt/equity (%)	net cash				
Activity (days)					
Days receivable	25.3	20.1	23.7	26.8	24.0
Days inventory	70.4	52.5	61.4	69.3	66.0
Days payable	54.5	63.9	71.2	70.9	73.6
Cash cycle	41.3	8.7	13.9	25.2	16.3

Cash cycle Source: Nomura estimates

MStar Semiconductor 3697 TT

TECHNOLOGY/IC DESIGN | TAIWAN

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O Action

We have maintained our non-consensus NEUTRAL view since MStar's IPO (Dec 25th, 2010) and our initiation. Mstar's handset chip business continues to be slow, although its TV chip business for 2011 is solid. However, TV chip is the major sales contributor to MStar with long-term downside risk. We continue to recommend investors stay on the sidelines as risk-reward looks fair for now.

🖊 Catalysts

Stronger-than-expected handset or/and STB chip volume ramp-up (upside) or unexpected TV chip order allocation shifted by main TV customers (downside).

Anchor themes

We expect Taiwan fabless companies that can continue to grow market share, deliver above-peers' sales growth momentum and sustain or even improve gross margin to outperform peers.

Slow handset momentum

① Stay non-consensus NEUTRAL with TP of NT\$250

We maintain our NEUTRAL rating on MStar with a TP of NT\$250. While the market is positive, we remain conservative given our persistent concerns on client concentration risk in the TV chip business and likely even slower handset chip volume ramp-up post handset management reorganisation. At 15x 2011F EPS or 1x PEG, valuation looks fair.

2 TV chip business looks solid for 2011

MStar targets to expand its leading gap with MediaTek in 2011 with its dedicated customer service, comprehensive software platform and more leading technology in 3D TV and connective TV. Our industry survey suggests that it has lots of design-ins at Japan TV makers, which is a new market for them and helpful in sustaining MStar's +50% market share for 2011. However, such high market share also suggests limited long-term upside, not to mention its high customer concentration risk and strong competition from MediaTek, Trident and in-house chips by Samsung and LGE.

3 Handset chip not a threat to competitors before 2012

We have been conservative on Mstar's handset chip business since our initiation. Further checks continue to point to disappointing handset chip shipments, which we attribute to unstable and unfriendly software, insufficient engineering resource and changing marketing plan. However, if Mstar can make its software stable over time, we expect it to become a stronger threat to the existing two vendors MediaTek and Spreadtrum from 2012 onwards.

④ STB chip a new opportunity but just the beginning

STB is a new market for Mstar. With its focus on high end STB (high definition with CA), there might be long-term upside. However, sales contribution will be limited at less than 5% for 2011, we believe.

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NEUTRAL

Maintained

_		
	Closing price on 29 Mar	NT\$240.0
	Price target	NT\$250.0
		(set on 14 Feb 11)
	Upside/dow nside	4.2%
	Difference from consensus	s -21.9%
	FY11F net profit (NT\$mn)	7,571
	Difference from consensus	s -4.7%
	Source: Nomura	

Nomura vs consensus

We are the only broker with a NEUTRAL rating (others have BUYs), as we have concerns over customer concentration risk and slow handset volume ramp-up.

Key financials & valuations										
31 Dec (NT\$mn)	FY09	FY10F	FY11F	FY12F						
Revenue	27,712	33,662	39,961	46,666						
Reported net profit	4,815	6,524	7,571	8,834						
Normalised net profit	4,815	6,524	7,571	8,834						
Normalised EPS (NT\$)	10.37	14.08	15.63	18.24						
Norm. EPS growth (%)	77.8	35.7	11.0	16.7						
Norm. P/E (x)	23.1	17.0	15.4	13.2						
EV/EBITDA (x)	17.2	12.5	10.4	8.7						
Price/book (x)	6.3	4.6	4.0	3.4						
Dividend yield (%)	0.8	2.9	3.3	3.3						
ROE (%)	31.7	30.2	27.6	27.9						
Net debt/equity (%)	net cash	net cash	net cash	net cash						
Earnings revisions										
Previous norm. net profit		6,524	7,571	8,834						
Change from previous (%)		-	-	-						
Previous norm. EPS (NT\$)		14.08	15.63	18.24						
Courses Company, Namura actimates										

course. company, nomura estimates

Share price relative to MSCITW



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Our target price of NT\$250 is

estimate

derived from 16x our 2011F EPS

Valuation methodology

Our target price of NT\$250 is derived from 16x our 2011F EPS estimate. Our target PE multiple is 16x (unchanged) as we expect slower earnings CAGR in FY10-12 due to rising operating expense and NTD appreciation. Our target P/E multiple of 16x is to factor in our expectation of slower earnings CAGR in FY10-12 on rising operating expenses and our 16x P/E multiple is based on unchanged 1x PEG.

Investment risks

Upside risks: 1) unsuccessful product strategies by either MediaTek or Spreadtrum, which could provide MStar with opportunities to penetrate into more handset accounts; 2) earlier-than-expected resolution of handset chip software stability and userunfriendly software, and/or launch of self-owned RF chip; and 3) larger-than-expected contributions from other (non-handset and non-TV) businesses.

Downside risks: 1) high sales concentration with Samsung and LGE; 2) slower-thanexpected resolution of handset chip software stability and user-unfriendly software, and/or launch of self-owned RF chip; and 3) in an extreme case, MediaTek can sacrifice its ASP and gross margin for its TV chip business to compete with MStar as TV chips only account for less than 10% of MediaTek's total sales but 80% of MStar's total sales.

Exhibit 75. MStar: quarterly income statement

	- -											
(NT\$mn)	1Q09	2Q09	3Q09	4Q09	1Q10	2Q10	3Q10	4Q10E	1Q11F	2Q11F	3Q11F	4Q11F
Net sales	5,754	5,754	8,826	7,377	6,872	9,181	9,414	8,196	8,343	8,879	10,930	11,809
COGS	3,232	3,232	5,066	4,295	3,941	5,237	5,459	4,818	4,847	5,170	6,487	6,934
Gross profit	2,522	2,522	3,761	3,081	2,930	3,944	3,954	3,378	3,496	3,709	4,443	4,875
SG&A	435	435	572	545	536	582	550	639	584	533	590	709
R&D expenses	938	938	1,145	1,292	893	1,218	1,386	1,335	1,300	1,400	1,500	1,550
Op income	1,149	1,149	2,043	1,245	1,501	2,143	2,018	1,404	1,612	1,776	2,353	2,616
Net non-op income	(26)	(26)	(117)	(241)	10	113	(201)	326	25	12	9	9
Pre-tax income	1,124	1,124	1,926	1,004	1,511	2,256	1,817	1,730	1,637	1,788	2,362	2,626
Tax expenses	88	88	130	56	181	330	106	173	164	179	236	263
Net income	1,035	1,035	1,796	948	1,330	1,926	1,711	1,557	1,473	1,609	2,126	2,363
EPS (NT\$)	2.23	2.23	3.87	2.04	2.87	4.16	3.69	3.36	3.04	3.32	4.39	4.88
Profitability (%)												
Gross margin	43.8	43.8	42.6	41.8	42.6	43.0	42.0	41.2	41.9	41.8	40.7	41.3
Op margin	20.0	20.0	23.1	16.9	21.8	23.3	21.4	17.1	19.3	20.0	21.5	22.2
Pre-tax margin	19.5	19.5	21.8	13.6	22.0	24.6	19.3	21.1	19.6	20.1	21.6	22.2
Net margin	18.0	18.0	20.4	12.9	19.4	21.0	18.2	19.0	17.7	18.1	19.4	20.0
(% q-q)												
Sales	52	0	53	(16)	(7)	34	3	(13)	2	6	23	8
Gross profit	57	0	49	(18)	(5)	35	0	(15)	3	6	20	10
Op income	102	0	78	(39)	21	43	(6)	(30)	15	10	32	11
Net income	66	0	73	(47)	40	45	(11)	(9)	(5)	9	32	11
(% у-у)												
Sales	52	52	133	94	19	60	7	11	21	(3)	16	44
Gross profit	57	57	134	92	16	56	5	10	19	(6)	12	44
Op profit	102	102	258	118	31	87	(1)	13	7	(17)	17	86
Net profit	66	66	188	52	28	86	(5)	64	11	(16)	24	52

Source: Company data, Nomura estimates

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Financial statements

Income statement (NT\$mn)					
Year-end 31 Dec	FY08	FY09	FY10F	FY11F	FY12F
Revenue	15,177	27,712	33,662	39,961	46,666
Cost of goods sold	(8,761)	(15,825)	(19,456)	(23,439)	(27,443)
Gross profit	6,416	11,886	14,206	16,522	19,223
SG&A	(4,136)	(6,300)	(5,607)	(6,670)	(7,580)
Employee share expense	-	-	(1,533)	(1,496)	(1,745)
Operating profit	2.280	5.586	7.066	8.357	9.898
51	,	- ,	,	-,	- ,
EBITDA	2.949	6.476	8.163	9.550	11.118
Depreciation	(99)	(128)	(136)	(147)	(153)
Amortisation	(570)	(762)	(961)	(1,046)	(1,067)
EBIT	2.280	5.586	7.066	8.357	9.898
Net interest expense	101	64	69	55	49
Associates & JCEs	175	(463)	(139)	-	(132)
Other income	52	(9)	319	-	-
Earnings before tax	2.607	5.177	7.315	8.412	9.815
Income tax	(115)	(362)	(791)	(841)	(982)
Net profit after tax	2,492	4,815	6,524	7,571	8,834
Minority interests	-	-		-	-
Other items	-	-	-	-	-
Preferred dividends	-	-	-	-	-
Normalised NPAT	2,492	4.815	6.524	7.571	8.834
Extraordinary items	-	-	-	-	-
Reported NPAT	2,492	4,815	6,524	7,571	8,834
Dividends	-	(928)	(3.391)	(3.875)	(3.875)
Transfer to reserves	2,492	3.887	3.134	3.696	4.959
	_,	-,	-,	-,	-,
Valuation and ratio analysis					
FD normalised P/E (x)	41.1	23.1	17.0	15.4	13.2
FD normalised P/E at price target (x)	42.8	24.1	17.8	16.0	13.7
Reported P/E (x)	41.1	23.1	17.0	15.4	13.2
Dividend yield (%)	-	0.8	2.9	3.3	3.3
Price/cashflow (x)	31.0	14.5	14.7	16.4	10.9
Price/book (x)	8.1	6.3	4.6	4.0	3.4
EV/EBITDA (x)	35.2	17.2	12.5	10.4	8.7
EV/EBIT (x)	44.8	20.2	14.5	11.9	9.8
Gross margin (%)	42.3	42.9	42.2	41.3	41.2
EBITDA margin (%)	19.4	23.4	24.2	23.9	23.8
EBIT margin (%)	15.0	20.2	21.0	20.9	21.2
Net margin (%)	16.4	17.4	19.4	18.9	18.9
Effective tax rate (%)	4.4	7.0	10.8	10.0	10.0
Dividend payout (%)	-	19.3	52.0	51.2	43.9
Capex to sales (%)	4.2	4.0	0.5	0.2	0.2
Capex to depreciation (x)	6.5	8.7	1.2	0.6	0.6
ROE (%)	21.8	31.7	30.2	27.6	27.9
ROA (pretax %)	33.2	53.2	51.2	47.0	47.8
Growth (%)					
Revenue	20.8	82.6	21.5	18.7	16.8
EBITDA	(21.3)	119.6	26.1	17.0	16.4
FBIT	(32.1)	145.0	26.5	18.3	18.4
	(32.1)	77.0	20.0	10.0	10.4
Normalised EPS	(70.3)	77.8	35.7	11.0	16.7
Normalised FDEPS	(70.3)	//.8	35.7	11.0	16.7
Devictore					
Personal EDC (NECC)	F 0	40.4		45.0	40.0
	5.8	10.4	14.1	15.6	18.2
	5.8	10.4	14.1	15.6	18.2
Fully diluted norm EPS (NI\$)	5.8	10.4	14.1	15.6	18.2
Book value per share (NT\$)	29.6	38.2	52.5	60.8	69.8
DPS (NT\$)	-	2.0	7.0	8.0	8.0

