

In touch with new market opportunities

- The outlook for the touch-screen market remains bright on the back of the proliferation of smartphones and tablet PCs
- We expect the addressable market to expand due to favourable developments in touch-screen technology
- Initiating coverage of Iljin Display and Melfas with Buy (1) ratings



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■ What's new

We initiate coverage of the Korea Touch Screen Sector with a Positive rating, as we see a bright market outlook for 2012, with robust demand growth for smart devices and favourable developments in touch-screen technology.

■ What's the impact

The touch-screen market should continue to boom in 2012, as smartphone and tablet-PC makers need touch-screen modules (TSM) to add value to their products. In addition, we see more opportunities opening up for the domestic TSM companies due to emerging new technologies such as the one-glass solution (OGS) and flexible displays.

While some touch-screen technologies are becoming obsolete as new ones emerge, we believe there is no perfect touch-screen technology for all applications, and that costs are an important variable factor in a technology being adopted. For many of the handset makers other than Apple (AAPL US, US\$459.68, Outperform [2]), we expect film-type

touch screen to remain the mainstream product, but they are likely to shift to OGS in the future.

Samsung Electronics (SEC) (005930 KS, W1,074,000, Outperform [2]) plans to launch smartphones with flexible displays in 2Q12, and we expect the company to increasingly outsource touch-screen production to domestic TSM companies. As a result, we believe that over the next few years, the addressable market for domestic touch-screen companies will expand much faster than the growth in the touch-screen market for mobile handsets.

The potential adoption of integrated-type touch screens, such as those using in-cell technology, are the major threat to the touch-screen industry. However, in-cell technology will have to overcome production issues as well as production costs in order to have a major impact, in our view. In addition, as SEC will continue to use active-matrix organic light-emitting diodes (AMOLED) for its high-end smartphones, we believe the potential threat is relatively smaller for the Korea TSM companies.

Based on our and the Bloomberg-consensus earnings forecasts, the Korea Touch Screen Sector (seven listed companies) is trading currently at a 2012 PER of 6.8x and a 2012 PBR of 1.9x. Given that the past-two-year weighted average (based on market capitalisation) PBR is 2.8x, we believe the sector valuation is attractive.

Korea Touch Screen Sector

- **Positive** (initiation)
- Neutral
- Negative

How do we justify our view?

■ What we recommend

Among the domestic touch-screen companies, our top pick is Iljin Display, as we expect the company to continue to gain share in the domestic touch-screen market and forecast a robust revenue growth rate of 51% YoY for 2012. We initiate coverage of the company with a Buy (1) rating and six-month target price of W16,500.

We also initiate coverage of Melfas with a Buy (1) rating, and a six-month target price of W30,000. Although 2011 appears to have been a difficult year for the company with flat revenue growth YoY and a substantial erosion in the operating-profit margin, we forecast Melfas to post stronger revenue and earnings growth for 2012 due to rising sales of touch-sensor chips and tablet-PC TSMs.

■ How we differ

Unlike most others in the market, among the domestic TSM companies, we believe that Iljin Display and Melfas are the best-positioned in the fast-growing and fast-changing touch-screen market.

Key stock calls

	New	Prev.
Iljin Display (020760 KS)		
Rating	Buy	
Target price	W16,500	
Up/downside	▲ 44.7%	
Melfas Inc (096640 KS)		
Rating	Buy	
Target price	W30,000	
Up/downside	▲ 25.5%	

Source: Daiwa forecasts

Note: Please refer to page 3 for details.

■ **Positive** (initiation)

■ Neutral

■ Negative

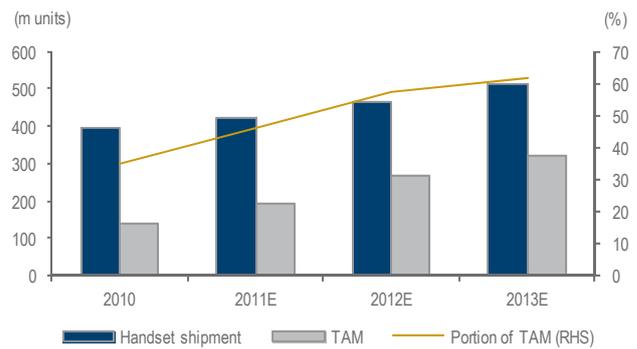
How do we justify our view?

- Growth outlook ✓ ✓ ✓ ✓ ✓
- Valuation ✓ ✓ ✓ ✓ ✓
- Earnings revisions ✓ ✓ ✓ ✓ ✓

■ **Growth outlook** ✓ ✓ ✓ ✓ ✓

While we forecast combined shipments for SEC and LG Electronics (LGE) (Not rated) mobile handsets to increase by 10.7% YoY to 465m units for 2012, we believe the total addressable market (TAM) for touch screens in mobile handsets will expand by 37.8% YoY to 268m units.

■ **TAM analysis for mobile-handset touch screens in Korea**



Source: Companies, Daiwa forecasts

■ **Valuation** ✓ ✓ ✓ ✓ ✓

Based on our and the Bloomberg-consensus earnings forecasts, the Korea Touch Screen Sector is currently trading at a 2012 PER of 6.8x and a 2012 PBR of 1.9x. Given that the past-two-year weighted average (based on market capitalisation) PBR is 2.8x, we believe the sector valuation is attractive.

■ **Korea touch-screen sector PBR trend**

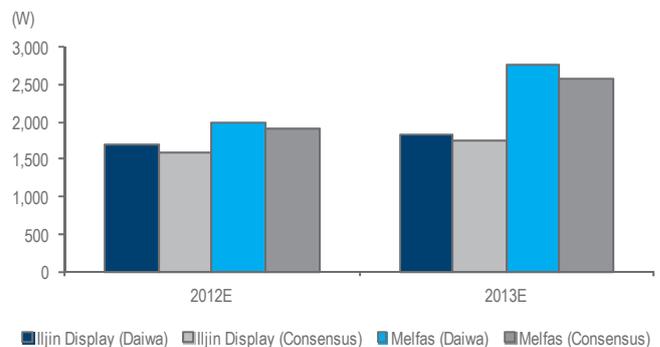


Source: Companies, FnData, Bloomberg, Daiwa forecasts

■ **Earnings revisions** ✓ ✓ ✓ ✓ ✓

For both Iljin Display and Melfas, our 2012-13 EPS forecasts are 4-7% higher than those of the FnGuide-consensus forecasts. We believe there could be upside to the consensus forecasts in the event of stronger sales growth of touch-screen market

■ **Iljin Display and Melfas: Daiwa vs. consensus EPS forecasts**



Source: FnData, Daiwa forecasts

Key stock calls

Company Name	Stock code	Share Price	Rating		Target price (local curr.)			EPS (local curr.)					
			New	Prev.	New	Prev.	% chg	FY1			FY2		
								New	Prev.	% chg	New	Prev.	% chg
Iijin Display	020760 KS	11,400	Buy		16,500		n.a.	1,047		n.a.	1,971		n.a.
Melfas Inc	096640 KS	23,900	Buy		30,000		n.a.	1,048		n.a.	1,991		n.a.

Source: Daiwa forecasts

Table of contents

In touch with new market opportunities	5
Why touch-screen companies at this juncture?	5
We expect strong growth in the addressable market for 2012.....	5
Potential threat from in-cell technology is relatively smaller for Korea TSM companies.....	6
We believe valuations are attractive, trading below the past-two-year average PBR	6
Change in touch-screen technologies does not pose a threat to everyone	8
P-cap touch screen takes over from resistive	8
Glass-type vs. film-type p-cap	8
Integrated touch screens are a potential threat but not in the short term	9
There is no perfect touch-screen technology; cost is an important factor.....	10
Market opportunities remain bright	11
Positioning in the competitive landscape	12
Ability to keep up with changes in technologies is a key to boosting top-line growth	13
Profitability varies with the degree of vertical integration and productivity.....	13
 Company Section	
Iljin Display.....	15
Melfas Inc.....	23

In touch with new market opportunities

We initiate coverage of the Korea Touch Screen Sector with a Positive rating, as we see bright prospects for the market in 2012, with robust demand growth for smart devices and favourable developments in touch-screen technology.

Why touch-screen companies at this juncture?

Although most of touch-screen companies in Korea enjoyed solid growth in revenue and earnings in 2010, only a few of them saw a robust growth for 2011, due to changes in touch-screen technologies and differences in their production efficiencies. As a result of changes in their market shares and increased price pressure, the share prices of the domestic TSM companies were extremely volatile in 2011, with the sector index (of seven listed companies) falling nearly 55% from early April to late September and then rising by more than 80% up to early December. Meanwhile, the share prices of the Taiwan TSM companies declined sharply between early July and December, due to what we believe were the market's concerns about the potential threat from in-cell touch-screen technology.

■ Korea and Taiwan touch-screen companies' share-price performances



Source: FnData, Bloomberg

Note: Share-price index comprised of seven listed touch-screen companies in Korea and four companies in Taiwan

We expect strong growth in the addressable market for 2012

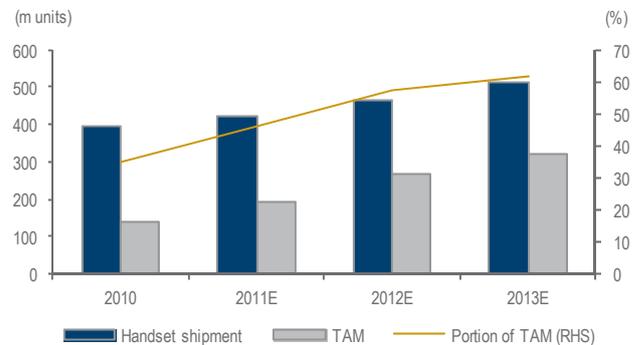
For 2012, we expect the wide adoption of touch screens in mobile handsets and tablet PCs to continue.

However, we see more opportunities opening up for the domestic TSM companies due to favourable developments in touch-screen technologies, such as OGS and flexible displays. Although we provide a more detailed discussion of various touch-screen technologies later in this report, we believe that many handset makers will shift to OGS for touch screens, in order to lower production costs and improve the quality of certain aspects of the touch function.

In addition, as SEC plans to launch smartphones with flexible displays in 2Q12, we expect the company to increasingly outsource touch-screen production to domestic TSM companies. Since more than 60% of SEC's smartphones used AMOLED in 2011, and the touch screens for these displays were all produced inhouse (using on-cell technology), we see opportunities for the domestic TSM companies once AMOLED substrates are switched to plastic/film from glass for flexible displays.

Although we forecast combined mobile-handset shipments for SEC and LGE to increase by 10.7% YoY to 465m units for 2012, we believe the for touch screens in mobile handsets will expand by 37.8% YoY to 268m units. We expect the main drivers should be: 1) the increased proportion of smartphone shipments, 2) a higher proportion of touch screens being used in feature phones, and 3) new touch-screen opportunities from the shift to flexible displays.

■ TAM analysis for mobile-handset touch screens in Korea



Source: Companies, Daiwa forecasts

Potential threat from in-cell technology is relatively smaller for Korea TSM companies

The potential adoption of integrated-type touch screens, such as those using in-cell technology, are currently being developed by several LCD-panel makers, and pose a major threat to the touch-screen industry. As LCD-panel companies can directly embed the touch function in the display, there may be fewer opportunities for touch-screen makers in the future. However, as in-cell technology has to overcome production-yield issues as well as production costs, we do not believe it will be a major threat to the current touch-screen technologies in the near term. In addition, as SEC will continue to use AMOLED for its high-end smartphones, we believe that the potential threat is relatively smaller for the Korea TSM companies.

We believe valuations are attractive, trading below the past-two-year average PBR

Based on our and the Bloomberg-consensus earnings forecasts, the Korea Touch Screen Sector is currently trading at a 2011 PER of 11.6x and 2012 PER of 6.8x. In terms of PBR, the sector trades at 2.4x and 1.9x on the respective 2011 and 2012 BVPS forecasts. Given the past-two-year weighted average (based on market capitalisation) PBR is 2.8x, we believe the sector valuation is attractive.

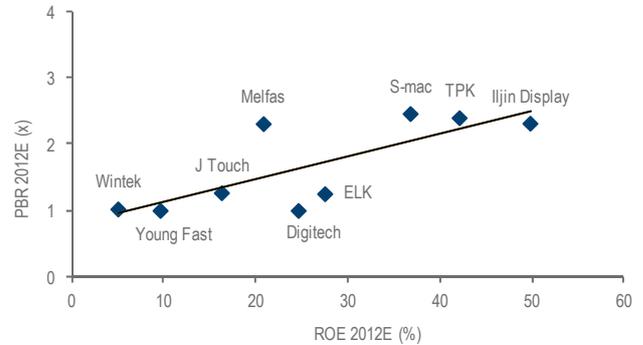
Korea Touch Screen Sector: PBR



Source: Companies, FnData, Bloomberg, Daiwa forecasts

Compared with the Taiwan TSM makers, the Korea TSM companies generally trade at higher PBR multiples, but ROEs are also higher than those of their peers in Taiwan.

