

# **Korea Touchscreen**

Sector Report / Touchscreen

April 5, 2011

## **Overweight (Initiate)**

Company	Rating	TP (KRW)
Melfas	BUY (-)	67,000 (♥)
Iljin Display	BUY (Initiate)	14,500 (-)
• S-MAC	BUY (Initiate)	18,000 (-)
• ELK	BUY (-)	27,000 (▲)

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## Focus on the fittest

## Korea touchscreen to grow 90% YoY – Initiate with Overweight

We initiate coverage of the touchscreen sector with Overweight. In 2011, we estimate the Korean touchscreen industry to continue its robust growth (90% YoY) given Korean handset makers' bullish stance on smartphones. Samsung Electronics and LG Electronics guide 225% YoY and 400% YoY smartphone shipment growth, respectively, in 2011. We believe Samsung Electronics is the best positioned to enjoy strong growth in both smartphones and tablet PCs thanks to its 1) cost competitiveness among Android tablet PC makers, 2) increasing market share of Android in tablet PCs and smartphones given the skyrocketing number of free applications and diverse product lineup. Within our sector coverage, we recommend investors to focus on selective names in the Samsung Electronics tablet PC supply-chain.

## Samsung is the most cost-competitive in Android tablet PCs

We expect price competition to intensify in the tablet PC market due to Apple's aggressive pricing strategy, which is the biggest obstacle to Android tablet PC makers in 2011. We believe Samsung Electronics is the most competitive player among Android tablet PC makers thanks to its high exposure of in-house production (66% of total BOM). We expect Samsung Electronics to outperform peers and maintain its global market share of 13% in 2011 with 7.0mn tablet PC shipments.

## Selective names with high exposure of in-house components

We focus on selected names in the Samsung Electronics supply chain within our touchscreen coverage and expect component companies that can meet Samsung Electronics' cost reduction requirements to benefit. We estimate a 35% YoY price reduction in touchscreens is required for Samsung Electronics to meet the touchscreen costs for Apple's iPad 2. Our analysis under this scenario suggests that only Melfas and Iljin Display remain profitable with double-digit operating margins while others make losses. This is mainly due to the high exposure of in-house component production (Melfas: 67%, Iljin Display: 37%). We believe the more Samsung Electronics focuses on price-cuts, the more volumes selective companies will enjoy.

## Attractive valuation – We like Melfas and Iljin Display

History suggests component stock prices tend to move with earnings growth. Thus, we expect further upside at touchscreen names given the near-term earnings momentum (OP: +66% QoQ in 2Q, +54% in 3Q). Pure touchscreen stocks are trading at 6-7x 2011EPS, undervalued to the 10x of global peers. We believe Melfas (10x) deserves a valuation premium given its in-house IC chip design capability. We note global IC chipmakers are trading at 13.1x 2011EPS on average. We like Melfas and Iljin Display given their 1) superior cost structure and 2) strong earnings momentum driven by Samsung Electronics tablet PC launch. Key risks on our sector call: 1) Samsung Electronics' lackluster tablet PC shipments, 2) poor yields of in-house component production.

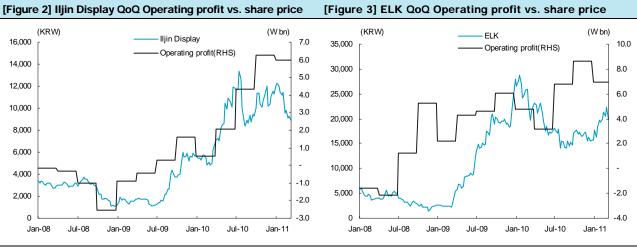
## I. Investment summary

**Good entry point with near-term earnings momentum at selective names.** We initiate our coverage of touchscreen sector with Overweight. We forecast the combined operating profit of touchscreen makers will post sequential operating profit growth through the year (2Q: +66% QoQ, 3Q: +54% QoQ). We note their main customers Samsung Electronics (Samsung) and LG Electronics (LGE) are the most bullish on smartphone shipment growth, guiding 225% YoY and 400% YoY growth, respectively, in 2011.

Historically, the share prices of touchscreen makers tend to move with quarterly earnings. In this context, we see further upside on selective names in the Samsung tablet PC supply-chain, which should post strong operating profit growth over peers from 2Q11. We like Melfas and Iljin Display (Iljin) given their 1) superior cost structure and 2) strong earnings momentum driven by Samsung's tablet PC launch.