Source: Nomura estimates

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Cashflow (NT\$mn)					
Year-end 31 Dec	FY08	FY09	FY10F	FY11F	FY12F
EBITDA	2,949	6,476	8,163	9,550	11,118
Change in w orking capital	258	2,717	(4,389)	(2,723)	(796)
Other operating cashflow	103	(1,530)	3,808	248	310
Cashflow from operations	3,310	7,662	7,582	7,075	10,632
Capital expenditure	(643)	(1,113)	(157)	(92)	(96)
Free cashflow	2,667	6,549	7,425	6,983	10,537
Reduction in investments	48	632	(1,942)	-	-
Net acquisitions	-	7	0	-	-
Reduction in other LT assets	-	-	-	-	-
Addition in other LT liabilities	-	-	-	-	-
Adjustments	(1,154)	(741)	(753)	-	-
Cashflow after investing acts	1,560	6,447	4,730	6,983	10,537
Cash dividends	(1)	-	(1,008)	(4,245)	(5,231)
Equity issue	-	-	-	-	-
Debt issue	-	868	1,946	-	-
Convertible debt issue	-	-	-	-	-
Others	(32)	255	(706)	(1,631)	(1,893)
Cashflow from financial acts	(33)	1,123	233	(5,876)	(7,124)
Net cashflow	1,527	7,570	4,963	1,107	3,413
Beginning cash	4,798	6,326	13,896	18,859	19,966
Ending cash	6,326	13,896	18,859	19,966	23,379
Ending net debt	(6,326)	(13,028)	(16,055)	(17,200)	(20,651)
Source: Nomura estimates					

Balance sheet (NT\$mn)					
As at 31 Dec	FY08	FY09	FY10F	FY11F	FY12F
Cash & equivalents	6,326	13,896	18,859	19,966	23,379
Marketable securities	97	297	526	526	526
Accounts receivable	2,354	3,985	4,454	6,490	7,063
Inventories	1,763	3,077	4,714	6,687	7,252
Other current assets	954	376	2,289	2,289	2,289
Total current assets	11,494	21,631	30,842	35,959	40,510
LT investments	55	-	-	-	-
Fixed assets	1,250	2,211	2,264	2,355	2,451
Goodw ill	-	-	-	-	-
Other intangible assets	-	-	-	-	-
Other LT assets	1,440	1,414	1,456	1,474	1,492
Total assets	14,238	25,257	34,562	39,788	44,453
Short-term debt	-	-	1,937	1,898	1,860
Accounts payable	396	2,763	2,881	4,179	4,532
Other current liabilities	1,194	3,911	3,423	3,412	3,400
Total current liabilities	1,590	6,674	8,240	9,488	9,793
Long-term debt	-	868	868	868	868
Convertible debt	-	-	-	-	-
Other LT liabilities	-	-	-	-	-
I otal liabilities	1,590	7,542	9,108	10,356	10,661
Minority interest	5	C	3	3	3
	-	-	-	-	-
Common Stock	4,271	4,042	4,044	4,044	4,044
Propos od dividonds	0,233	13,739	21,047	25,625	29,900
	-	-	-	-	-
Other equity and reserves	141	(670)	(1,040)	(1,040)	(1,040)
lotal shareholders' equity	12,644	17,711	25,451	29,429	33,789
Total equity & liabilities	14,238	25,257	34,562	39,788	44,453
Liquidity (x)					
Current ratio	7.23	3.24	3.74	3.79	4.14
Interest cover	na	na	na	na	na
Loverage					
Net debt/FBITDA (x)	net cash				
	not cash				
Net dept/equity (%)	net cash				
Activity (days)					
Days receivable	57.9	41.7	45.8	50.0	53.2
Days inventory	70.6	55.8	73.1	88.8	93.0
Days payable	28.1	36.4	52.9	55.0	58.1
Cash cycle	100.4	61.1	65.9	83.8	88.0

Source: Nomura estimates

LG Electronics 066570 KS

TECHNOLOGY/HANDSETS | SOUTH KOREA

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O Action

We maintain a BUY rating to reflect the rapid recovery in handset momentum (spurred by an attractive smartphone line-up). We believe the handset business is key to LGE's stock price, and with the company having launched a competitive smartphone line-up, including the Optimus 2x, upcoming models such as the Optimus Black and other mid- to low-end models in the pipeline, we are positive.

🖊 Catalysts

We think LGE's handset business is showing signs of a turnaround. We believe LGE is recovering its business momentum.

Anchor themes

Mr Koo's strong leadership has helped resolve problems that plagued LGE prior to his appointment. We expect his long experience in the electronics industry and appreciation of the importance of product development will help in addressing shortcomings in production development and delivery.

Faster recovery in handset

Improving handset margin in 1H11

Based on our analysis and channel checks, LGE is quickly reducing operating losses in the handset business by increasing smartphone shipments and removing loss-making models in feature phones. We now expect a -3% handset operating margin for 1Q11F. Of note, LGE recorded a handset operating margin of -7.9% for 4Q10 and -10.2% for 3Q10. For 2Q11, we expect a -1% handset operating margin, with a handset profit turnaround from May 2011F.

② Second stage of smartphone strategy

LGE's smartphone strategy is to first gain market share in the mid- to low-end segments and then gain market share in the high-end segment. We think LGE is moving to the second stage, firming its position and gaining market share in the mid- to low-end segments by launching second-generation models, while entering aggressively into the high-end segment with dual-core processor adopted phones, 3D phones enhances, and the world's lightest phones.

3 BUY maintained

We reiterate BUY on LGE and maintain our price target of W147,000 on its smartphone share gain trend. Our price target translates into 2011-12F P/BV of 1.7x and 1.5x, and 2011-12 P/E of 25.9x and 12.2x, respectively. We recommend BUY on LGE for its smartphone share gain and its low valuation.

NOMURA INTERNATIONAL (HK) LIMITED

BUY

Maintained

Closing price on 29 Mar	W106,500
Price target	W147,000
	(set on 25 Mar 11)
Upside/downside	38.0%
Difference from consensus	7.3%
FY11F net profit (Wbn)	919
Difference from consensus	-38.4%
Source: Nomura	

Nomura vs consensus

Handset margin is the key share price driver, in our view. Our bullish view on the handset business supports our BUY call, while we think consensus remains focussed on the non-handset business.

Key financials & valuations									
31 Dec (Wbn)	FY09	FY10F	FY11F	FY12F					
Revenue	55,491	55,754	61,098	67,343					
Reported net profit	2,288	1,227	919	1,955					
Normalised net profit	2,288	1,227	919	1,955					
Normalised EPS (W)	14,135	7,581	5,676	12,082					
Norm. EPS growth (%)	421.6	(46.4)	(25.1)	112.8					
Norm. P/E (x)	7.5	14.0	18.8	8.8					
EV/EBITDA(x)	4.3	10.6	6.8	5.2					
Price/book (x)	1.5	1.4	1.3	1.1					
Dividend yield (%)	1.6	1.1	1.4	1.4					
ROE (%)	22.9	10.1	7.0	13.4					
Net debt/equity (%)	38.0	42.1	40.3	40.2					
Earnings revisions									
Previous norm. net profit		1,227	919	1,955					
Change from previous (%)		-	-	-					
Previous norm. EPS (W)		7,581	5,676	12,082					
Source: Company, Nomura estimates									

Source: Company, Nom ura estimates

Share price relative to MSCIKP



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Valuation and risks

Valuation and risks

Valuation

Our SOTP price target of W147,000 is based on EV/EBITDA, using annualised 2H11F EBITDA of the handset segment and 2011F EBITDA for the other businesses. We believe using annualised 2H11F EBITDA for the handset segment is reasonable as we expect a recovery in 2H11F. Moreover, for the handset segment, we use the average of HTC's multiple and the peer average, as we believe LGE is approaching HTC in terms of handset competitiveness.

Risks to our price target: Risks to our price target include weaker-than-expected end-demand for handsets and TVs, which could hurt the company's shipments. Upside risks include a successful product launch in 2Q11 and onward.

Exhibit 76. LG Electronics: SOTP valuation	on					
Global basis	2011F	EV/EBITDA	Range		Value	
(Wbn)	EBITDA	Peer Avg.	Discount	High discount	No Discount	Discount
Home appliance	971	7.6	No Discount	10% premium	7,352	8,087
Display & media	764	5.2	No Discount	No Discount	4,003	4,003
Telecom equipment (including handset)	776	10.5	No Discount	No Discount	8,134	8,134
Total firm value					19,489	20,225
Net debt					2,151	2,151
Implied equity value					17,338	18,074
Management discount (%)					0	0
Value of investment holdings (no discount)					5,689	5,689
LG Display			No Discount	No Discount	4,719	4,719
LG Innotek			No Discount	No Discount	970	970
Total equity value					23,027	23,763
All listed shares outstanding (mn)					162	162
Implied share price					142,291	146,833