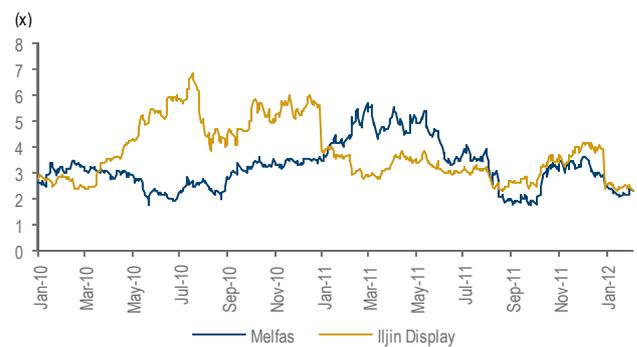
Touch-screen companies: PBR and ROE comparison



Source: FnData, Bloomberg, Daiwa forecasts

Our top pick among the Korea touch-screen companies is Iljin Display, as we expect the company to continue to gain share in the domestic touch-screen market and forecast a robust revenue growth rate of 51% YoY for 2012. We initiate coverage of the company with a Buy (1) rating and a six-month target price of W16,500. We also initiate coverage of Melfas with a Buy (1) rating, and a six-month target price of W30,000. Although 2011 appears to have been a difficult year for the company with flat revenue growth YoY and a substantial erosion in the operating-profit margin, we forecast Melfas to post stronger revenue and earnings growth for 2012 due to rising sales of touch-sensor chips and tablet-PC TSMs.

Iljin Display and Melfas: PBRs



Source: Companies, FnData, Daiwa forecasts

■ Korea and Taiwan touch-screen companies' valuation comparison

	Bloomberg code	Rating	Share price (local curr.)	PER (x)		ROE (%)		PBR (x)		Three-year PBR range (x)		
				2011E	2012E	2011E	2012E	2011E	2012E	Low	Ave	High
Korea												
Melfas	096640 KS	1	23,900	22.8	12.0	12.7	20.9	2.7	2.3	0.9	2.9	6.1
Ijin Display	020760 KS	1	11,400	10.9	5.8	43.0	49.8	3.8	2.3	0.5	3.4	6.8
ELK	094190 KS	Not rated	13,600	6.4	4.9	28.9	27.5	1.6	1.2	0.9	4.0	10.0
S-mac	097780 KS	Not rated	11,600	11.0	7.5	34.4	36.8	3.5	2.5	0.8	2.0	3.8
Digitech Systems	091690 KS	Not rated	12,950	6.0	4.4	23.3	24.7	1.3	1.0	1.0	3.2	6.5
Taiwan												
TPK	3673 TT	1	465.50	8.5	6.8	55.6	42.1	3.6	2.4	2.7	7.6	11.3
Wintek	2384 TT	2	24.65	109.1	20.5	1.1	5.1	1.1	1.0	0.2	1.2	2.2
Young Fast	3622 TT	Not rated	80.20	16.6	11.6	7.6	9.7	1.1	1.0	0.7	5.0	12.7
J Touch	3584 TT	Not rated	40.90	n.a.	19.7	15.0	16.3	1.6	1.3	1.3	5.2	11.0

Source: Fndata, Bloomberg, Daiwa forecasts

Note: closing share prices as at 6 February 2012

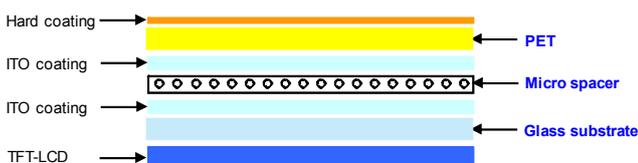
Change in touch-screen technologies does not pose a threat to everyone

The touch-screen market should continue to boom as mobile-handset and tablet-PC makers need TSM to add value to their products. Although some touch-screen technologies are becoming obsolete as new ones emerge, we believe that there is no touch-screen technology that is suited to all applications and that costs are likely to be an important factor in a technology being adopted. We expect add-on type touch screens, such as glass/film/film (GFF), glass/glass (G/G), and OGS, to remain the mainstream products.

P-cap touch screen takes over from resistive

The previous generation of touch screens is mostly based on a resistive technology that features a flexible outer layer of thin plastic film, and through contact with a rigid inner layer, electrical contact is recognised. Although resistive TSM is inexpensive to produce, the thin plastic outer layer makes the screen less durable and manual recalibration is required periodically.

Resistive-type touch screen: cross section



Source: Various sources (including Melfas), Daiwa

Meanwhile, the adoption of projective capacitive (p-cap) touch screens has increased with the launch of Apple's iPhone in 2007. P-cap features two layers of glass and the conductive material is placed between the glass layers. The electric fields are projected from a grid of conductive materials in rows and columns, and by placing a finger on the outer layer it detects the contact.

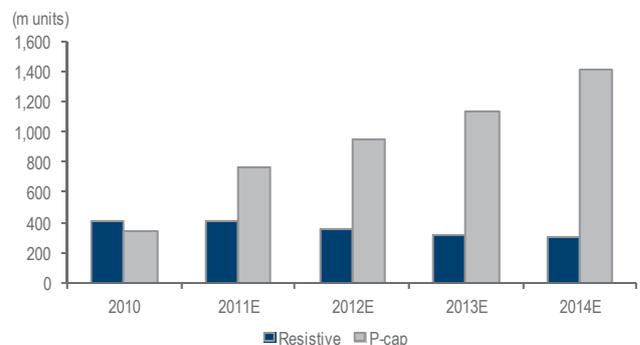
P-cap touch screen: cross-sectional view



Source: Various sources (including Melfas), Daiwa

Although resistive touch screens were the mainstream products until 2010, p-cap touch screens have gained in popularity, due to their: 1) durability, 2) high optical quality, 3) multi-touch functionality, as the application software used in smartphones and tablet PCs has become more sophisticated, and 4) declining prices, as manufacturers continue to cut production costs on increased usage. Although we forecast resistive touch-screen shipments to decline from 408m units for 2010 to 318m units for 2013, we forecast p-cap touch-screen shipments to increase from 345m units to 1.1bn units over the same period.

Global touch-screen module shipments by technology



Source: DisplaySearch, Daiwa forecasts

Glass-type vs. film-type p-cap

There are various types of p-cap touch screens and they can be largely categorised as glass-type and film-type. In 2007, the iPhone became the first mobile device to use the G/G touch screen with indium tin oxide (ITO), a transparent conductor, deposited on glass. Meanwhile, film-type touch screen has been mainly adopted by most of non-Apple handset makers. In Taiwan, there are many TSM companies producing glass-type touch screens as they transformed their existing small- to medium-sized colour filters or STN-LCD production lines to TSM production. However, as there were fewer numbers of these production lines in Korea, particularly among small- to medium-sized enterprises, many TSM companies have been focusing more on the film-type touch screen.

Comparing these two touch-screen technologies, G/G has advantages in optical performance and durability, and a narrow bezel, while film-type has advantages in terms of cost, thinness and lightness, and the ease of production. In addition, G/G is more suitable for a single product manufactured in high volume (such as the iPhone), whereas film-type has advantages in a variety of low-volume products with a quick time-to-market. Given the distinct advantages of these two types of p-cap touch screen, we believe that G/G will be

used mainly for certain high-end smartphones and for tablet PCs, while film-type will become more popular among the low-end to mid-range smartphones.

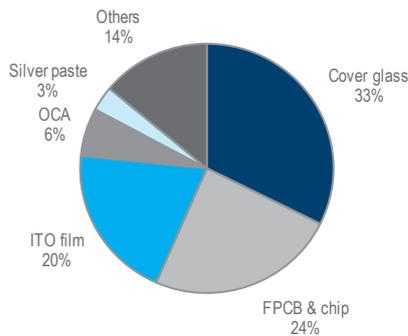
Meanwhile, the technology used in film-type touch screens is evolving from glass/film/film (GFF) to glass/one film (G1F) and to OGS. The main reason for the shift in technology is lower production costs and the improved quality of certain aspects of the touch screen. Although G/G touch screens use two layers of glass, GFF uses cover glass and two layers of film. Therefore, production costs are 10-20% lower for GFF than G/G touch screens.

■ **GFF solution: cross-section**



Source: Various sources (including Melfas), Daiwa

■ **Production cost breakdown for GFF touch screens**



Source: Various sources (including Melfas), Daiwa

In order to reduce production costs further, TSM makers are trying to reduce the number of film layers in the touch screen. However, prior to a full shift to OGS, in which no ITO films are used, G1F provides a hybrid solution, in which one axis of ITO sensors are printed on the cover glass and another axis of ITO sensors is attached to the film. As G1F uses one less film than the GFF solution, it is slightly thinner and has better translucence or optical quality.

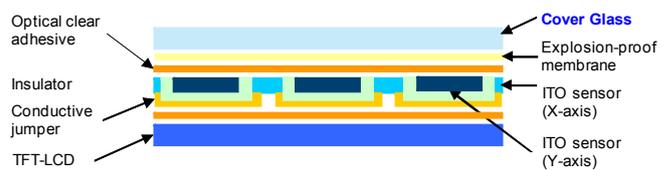
■ **G1F solution: cross-section**



Source: Various sources (including Melfas), Daiwa

However, one drawback of the G1F solution is that it tends to have a low production yield, and so we believe OGS will be more widely used by TSM makers in 2012. By removing all the films, the production cost of OGS is more than 20% lower than that of the conventional G/G touch screens, and is also lighter and has a better optical quality than the GFF solution. While the concept of OGS is similar among TSM makers, they have different names for their own technologies. Melfas calls it direct patterned window (DPW) as the ITO material is sputtered directly on the covered glass, while TPK (3673TT, NT\$465.50, Buy [1]) has a touch-on-lens (TOL) solution, and Wintek (2384 TT, NT\$24.65, Outperform [2]) has the advanced-technology touch (ATT) solution, which the company began shipments of in April 2010, for low-end to mid-range smartphones.

■ **OGS solution: cross-section**



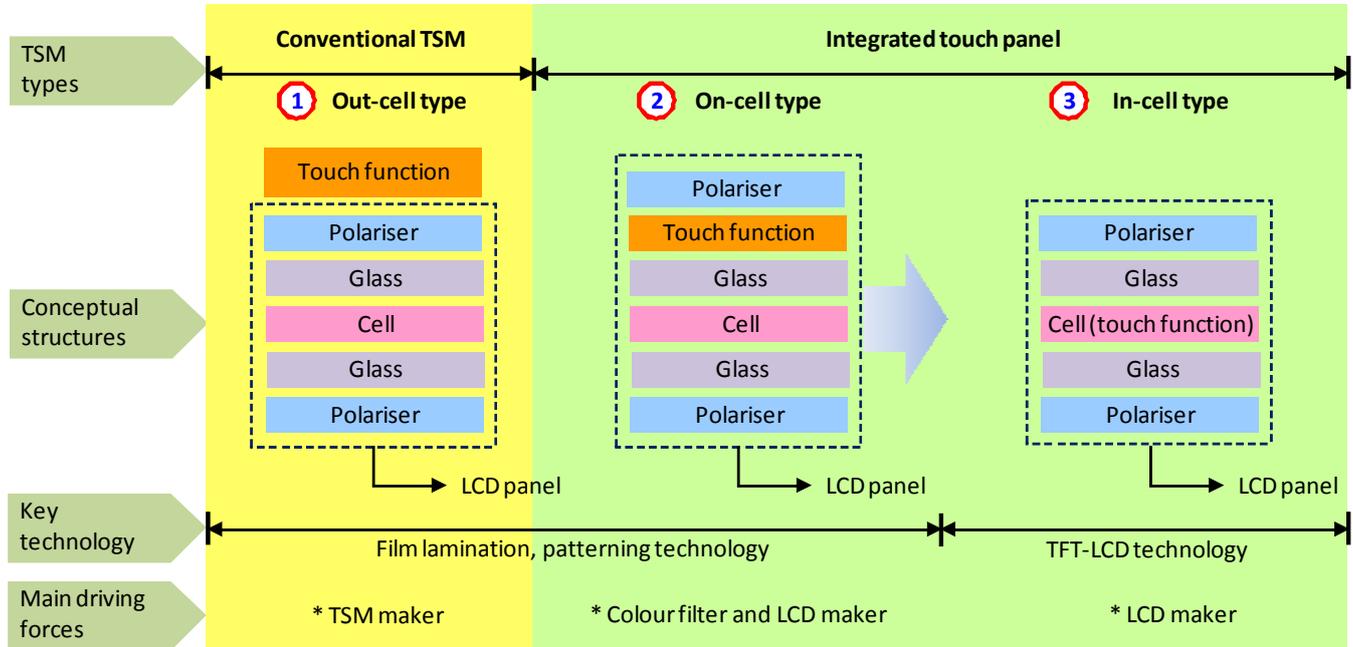
Source: Various sources (including Melfas), Daiwa

Integrated touch screens are a potential threat but not in the short term

We have discussed different touch-screen technologies, but they all fall in to one major category of add-on (out-cell) type, in which the TSM is attached on the top of the main display, such as TFT-LCD. However, another touch-screen technology emerging, in which the touch screen is integrated into the main display. This is led by LCD panel makers and competes with the conventional TSM industry.