[Figure 1] Kore	a touchs	creen m	akers ea	arnings f	orecast			(W bn)
	1Q10	2Q10	3Q10	4Q10	1Q11F	2Q11F	3Q11F	4Q11F
Melfas								
Sales	50	47	73	82	68	113	176	174
Operating profit	5	7	12	13	9	18	28	27
Operating margin	10.6%	15.8%	16.8%	15.5%	13.6%	15.7%	16.1%	15.4%
QoQ growth (%)	15.0%	39.8%	67.1%	4.1%	-27.4%	91.8%	57.9%	-4.8%
lljin Display								
Sales	12	23	30	49	49	75	108	102
Operating profit	1	2	4	6	6	11	16	14
Operating margin	4.2%	9.0%	14.3%	12.7%	12.2%	14.6%	15.0%	13.4%
QoQ growth (%)	-69.0%	306.5%	110.3%	46.2%	-4.7%	82.4%	47.7%	-15.9%
S-MAC								
Sales	37	29	37	102	73	77	87	71
Operating profit	1	-0	1	7	3	4	6	5
Operating margin	3.8%	-0.4%	3.3%	6.6%	4.6%	5.4%	6.7%	7.2%
QoQ growth (%)	348.2%	NM	NM	455.3%	-49.7%	23.5%	39.0%	-12.0%
ELK								
Sales	40	57	74	68	61	80	121	110
Operating profit	5	3	7	9	7	10	15	13
Operating margin	12.0%	5.6%	9.1%	12.8%	11.5%	12.0%	12.8%	12.1%
QoQ growth (%)	-21.2%	-33.2%	111.4%	27.9%	-19.4%	37.8%	60.5%	-13.1%
Total								
Sales	138	155	214	302	251	345	492	457
Operating profit	12	12	25	34	26	42	65	59
Operating margin	8.6%	8.1%	11.4%	11.4%	10.2%	12.3%	13.3%	12.9%
QoQ growth (%)	-5.1%	4.5%	96.7%	40.3%	-25.6%	65.9%	54.0%	-10.1%

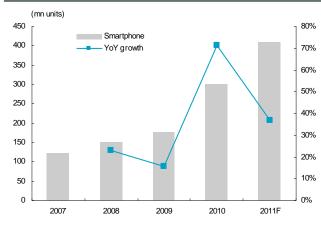
## Touchscreen

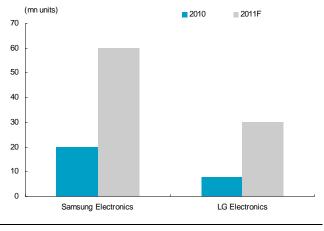


Source: Company data, Korea Investment & Securities

Source: Company data, Korea Investment & Securities

#### [Figure 4] Smartphone market to grow 37% YoY in 2011 [Figure 5] Strong shipment growth at Korean handset makers



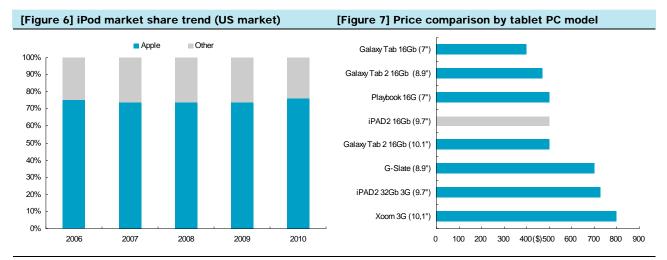


Source: Strategy Analytics, Korea Investment & Securities

\*Company shipment guidance. Source: Company data, Korea Investment & Securities

**Samsung is the most cost-competitive in Android tablet PCs.** Apple has commanded a 70% market share in the MP3 player market without any serious competition since 2005. Unlike the MP3 market, we believe Android has more chances to compete with Apple thanks to its 1) diverse product lineup, 2) skyrocketing number of free applications (Android: 65% vs. Apple: 28%), 3) high penetration of Android smartphones that lowers the entry barrier for customers' purchase of Android tablets.