Source: Nomura estimates

LG Electronics					James Kim			NOMURA			
Exhibit 77. LG Electron	nics: han	dset sh	ipments	by reg	gion						
(k units)	1Q10	2Q10	3Q10	4Q10	2010	1Q11F	2Q11F	3Q11F	4Q11F	2011F	2012F
Feature phone	26,770	29,798	27,458	27,002	111,028	21,901	24,291	26,302	27,882	100,377	96,845
Smartphone	328	764	943	3,552	5,587	4,500	5,200	6,700	8,100	24,500	46,000
Total units	27,098	30,562	28,401	30,554	116,615	26,401	29,491	33,002	35,982	124,877	142,845
Total sales (Wbn)	3,140	3,373	2,971	3,328	12,811	3,036	3,539	4,224	4,858	15,657	18,759
ASP (W k)	116	110	105	109	110	115	120	128	135	125	131
Sales by customers/region											
(k units)	1Q10	2Q10	3Q10	4Q10	2010	1Q11F	2Q11F	3Q11F	4Q11F	2011F	2012F
North America	5,909	6,504	6,931	8,097	27,441	7,060	7,783	8,621	9,048	32,511	38,879
Latin America	5,452	6,418	6,706	7,493	26,068	6,519	7,627	8,771	9,648	32,566	41,659
India	1,084	1,528	1,584	1,617	5,813	1,051	1,103	1,313	1,457	4,924	6,804
Greater China	1,582	1,488	1,878	2,028	6,976	1,623	1,769	1,928	2,217	7,536	9,359
Europe	4,878	4,584	3,966	4,785	18,213	4,163	4,787	5,506	6,166	20,622	25,776
CIS	1,355	1,528	1,607	1,315	5,805	920	976	985	1,104	3,985	4,829
Domestic	1,084	1,222	1,395	1,079	4,780	1,130	1,206	1,363	1,532	5,230	5,918
Others	5,755	7,290	4,334	4,140	21,519	3,933	4,247	4,502	4,817	17,500	19,734
Total	27,098	30,562	28,401	30,554	116,615	26,401	29,491	33,002	35,982	124,877	142,845
% of total											
North America	22	21	24	27	24	27	26	26	25	26	27
Latin America	20	21	24	25	22	25	26	27	27	26	29
India	4	5	6	5	5	4	4	4	4	4	5
Greater China	6	5	7	7	6	6	6	6	6	6	7
Europe	18	15	14	16	16	16	16	17	17	17	18
CIS	5	5	6	4	5	3	3	3	3	3	3
Domestic	4	4	5	4	4	4	4	4	4	4	4
Others	21	24	15	14	18	15	14	14	13	14	14
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	107.1
a-a arowth					v-v growth					v-v growth	/-v arowth
North America (%)	(35,3)	10.1	6.6	16.8	(15)	(12.8)	10.2	10.8	5.0	18	20
Latin America (%)	(26.9)	17.7	4.5	11.7	18	(13.0)	17.0	15.0	10.0	25	28
India (%)	(48.5)	41.0	3.7	2.0	(10)	(35.0)	5.0	19.0	11.0	(15)	38
Greater China (%)	5.2	(5.9)	26.2	8.0	32	(20.0)	9.0	9.0	15.0	8	24
Europe (%)	(24.3)	(6.0)	(13.5)	20.7	(13)	(13.0)	15.0	15.0	12.0	13	25
CIS (%)	(0.1)	12.8	5.2	(18.2)	58	(30.0)	6.0	1.0	12.0	(31)	21
Domestic (%)	4.1	12.8	14.1	(22.7)	(29)	4.7	6.7	13.1	12.4	9	13

Source: Company data, Nomura estimates

18.3

(20)

26.7

13

(40.5)

(7)

(4.5)

8

6

(1)

(5.0)

(14)

8.0

12

6.0

12

7.0

9

(19)

7

Others (%)

Total (%)

13

14

James Kim

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Financial statements

Income statement (Wbn)					
Year-end 31 Dec	FY08	FY09	FY10F	FY11F	FY12F
Revenue	63,280	55,491	55,754	61,098	67,343
Cost of goods sold	(47,707)	(41,341)	(43,724)	(47,800)	(51,657)
Gross profit	15,573	14,151	12,030	13,298	15,686
SG&A	(11,519)	(11,470)	(11,854)	(12,342)	(13,603)
Employee share expense	4.05.1	0.004	470	0.50	0.000
operating profit	4,054	2,681	176	956	2,083
EBITDA	7.733	4.182	1.474	2.671	3,668
Depreciation	(3,679)	(1,501)	(1,298)	(1,715)	(1,585)
Amortisation	. /		,		. ,
EBIT	4,054	2,681	176	956	2,083
Net interest expense	(153)	(287)	(219)	(278)	(296)
Associates & JCEs	52	471	477	422	485
Otherincome	(2,333)	-	-	20	113
Earnings before tax	1,619	2,865	434	1,120	2,384
Income (ax	(480)	(589)	-	(202)	(429)
Minority interests	(700)	2,2/6	434	919	1,955
Otheritems	(700)	(63) 74	(CC)	-	-
Preferred dividends	-	14	040		
Normalised NPAT	439	2,288	1,227	919	1,955
Extraordinary items	-	-	, ==-	-	
Reported NPAT	439	2,288	1,227	919	1,955
Dividends	(57)	(283)	(195)	(236)	(236)
Transfer to reserves	381	2,005	1,032	683	1,720
Valuation and ratio analysis					
FD normalised P/E (x)	39.3	7.5	14 0	18.8	8.8
FD normalised P/E at price target (x)	54.2	10.4	19.4	25.9	12.2
Reported P/E (x)	39.3	7.5	14.0	18.8	8.8
Dividend yield (%)	0.3	1.6	1.1	1.4	1.4
Price/cashflow (x)	2.9	35.0	430.9	7.6	14.5
Price/book (x)	2.1	1.5	1.4	1.3	1.1
EV/EBITDA (x)	2.9	4.3	10.6	6.8	5.2
EV/EBIT (x)	5.6	6.3	31.7	15.2	8.4
Gross margin (%)	24.6	25.5	21.6	21.8	23.3
EBIT margin (%)	12.2	1.5	2.6	4.4	5.4
Net margin (%)	0.4	4.8	0.3	1.0	3.1 2.0
Effective tax rate (%)	0.1 20.7	4.1 20 6	2.2	0.1 12 0	2.9 180
Dividend pavout (%)	13.1	12 4	15 9	25.6	12.0
Capex to sales (%)	66	3.2	2.7	3.8	30
Capex to depreciation (x)	1.1	1.2	1.2	1.3	1.3
ROE (%)	5.7	22.9	10.1	7.0	13.4
ROA (pretax %)	11.6	9.3	2.2	4.2	7.2
Grouth (%)					
Revenue	1.0 /	(10.2)	05	0.6	10.2
FRITDA	10.4	(12.3) (AF 0)	C.U (7 1/6)	9.0 81 0	10.2 37 2
FRIT	10.0 7 CA	(C. CF)	(02 A)	1/10	1170
	43./	(33.9)	(33.4)	441.9	117.9
Normalised EDEPS	(64.3)	421.6 ⊿21.6	(46.4) (16.4)	(25.1) (25.1)	112.8 112.9
	(04.3)	4 ∠1.0	(40.4)	(20.1)	ιιΖ.Ծ
Per share					
Reported EPS (W)	2,710	14,135	7,581	5,676	12,082
Norm EPS (W)	2,710	14,135	7,581	5,676	12,082
Fully diluted norm EPS (W)	2,710	14,135	7,581	5,676	12,082
Book value per share (W)	51,407	72,940	78,226	85,001	95,724
DPS (W) Source: Nomura estimates	354	1,747	1,205	1,455	1,456
oouroo. Nomula coumateo					

OP to improve significantly in FY12F, driven by smartphone business

Nomura
James Kim

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Cashflow (Wbn)					
Year-end 31 Dec	FY08	FY09	FY10F	FY11F	FY12F
EBITDA	7,733	4,182	1,474	2,671	3,668
Change in working capital	442	1,276	(318)	(312)	(1,287)
Other operating cashflow	(2,321)	(4,966)	(1,116)	(106)	(1,193)
Cashflow from operations	5,854	493	40	2,254	1,188
Capital expenditure	(4,187)	(1,785)	(1,515)	(2,300)	(2,000)
Free cashflow	1,667	(1,292)	(1,475)	(46)	(812)
Reduction in investments	(326)	(3,355)	(1,604)	(901)	(1,036)
Net acquisitions	(1,256)	(1,050)	(1,208)	7	(42)
Reduction in other LT assets					
Addition in other LT liabilities					
Adjustments	273	5,018	2,629	973	1,387
Cashflow after investing acts	358	(678)	(1,659)	32	(503)
Cash dividends	(138)	(57)	(283)	(195)	(236)
Equity issue	272	-	-	-	-
Debt issue	2,211	369	544	(62)	977
Convertible debt issue					
Others	(1,299)	(1,139)	918	31	59
Cashflow from financial acts	1,046	(828)	1,179	(226)	801
Net cashflow	1,404	(1,506)	(479)	(194)	297
Beginning cash	2,525	3,929	2,424	1,944	1,750
Ending cash	3,929	2,423	1,945	1,750	2,047
Ending net debt	7,483	4,485	5,328	5,540	6,225
Source: Nomura estimates					

Balance sheet (Wbn)					
As at 31 Dec	FY08	FY09	FY10F	FY11F	FY12F
Cash & equivalents Marketable securities	3,929	2,424	1,944	1,750	2,047
Accounts receivable	6,105	7,637	7,002	9,970	10,133
Inventories	6,449	4,899	5,872	5,975	6,623
Other current assets	5,791	1,950	1,696	1,792	1,976
Total current assets	22,274	16,910	16,515	19,487	20,779
LT investments	1,049	4,404	6,008	6,909	7,946
Fixed assets Goodwill	16,253	7,709	6,501	6,507	6,465
Other intangible assets	774	804	763	802	842
Other LT assets	2,022	2,288	2,532	2,659	2,792
Total assets	42,372	32,115	32,318	36,364	38,823
Short-term debt	5,957	4,307	4,436	4,214	4,847
Accounts payable	4,456	5,316	5,824	7,833	6,926
Other current liabilities	9,988	6,546	5,803	6,650	7,263
Total current liabilities	20,400	16,169	16,064	18,697	19,036
Long-term debt	5,455	2,602	2,836	3,076	3,426
Convertible debt					
Other LT liabilities	1,724	919	559	615	628
Total liabilities	27,580	19,689	19,459	22,388	23,090
Minority interest	6,473	621	200	220	242
Preferred stock	86	86	86	86	86
Common stock	723	723	723	723	723
Retained earnings Proposed dividends	4,042	9,214	10,246	10,929	12,649
Other equity and reserves	3,469	1,781	1.604	2.018	2.033
Total shareholders' equity	8.319	11,804	12,660	13,756	15 491
Total equity & liabilities	42,372	32,115	32,318	36,364	38,823
Liquidity (x)					
Current ratio	1.09	1.05	1.03	1.04	1.09
Interest cover	26.5	9.3	0.8	3.4	7.0
Leverage					
Net debt/EBITDA (x)	0.97	1.07	3.61	2.07	1.70
Net debt/equity (%)	89.9	38.0	42.1	40.3	40.2
Activity (days)					
Days receivable	33.2	45.2	47.9	50.7	54.6
Days inventory	46.6	50.1	45.0	45.2	44.6
Dayspayable	34.2	43.1	46.5	52.1	52.3
Cash cycle	45.7	52.2	46.4	43.8	47.0

Source: Nomura estimates

TCL Communication Tech 2618 HK

TECHNOLOGY | CHINA

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O Action

Our visit to TCL Com shows that its factory is at full capacity utilisation, driven by a strong momentum for its social network service (SNS) phone models. TCL Com's launch of five smartphone models at end-Feb has lifted our confidence in its ability to capitalise on the global entry-level smartphone trend. We reaffirm our BUY rating and PT of HK\$12, seeing TCL Com a key beneficiary of the global SNS trend.