Integrated-type technologies, such as on-cell and in-cell touch screens, are currently being developed by the major LCD panel makers. However, this technology would need to be verified for mass production, as defective touch screens would result in the scrapping of the whole display as the touch screen cannot be separated from the main display.

■ Comparison of conventional TSM and integrated touch panel



Source: Displaybank, Daiwa

On-cell touch screen for LCD

For on-cell touch screens, the touch sensor is deposited on the top of the colour filter and one layer of glass is eliminated, resulting in a thinner module with lower production costs (theoretically). However, the major challenges for on-cell technology include: 1) it requires additional photo mask steps to create the touch sensors on the top surface of the colour filter substrate, and this effectively lowers the overall production yield and 2) potential defects on the touch sensor could result in the whole colour filter being scrapped.

On-cell touch screen for AMOLED

SEC launched its own touch-screen technology for AMOLED in 2010 and this is currently used in its high-end smartphones, such as the Galaxy S2 and Galaxy Note. The company integrated touch sensors on the top glass layer of AMOLED and covered it with tempered glass. As the touch screen is already integrated with the AMOLED, SEC produces them inhouse as it does not need to outsource the touch-function process to TSM makers.

In-cell touch screen

For in-cell touch screens, the touch sensor is physically inside the LCD cell and the touch sensor can be light-sensing elements, micro switches (voltage-sensing), or capacitive electrodes (charge-sensing). In light sensing, the photo sensor is placed in each pixel or group of pixels and the visible-light sensor recognises the shadow of a finger under bright light or the reflection of the backlight on the finger in dim light. As for

voltage sensing, pressing the LCD surface closes micro-switches in each pixel to detect the location touched. It works with any touch objects, such as a finger or stylus. However, durability is an issue as it requires touching the LCD surface and the cover glass cannot be added. In charge-sensing, pressing the LCD surface changes the dielectric constant of the liquid crystal, which changes the capacitance between the electrodes. However, durability is also an issue as the cover glass cannot be attached.

There is no perfect touch-screen technology; cost is an important factor

While there many different types of touch screens available and new ones continue to emerge, there is no perfect solution for all touch applications as each touch technology has its own strengths and weaknesses, in our view. Recently, many investors have raised concerns about the sales-growth prospects for TSM makers, as the potential adoption of integrated-type touch screens, such as on-cell and in-cell technologies, should eventually take the business opportunities away from TSM companies.

However, the LCD-panel makers have told us that the most important factors for touch panels are the cost competitiveness and the customer's acceptance of different touch-screen technologies. Although a few integrated touch screens could be ready to market at this time, mobile-handset makers may not choose this solution as they have a higher cost than conventional add-on type solutions and as integrated touch screens

have not been verified for mass production, as this could pose a potential procurement risk.

In conclusion, we have no doubt that the touch-screen market will continue to boom as mobile-handset and tablet-PC makers need TSMs to add value to their products. Currently, the dominant technology is p-cap, as it is more reliable in terms of cost and volume production. We forecast global p-cap touch-screen shipments to increase at a CAGR of 23% over the next three years (2012-14). Among the p-cap touch-screen solutions in 2012, we expect GFF to account for over 60%, G/G to account for about 20%, and the remainder to be both OGS and G1F solutions.

■ **Comparison of touch-screen technologies**

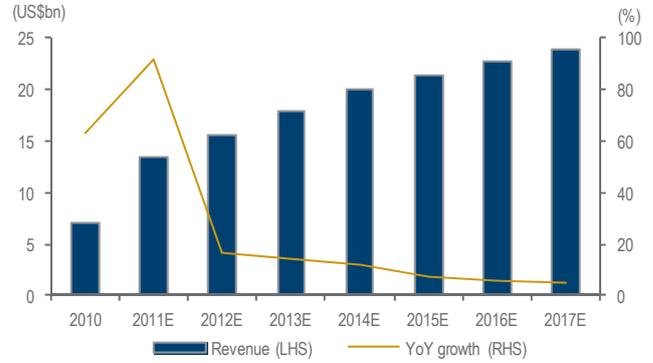
	G/G	GFF	G1F	OGS
Cost	★	★★	★	★★★
Durability	★★★	★★	★★	★
Optical quality	★★★	★★	★★	★★★
Narrow bezel	★★	★	★	★★★
Thickness	★	★★	★★	★★★
Production yield	★★	★★★	★	★★
Sensitivity	★★★	★	★★	★★

Source: Various sources, Daiwa

Market opportunities remain bright

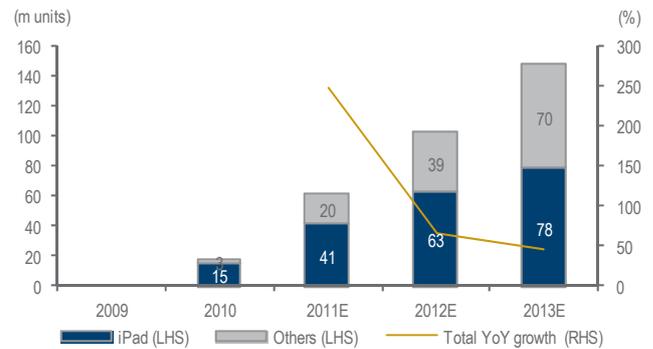
According to DisplaySearch, the value of the global TSM market will increase by 90% YoY to US\$13.4bn for 2011 and nearly double to US\$23.9bn in 2017. The TSM market should see strong growth in revenue, units, and area due to increasing penetration in mobile devices during this period. Although touch screens for smartphones currently make up more than 70% of the total TSM market in terms of volume, we believe the fastest-growing segment is tablet PCs, and forecast shipments to increase to 61m units for 2011 from 18m units for 2010, and rise to 102m units for 2012. Although the iPad currently dominates the global tablet-PC market with a 67% share for 2011, we forecast its share to decline to 53% for 2013 as Android-based tablets and the Kindle Fire gain market share.

■ **Global touch-screen market: revenue forecasts**



Source: DisplaySearch

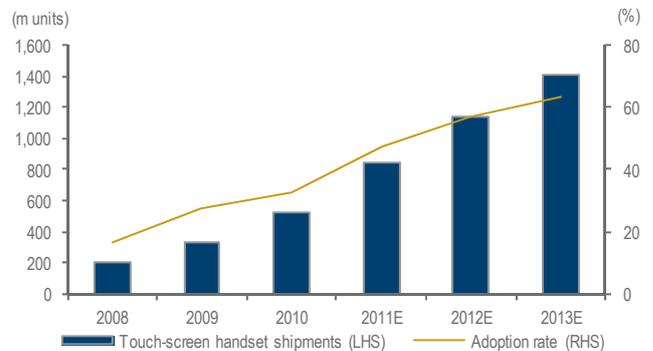
■ **Global tablet-PC shipments**



Source: Various sources, Daiwa forecasts

For mobile handsets, out of the 1.78bn unit shipments for 2011, we estimate 47% (837m units) were touch-enabled, compared with 32% (517m units) for 2010. For 2012, we forecast the touch-screen adoption rate to increase to 57%. We see the major drivers of touch-screen handset shipment as being: 1) rising smartphone shipments, and 2) increased touch-screen adoption in feature phones.

■ **Global touch-screen handset shipments and adoption rate**



Source: DisplaySearch, Daiwa forecasts

Meanwhile, Taiwan TSM makers have been riding on the success of Apple in mobile devices. Three companies, TPK, Wintek and Chimei Innolux (3481 TT, NT\$16.2, Hold [3]) currently dominate the touch-screen market for both the iPhone and the iPad. However, the Korea TSM makers have been competing more fiercely in a much smaller and fragmented domestic market, supplying touch screens mainly to SEC and LGE.

■ Allocation of touch screen for Apple

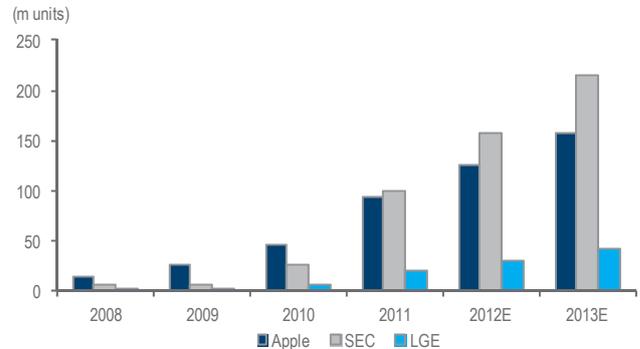
	2007	2008	2009	2010	2011E	2012E
iPhone						
TPK	100	80	65	60	45	40
Wintek		20	30	30	35	30
CMI			5	10	20	30
iPad						
TPK				50	55	50
Wintek				50	35	30
CMI					10	20

Source: Daiwa forecasts

As a substantial proportion of SEC's smartphone TSMs have been produced inhouse (as on-cell technology is used for AMOLED touch screens) until now, domestic TSM companies were not able to benefit substantially from the rapid market-share gains by SEC. However, as the company expands its smartphones into the low-end to mid-range segments, and as LGE gradually gains traction in the smartphone market globally, we believe there will be greater opportunities for the Korea TSM companies in the future.

For 2011, we estimate that SEC shipped 99m smartphones, accounting for the largest share of the global smartphone market for the first time. Although the company expects the global smartphone market to expand by 30-40% YoY for 2012, it believes it will outgrow the market, with a shipment growth rate of over 50% YoY. Meanwhile, LGE shipped 20.2m smartphones for 2011, a substantial increase from the 6.5m units for 2010, and it aims to sell 30-35m units for 2012. In addition, as SEC plans to launch smartphones with flexible displays in 2Q12, we think it is highly likely that touch screens will be outsourced to domestic TSM makers, as on-cell technology will only be used for AMOLED displays with glass substrates.

■ Smartphone shipments by key handset maker



Source: Companies, Daiwa forecasts

Positioning in the competitive landscape

One TSM company told us that there were more than 50 touch-screen companies in Korea, and 7-8 of them account for an 80-90% share of the domestic market. Given that there is no single dominant player, the key to the TSM companies' revenue growth has been their ability to adapt to new technologies, and their profitability has depended greatly on their productivity as well as the degree of vertical integration, in our view.

While most of the domestic TSM makers (seven listed companies) recorded robust YoY revenue growth for 2010, some TSM makers were on track to see flat YoY revenue growth for 2011. We believe that a few of these companies have been facing technological or productivity issues amid the changes in touch-screen technologies. For the first nine months of 2011, only three companies, Iljin Display, S-mac (Not rated), and Synopex (Not rated) recorded touch-screen revenue greater than that for 2010 (full year).

■ Korea TSM makers: touch-screen revenues

Company	Bloomberg code	Mkt cap (Wbn)	TSM revenue only		
			2009	2010	9M11
Melfas	096640 KS	410	134	195	132
Iljin Display	020760 KS	309	11	43	175
S-mac	097780 KS	190	70	168	240
ELK	094190 KS	184	103	227	175
Digitech Systems	091690 KS	177	115	136	106
Moreens	110310 KS	111	86	74	16
Synopex	025320 KS	93	28	84	190

Source: Companies

Ability to keep up with changes in technologies is a key to boosting top-line growth

Over the past two years, the Taiwan TSM makers such as TPK and Wintek have seen robust revenue growth due to their advantages in capacity, yield, and production costs. Meanwhile, the TSM makers in Korea have realised much smaller revenue-growth rates due to the smaller addressable market and more intense competition. As touch-screen technology evolved from resistive to p-cap, handset companies such as SEC reduced their dependency on Digitech, Moreens, and Taiwan TSM companies such as Young Fast and J Touch, while increasing procurements to S-mac and Synopex, which have spent years developing p-cap technology in co-operation with SEC. Meanwhile, Iljin Display started to supply touch screens for SEC's 7.0-inch tablet PC in late 2010 and later expanded to TSMs for the 10.1-inch model. We estimate that Iljin Display currently manufactures nearly half of SEC's tablet-PC touch screens.

■ TSM companies: market shares with SEC and LGE

	TSM maker	Share (%)	
Samsung Electronics	Handset w/ AMOLED	100	
	Handset w/ LCD	31	
		Synopex	22
		Melfas	18
		Iljin Display	9
		Digitech Systems	7
		Others	14
	Tablet PC	Iljin Display	47
		S-mac	17
		Digitech Systems	9
	Melfas	6	
	Others	22	
LG Electronics	Handset	60	
		ELK	40
	Tablet PC	ELK	100

Source: Companies, Daiwa estimates

As touch-screen technology evolves to OGS, we believe that companies such as Melfas are likely to benefit, since Melfas has spent a lot of time and resources on developing DPW technology. While domestic TSM companies spend an average of 2-3% of revenue on R&D expenses annually, Melfas has been the top R&D spender over the past three years. However, as companies such as Samsung Fiberoptics (Not listed) and Nepes Display (Not listed) are developing similar types of OGS technology, productivity and cost competitiveness will be the key in garnering market share, in our view. As for flexible displays, we believe that Iljin Display is currently developing touch screens for the new display technology.

■ Korea TSM companies: R&D spending

Company	R&D expenses (Wbn)			R&D as a % of revenue		
	2009	2010	9M11	2009	2010	9M11
Melfas	6.3	8.6	8.2	4.2	3.4	4.6
Iljin Display	1.3	1.5	4.6	3.8	1.4	2.1
ELK	4.7	3.4	4.4	4.0	1.4	2.5
S-mac	4.9	8.2	6.8	3.4	4.0	2.2
Digitech Systems	2.1	1.8	1.2	1.8	1.3	1.1
Moreens	2.0	0.3	0.4	2.3	0.4	2.4
Synopex	4.8	3.9	5.2	3.1	1.8	2.1

Source: Companies

Profitability varies with the degree of vertical integration and productivity

Although there are many TSM companies, not all of them are vertically integrated. One of the important components in TSMs is touch sensors, and in Korea there are only five TSM makers that can produce touch sensors inhouse: Samsung Mobile Display (Not listed), LG Innotek (Not rated), Iljin Display, ELK (Not rated), and Digitech Systems (Not rated). Meanwhile, Melfas is the only domestic company that can produce the controller ICs.

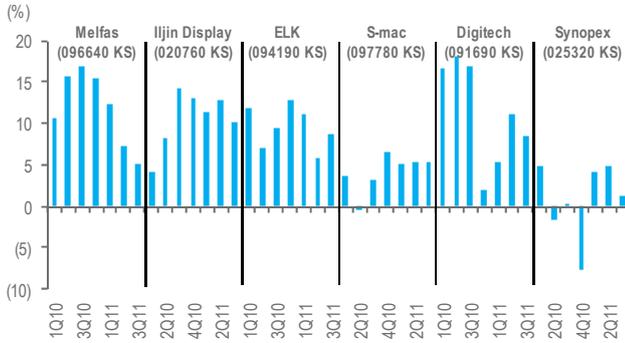
■ Vertical integration of TSM companies

	TSM	Touch sensor	Cover glass	ITO film	Controller IC
Korea					
Melfas	■				■
Iljin Display	■	■			
ELK	■	■	■		
S-mac	■				
Digitech	■	■	■		
Moreens	■				
Synopex	■				
Taiwan					
TPK	■	■	■		
Wintek	■	■	■		
Youngfast	■	■			
J Touch	■	■			
Cando	■	■	■		

Source: Companies, Daiwa estimates

As a result of these diversification efforts, companies such as Melfas, Iljin Display, ELK, and Digitech posted robust operating-profit margins of 10-15% for 2010. However, except for Iljin Display, the other three companies saw the margin erode for 2011 due to market share losses and productivity issues. Although companies such as S-mac and Synopex have gained market share and touch-screen revenue expanded in 2011, their operating-profit margins remained at mid-single-digit percentages as they do not source components internally.

■ TSM makers: operating-profit margin comparison



Source: Companies

In conclusion, we believe that both Iljin Display and Melfas are well-positioned in the growing touch-screen market. Iljin Display is the most profitable company among the domestic TSM makers (seven listed companies) and is continuing to expand its market share through production efficiencies and cost competitiveness. Meanwhile, Melfas is likely to benefit from the technology shift to OGS, and its touch-sensor chip revenue is likely to increase strongly from the proliferation of low-end smartphones in China.

Iljin Display
020760 KS

Target price: **W16,500**
Up/downside: **+44.7%**
Share price (6 Feb): **W11,400**

Initiation: market-share gains on high productivity

- Coverage initiated with a Buy (1) rating and six-month target price of W16,500
- The company continues to gain market share in both handsets and tablet-PC touch-screen modules
- We are upbeat on earnings growth, forecasting operating profit to expand by 55% YoY for 2012

- 1 Buy (initiation)
- 2 Outperform
- 3 Hold
- 4 Underperform
- 5 Sell

How do we justify our view?



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■ **What's new**

Iljin Display is one of the fastest-growing touch-screen makers in Korea, forecast by us to record touch-screen module (TSM) revenue growth of over 515% YoY for 2011. As it continues to gain share in both the handset and tablet-PC touch-screen markets, we forecast the company's revenue to rise by 51% YoY to W492bn for 2012.

■ **What's the impact**

Iljin Display's touch-screen revenue started to expand from 4Q10, as the company was able to satisfy SEC's need for both quality and price for the Galaxy Tab in a short period of time. Iljin Display is the largest TSM provider for SEC's tablet PC, with a 47% share in 2011. In order to cope with the changes in touch-screen technologies, the company is currently working on several new projects with this captive customer,

and we expect its exposure to smartphone TSMs to expand further in 2012. The company was the only domestic TSM maker to raise its production capacity during 2H11.

Meanwhile, Iljin Display enjoys a relatively high operating-profit margin of a low-teen percentage for its TSM business. Although there are a few TSM makers that can produce touch sensors inhouse, Iljin Display is the only TSM maker that produces its entire touch-sensor requirements internally. As a result, we expect the company to deploy a more aggressive pricing strategy to gain share in the handset TSM market.

■ **What we recommend**

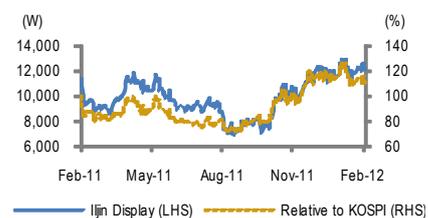
The stock is trading currently at 2011E and 2012E PERs of 10.9x and 5.8x, respectively, and at respective PBRs of 3.8x and 2.3x. Given the robust revenue and earnings growth outlook for 2012, we set our six-month target price at W16,500, based on a mid-cycle PBR of 3.3x on our 2012 BVPS forecast. The key risks are weak TSM orders from its customers and intensifying competition.

■ **How we differ**

Our 2012 and 2013 EPS forecasts are 6.7% and 4.7% higher, respectively, than those of the FnGuide consensus. We believe

there could be upside to the consensus forecasts if Iljin Display gains market share in touch-screens and sapphire wafer demand rises.

Share price performance



12-month range	6,990-12,950
Market cap (US\$m)	275.11
Average daily turnover (US\$m)	5.75
Shares outstanding (m)	27
Major shareholder	Chin-Kyu Huh (26.3%)

Financial summary (W)

Year to 31 Dec	11E	12E	13E
Revenue (bn)	326	492	596
Operating profit (bn)	37	56	67
Net profit (bn)	28	53	57
Core EPS	1,047	1,971	2,113
EPS change (%)	165.5	88.1	7.2
Daiwa vs Cons. EPS (%)	(5.8)	6.7	4.7
PER (x)	10.9	5.8	5.4
Dividend yield (%)	0.0	0.0	0.0
DPS	0.000	0.000	0.000
PBR (x)	3.8	2.3	1.6
EV/EBITDA (x)	8.0	5.0	3.8
ROE (%)	43.0	49.8	35.2

Source: Bloomberg, Daiwa forecasts

- 1 Buy (initiation)
- 2 Outperform
- 3 Hold
- 4 Underperform
- 5 Sell

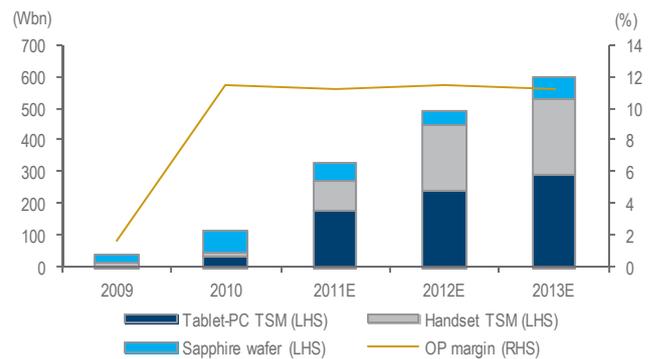
How do we justify our view?

- Growth outlook ✓ ✓ ✓ ✓ ✓
- Valuation ✓ ✓ ✓ ✓ ✓
- Earnings revisions ✓ ✓ ✓ ✓ ✓

■ Growth outlook ✓ ✓ ✓ ✓ ✓

We expect Iljin Display's touch-screen revenue to continue to expand on the back of rising shipments of SEC's Galaxy Tab and increase in the number of touch-screen projects for SEC's smartphones. For 2012, we forecast the company's revenue to increase by 51% YoY to W492bn and its operating profit to expand by 55% YoY to W56bn.

■ Iljin Display: revenue and operating-profit margin forecasts

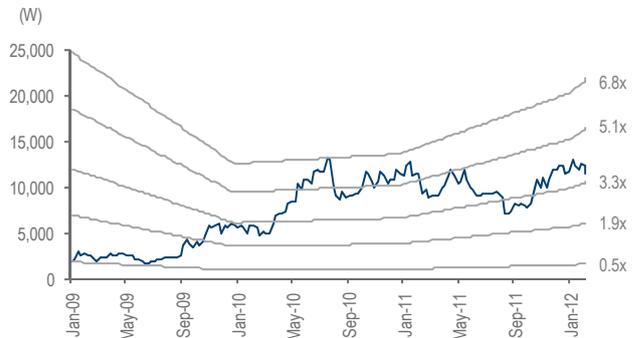


Source: Company, Daiwa forecasts

■ Valuation ✓ ✓ ✓ ✓ ✓

The stock is trading currently at PERs of 10.9x and 5.8x on our 2011 and 2012 EPS forecasts, respectively. It is also trading at PBRs of 3.8x and 2.3x on our 2011 and 2012 BVPS forecasts, respectively, versus its past three-year trading range of 0.9-6.8x.

■ Iljin Display: PBR bands

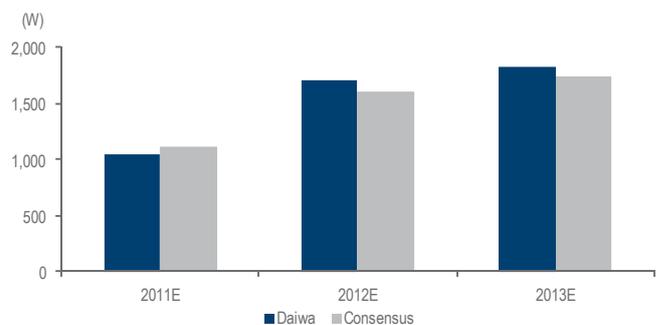


Source: Company, Daiwa forecasts

■ Earnings revisions ✓ ✓ ✓ ✓ ✓

Our 2012 and 2013 EPS forecasts are 6.7% and 4.7% higher, respectively than those of the FnGuide consensus. We believe there could be upside to the consensus forecasts if Iljin Display gains market share in touch-screens and sapphire wafer demand improves.