🖊 Catalysts

New product launches and monthly shipment volume are important catalysts.

Anchor themes

The take-off of China's smartphone market and the temporary vacancy in the midend segment of the global handset market, due to Nokia's smartphone platform shift, are two anchor themes in the global handset industry. We believe TCL is well positioned to capitalise, leveraging its competitive product portfolio and cost.

Key beneficiary of social network trend

① Factory at full capacity utilisation

Our visit to TCL Com shows that its factory is at full capacity utilisation, driven by strong momentum for its social network service (SNS) phone models (GSM handset with QWERTY keyboard). According to the company, while the basic phone weighting is declining, smartphones remain a small part of the mix. This reaffirms our view that its product mix from basic phones to higher ARPU SNS/smartphones presents an unusual investment opportunity, on both ASP and volume growth.

② Five smartphones and tablets

In addition to the SNS phones, the company launched five Androidbased smartphones and tablets at end-Feb. OT-990, an Androidbased smartphone with a 3.5-inch capacitive touch screen and a stylish metal casing, has caught the eye of smartphone players, given its impressive design and performance. We believe these models have narrowed gap with leading handset vendors in the smartphone space, and will become a major revenue driver for TCL in FY11F.

3 SNS phone popular in China owing to Weibo

Moreover, we notice that its social network phone under the Alcatel brand recently became quite popular, especially in online channels such as Taobao.com and 360buy. We believe graduate students, who tend to have lower purchasing power and are heavy users of SMS and Twitter-like social network services such as Weibo, are likely to be the major buyers of its products.

④ Reaffirm BUY; PT of HK\$12.00

Our price target is based on 12x FY11F EPS of HK\$1.00, the average P/E of global branded handset names and OEMs.

NOMURA

NOMURA INTERNATIONAL (HK) LIMITED

BUY

Maintained

Closing price on 29 Mar	Н	K\$7.56
Price target	HK\$′	12.00
	(set on 2	5 Feb 11)
Upside/dow nside		58.7%
Difference from consensu	IS	24.7%
FY12F net profit (HK\$mn)		1,494
Difference from consensu	IS	22.6%
Source: Nomura		

Nomura vs consensus

We are more bullish on the company's volume and ASP growth driven by the social networking trend in emerging markets and the entrylevel smartphone trend globally.

Key financials & va	luation	S		
31 Dec (HK\$mn)	FY10F	FY11F	FY12F	FY13F
Revenue	8,701	13,485	17,283	21,360
Reported net profit	702	1,101	1,494	1,809
Normalised net profit	702	1,101	1,494	1,809
Normalised EPS (HK\$)	0.64	1.00	1.36	1.65
Norm. EPS growth (%)	2,882.1	56.9	35.6	21.1
Norm. P/E (x)	12.1	7.7	5.7	4.7
EV/EBITDA (x)	11.4	7.0	5.2	4.0
Price/book (x)	3.7	2.8	2.1	1.6
Dividend yield (%)	3.3	4.0	5.4	6.5
ROE (%)	42.4	42.2	42.7	38.9
Net debt/equity (%)	net cash	net cash	net cash	net cash
Earnings revisions				
Previous norm. net profit		1,101	1,494	1,809
Change from previous (%)		-	-	-
Previous norm. EPS (HK\$)		1.00	1.36	1.65
Source: Company, Nomura estimates				

Share price relative to MSCICN



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Drilling down

Social network trend a boon

We believe the newly launched five Android-based smartphones and tablets should help TCL ride the social network trend. The exhibit below illustrates the smartphones and tablets launched by TCL on 25 Feb 2011. We believe products such as OT-990 have greatly narrowed the gap between TCL and leading Android-based smartphone vendors such as HTC and Samsung.



Source: Company Data

Based on discussions with management, we believe TCL's Alcatel-brand QWERTY keyboard GSM handset is one of the best selling brands in online channels such as Taobao and 360buy in China. According to the company, its daily shipment volumes reached 10k during peak seasons. We believe these products receive strong support from graduate students and other youth groups, who tend to use SMS and social network services such as Weibo more.

Brand	Alcatel	Alcatel
Model	OT-807D	OT-800
Photo		
Wireless	GSM	GSM
Screen size (inch)	2.8	2.2
Touch screen	Resistive	No
OS	n.a.	n.a.
Camera (M pixels)	2.0	2.0
Channel	Taobao.com	360buy
Retail price (RMB)	1,399	499

Exhibit 79. TCL's new models in China's online channel

Source: Taobao.com, 360buy.com

For further information, please refer to TCL's online mall in Taobao

(<u>http://alcatellm.tmall.com/</u>) and 360buy (<u>http://market.360buy.com/zhuanmai/aerkate/index.aspx</u>).

Risks to our investment view

We expect competition in the feature-phone market, especially feature-phones for social-network usage, to remain moderate. We believe the company still has price leadership vis-à-vis peers in products that have similar features (such as Nokia C3), but we caution that aggressive marketing undertaken by the likes of Nokia, Samsung Electronics and LG may erode the company's shipment volume.

The company is planning to launch 13 entry-level smartphone models in FY11 and is rapidly expanding its R&D team. An unexpected delay in project development will be a downside risk to our forecasts. The new products launched on 25 February 2011 have greatly reduced the risk of product delay in the short term, and the acquisition of a new R&D team has reduced investors concern on the company's sustainability of its product development when shifting to the mid- from low-end market.

The company is trying to penetrate the middle-end of the handset market, and at the same time, supply low-end handsets to another handset OEM. The potential for conflict of interest from this arrangement could risk the loss of ODM clients.

Financial statements

Income statement (HK\$mn)					
Year-end 31 Dec	FY09	FY10F	FY11F	FY12F	FY13F
Revenue	4,361	8,701	13,485	17,283	21,360
Cost of goods sold	(3,412)	(6,752)	(10,414)	(13,204)	(16,282)
Gross profit	949	1,949	3.071	4.079	5.078
SG&A	(933)	(1,438)	(2,136)	(2,727)	(3,392)
Employee share expense	(/	())	())		(-))
Operating profit	16	511	935	1.352	1.686
operating press		••••		.,	.,
EBITDA	124	611	1.135	1.552	1.986
Depreciation	(108)	(100)	(200)	(200)	(300)
Amortisation	-	-	-	-	-
FBIT	16	511	935	1.352	1.686
Net interest expense	(46)	-	-	-	-
Associates & ICEs	(10)	-	-	_	_
Other income	64	234	234	234	234
Earnings before tax	3/	7/5	1 169	1 586	1 0 20 4
Income tax	(11)	(13)	(68)	(92)	(111)
Not profit after tax	(11)	(43)	(00)	(92)	1 200
Minority interests	23	102	1,101	1,494	1,009
Other items	-	-	-	-	-
Other items					
		700	4 4 6 4	4 404	4 000
	23	702	1,101	1,494	1,809
	22	702	1 101	1 /0/	1 200
	23	102	1,101	1,494	1,009
Dividends	(38)	(272)	(330)	(448)	(543)
Transfer to reserves	(15)	430	771	1,046	1,267
valuation and ratio analysis	0545	10.4			4 7
FD normalised P/E (x)	354.5	12.1	1.1	5.7	4.7
FD normalised P/E at price target (x)	562.6	19.3	12.3	9.1	7.5
Reported P/E (x)	352.5	11.8	7.5	5.6	4.6
Dividend yield (%)	0.5	3.3	4.0	5.4	6.5
Price/cashflow (x)	34.2	27.7	8.5	8.9	5.6
Price/book (x)	7.4	3.7	2.8	2.1	1.6
EV/EBITDA (x)	71.3	11.4	7.0	5.2	4.0
EV/EBIT (x)	551.6	13.6	8.5	6.0	4.7
Gross margin (%)	21.8	22.4	22.8	23.6	23.8
EBITDA margin (%)	2.8	7.0	8.4	9.0	9.3
EBIT margin (%)	0.4	5.9	6.9	7.8	7.9
Net margin (%)	0.5	8.1	8.2	8.6	8.5
Effective tax rate (%)	32.5	5.8	5.8	5.8	5.8
Dividend payout (%)	163.3	38.7	30.0	30.0	30.0
Capex to sales (%)	2.5	3.0	3.0	2.9	2.8
Capex to depreciation (x)	1.0	2.6	2.0	2.5	2.0
ROE (%)	2.1	42.4	42.2	42.7	38.9
ROA (pretax %)	0.3	6.2	7.8	9.7	10.8
Growth (%)					
Revenue	(3.9)	99.5	55.0	28.2	23.6
EBITDA	na	394.3	85.8	36.7	28.0
ЕВІТ	na	3,097.0	83.0	44.6	24.8
Normalis ad EPS	(10 0)	2,201.0	EE O	25.6	21.0
Normalised EDEDS	(10.9)	2,00Z. I	50.9 FC 0	35.0	21.1
Normalisea FDEPS	(18.9)	2,820.5	56.9	35.6	21.1
Derehere					
	0.00	0.04	4 00	4 00	4.05
	0.02	0.64	1.00	1.30	1.65
Norm EPS (HK\$)	0.02	0.64	1.00	1.36	1.65
Fully diluted norm EPS (HK\$)	0.02	0.62	0.98	1.33	1.61
Book value per share (HK\$)	1.02	2.02	2.73	3.64	4.83
DPS (HK\$)	0.03	0.25	0.30	0.41	0.49
Source: Nomura estimates					

ASP uplift + volume growth to drive fast revenue growth

Nomura

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Cashflow (HK\$mn)					
Year-end 31 Dec	FY09	FY10F	FY11F	FY12F	FY13F
EBITDA	124	611	1,135	1,552	1,986
Change in w orking capital	(289)	(548)	(963)	(800)	(900)
Other operating cashflow	402	237	801	179	386
Cashflow from operations	237	300	973	931	1,472
Capital expenditure	(108)	(260)	(400)	(500)	(600)
Free cashflow	129	40	573	431	872
Reduction in investments	(0)	20	-	-	-
Net acquisitions					
Reduction in other LT assets					
Addition in other LT liabilities					
Adjustments	71	(20)	(700)	(200)	(325)
Cashflow after investing acts	200	40	(127)	231	547
Cash dividends	-	(38)	(272)	(330)	(448)
Equity issue	1,962	-	-	-	-
Debt issue	(606)	-	-	-	-
Convertible debt issue	-	-	-	-	-
Others	(1,049)	173	(600)	-	-
Cashflow from financial acts	307	135	(872)	(330)	(448)
Net cashflow	507	175	(999)	(100)	99
Beginning cash	663	1,170	1,345	347	247
Ending cash	1,170	1,345	347	247	346
Ending net debt	516	(1,345)	(347)	(247)	(346)
Source: Nomura estimates					