■ Iljin Display: Daiwa vs. consensus 2011-13E



Source: FnGuide, Daiwa forecasts

Financial summary

■ **Key assumptions**

Year to 31 Dec	2006	2007	2008	2009	2010	2011E	2012E	2013E
TSM sales (W bn)	0	0	0	0	33	269	447	530
Global handset market (m units)	990.9	1,152.8	1,222.3	1,211.2	1,596.8	1,775.9	2,001.0	2,239.4
Global smartphone market (m units)	80.2	122.3	139.3	172.4	296.6	460.5	666.3	898.9

■ **Profit and loss (Wbn)**

Year to 31 Dec	2006	2007	2008	2009	2010	2011E	2012E	2013E
Sapphire-wafer	1	2	5	23	70	55	45	66
Tablet-PC TSM	0	0	0	0	32	176	237	290
Others	5	4	5	11	12	96	210	239
Total revenue	6	5	10	34	114	326	492	596
Other income	0	0	0	0	0	0	0	0
COGS	(12)	(8)	(11)	(28)	(93)	(277)	(418)	(509)
SG&A	(2)	(2)	(3)	(5)	(8)	(13)	(17)	(20)
Other op. expenses	0	0	0	0	0	0	0	0
Operating profit	(9)	(5)	(4)	1	13	37	56	67
Net-interest inc./(exp.)	(3)	(2)	(1)	(1)	(3)	(2)	(2)	(1)
Assoc/forex/extraord./others	(23)	(22)	(27)	1	0	(6)	(2)	(2)
Pre-tax profit	(34)	(28)	(32)	1	10	28	53	63
Tax	0	6	0	0	0	0	0	(6)
Min. int./pref. div./others	0	0	0	0	0	0	0	0
Net profit (reported)	(34)	(23)	(32)	1	10	28	53	57
Net profit (adjusted)	(34)	(23)	(32)	1	10	28	53	57
EPS (reported) (W)	(13,664)	(7,301)	(7,555)	24,985	394	1,047	1,971	2,113
EPS (adjusted) (W)	(13,664)	(7,301)	(7,555)	24,985	394	1,047	1,971	2,113
EPS (adjusted fully-diluted) (W)	(13,664)	(7,301)	(7,555)	24,985	394	1,047	1,706	1,829
DPS (W)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
EBIT	(9)	(5)	(4)	1	13	37	56	67
EBITDA	17	8	(2)	4	19	42	64	75

■ **Cash flow (Wbn)**

Year to 31 Dec	2006	2007	2008	2009	2010	2011E	2012E	2013E
Profit before tax	(34)	(28)	(32)	1	10	28	53	63
Depreciation and amortisation	25	12	2	3	6	5	7	9
Tax paid	0	6	0	0	0	0	0	(6)
Change in working capital	(23)	(20)	2	0	(12)	(7)	(9)	(6)
Other operational CF items	24	25	27	0	3	1	1	1
Cash flow from operations	(8)	(6)	(1)	3	7	27	52	61
Capex	0	0	(1)	(8)	(41)	(20)	(25)	(20)
Net (acquisitions)/disposals	(1)	0	0	0	0	0	(4)	(10)
Other investing CF items	0	0	(1)	(8)	5	(2)	(9)	(9)
Cash flow from investing	(1)	0	(2)	(16)	(36)	(22)	(38)	(39)
Change in debt	9	0	1	(6)	33	6	(5)	(11)
Net share issues/(repurchases)	0	5	0	23	0	1	0	0
Dividends paid	0	0	0	0	0	0	0	0
Other financing CF items	0	(1)	0	0	0	0	0	0
Cash flow from financing	9	5	1	17	33	6	(5)	(12)
Forex effect/others	0	0	0	0	0	0	0	0
Change in cash	(1)	(1)	(1)	4	4	11	10	11
Free cash flow	(9)	(6)	(2)	(4)	(34)	7	27	41

Source: Company, Daiwa forecasts

Financial summary continued ...

■ **Balance sheet (Wbn)**

As at 31 Dec	2006	2007	2008	2009	2010	2011E	2012E	2013E
Cash & short-term investment	1	0	3	12	13	25	40	57
Inventory	3	1	2	7	28	37	45	53
Accounts receivable	1	1	3	8	21	38	50	58
Other current assets	0	0	0	5	8	13	17	21
Total current assets	5	3	8	32	69	113	153	189
Fixed assets	77	4	12	19	55	70	88	99
Goodwill & intangibles	0	0	20	19	18	20	22	25
Other non-current assets	1	26	0	0	2	1	6	16
Total assets	84	33	41	70	144	203	268	329
Short-term debt	23	8	17	12	44	36	39	33
Accounts payable	2	1	2	11	33	50	62	71
Other current liabilities	3	1	3	6	11	18	22	27
Total current liabilities	27	9	22	28	88	104	123	131
Long-term debt	25	6	3	2	3	16	8	4
Other non-current liabilities	1	0	0	1	1	2	3	4
Total liabilities	54	15	25	31	92	123	134	139
Share capital	13	17	27	13	13	14	14	14
Reserves/R.E./others	17	1	(12)	25	38	67	120	177
Shareholders' equity	30	18	15	38	51	80	134	191
Minority interests	0	0	0	0	0	0	0	0
Total equity & liabilities	84	33	41	70	144	203	268	329
EV	76	49	65	240	327	336	316	288
Net debt/(cash)	47	13	17	2	34	28	8	(20)
BVPS (W)	11,932	5,711	3,661	1,840	1,999	2,970	4,941	7,053

■ **Key ratios (%)**

Year to 31 Dec	2006	2007	2008	2009	2010	2011E	2012E	2013E
Sales (YoY)	n.a.	(4.6)	82.9	241.1	237.5	186.0	50.9	21.2
EBITDA (YoY)	n.a.	(53.9)	n.a.	n.a.	379.1	123.3	52.0	18.1
Operating profit (YoY)	n.a.	n.a.	n.a.	n.a.	n.m.	179.0	54.7	17.8
Net profit (YoY)	n.a.	n.a.	n.a.	n.a.	n.m.	179.5	88.1	7.2
EPS (YoY)	n.a.	n.a.	n.a.	n.a.	n.m.	165.5	88.1	7.2
Gross-profit margin	(118.2)	(56.9)	(12.2)	17.5	18.2	15.1	15.0	14.6
EBITDA margin	n.m.	n.m.	n.a.	11.6	16.4	12.8	12.9	12.6
Operating-profit margin	n.a.	n.a.	n.a.	1.7	11.5	11.2	11.5	11.2
ROAE	n.a.	n.a.	n.a.	1.9	22.6	43.0	49.8	35.2
ROAA	n.a.	n.a.	n.a.	0.9	9.5	16.3	22.6	19.1
ROCE	n.a.	n.a.	n.a.	1.3	17.4	31.6	35.9	32.6
ROIC	n.a.	n.a.	n.a.	1.5	20.6	37.7	45.3	38.4
Net debt to equity	155.9	75.8	114.0	6.4	66.7	34.7	5.7	net cash
Effective tax rate	n.a.	n.a.	n.a.	1.6	0.5	0.0	0.0	10.0
Accounts receivable (days)	n.a.	53.1	68.0	56.8	45.2	32.9	32.9	33.3
Payables (days)	n.a.	81.1	52.2	67.5	70.3	46.8	41.5	40.7
Net interest cover (x)	n.a.	n.a.	n.a.	0.5	4.9	20.4	35.4	67.6
Net dividend payout	n.a.	n.a.	n.a.	0.0	0.0	0.0	0.0	0.0

Source: Company, Daiwa forecasts

■ **Company profile**

Iljin Display is one of the fastest growing touch-screen makers in Korea. The company was established in April 1994 and listed on the Korea Stock Exchange in December 2004. In 2010, touch screens and sapphire wafers contributed 39% and 61% of its revenue, respectively.

Continues to gain market share on high productivity

We are upbeat about Iljin Display's earnings growth for 2012 due to further expansion of its market share and robust touch-screen order guidance from its core customer.

Investment summary

We initiate coverage of Iljin Display with a Buy (1) rating and six-month target price of W16,500. Iljin Display is one of the fastest-growing TSM makers in Korea, posting TSM revenue growth of about 298% YoY for 2010, and forecast by us to achieve TSM revenue growth of more than 515% YoY for 2011. The company is a major touch-screen supplier for SEC's Galaxy Tab and is now expanding its exposure to smartphone TSMs. For 2012, we forecast its revenue to increase by 51% YoY to W492bn and its operating profit to expand by 55% YoY to W56bn.

Iljin Display's touch-screen revenue started to expand from 4Q10, as the company received the initial batch of TSM orders for SEC's 7.0-inch Galaxy Tab. As Iljin Display was able to satisfy both the quality and price in a short period of time, the company received additional TSM orders for both 8.9-inch and 10.1-inch Galaxy Tab products during 2011. Iljin Display is currently the only company to supply touch screens for all of SEC's tablet-PC products.

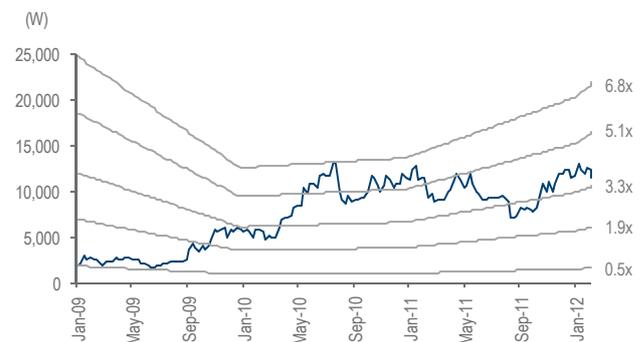
For 2012, we forecast the company's touch-screen revenue to continue to expand on the back of rising shipments of SEC's Galaxy Tab and increase in the number of touch-screen projects for SEC's smartphones. For 4Q11, Iljin Display supplied touch screens for seven smartphone models, compared with five models in 3Q, and three models in 2Q. The company adopted glass/film/film (GFF) technology in late-2010, and was able to maintain high production yields throughout 2011. Iljin Display told us that it is now working on few different touch-screen

technologies to meet the changing demand from its customers.

Iljin Display's share price declined by 3.7% for 2011. However, the share-price trend was more choppy than expected during the year, reaching a 52-week low of W6,990 in mid-August before recovering to W12,450 in early December. Despite steady improvements in its quarterly earnings momentum throughout 2011, the company thinks macroeconomic concerns led to more volatile movements in its share price in 2011.

The stock is trading currently at PERs of 10.9x and 5.8x on our 2011 and 2012 EPS forecasts, respectively. It is also trading at PBRs of 3.8x and 2.3x on our 2011 and 2012 BVPS forecasts, respectively, versus its past three-year trading range of 0.9-6.8x. Given the robust revenue and earnings growth outlook for 2012, we set our six-month target price of W16,500, based on a mid-cycle PBR valuation of 3.3x on our 2012 BVPS forecast.

Iljin Display: PBR bands



Source: Company, Bloomberg, Daiwa forecasts

Revenue-growth prospects

Although Iljin Display's revenue was driven mainly by sapphire wafers until 2010, we estimate that touch-screen revenue accounted for over 80% in 2011. The company entered the TSM business by acquiring a local touch-screen manufacturer, A-Touch, in August 2008. Although Iljin Display initially manufactured a small resistive TSM for navigation devices, the company started to supply p-cap touch screen to SEC's 7-inch Galaxy Tab in 4Q10.

As Iljin Display received touch-screen orders for new tablet PC models (8.9- and 10.1-inch), we estimate the company controlled a 47% share with SEC's tablet-PC TSMs in 2011. In mobile handsets, Iljin Display's share of SEC's handset touch screens was less than 1% in 2010. However, as the number of handset touch-screen

projects increased, we estimate that its share in SEC's handset TSM increased to about 6% for 2011.

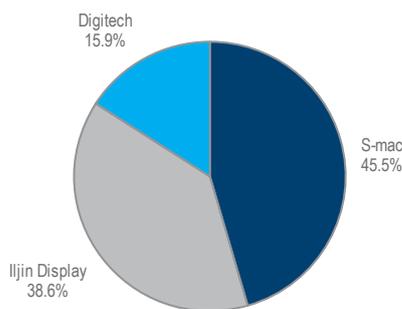
■ **SEC's Galaxy Tab**



Source: Company

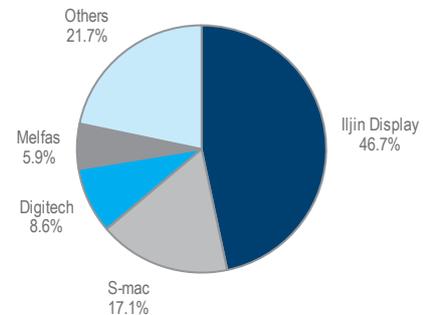
Iljin Display is positive on the outlook for its touch-screen business for 2012 due to the expanding addressable market size as well as its potential share gains in handset TSMs. We estimate SEC shipped nearly 6.0m tablet PCs in 2011, up from 1.5m units in 2010, and we forecast further growth in its shipments to 11-12m units for 2012. Although Iljin Display's share in SEC may decline slightly in 2012, as touch screens for tablet PCs with AMOLEDs are likely to be produced internally by SEC, due to strong volume growth in overall tablet-PC shipments, we forecast the company's tablet-PC TSM revenue to increase by 35% YoY to W237bn for 2012.