As at 31 Dec	EV00	EV10E	EV11E	EV12E	EV12
Cook & oquivalanta	1 170	1 245	247	247	240
	1,170	1,345	347	247	340
	-	-	-	-	-
	1,815	2,800	4,000	5,100	6,400
Inventories	448	780	900	1,200	1,500
	2,040	0,094	0,094	0,094	0,094
L Tipucotmonto	6,278	11,619	11,941	13,241	14,940
	20	-	-	-	1 400
Coodwill	220	-	800	1,100	1,400
Other intensible accets					
	-	-	-	-	-
	240 6 766	12 252	12 275	14 075	16 07/
Point form debt	1 695	12,233	13,375	14,975	10,974
	1,000	-	2 200	2 000	2 500
Other current liabilities	2 551	9 171	2,200	2,000	9,500
Total ourrent liabilities	2,001 5 210	10 01 4	10 271	10 071	11 67
Long torm dobt	5,510	10,014	10,371	10,971	11,07
Convertible debt	-	-	-	-	-
Other I T liabilities	360	- 18	-	-	-
	5 671	10 032	10 271	10 071	11 67
Minority interest	5,071	10,052	10,571	10,371	11,07
Preferred stock		-	-	-	-
Common stock	716	_	_	_	_
Retained earnings	370	2 218	3 000	4 000	5 300
Proposed dividends	5/5	2,210	5,000	-,000	-
Tetel chorcheldere' equity	1 005	2 24 9	2 000	4 000	E 200
Total shareholders equity	1,095	2,210	3,000	4,000	5,300
Total equity & liabilities	6,766	12,253	13,375	14,975	16,975
Liquidity (x)					
Current ratio	1.18	1.16	1.15	1.21	1.28
Interest cover	0.3	na	na	na	na
Leverage					
Net debt/FBITDA (x)	4.17	net cash	net cash	net cash	net cash
Net debt/equity (%)	47.1	net cash	net cash	net cash	net cash
Activity (dovo)					
Activity (days)	100 7	06.0	02.0	06 /	00.0
Days receivable	120.7	90.0	92.0	90.4	90.3
Days inventory	30.3	33.2	29.4	29.1	30.3
Days payable	89.1	78.8	70.9	69.3	70.6
Cash cycle	75.9	51.1	50.6	56.2	57.

Source: Nomura estimates

Qualcomm Inc. QCOM US

SEMICONDUCTOR | AMERICAS

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O Action

We believe Qualcomm is well positioned in the growing sub-\$150 smartphone market in China. Qualcomm is ahead of the competition in supporting Android OS and has a low-cost integrated 3G cellular baseband and apps processor offering. Qualcomm has also gained significant traction with Chinese OEMs like ZTE and Huawei.

🖊 Catalysts

Faster pace of adoption of the low-cost Android phones in China and India would be one of the key catalysts for the stock.

Anchor themes

Expanding foot-print in Android based devices in both high-end and low-end, expanding royalty based from transition from 2G to 3G, significant traction with Chinese handset OEMS like ZTE and Huawei

Well positioned for the rising growth in smartphones in China

① Qualcomm leads the integration bandwagon

Qualcomm's approach to developing chipsets has always been of tight integration between apps processor and cellular connectivity. Recently the company took another step in that direction and at the MWC Barcelona announced its new family of devices, Krait, which will have WiFi and Bluetooth connectivity too integrated in the chipset. We expect this integration to trickle down to the entry level chipsets as well, which we expect to be a major enabler for mass market Android phones. The recent acquisition of Ralink by MediaTek highlights this trend in the industry.

② Qualcomm is ahead in performance, OS and TD-SCDMA support

Qualcomm is ahead of its competitors in performance and OS support. MediaTek is a strong competitor in 2G/2.5G, but has yet to gain traction in 3G handsets. Qualcomm, with its integrated 3G offerings, has further increased the bar. The rise of Android, we believe, is also making it difficult for MediaTek to compete effectively. One key difference between Android and non-Android phones is in minimum performance requirements. Android requires a minimum set of performance from the apps processor to function optimally, while non-Android phones do not have such restrictions. Qualcomm has also been pro-active in implementing the TD-SCDMA technology for the Chinese markets, which we expect to be pushed by many Chinese operators. Today, Qualcomm already has TD-SCDMA support in its offerings while Broadcom is yet to announce its TD-SCDMA strategy. Marvell, although having a head-start with Ophones, seems to be lacking traction in Android-based phones.

NEUTRAL

NOMURA

EQUITY RESEARCH AMERICAS

Closing price on 29 Mar	US\$53.91
Price target	US\$51
Upside/downside	-5.4%
Difference from consensus	-2.0%
FY11F net profit (US\$mn)	4,968
Difference from consensus	7.1%

Nomura vs consensus

We are inline with the consensus estimates (\$3.00 vs. \$3.02) for FY11 and below consensus (\$3.02 vs. \$3.26) in FY12 due to margin compression in FY12.

Key financials & valuations												
31 Dec (US\$mn)	FY10	FY11F	FY12F									
Revenue	10,981	13,741	14,871									
Reported net profit	4,071	4,968	5,060									
Normalised net profit	4,071	4,968	5,060									
Normalised EPS (US\$)	2.46	3.00	3.02									
Norm. EPS growth (%)	45.6	22.2	0.6									
Norm. P/E (x)	21.4	17.5	17.4									
Price/book (x)	4.2	3.9	3.4									
Dividend yield (%)	1.4	1.5	1.5									
ROE (%)	15.6	14.6	14.3									
Net debt/equity (%)	net cash	net cash	net cash									
Earnings revisions												
Previous norm. net profit	4,071	4,968	5,060									
Change from previous (%)	-	-	-									
Previous norm. EPS (US\$)	2.46	3.00	3.02									
Source: Company, Nomura estimates												

Share price relative to MSCI US



3 Qualcomm is gaining traction with Chinese OEMs

In the last few years, Qualcomm has received significant traction from Chinese OEMs. Huawei, a Chinese OEM, recently launched low-cost Android phones (Ideos X5) in India in the sub-US\$200 price range. The phone is based on Qualcomm's integrated MSM72xx chipset. We believe Qualcomm is also promoting an ecosystem of low-cost smartphones (US\$100-US\$120) by working with OEMs like Huawei, Lenovo, Simcom, Prowave, Shengyao, Newings and Basewin. Qualcomm is targeting its MSM 72xx and 76xx based chipsets for these low-cost phones.

Valuation methodology

Our price target of US\$51 is based on 17x CY11 GAAP EPS of US\$2.92.

Risks to our call

Risks to our target price include: a) A slower growth of data devices (eReaders and tablets) than our estimates of 50mn, b) less than projected rate of growth of MSM chipsets, c) a slower or faster transition to 3G from 2G than assumed could provide downside/upside risk to our target price.

Financial statements

Year End: September		FY2	010			FY2	011E			FY20	12E		FY2010	FY2011	FY2012
(\$ in millions)	Dec-09	Mar-10	Jun-10	Sep-10	Dec-10	Mar-11E	Jun-11E	Sep-11E	Dec-11E	Mar-12E	Jun12E	Sep-12E	Sep-10	Sep-11E	Sep-12E
INCOME STATEMENT															
Total Revenue (pro-forma)	2,668	2 661	2,700	2,952	3.345	3 599	3.334	3 463	3 542	3 640	3,769	3,921	10.981	13.741	14 871
Q/Q	-0.6%	-0.3%	1.5%	9.3%	13.3%	7.6%	-7.4%	3.9%	2.3%	2.8%	3.5%	4.0%			,
ŶŃ	6.3%	8.7%	-1.6%	10.0%	25.4%	35.3%	23.5%	17.3%	5.9%	1.1%	13.0%	13.2%	5.7%	25.1%	8.2%
COGS (GAAP)	816	809	905	988	1,130	1,402	1,265	1,298	1,292	1,323	1,411	1,435	3,518	5,094	5,461
COGS (pro-forma)	759	744	842	911	964	1,002	1,065	1,118	1,162	1,193	1,281	1,305	3,256	4,148	4,941
Gross profit (GAAP)	1,854	1,854	1,801	1,964	2,218	2,198	2,068	2,166	2,250	2,317	2,357	2,486	7,473	8,650	9,410
Gross profit (pro-forma)	1,909	1,917	1,858	2,041	2,381	2,598	2,268	2,346	2,380	2,447	2,487	2,616	7,725	9,593	9,930
R&D (GAAP)	596	648	649	656	671	789	706	712	754	773	794	801	2,549	2,878	3,122
R&D (pro-forma)	503	550	546	547	560	627	596	602	614	633	654	661	2,146	2,385	2,562
SG&A (GAAP)	379	430	360	471	437	503	453	462	449	475	498	518	1,640	1,856	1,941
SG&A (pro-forma)	272	305	321	364	343	377	377	396	353	379	402	422	1,262	1,494	1,557
Other/Litigation (GAAP))		(-)											0	0	0
Other (pro-forma)	-	(3)	-	-	-	-	-		-	-	-	-	(3)	0	0
Total operating expenses (GAAP)	975	1,078	1,009	1,127	1,108	1,293	1,159	1,174	1,203	1,248	1,292	1,320	4,189	4,734	5,063
i otal operating expenses (pro-forma)	//5	852	867	911	903	1,005	973	998	967	1,012	1,056	1,084	3,405	3,879	4,119
Operating income (EBIT) (pro-forma)	1,134	1,065	991	1,130	1,478	1,593	1,295	1,348	1,413	1,435	1,431	1,532	4,320	5,714	5,811
Investment income (pro-forma)	176	193	170	231	194	107	102	114	129	142	155	169	770	516	594
Pretax income (pro-forma)	1,310	1,258	1,161	1,361	1,672	1,700	1,397	1,461	1,542	1,576	1,586	1,701	5,090	6,231	6,405
Income tax expense (pro-forma)	269	269	225	256	330	357	307	322	324	331	333	357	1,019	1,316	1,345
Net income - GAAP	841	774	767	865	1.170	857	918	999	1.067	1.094	1.102	1,192	3.247	3.944	4.455
Net income - Pro-forma	1,041	989	936	1,105	1,345	1,283	1,140	1,200	1,218	1,245	1,253	1,344	4,071	4,968	5,060
Net income - Pro-forma (incl ESO)	927	891	825	985	1,229	1,139	1,000	1,061	1,079	1,106	1,114	1,204	3,628	4,429	4,503
EPS - GAAP	\$0.50	\$0.46	\$0.47	\$0.53	\$0.71	\$0.52	\$0.55	\$0.60	\$0.64	\$0.65	\$0.66	\$0.71	\$1.96	\$2.38	\$2.66
EPS - Pro-forma	\$0.62	\$0.59	\$0.57	\$0.68	\$0.82	\$0.78	\$0.69	\$0.72	\$0.73	\$0.74	\$0.75	\$0.80	\$2.46	\$3.00	\$3.02
EPS - Pro-forma (incl ESO)	\$0.55	\$0.53	\$0.50	\$0.61	\$0.75	\$0.69	\$0.60	\$0.64	\$0.65	\$0.66	\$0.66	\$0.72	\$2.19	\$2.68	\$2.69
Shares outstanding - basic	1.662	1.662	1.629	1.608	1.623	1.628	1.633	1.638	1.643	1.648	1.653	1.658	1.640	1.631	1.651
Shares outstanding - fully diluted	1,691	1,678	1,642	1,621	1,648	1,653	1,658	1,663	1,668	1,673	1,678	1,683	1,657	1,655	1,676
Barrant of Balan															
Percent of Sales	00.40/	00.00/	00.00/	00 50/	00.00/	04.40/	00.00/	00 50/	00 50/	00.00/	00.00/	00.40/	00.00/	00.00/	00.00/
Gross margin (GAAP) Gross margin (pro forma)	69.4% 71.6%	59.5% 72.0%	60.0%	60.1%	00.2% 71.2%	51.1% 72.2%	62.0%	67.5%	67.2%	67.0%	62.6%	63.4%	68.0% 70.2%	62.9%	63.3%
Gross margin (pro-forma) aval OTI	FG 70/	7 Z.0 %	00.070 E4.69/	09.170 EE 10/	F7 00/	F2.270	61 E0/	62 00/	61 00/	61 E0/	E1 20/	61.0%	70.3% EE E9/	09.070 52.60/	61 /0/
B&D (pro-forma)	18 0%	20.7%	20.2%	18 5%	16 7%	17 /0/	17 0%	17 /0/	17 3%	17 /0/	17 /0/	16.0%	10.5%	17 1%	17 2%
SG&A (pro-forma)	10.3%	11 5%	11 9%	12 3%	10.7%	10.5%	11 3%	11 4%	10.0%	10.4%	10.7%	10.3%	11 5%	10.7%	10.5%
Operating expenses (pro-forma)	29.0%	32.0%	32.1%	30.9%	27.0%	27.9%	29.2%	28.8%	27.3%	27.8%	28.0%	27.6%	31.0%	27.9%	27.7%
Operating Margin (pro-forma)	42.5%	40.0%	36.7%	38.3%	44 1%	44.3%	38.9%	38.9%	39.9%	39.4%	38.0%	39.1%	39.3%	42.0%	39.1%
Pretax income (pro-forma)	49.1%	47.3%	43.0%	46.1%	50.0%	47.2%	41.9%	42.2%	43.5%	43.3%	42.1%	43.4%	36.7%	33.2%	34.3%
Tax rate (pro-forma)	20.5%	21.4%	19.4%	18.8%	19.7%	21.0%	22.0%	22.0%	21.0%	21.0%	21.0%	21.0%	20.0%	21.1%	21.0%
Net margin (pro-forma)	39.0%	37.2%	34.7%	37.4%	40.2%	35.7%	34.2%	34.6%	34.4%	34.2%	33.2%	34.3%	37.1%	36.2%	34.0%

Year End: September		FY2	010			FY2	011E			FY20	012E		FY2010	FY2011	FY2012
(\$ in millions)	Dec-09	Mar-10	Jun-10	Sep-10	Dec-10	Mar-11E	Jun-11E	Sep-11E	Dec-11E	Mar-12E	Jun12E	Sep-12E	Sep-10	Sep-11E	Sep-12E
BALANCE SHEET															
Assets															
Cash, Equiv & ST Investments	12,164	11,156	9,968	10,279	10,509	12,007	13,677	15,343	17,089	18,855	20,619	22,471	10,279	15,343	22,471
Accounts Receivable	616	680	798	730	657	706	654	680	695	714	740	769	730	680	769
Finance Receivable, Net	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Inventories	350	402	446	528	574	/12	643	659	656	672	/1/	729	528	659	729
Deterred Tax Assets	199	204	213	321	336	336	336	336	336	336	336	336	321	336	336
Collateral under securities lending	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Current Assets	245	210	189	275	255	255	255	255	255	255	255	255	275	255	255
Total Current Assets	13,574	12,652	11,614	12,133	12,331	14,016	15,565	17,273	19,032	20,832	22,666	24,560	12,133	17,273	24,560
Marketable Securities	6,764	7,057	7,618	8,123	8,598	8,598	8,598	8,598	8,598	8,598	8,598	8,598	8,123	8,598	8,598
Finance Receivables	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Investments	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
P, P & E, Net	2,384	2,374	2,382	2,373	2,361	2,270	2,180	2,087	1,994	1,903	1,811	1,718	2,373	2,087	1,718
Goodwill and Intangibles	1,490	1,483	1,476	1,488	1,519	1,519	1,519	1,519	1,519	1,519	1,519	1,519	1,488	1,519	1,519
Deferred Tax Assets	1,118	1,376	1,774	1,922	1,979	1,979	1,979	1,979	1,979	1,979	1,979	1,979	1,922	1,979	1,979
Other Assets	3,573	3,555	4,537	4,533	4,503	4,503	4,503	4,503	4,503	4,503	4,503	4,503	4,533	4,503	4,503
Total non-Current Assets		15,845	17,787	18,439	18,960	18,869	18,779	18,686	18,593	18,502	18,410	18,317	18,439	18,686	18,317
Total Assets	28,903	28,497	29,401	30,572	31,291	32,885	34,343	35,959	37,625	39,334	41,076	42,877	30,572	35,959	42,877
Liabilities															
Accts Payable	415	545	640	764	522	647	584	599	597	611	652	663	764	599	663
Payroll and benefits related liabilities	385	368	433	467	480	480	480	480	480	480	480	480	467	480	480
Unearned Revenue	567	592	601	623	631	631	631	631	631	631	631	631	623	631	631
Dividends Payable	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Income Taxes Payable	458	764	1,135	1,443	10	10	10	10	10	10	10	10	1,443	10	10
Current Portion of Long Term Debt	0	0	1,061	1,086	1,089	1,089	1,089	1,089	1,089	1,089	1,089	1,089	1,086	1,089	1,089
Other Current Liabilities	1,123	1,061	1,320	1,085	1,211	1,211	1,211	1,211	1,211	1,211	1,211	1,211	1,085	1,211	1,211
Total Current Liabilities	2,948	3,330	5,190	5,468	3,943	4,068	4,005	4,020	4,018	4,032	4,073	4,084	5,468	4,020	4,084
Unearned Revenues	3,775	3,687	3,587	3,485	3,821	3,749	3,678	3,606	3,534	3,463	3,391	3,319	3,485	3,606	3,319
Long-Term Debt	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Income Taxes Payable	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Long-Term Liabilities	827	760	738	761	791	791	791	791	791	791	791	791	761	791	791
Total non-Current Liabilities		4,447	4,325	4,246	4,612	4,540	4,469	4,397	4,325	4,254	4,182	4,110	4,246	4,397	4,110
Total Liabilities	7,550	7,777	9,515	9,714	8,555	8,609	8,474	8,417	8,343	8,286	8,255	8,194	9,714	8,417	8,194
Minority Interest	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Shareholders' Equity	21,353	20,720	19,886	20,858	22,736	24,276	25,869	27,542	29,282	31,048	32,821	34,683	20,858	27,542	34,683
Total Liabilities and Equity	28,903	28,497	29,401	30,572	31,291	32,885	34,343	35,959	37,625	39,334	41,076	42,877	30,572	35,959	42,877

Source: company data, Nomura estimates

STMicroelectronics STM FP

TECHNOLOGY | EUROPEAN

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O Action

We expect to see upside in earnings for STM, given the encouraging outlook for the company's wireless business. ST Ericsson is now starting to reap benefits with legacy customers, new customer announcements and design wins, and is expected to break-even on an adjusted operating profit basis in 2Q12.

🖊 Catalysts

Design wins in the wireless business, especially on the application processor side, are potential catalysts.

Anchor themes

With China's mobile service providers shifting focus towards the lower end of the TD-SCDMA market, local handset makers are benefitting from the trend with toptier OEMs not taking interest in the shift. This may translate into headwinds for wireless component providers like ST Ericsson, Spreadtrum and Leadcore.

Focus shifting to wireless: ST Ericsson China TD-SCDMA update

Upside to earnings from improved wireless business

Post Barcelona we are more positive for STM and see upside for earnings, given the encouraging outlook for the company's wireless business. After a difficult transition year, ST Ericsson is now starting to reap benefits with legacy customers, new customer announcements and design wins, and is expected to break-even on an adjusted operating profit basis in 2Q12.

② Fully integrated solutions covering both high-end and mainstream segments

At the Mobile World Congress in Barcelona, ST Ericsson announced new 1) leading-edge Nova range of application processors; 2) Thor range of advanced multimode/LTE modems, 3) NovaThor integrated platform solutions and Infrastructure projects, Snowball developer board and Igloo open source community for smartphone system development. This positions ST Ericsson as a full service provider offering standalone application engines, modems, connectivity chipsets and fully-integrated solutions that cover both high-end and mainstream segments.

③ Encouraging customer design wins and upgrades

ST Ericsson announced a key HSPA+ thin modem design win with Samsung Galaxy S4G and LTE modem and apps processor tablet design win with Quanta. It also gave reassuring comments about Windows Phone solutions and the U8500 symbian ramp for Nokia.

④ ST Ericsson breaking-even on adjusted basis in 2Q12

With a positive outlook and the company expecting the wireless business to break-even in 2Q12 at expected ST Ericsson revenue of ~US\$770mn, we expect STM's revenues to grow 8% in 2012, driven by a 38% increase in wireless revenues translating into 2012 adj. EPS of US\$1.36.

Maintained

NOMURA

NOMURA INTERNATIONAL PLC LONDON

BI	U	Y

Closing price on 29 Mar	€ 8.77
Price target	€10.40
Upside/downside	21.6%
Difference from consensus	5.7%
FY11F net profit (US\$mn)	972
Difference from consensus Source: Nomura	8.0%

Nomura vs consensus

Our earnings estimates are in line with consensus. We expect emerging markets (ex China) to contribute to the bottom-line after 2012.

Key financials & valuations				
31 Dec (US\$mn)	FY09	FY10F	FY11F	FY12F
Revenue	8,511	10,346	11,001	11,835
Reported net profit	(1,130)	830	1,117	1,238
Normalised net profit	(627)	675	972	1,238
Normalised EPS (US\$)	(0.71)	0.74	1.07	1.36
Norm. EPS growth (%)	NA	NA	44.4	27.3
Norm. P/E (x)	NA	11.9	8.2	6.4
EV/EBITDA(x)	18.1	5.6	4.9	3.5
Price/book (x)	1.22	1.24	1.16	1.05
Dividend yield (%)	1.0	2.1	2.4	2.4
ROE (%)	(13.5)	9.8	12.3	12.4
Net debt/equity (%)	5.0	13.6	17.6	26.3
Earnings revisions				
Previous norm. net profit	(1,130)	830	1,117	1,238
Change from previous (%)	-	-	-	-
Previous norm. EPS (US\$)	(0.71)	0.74	1.07	1.36
Source: Company, Nomura estimates				

Source: Company, Nom ura estimates

Share price relative to MSCI Europe



Drilling down

Shift towards lower end of TD-SCDMA phones in China

In the Chinese market, the mobile network services providers like China Mobile underwent a strategic shift, and increased focus on the lower end of the market through phones with less features. This focus on "no-frills" handsets led to the wireless component demand to move towards low-end TD-SCDMA products. This shift towards the simpler, lower-end TD components started in mid-2010 and continued through the third and fourth quarters.