■ **2010 tablet-PC TSM share within SEC**



Source: Companies

■ **2011 tablet-PC TSM share within SEC**



Source: Companies

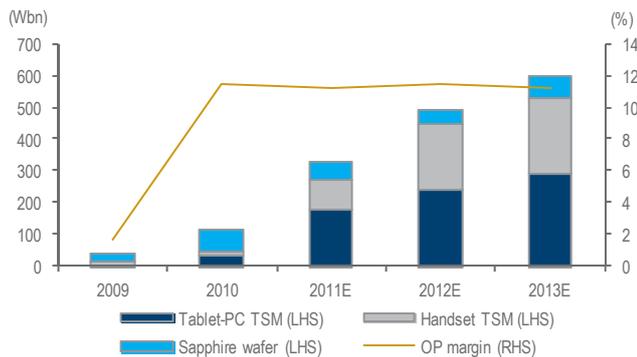
As for handset TSMs, Iljin Display has been deploying a more aggressive pricing strategy due to its cost competitiveness, compared with its peers. Although there are a few TSM makers that can produce touch sensors inhouse, Iljin Display is the only company that currently produces its entire touch-sensor requirements internally. As a result, the company was able to maintain a relatively high operating-profit margin of a low-teen percentage for 2011. For 2012, we forecast Iljin Display's handset TSM revenue to more than double to W210bn. The company expects more than 50% YoY growth for SEC's smartphone shipments in 2012, as well as expanding its share within SEC to over 10%, compared with 6% for 2011.

In order to cope with the rise in handset TSM sales, Iljin Display raised its production capacity to 7m units (based on 3.5-inch equivalent panels) per month at the end of 2011, from 4m units at the end of 3Q11. The company told us that it was the only local TSM maker to raise capacity during 2H11, since some companies saw market-share erosion.

Iljin Display is one of the only two sapphire wafer manufacturers in Korea and has monthly production capacity of 550,000 wafers (2-inch equivalent) per month. Due to the prolonged oversupply of LED chips as a result of weak demand for LED-TVs, we estimate the company's sapphire revenue declined by 22% YoY to W55bn for 2011. As many LED-chip companies expect only a moderate improvement in their utilisation rates from 2Q12, we expect Iljin Display's sapphire wafer revenue to further decline by 15-20% YoY for 2012.

However, on a longer-term perspective, we think the proliferation of LED lighting will provide upside to the company's revenue. In the major general lighting markets, such as the US, Europe and China, the usage of incandescent light is discouraged by government, and we may therefore see a substantial pick-up in LED lighting over the next few years.

■ **Iljin Display: revenue and operating-profit margin forecasts**



Source: Company, Daiwa forecasts

Earnings outlook

Iljin Display plans to announce its 4Q11 results in mid-February. We forecast the company to post revenue of W102.0bn (down 14% QoQ) and an operating profit of W11.6bn (down 5% QoQ). Due to inventory adjustments by its core customers, we believe revenue declined sequentially in 4Q11 while the operating-profit margin was maintained at a low-teen percentage due to favourable foreign-exchange rates and a further improvement in its production yield.

Throughout 2011, Iljin Display maintained a low-teen percentage quarterly operating-profit margin due to robust top-line growth for touch screens. Although we estimate the operating-profit margin for sapphire wafers declined to about 10% for 2011, from a mid-teen percentage for 2010, this was substantially better than the operating losses posted by some of the local LED-chip makers, in our view. For 2012, we expect Iljin Display to maintain a low-teen percentage operating-profit margin.

■ **Iljin Display: quarterly earnings forecasts (Wbn)**

	1Q11	2Q11	3Q11	4Q11E	2011E
Revenue:					
Tablet-PC TSM	20.8	31.8	67.4	55.5	175.5
Handset TSM	5.5	14.5	35.9	39.8	95.7
Sapphire wafer	21.1	11.7	15.1	6.7	54.6
Total	47.4	58.0	118.4	102.0	325.8
Operating profit	5.4	7.4	12.1	11.6	36.5
OP margin (%)	11.4	12.7	10.3	11.4	11.2

	1Q12E	2Q12E	3Q12E	4Q12E	2012E
Revenue:					
Tablet-PC TSM	55.3	58.7	63.3	59.9	237.2
Handset TSM	42.7	47.4	54.6	64.9	209.6
Sapphire wafer	7.8	9.3	12.1	15.8	45.0
Total	105.8	115.3	130.0	140.6	491.8
Operating profit	12.1	13.4	15.1	15.8	56.5
OP margin (%)	11.4	11.7	11.6	11.3	11.5

Source: Company, Daiwa forecasts

At the end of 3Q11, Iljin Display held W23bn in cash equivalents and its net debt-to-equity ratio stood at 42.9%. The company expects to improve its financials in the future as its annual capex is maintained at W20-25bn while targeting to generate annual EBITDA of more than twice capex. Iljin Display hedges its exposure to foreign-exchange risk as all of its revenue is based on US Dollars, while about 65% of its raw material is based on US Dollars.

Risk factors

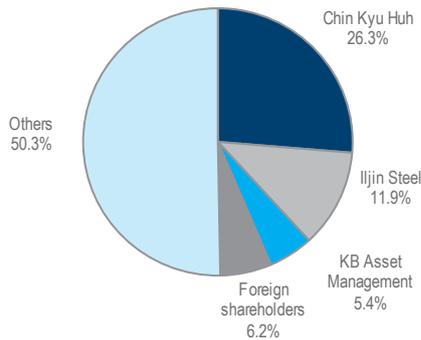
We believe the risks to our earnings forecasts and target price include slower-than-expected sales of tablet-PCs and mobile handsets, intense competition, and pricing pressure from its customers. In addition, changing industry dynamics, such as touch-screen technology and the adoption rate of LED lighting, may provide both opportunities and risks for top-line growth.

Company description

Iljin Display was established under Iljin Diamond (Not rated) in April 1994. The company was spun off and listed on the Korea Stock Exchange in December 2004. Although Iljin Display initially produced sapphire wafers for the LED-chip industry, it acquired a domestic touch panel company, A-Touch, in August 2008 and developed p-cap touch screen technology. The company's head office is located in Pyeongtaek, Gyeonggi Province, and it has production facilities in Pyeongtaek (touch screen) and Eumseong (sapphire wafer).

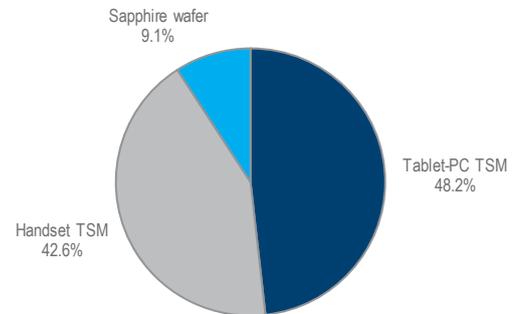
Iljin Display supplies touch screens to SEC and sapphire wafers to domestic LED-chip companies such as Samsung LED (Not listed), LG Innotek (Not rated), and Seoul Semiconductor (Not rated). At the end of 3Q11, the company had 516 employees and the chairman of Iljin Group, Chin Kyu Huh, is the major shareholder with a 26.3% stake.

■ **Iljin Display: shareholder structure**



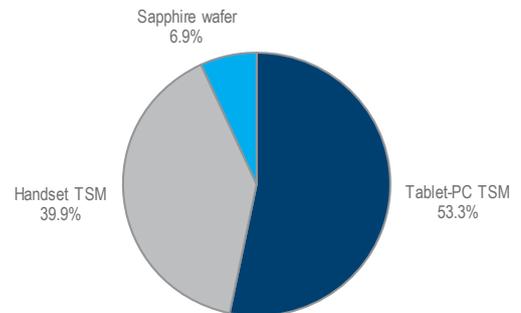
Source: Company
Note: As at 30 September 2011

■ **Iljin Display: 2012 revenue forecasts by product**



Source: Daiwa forecasts

■ **Iljin Display: 2012 operating-profit forecasts by product**



Source: Daiwa forecasts

Melfas Inc

096640 KS

Initiation: touch-sensor chips to boost 2012 revenue

- We initiate coverage of Melfas with a Buy (1) rating and six-month target price of W30,000
- Market-share erosion and low productivity likely to have undermined its revenue growth for 2011
- However, we forecast robust 2012 revenue on the back of rising sales of touch-sensor chips and tablet-PC TSMs

Target price: **W30,000**
Up/downside: **+25.5%**
Share price (6 Feb): **W23,900**

- 1 Buy (initiation)
- 2 Outperform
- 3 Hold
- 4 Underperform
- 5 Sell

How do we justify our view?



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What's new

Although it looks as though 2011 was a difficult year for Melfas with flat revenue growth YoY and a substantial erosion in the operating-profit margin, we forecast the company to post stronger revenue and earnings growth for 2012 due to rising sales of touch-sensor chips and tablet-PC TSMs.

What's the impact

Melfas' touch-screen share with SEC dropped significantly in 2011 due to a lower-than-expected production yield in newly-adopted touch-screen technology as well as increased competition. However, for 2012, we expect the company to post robust revenue growth for touch-sensor chips due to further market-share gains with SEC, and on the back of the proliferation of low-end smartphones in China. We forecast PRC handset makers to account for

40% of the company's touch-sensor chips sales for 2012.

We are also positive on the company's earnings outlook due to robust top-line growth and an improving product mix. Although we estimate that the gross-profit margin for TSMs ranges from a mid-to-high single-digit percentage, we believe the gross-profit margin for touch-sensor chips is significantly higher, at 40-50%.

What we recommend

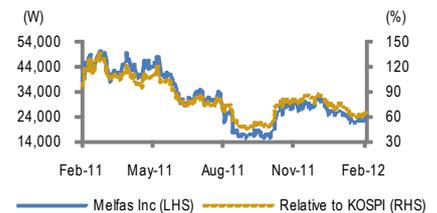
The stock is trading currently at PERs of 22.8x and 12.0x on our respective 2011 and 2012 EPS forecasts, and at PBRs of 2.7x and 2.3x on our respective 2011 and 2012 BVPS forecasts. As we expect the company's earnings momentum to improve steadily from 1Q12, we believe there is upside potential to the current share price. We initiate coverage with a six-month target price of W30,000, based on a target PBR of 2.9x (assuming a long-term ROE of 25% and a cost of equity of 11.7%) on our 2012 BVPS forecast. The key risks are slower-than-expected sales of smartphones and tablet PCs.

How we differ

Our 2012 and 2013 EPS forecasts are respectively 4.6% and 6.2% higher than those of the FnGuide

consensus. We believe there could be upside to the consensus forecasts in the event of Melfas' gaining share in the mobile-handset TSM market and rising touch-sensor chip revenue.

Share price performance



12-month range	15,500-50,500
Market cap (US\$m)	365.56
Average daily turnover (US\$m)	19.41
Shares outstanding (m)	17
Major shareholder	Dong-Jin Min (12.0%)

Financial summary (W)

Year to 31 Dec	11E	12E	13E
Revenue (bn)	255	355	433
Operating profit (bn)	19	37	51
Net profit (bn)	18	34	47
Core EPS	1,048	1,991	2,747
EPS change (%)	(51.2)	89.9	38.0
Daiwa vs Cons. EPS (%)	(1.7)	4.6	6.2
PER (x)	22.8	12.0	8.7
Dividend yield (%)	0.6	1.3	1.7
DPS	150	300	400
PBR (x)	2.7	2.3	1.9
EV/EBITDA (x)	16.5	8.8	6.3
ROE (%)	12.7	20.9	23.8

Source: Bloomberg, Daiwa forecasts

- 1 Buy (initiation)
- 2 Outperform
- 3 Hold
- 4 Underperform
- 5 Sell

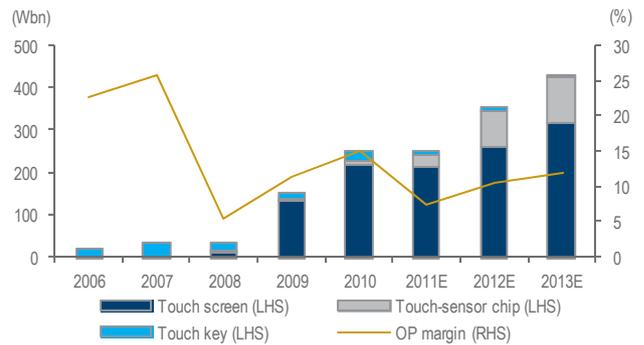
How do we justify our view?