The shift had two major consequences 1) local Chinese vendors like ZTE, Huawei and Yulong etc. benefitted from the shift at the expense of top and mid-tier OEMS like Samsung, Motorola; 2) component makers like Spreadtrum, Leadcore etc. experienced falls in shipment volumes and ASPs of TD-SCDMA components. Though these developments translate into headwinds for STM's wireless business, the company does not see substantial risks to its market share.

While China Mobile is promoting a shift towards lower end TD-SCDMA, at the same time it is committed to TD/LTE evolution and it will transition to TD/LTE once the standard is implemented in 2012. STM's wireless solutions business stands to benefit from the transition to TD/LTE and a progressive shift of TD-SCDMA smartphones towards the higher end features. We believe meanwhile that ST Ericsson is aiming to pitch for some design-wins on the WCDMA chip side.

Valuation methodology

Our target price of €10.4 is based on higher P/E (ex-cash) multiple of 8.2x 2012F EPS. This implies 4.5x 2012F EV/EBITDA, still offering substantial value in a sector context, in our opinion.

Risks to our call

As a diversified semiconductor company, ST's revenue, earnings and cash flow development are subject to changes in the overall semiconductor industry climate.

Financial statements

Income Statement

Dec FY, US\$mn	2009A	2010A	1Q11E	2Q11E	3Q11E	4Q11E	2011E	2012E
Income Statement								
Net Revenues	8,511	10,346	2,565	2,652	2,792	2,992	11,001	11,835
Cost of sales	-5,884	-6,332	-1,565	-1,612	-1,692	-1,804	-6,673	-6,923
Gross profit	2,627	4,014	1,000	1,040	1,100	1,188	4,328	4,912
Gross Margin	30.9%	38.8%	39.0%	39.2%	39.4%	39.7%	39.3%	41.5%
Operating expenses								
Selling, general & administrative	-1,159	-1,174	-285	-300	-305	-310	-1,200	-1,215
Research & development	-2,365	-2,350	-575	-595	-602	-614	-2,386	-2,407
Other income and expenses, net	165	91	15	28	19	19	81	84
Impairment, restructuring & other related closure costs	-291	-104	0	0	0	0	0	0
Total operating expenses	-3,650	-3,537	-845	-867	-888	-905	-3,505	-3,538
- % of revenue	-42.9%	-34.2%	-32.9%	-32.7%	-31.8%	-30.2%	-31.9%	-29.9%
Operating income	-1,023	477	155	173	212	283	823	1,374
Operating Margin	-12.0%	4.6%	6.1%	6.5%	7.6%	9.5%	7.5%	11.6%
Adjusted Operating income	-744	584	155	173	212	283	823	1.374
Adjusted Operating Margin	-8.7%	5.6%	6.1%	6.5%	7.6%	9.5%	7.5%	11.6%
Other-than-temporary impairment charge / others	-139	0	0	177	0	0	177	0
Interest income (expense), net	9	-3	-4	0	2	6	4	27
Earnings (loss) on equity investments	-336	241	2	3	5	5	15	15
Income before taxes & noncontrolling interests	-1,494	691	153	353	219	294	1,019	1,416
Income tax benefit (expense)	94	-150	-28	-63	-39	-53	-183	-227
- effective tax rate	-6.3%	-21.7%	-18.0%	-18.0%	-18.0%	-18.0%	-18.0%	-16.0%
Income before noncontrolling interests	-1,400	541	126	289	180	241	835	1,189
Net loss (income) attributable to noncontrolling interest	270	289	83	79	63	58	282	49
Net income	-1,130	830	208	368	242	298	1,117	1,238
- % of revenue	-13.3%	8.0%	8.1%	13.9%	8.7%	10.0%	10.2%	10.5%
AdjustedNet income	-627	675	208	223	242	298	972	1,238
Adjusted EPS	-0.71	0.74	0.23	0.25	0.27	0.33	1.07	1.36

Source: Company data, Nomura estimates

Balance Sheet								
Dec FY, US\$mn	2009A	2010A	1Q11E	2Q11E	3Q11E	4Q11E	2011E	2012E
Assets								
Current assets								
Cash & cash equivalents	1,588	1,892	1,720	1,646	1,599	1,562	1,562	2,405
Marketable securities	1,032	1,052	944	944	944	944	944	944
Trade account receivables, net	1,367	1,230	1,283	1,326	1,396	1,330	1,330	1,427
Inventories, net	1,275	1,497	1,391	1,433	1,440	1,473	1,473	1,533
Deferred tax assets	298	218	218	218	218	218	218	218
Assets held for sale	31	28	28	28	28	28	28	28
Receivables, net on transactions on-behalf	0	0	0	0	0	0	0	0
Other receivables and assets	753	683	683	683	683	683	683	683
Total current assets	6,344	6,600	6,267	6,278	6,308	6,237	6,237	7,238
Non-current assets								
Goodwill	1,071	1,054	1,054	1,054	1,054	1,054	1,054	1,054
Other intangible assets, net	819	731	731	731	731	731	731	731
Property, plant & equipment, net	4,081	4,046	4,106	4,174	4,199	4,230	4,230	4,025
Long-term deferred tax assets	333	329	329	329	329	329	329	329
Equity investments	273	133	135	138	143	148	148	163
Restricted cash	250	0	0	0	0	0	0	0
Non-current marketable securities	42	72	72	72	72	72	72	72
Other investments and other non-current assets	442	384	384	384	384	384	384	384
Total non-current assets	7,311	6,749	6,811	6,882	6,912	6,948	6,948	6,758
Total Assets	13,655	13,349	13,078	13,160	13,220	13,186	13,186	13,996
Liabilities & Shareholders' Equity								
Current liabilities								
Current portion of long-term debt	176	720	720	720	720	720	720	720
Trade accounts payable	883	1,233	1,080	1,117	1,241	1,209	1,209	1,284
Other payables and accrued liabilities	1,049	1,004	1,004	1,004	1,004	1,004	1,004	1,004
Dividends payable to shareholders	26	62	62	62	62	62	62	62
Deferred tax liabilities	20	7	7	7	7	7	7	7
Accrued income tax	126	96	96	96	96	96	96	96
Total current liabilities	2,280	3,122	2,969	3,006	3,130	3,098	3,098	3,173
Non-current liabilities								
Long-term debt	2,316	1,050	870	690	510	330	330	130
Reserve for pension and termination indemnities	317	326	326	326	326	326	326	326
Long-term deferred tax liabilities	37	59	59	59	59	59	59	59
Other non-current liabilities	342	295	295	295	295	295	295	295
Total non-current liabilities	3,012	1,730	1,550	1,370	1,190	1,010	1,010	810
Total Liabilities	5,292	4,852	4,519	4,376	4,320	4,108	4,108	3,983
Shareholders' equity								
Common stock	1 156	1 156	1 156	1 156	1 156	1 156	1 156	1 156
Capital surplus	2 481	2,515	2,515	2,515	2,515	2,515	2,515	2 515
Accumulated result	2,-01	3,241	3,385	3,690	3,869	4,104	4,104	5 087
Accumulated other comprehensive income	1 164	979	979	979	979	979	9,104	979
Treasury stock	-377	-304	-304	-304	-304	-304	-304	-304
Noncontrolling interest	1.216	910	827	748	686	628	628	580
Total shareholders' equity	8,363	8,497	8,559	8,785	8,901	9,078	9,078	10,013
Total Liabilities & Shareholders' Equity	13,655	13,349	13,078	13,160	13,220	13,186	13,186	13,996
	-,							,

Source: Company data, Nomura estimates

Cash Flow Statement								
Dec FY, US\$mn	2009A	2010A	1Q11E	2Q11E	3Q11E	4Q11E	2011E	2012E
Cash flow from operations								
Net income (loss)	-1,400	830	208	368	242	298	1,117	1,238
Adjustments for:								
Depreciation & amortisation	1,367	1,240	273	277	282	283	1,115	1,033
Amortization of discount on convertible debt	13		0	0	0	0	0	0
Other-than-temporary impairment charge on financial asset	s 140		0	0	0	0	0	0
Other non-cash items	-67		0	0	0	0	0	0
Minority interests in net income of subsidiaries	8		-83	-79	-63	-58	-282	-49
Deferred income tax	-24		0	0	0	0	0	0
(Earnings) loss on equity investments	337		-2	-3	-5	-5	-15	-15
Impairment, restructuring charges & other related closure co	osts -4		0	0	0	0	0	0
Changes in working capital:								
Trade receivables, net	-300		-53	-44	-70	66	-100	-97
Inventories, net	553		106	-42	-7	-33	24	-60
Trade payables	-54		-153	37	124	-32	-24	75
Other assets & liabilities, net	248		0	0	0	0	0	0
Net cash from operating activities	817	1,698	298	514	504	521	1,836	2,126
Cook flow from invocting								
Cash now nom investing	454	1 00 4	222	245	207	014	1 200	000
Payment for purchases of tangible assets	-451	-1,034	-333	-345	-307	-314	-1,300	-828
Payment for purchases of marketable securities	-1,730	-1,001	0	0	0	0	0	0
Proceeds from sale of marketable securities	1,371	838	108	0	0	0	108	0
Proceeds from matured short-term deposits	101	-62	0	0	0	0	0	0
Restricted cash for equity investments	0	250	0	0	0	0	0	0
Investment in intangible and financial assets	-138	-75	0	0	0	0	0	0
Payment for business acquisitions, net of cash & cash equi	v18	-4	0	0	0	0	0	0
Net cash from investing	290	-1,088	-225	-345	-307	-314	-1,192	-828
Cash flow from financing								
Proceeds from long-term debt	1	1	0	0	0	0	0	0
Proceeds from repurchase agreements	0	25	0	0	0	0	0	0
Extinguishment of obligations under repurchase agreement	s 0	0	0	0	0	0	0	0
Repayment of long-term debt	-237	-547	-180	-180	-180	-180	-720	-200
Capital increase	-114	-6	0	0	0	0	0	0
Repurchase of common stock	0	0	0	0	0	0	0	0
Dividends paid	-158	-212	-64	-64	-64	-64	-254	-254
Dividends paid to minority interests	-5	0	0	0	0	0	0	0
Net cash from financing	-513	-739	-244	-244	-244	-244	-974	-454
			0	0	0	0	0	~
Effect of changes in exchange rates	14	-88	0	0	0	0	0	0
Net increase / (decrease) in cash & equivalents	579	-217	-172	-74	-47	-37	-330	843
Cash & equivalents at beginning of period	1,009	1,588	1,892	1,720	1,646	1,599	1,892	1,562
Cash & equivalents at end of period	1,588	1,371	1,720	1,646	1,599	1,562	1,562	2,405

Source: Company data, Nomura estimates

Any Authors named on this report are Research Analysts unless otherwise indicated

Analyst Certification

We, Aaron Jeng and Peter Liao, hereby certify (1) that the views expressed in this Research report accurately reflect our personal views about any or all of the subject securities or issuers referred to in this Research report, (2) no part of our compensation was, is or will be directly or indirectly related to the specific recommendations or views expressed in this Research report and (3) no part of our compensation is tied to any specific investment banking transactions performed by Nomura Securities International, Inc., Nomura International plc or any other Nomura Group company.