- Growth outlook ✓ ✓ ✓ ✓ ✓
- Valuation ✓ ✓ ✓ ✓ ✓
- Earnings revisions ✓ ✓ ✓ ✓ ✓

■ Growth outlook ✓ ✓ ✓ ✓ ✓

Although a fall in market share and low productivity are likely to undermine the company's revenue growth for 2011, we forecast Melfas' revenue to increase by more than 39% YoY for 2012, driven by rising sales of touch-sensor chips and increasing exposure to tablet-PC TSMs.

■ Melfas: revenue and operating-profit-margin forecasts

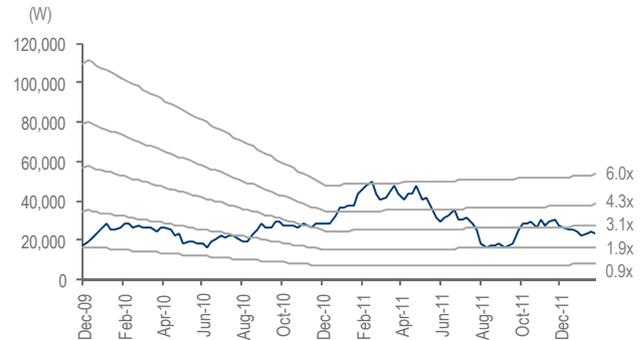


Source: Company, Daiwa forecasts

■ Valuation ✓ ✓ ✓ ✓ ✓

The stock is trading currently at PERs of 22.8x and 12.0x on our respective 2011 and 2012 EPS forecasts. In terms of PBR, it is trading at 2.7x and 2.3x on our respective 2011 and 2012 BVPS forecasts, compared with its past three-year trading range of 0.9-5.8x.

■ Melfas: PBR bands

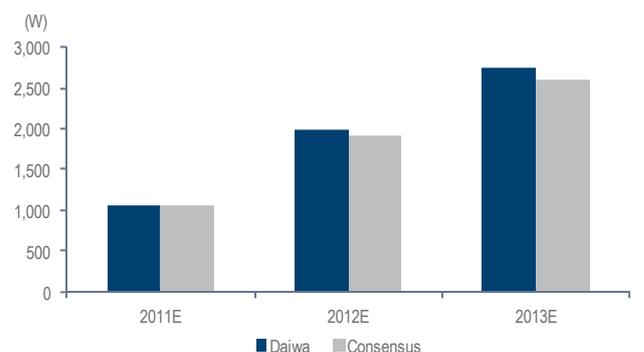


Source: Company, Bloomberg, Daiwa forecasts

■ Earnings revisions ✓ ✓ ✓ ✓ ✓

Our 2012 and 2013 EPS forecasts are respectively 4.6% and 6.2% higher than those of the FnGuide consensus. We believe there could be upside to the consensus forecasts in the event of Melfas' gaining share in the mobile-handset TSM market and rising touch-sensor chip revenue.

■ Melfas: Daiwa vs. consensus EPS forecasts (2011-13E)



Source: FnGuide, Daiwa forecasts

Financial summary
■ Key assumptions

Year to 31 Dec	2006	2007	2008	2009	2010	2011E	2012E	2013E
TSM sales (W bn)	0	0	14	134	195	188	240	297
Global handset market (m units)	990.9	1,152.8	1,222.3	1,211.2	1,596.8	1,775.9	2,001.0	2,239.4
Global smartphone market (m units)	80.2	122.3	139.3	172.4	296.6	460.5	666.3	898.9

■ Profit and loss (Wbn)

Year to 31 Dec	2006	2007	2008	2009	2010	2011E	2012E	2013E
Touch-screen	0	0	14	134	218	216	263	319
Touch-sensor chip	0	0	0	5	11	26	84	106
Others	20	35	20	13	23	12	8	8
Total revenue	20	35	35	151	252	255	355	433
Other income	0	0	0	0	0	0	0	0
COGS	(13)	(23)	(27)	(122)	(195)	(215)	(291)	(351)
SG&A	(2)	(4)	(6)	(12)	(19)	(21)	(26)	(31)
Other op. expenses	0	0	0	0	0	0	0	0
Operating profit	5	9	2	17	38	19	37	51
Net-interest inc./(exp.)	0	0	0	0	2	0	0	0
Assoc/forex/extraord./others	0	0	0	0	(1)	0	0	0
Pre-tax profit	4	10	2	18	39	19	37	51
Tax	0	(1)	1	0	(3)	(1)	(3)	(4)
Min. int./pref. div./others	0	0	0	0	0	0	0	0
Net profit (reported)	5	9	3	17	36	18	34	47
Net profit (adjusted)	5	9	3	17	36	18	34	47
EPS (reported) (W)	2,876	2,706	857	3,301	2,147	1,048	1,991	2,747
EPS (adjusted) (W)	2,876	2,706	857	3,301	2,147	1,048	1,991	2,747
EPS (adjusted fully-diluted) (W)	2,876	2,706	857	3,301	2,147	1,048	1,991	2,747
DPS (W)	0.000	0.000	0.000	0.000	350	150	300	400
EBIT	5	9	2	17	38	19	37	51
EBITDA	5	9	3	18	40	24	44	60

■ Cash flow (Wbn)

Year to 31 Dec	2006	2007	2008	2009	2010	2011E	2012E	2013E
Profit before tax	4	10	2	18	39	19	37	51
Depreciation and amortisation	0	0	1	1	3	5	7	9
Tax paid	0	(1)	1	0	(3)	(1)	(3)	(4)
Change in working capital	0	(1)	(5)	(6)	(9)	(17)	0	(6)
Other operational CF items	0	0	0	4	6	2	2	2
Cash flow from operations	5	8	(2)	16	36	8	43	52
Capex	(1)	(1)	(7)	(5)	(53)	(35)	(20)	(25)
Net (acquisitions)/disposals	(1)	(2)	3	0	(7)	0	(4)	(3)
Other investing CF items	(1)	(6)	2	(66)	38	5	(7)	(7)
Cash flow from investing	(4)	(9)	(3)	(71)	(21)	(29)	(31)	(36)
Change in debt	0	0	1	(1)	0	19	(3)	(5)
Net share issues/(repurchases)	2	1	0	59	1	0	0	0
Dividends paid	0	0	0	0	0	(5)	(3)	(5)
Other financing CF items	0	0	0	0	0	0	(4)	(3)
Cash flow from financing	3	1	1	58	1	15	(10)	(13)
Forex effect/others	0	0	0	0	0	0	0	0
Change in cash	4	0	(4)	2	15	(6)	2	3
Free cash flow	4	8	(9)	11	(17)	(27)	23	27

Source: Company, Daiwa forecasts

Financial summary continued ...

■ **Balance sheet (Wbn)**

As at 31 Dec	2006	2007	2008	2009	2010	2011E	2012E	2013E
Cash & short-term investment	5	14	0	67	37	27	34	42
Inventory	1	1	9	17	16	35	36	41
Accounts receivable	1	1	5	11	36	36	44	50
Other current assets	1	1	6	4	5	4	4	5
Total current assets	7	17	20	99	94	102	118	139
Fixed assets	1	2	8	13	63	93	106	123
Goodwill & intangibles	0	0	0	1	1	1	1	1
Other non-current assets	2	1	2	3	15	14	21	26
Total assets	10	20	31	116	174	211	246	288
Short-term debt	0	0	1	0	0	19	16	11
Accounts payable	2	1	9	17	28	30	36	41
Other current liabilities	0	1	1	2	11	11	13	15
Total current liabilities	3	2	11	19	39	60	66	68
Long-term debt	1	1	1	0	0	0	0	0
Other non-current liabilities	0	0	0	0	1	1	2	2
Total liabilities	3	3	12	20	40	62	68	70
Share capital	1	2	2	3	8	9	9	9
Reserves/R.E./others	6	15	17	93	125	141	169	210
Shareholders' equity	7	17	19	96	133	149	178	218
Minority interests	0	0	0	0	0	0	0	0
Total equity & liabilities	10	20	31	116	174	211	246	288
EV	34	66	81	57	363	402	393	379
Net debt/(cash)	(4)	(13)	1	(66)	(36)	(8)	(17)	(31)
BVPS (W)	4,273	4,937	5,565	18,506	7,998	8,697	10,387	12,734

■ **Key ratios (%)**

Year to 31 Dec	2006	2007	2008	2009	2010	2011E	2012E	2013E
Sales (YoY)	n.a.	75.5	(1.2)	333.7	66.2	1.1	39.3	22.2
EBITDA (YoY)	n.a.	92.2	(72.3)	604.7	120.2	(39.3)	82.0	34.5
Operating profit (YoY)	n.a.	99.0	(79.0)	801.9	117.3	(49.7)	97.8	36.5
Net profit (YoY)	n.a.	96.0	(68.3)	498.7	109.5	(49.8)	89.9	38.0
EPS (YoY)	n.a.	(5.9)	(68.3)	285.3	(35.0)	(51.2)	89.9	38.0
Gross-profit margin	33.7	36.2	22.7	19.3	22.4	15.6	18.0	18.9
EBITDA margin	24.2	26.5	7.4	12.1	16.0	9.6	12.5	13.8
Operating-profit margin	22.8	25.8	5.5	11.4	15.0	7.4	10.6	11.8
ROAE	n.a.	77.4	16.3	29.9	31.2	12.7	20.9	23.8
ROAA	n.a.	60.2	11.3	23.3	24.8	9.4	15.0	17.6
ROCE	n.a.	71.9	10.1	29.6	32.7	12.5	20.6	24.1
ROIC	n.a.	262.4	16.2	67.5	54.5	14.8	22.8	27.0
Net debt to equity	net cash	net cash	7.2	net cash				
Effective tax rate	n.a.	8.3	n.a.	2.7	8.0	6.5	8.0	8.0
Accounts receivable (days)	n.a.	12.5	31.9	19.3	34.1	51.6	41.0	39.6
Payables (days)	n.a.	14.4	51.7	31.0	32.6	42.1	34.4	32.7
Net interest cover (x)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	229.6	n.a.
Net dividend payout	0.0	0.0	0.0	0.0	16.3	14.3	15.1	14.6

Source: Company, Daiwa forecasts

■ **Company profile**

Melfas is one of the leading touch-screen and touch-sensor chip manufacturer in Korea. The company was established in February 2002 and was listed on the KOSDAQ in December 2009. In 2010, touch screens accounted for 87% of its revenue, touch key 9%, and touch sensor chips 4%.

Touch-sensor chip sales to boost 2012 revenue

Despite its share of the mobile-handset TSM market being eroded in 2011, we expect Melfas to post robust earnings growth for 2012, on the back of rising sales of touch-sensor chips and increased exposure to tablet-PC TSMs.

Investment summary

We initiate coverage of Melfas with a Buy (1) rating and six-month target price of ₩30,000. Although 2011 looks as though it was a difficult year for the company, with flat revenue growth YoY and a substantial erosion in the operating-profit margin, we forecast the company to record more than 39% YoY growth in revenue to ₩355bn for 2012 due to rising sales of touch-sensor chips and increased exposure to tablet-PC TSMs.

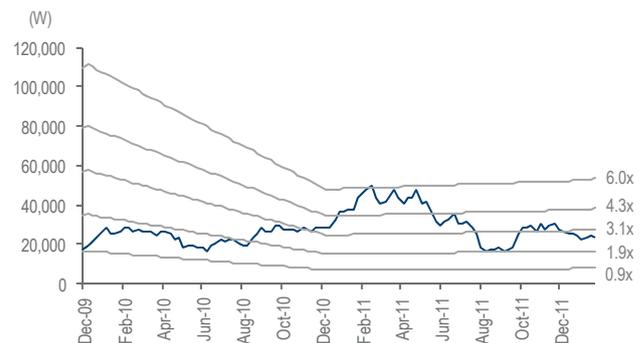
Until 2010, Melfas accounted for the largest share of SEC's p-cap TSM orders for mobile handsets. However, we estimate that its share declined to about 12% for 2011 (from 35% for 2010) due to a lower-than-expected production yield on its newly-adopted touch-screen technology, increased price pressure, and greater competition. We forecast the company's TSM revenue for mobile handsets to decline by nearly 17% YoY to ₩163bn for 2011.