Issuer Specific Regulatory Disclosures Mentioned companies

Issuer name	Ticker	Price	Price date	Stock rating	Sector rating	Disclosures
HTC Corporation	2498 TT	1080.00 TWD	29-Mar-2011	Buy	Not Rated	
LG Electronics	066570 KS	106500.00 KRW	29-Mar-2011	Buy	Not Rated	109
MediaTek	2454 TT	341.00 TWD	29-Mar-2011	Reduce	Not Rated	
MStar Semiconductor	3697 TT	240.00 TWD	29-Mar-2011	Neutral	Not Rated	
Qualcomm, Inc.	QCOM US	53.91 USD	29-Mar-2011	Neutral	Neutral	123
STMicroelectronics	STM FP	8.77 EUR	29-Mar-2011	Buy	Neutral	8,48
TCL Communication Tech	2618 HK	7.56 HKD	29-Mar-2011	Buy	Not Rated	

Disclosures required in the U.S.

48 IB related compensation in the past 12 months

Nomura Securities International, Inc and/or its affiliates has received compensation for investment banking services from the company in the past 12 months.

123 Market Maker - NSI

Nomura Securities International Inc. makes a market in securities of the company.

Disclosures required in the European Union

8 Investment banking services

Nomura International plc or an affiliate in the global Nomura group is party to an agreement with the issuer relating to the provision of investment banking services which has been in effect over the past 12 months or has given rise during the same period to a payment or to the promise of payment.

Disclosures required in Korea

109 Liquidity Provider for Equity Linked Warrant

Nomura Financial Investment (Korea) Co., Ltd. is a liquidity provider (LP) or LP & issuer for ELW which the underlying is LG Electronics (066570.KS), and holds 73,313,010 warrants as of 30-Mar-2011.

Previous Rating

Issuer name	Previous Rating	Date of change
HTC Corporation	Neutral	26-Feb-2010
LG Electronics	Neutral	22-Feb-2011
MediaTek	Neutral	25-Feb-2010
MStar Semiconductor	Not Rated	06-Jan-2011
Qualcomm, Inc.	Not Rated	09-Dec-2010
STMicroelectronics	Buy	18-Nov-2008
TCL Communication Tech	Not Rated	24-Jan-2011

HTC Corporation (2498 TT)

Rating and target price chart (three year history)

1080.00 TWD (29-Mar-2011) Buy (Sector rating: Not Rated)

106500.00 KRW (29-Mar-2011) Buy (Sector rating: Not Rated)

Date

22-Feb-2011

22-Feb-2011

15-Oct-2010

11-Jun-2010

18-May-2010

19-Apr-2010

18-Nov-2009

18-Nov-2009

15-Oct-2009

07-Sep-2009

11-Aug-2009

15-Jun-2009

16-Apr-2009

27-Mar-2009

27-Mar-2009

05-Mar-2009

22-Dec-2008

13-Nov-2008

17-Sep-2008 17-Sep-2008

23-Jun-2008 07-May-2008

12-Mar-2008

Rating

Neutral

Buy

Neutral

Buy



Date	Rating	Target price	Closing price
23-Nov-2010		1000.00	863.00
29-Jul-2010		687.00	570.00
06-Jul-2010		609.00	471.43
29-Apr-2010		500.00	395.71
31-Mar-2010		438.70	353.33
03-Mar-2010		384.70	308.10
26-Feb-2010		385.00	308.57
26-Feb-2010	Buy		308.57
27-Jan-2010		359.70	318.57
30-Oct-2009		374.50	314.29
03-Aug-2009		420.70	354.76
03-Aug-2009	Neutral		354.76
06-Jul-2009		566.00	419.05
02-Mar-2009		456.00	341.04
06-Feb-2009		382.00	299.32
17-Dec-2008		390.00	315.19
31-Oct-2008		504.00	356.92
24-Sep-2008		670.00	508.84
31-Jul-2008		652.00	440.82
11-Jun-2008		860.00	519.10
18-Apr-2008		900.00	527.47
21-Mar-2008		735.00	457.70
21-Mar-2008	Buy		457.70

Target price

158000.00

98000.00

93000.00

104000.00

116400.00

110000.00

136000.00

171000.00

180000.00

170000.00

133000.00

123000.00

75000.00

84000.00

89000.00

97000.00

147000.00

183000.00

133000.00

Closing price

119000.00

119000.00

100500.00

94600.00

105000.00

122500.00

102000.00

102000.00

116500.00

142500.00

133500.00

122500.00

104500.00

94000.00

94000.00

73000.00

77100.00

82900.00

94600.00

94600.00

123500.00

153500.00

114000.00

For explanation of ratings refer to the stock rating keys located after chart(s)

LG Electronics (066570 KS)

Rating and target price chart (three year history)



For explanation of ratings refer to the stock rating keys located after chart(s)

MediaTek (2454 TT)

Rating and target price chart (three year history)

341.00 TWD (29-Mar-2011) Reduce (Sector rating: Not Rated)



Date	Rating	Target price	Closing price
31-Jan-2011		250.00	396.00
25-Jan-2011		260.00	396.00
01-Nov-2010		275.00	393.50
28-Oct-2010		290.00	391.00
30-Jul-2010		330.00	433.50
16-Jul-2010		350.00	468.06
30-Apr-2010		460.00	532.93
22-Mar-2010		450.00	528.94
25-Feb-2010		400.00	505.99
25-Feb-2010	Reduce		505.99
05-Aug-2009		483.00	473.05
30-Apr-2009		325.00	343.13
03-Mar-2009		299.00	293.33
03-Mar-2009	Neutral		293.33
18-Dec-2008		271.00	236.05
18-Dec-2008	Buy		236.05
04-Dec-2008		187.00	194.22
08-Sep-2008		342.00	360.56
30-Jul-2008		309.00	317.23
07-Jul-2008		320.00	314.09
07-Jul-2008	Neutral		314.09
01-May-2008		340.00	389.53

For explanation of ratings refer to the stock rating keys located after chart(s)



Qualcomm, Inc. (QCOM US) Chart Not Available 53.91 USD (29-Mar-2011) Neutral (Sector rating: Neutral)

Valuation Methodology Qualcomm has historically traded at an average premium of 44% (1.44x) to the S&P500 NTM PE multiple. Our price target of \$45 for Qualcomm is based on a 1.25x S&P500 NTM PE or 21x CY11 GAAP EPS multiple of \$2.13. We believe Qualcomm should trade at a premium to the market given a higher expected growth (15% in CY11 versus +6% for our coverage). Benchmarks for our stocks are S&P500 and composite of our coverage universe.

Risks that may impede the achievement of the target price We expect an increasing mix of APAC sales driving down the QCT gross margins in CY11 and CY12. A slower mix shift or ASP improvement in the APAC region may pose a risk to our \$45 price target for Qualcomm (QCOM). We also expect increase in royalties to partially offset the decline in the chipset margin. A slower or faster increase in the expected royalty rates could provide downside/upside posing a risk to our price target.

STMicroelectronics (STM FP)

Rating and target price chart (three year history)

8.77 EUR (29-Mar-2011) Buy (Sector rating: Neutral)



Date	Rating	Target price	Closing price
16-Feb-2011		10.40	9.26
26-Jan-2011		9.10	8.52
28-Oct-2010		8.10	6.33
26-Apr-2010		8.40	7.30
12-Jan-2010		7.60	6.23
01-Sep-2009		6.70	6.06
22-Apr-2009		6.10	5.03
29-Jan-2009		5.10	4.04
15-Dec-2008		6.50	4.92
19-Nov-2008		7.40	5.33
18-Nov-2008	BUY		5.56
07-Aug-2008	BUY		8.00
01-May-2008	NOT RATED		7.53

Valuation Methodology Our price target of EUR 10.40 is based on P/E (ex-cash) multiple of 8.2x 2012 EPS of \$1.36 and EUR/USD FX rate of 1.35. This implies 4.5x 2012 EV/EBITDA, still offering substantial value in a sector context. The benchmark index for this stock is Dow Jones STOXX® 600 Technology.

Risks that may impede the achievement of the target price As a diversified semiconductor company, ST's revenue, earnings and cash flow development are subject to changes in the overall semiconductor industry climate. These are likely to lead to changes to our estimates and price target.



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As at 31 December 2010.

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STOCKS

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Explanation of Nomura's equity research rating system for Asian companies under coverage ex Japan published from 30 October 2008 and in Japan from 6 January 2009

STOCKS

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A 'Buy' recommendation indicates that potential upside is 15% or more.

A 'Neutral' recommendation indicates that potential upside is less than 15% or downside is less than 5%.

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Explanation of Nomura's equity research rating system for Asian companies under coverage ex Japan published prior to 30 October 2008

STOCKS

Stock recommendations are based on absolute valuation upside (downside), which is defined as (Fair Value - Current Price)/Current Price, subject to limited management discretion. In most cases, the Fair Value will equal the analyst's assessment of the current intrinsic fair value of the stock using an appropriate valuation methodology such as Discounted Cash Flow or Multiple analysis etc. However, if the analyst doesn't think the market will revalue the stock over the specified time horizon due to a lack of events or catalysts, then the fair value may differ from the intrinsic fair value. In most cases, therefore, our recommendation is an assessment of the difference between current market price and our estimate of current intrinsic fair value. Recommendations are set with a 6-12 month horizon unless specified otherwise. Accordingly, within this horizon, price volatility may cause the actual upside or downside based on the prevailing market price to differ from the upside or downside implied by the recommendation.

A 'Strong buy' recommendation indicates that upside is more than 20%.

A 'Buy' recommendation indicates that upside is between 10% and 20%.

A 'Neutral' recommendation indicates that upside or downside is less than 10%.

A 'Reduce' recommendation indicates that downside is between 10% and 20%.

A 'Sell' recommendation indicates that downside is more than 20%.

SECTORS

A 'Bullish' rating means most stocks in the sector have (or the weighted average recommendation of the stocks under coverage is) a positive absolute recommendation.

A 'Neutral' rating means most stocks in the sector have (or the weighted average recommendation of the stocks under coverage is) a neutral absolute recommendation.

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