However, for 2012, we expect the company to post robust growth in tablet-PC TSM revenue due to the more aggressive sales target for SEC's Galaxy Tab and over 230% YoY growth in touch-sensor chip shipments. We estimate that Melfas' share of touch-sensor chip with SEC expanded to about 40% for 2011 from 20-30% for 2010. In addition, the company is benefitting from the proliferation of low-end smartphones in China, and forecast PRC handset makers to account for 40% of its touch-sensor chip sales for 2012, compared with 30% for 2011.

Although the share price of Melfas fell by 12% over 2011, share prices were very volatile during the course of the year, falling nearly 70% from peak (in early March) to trough (in late-September), mainly due to what we believe is the market's concern about its quarterly-revenue momentum and a sharp erosion in the operating-profit margin.

The stock is trading currently at respective PERs of 22.8x and 12.0x on our 2011 and 2012 EPS forecasts. In terms of PBR, it is trading at 2.7x and 2.3x on our respective 2011 and 2012 BVPS forecasts, compared with its past three-year trading range of 0.9-5.8x. As we expect the company's earnings momentum to improve steadily from 1Q12, we see upside to the current share price. Our six-month target price of ₩30,000, based on a target PBR of 2.9x (assuming a long-term ROE of 25% and a cost of equity of 11.7%) on our 2012 BVPS forecast.

■ Melfas: PBR bands



Source: Company, Bloomberg, Daiwa forecasts

Revenue-growth prospects

While the bulk of Melfas' revenue is driven by mobile handset TSMs, we expect tablet-PC TSMs and touch-sensor chip to account for 35% of 2012 revenue, up from just 4% for 2010. Meanwhile, we forecast the touch-screen revenue contribution from mobile handsets to fall to 56% for 2012 from 78% for 2010, partly due to market-share erosion. Although the company has been one of the major vendors of SEC in GFF touch screens, its G1F solution (which uses one less film) was not widely accepted due to a low production yield.

For 2012, Melfas plans to regain its market share in handset TSMs by supplying OGS or direct patterned window (DPW) solutions, which do not use any ITO films but ITO material is sputtered directly on the covered glass. The company expects a cost savings of 20% for DPW compared with GFF touch screens. However, Melfas still faces challenges from its

competitors, as only a few companies are looking to supply OGS in 2012. In fact, Samsung Fiberoptics started volume production of OGS in September 2011. Meanwhile, Melfas believes that it has the greatest OGS production capacity among the domestic TSM manufacturers, with 2.5m units per month for G1F and DPW combined, compared with capacity of 30,000/month for Samsung Fiberoptics.

In addition to forecasting 22% YoY growth for Melfas' handset-TSM revenue in 2012, we expect stronger revenue growth from both touch-sensor chips and tablet-PC TSMs. The company is one of the four major global touch-sensor chip makers globally, and its chip revenue has been increasing robustly over the past few years on the back of increased orders from SEC and PRC TSM makers. In the high-end segment, Melfas currently has the largest share due to its effective solutions. The company says that four touch-sensor chips are normally required for a 10-inch touch screen, but the company was able to offer a two-chip solution and gained share with its customers.

■ **Smart devices adopting Melfas' touch-sensor chip**



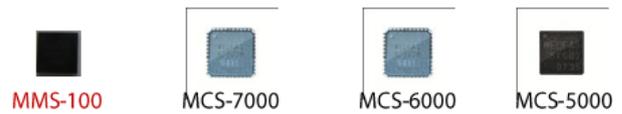
Source: Company

We estimate that Melfas' touch-sensor chip share with SEC reached 40% for 2011, from 20-30% for 2010, as the company has qualified and supplied the chips for high-end applications since 3Q11. Melfas said its touch-sensor chip shipments for the 8.9-inch Galaxy Tab started in July, for the Galaxy S2 HD LTE model from September, and for the Galaxy Nexus from November 2011. The company also said market-share gains were possible as it offered a fast time-to-market for its touch-sensor chips for SEC's new handset models. In addition, touch-sensor chip sales to PRC TSM companies expanded from 3Q11 on the back of robust low-end smartphone demand in China.

We forecast China's smartphone shipments to be 90m units for 2011 (35m units for the WCMA standard, and 15-20m units each for CDMA/TD-SCDMA/Edge). However, for 2012, we forecast smartphone shipments to exceed 200m units, as rising smartphone penetration is driven mainly by lower bill-of-material costs and handset prices. Although touch-sensor chips account for a small proportion of Melfas' revenue due to low average selling prices, we forecast chip revenue

to increase by 147% YoY to W26bn for 2011 (10.4% of total revenue) and 218% YoY to W84bn for 2012 (23.6% of total revenue).

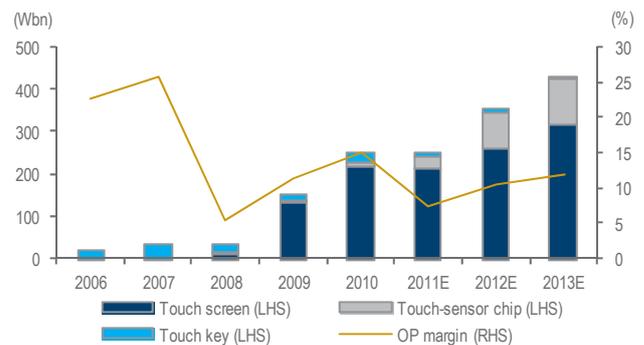
■ **Melfas: key touch-sensor chip products**



Source: Company

In tablet-PC TSMs, Melfas started shipments from 3Q11 for SEC's Galaxy Tab. As we forecast Galaxy Tab sales volume to expand close to 6.0m units for 2011 from 1.5m units for 2010 and to 11-12.0m units for 2012, Melfas will continue to benefit. The company also manufactures touch-key modules, which are physical touch-enabled buttons located on the bottom of the touch screen. We forecast touch-key modules to account for 5% of revenue for 2011 but expect this to decline to a low single-digit percentage for 2012 as an increasing number of new smartphones do not have touch keys on the screen. While we forecast 1.1% YoY growth in the company's 2011 revenue, we forecast 2012 revenue to grow at a substantially higher rate of 39.3% YoY to W355bn.

■ **Melfas: revenue and operating-profit margin forecasts**



Source: Company, Daiwa forecasts

Earnings outlook

Melfas plans to announce its 4Q11 results in mid-February. We forecast revenue for the quarter of W75.7bn (up 14.6% QoQ) and an operating profit of W4.4bn (up 31.8% QoQ). We expect revenue to be slightly short of the company's original expectation of W80-90bn as its tablet-PC TSM sales were affected by inventory adjustments by customers. Meanwhile, we expect the operating-profit margin to remain at a mid-single-digit percentage due to a higher fixed-cost burden and production-yield issues.

For most of 2011, we believe that Melfas experienced a sharp erosion in its operating-profit margin on the back of market-share loss and low productivity. Although the company posted an operating-profit margin of 15.0% for full-year 2010, its operating-profit margin fell to 7.2% for 2Q11 and 5.1% for 3Q11. Melfas said it failed to achieve economies of scale as it was losing touch-screen orders from its major customer while competition remained intense. In addition, its G1F solution suffered from a low production yield and large orders for DPW touch screens did not materialise.

However, for 2012, we are positive on the company's earnings outlook as we expect robust top-line growth and an improving product mix. Although we expect the gross-profit margin for TSMs to range from a mid-to-high single-digit percentage, we believe the gross-profit margin for touch-sensor chips will be much higher, at 40-50%. For 2011, touch-sensor chip revenue accounted for 10.4% of total revenue; for 2012 we forecast it to increase to 23.6%. As a result, we forecast the operating-profit margin to improve to 10.6% for 2012 from 7.4% for 2011.

■ **Melfas: quarterly earnings forecasts (Wbn)**

	1Q11	2Q11	3Q11	4Q11E	2011E
Revenue:					
Touch screens	53.6	45.4	56.7	60.2	215.9
Touch-sensor chips	3.0	2.6	7.3	13.5	26.4
Touch keys	4.3	3.9	2.1	2.1	12.4
Total	60.9	51.9	66.1	75.7	254.6
Operating profit					
	7.5	3.7	3.3	4.4	18.9
Operating-profit margin (%)	12.2	7.2	5.1	5.8	7.4
1Q12E 2Q12E 3Q12E 4Q12E 2012E					
Revenue:					
Touch screens	56.1	62.0	68.8	75.6	262.5
Touch-sensor chips	15.6	19.2	23.5	25.4	83.8
Touch keys	2.1	2.1	2.1	2.0	8.4
Total	73.9	83.4	94.4	103.0	354.7
Operating profit					
	5.6	8.7	11.3	11.8	37.5
Operating-profit margin (%)	7.6	10.5	11.9	11.5	10.6

Source: Company, Daiwa forecasts

Melfas has a fairly healthy balance sheet, and had cash and short-term financial instruments of W19.4bn and borrowing of W19.7bn at the end of 3Q11. In 2011, the company paid a dividend of W350/share, representing a payout ratio of 16.3%. Although Melfas' total exports (including local exports) currently account for over 80% of revenue, we believe the company is more or less hedged in terms of the foreign-exchange risk as 80% of its raw materials is procured in US Dollars.

Risk factors

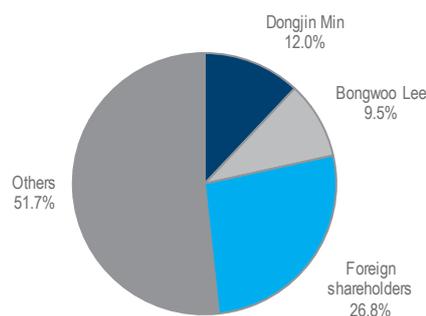
The risks to our earnings forecasts and target price are slower-than-expected sales of end products such as smartphones and tablet PCs. As Melfas is a component maker dependent mostly on a few major customers, increasing price pressure and an increase in competition could adversely affect its earnings. In addition, changing industry dynamics such as touch-screen technologies could represent both opportunities and risks to its top-line growth, in our view.

Company description

Melfas is one of the leading touch-screen and touch-sensor chip makers in Korea. The company was established in February 2002 by two research labs spun off from Seoul National University and Hanyang University, and was listed on the KOSDAQ in December 2009. Its headquarters are in Seoul and it has production facilities in Yongin-City, and Ansong-City, Gyeonggi Province.

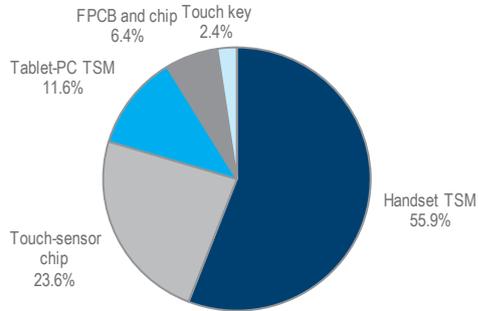
The company's major customers are SEC (which we forecast to account for 70% of 2011 revenue) and LGE (we forecast it to account for 20% of 2011 revenue). At the end of 3Q11, the company had 306 employees and chief technology officer Dongjin Min, and CEO Bongwoo Lee were the major shareholders with respective stakes of 12.0% and 9.5%.

■ **Melfas: shareholder structure**



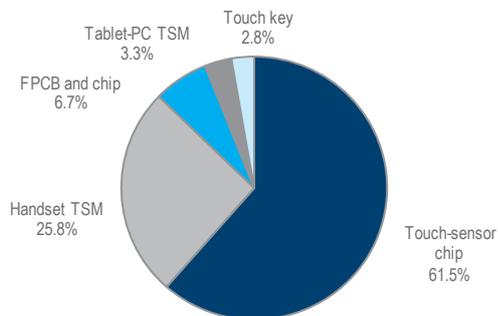
Source: Company
Note: As at 30 September 2011

■ **Melfas: 2012 revenue forecasts by product**



Source: Daiwa forecasts

■ **Melfas: 2012 gross-profit contribution forecasts by product**



Source: Daiwa forecasts

■ **Ijjin: share price and Daiwa recommendation trend**

Date	06/02/2012
Target price	16,500
Rating	1



Source: Daiwa

■ **Melfas: share price and Daiwa recommendation trend**

Date	06/02/2012
Target price	30,000
Rating	1



Source: Daiwa

■ **Samsung Electronics: share price and Daiwa recommendation trend**

Date	27/01/2012	06/12/2011	28/10/2011	27/09/2011	07/07/2011	28/01/2011	22/12/2010
Target price	1,300,000	1,200,000	1,100,000	1,000,000	1,100,000	1,200,000	1,100,000
Rating	2	2	2	2	2	2	2

Date	06/10/2010	30/04/2010	07/04/2010	29/01/10
Target price	970,000	1,080,000	1,040,000	970,000
Rating	2	2	2	2



Source: Daiwa

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