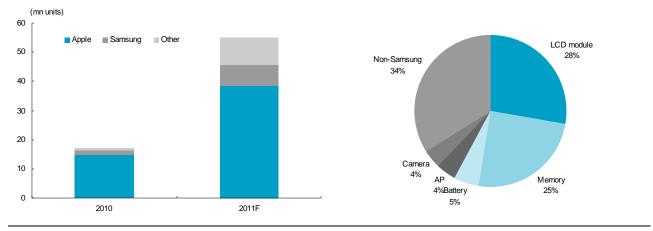
In particular, we believe Samsung will outperform peers as we view Samsung as the most cost-competitive among them thanks to its high exposure of in-house production (66% of total BOM). We believe price-cut is the key factor for Android tablet makers to compete with Apple's iPad 2 as Apple retains its pricing advantage on iPad 2. Hence, we expect Samsung to maintain its global market share of 13% in 2011, 7.0mn unit shipments of tablets PCs.



Source: Company data, Korea Investment & Securities

Source: Company data, Korea Investment & Securities

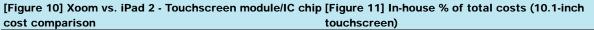


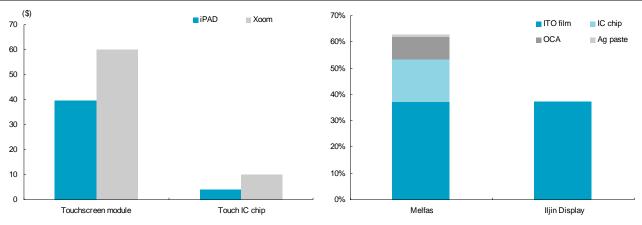


Source: Korea Investment & Securities

Source: iSuppi, Company data, Korea Investment & Securities

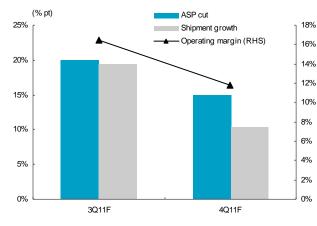
Focus on winners in the Samsung tablet PC supply chain. As Samsung focuses on price reduction, we estimate a 35% price reduction of touchscreens is required for Samsung to meet the touchscreen costs for Apple's iPad 2. Our analysis suggests that only Melfas and Iljin remain profitable with double-digit operating margins while others make losses. This is mainly due to the high exposure to in-house component production (Melfas: 67%, Iljin: 37%). The more Samsung focuses on price cuts, the more volumes selective names enjoy, in our view.



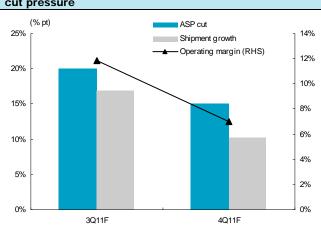












## [Figure 13] Iljin Display - Shipment growth offsets pricecut pressure

Source: Korea Investment & Securities

Attractive valuation – We like Melfas and Iljin Display Pure touchscreen stocks are trading at 6-7x 2011EPS, undervalued to the 10x of global peers. We believe Melfas (10x) deserves a valuation premium given its in-house IC chip design capability. We note global IC chipmakers are trading at 13.1x 2011EPS on average. However, we see limited upside on ELK as the share price recently surged 35% from the trough in the March, reaching the global peer level.

Key risks on our sector call: 1) Samsung's lackluster tablet PC shipments, 2) poor yields of in-house component production.

[Figure 14] Korea touchscreen snapshot

Company	Rating	ТР	Return	Target Multiple	Valuation rationale	Investment points
Melfas	BUY	67,000	46.8%	P/E14.6x	2011F average of global touch	Beneficiary of Samsung tablet PC
					IC chip/glass-type touchsceen	Taking leadership in touch IC chip
					names	Korea's most cost-competitive touchscreen player
lljin Display	BUY	14,500	35.5%	P/E9.8x		Beneficiary of Samsung tablet PC
					2011F average of global film-	High utilization rate to lift sapphire wafer margin
					type touchsceen names	Margin improvement thanks to high exposure of in- house production
S-MAC	BUY	18,000	33.3%	P/E8.8x	10% discount to 2011F average	Strong touch phone order flow from Samsung
					of global film-type touchsceen	In-house ITO sensor lifts margin
					names	Adding more global customers
ELK	BUY	27,000	17.4%	P/E9.8x	2011F average of global film- type touchsceen names	Near-term weakness due to market share decline in Motorola Stable margin trend thanks to diversified client portfolio

Source: Korea Investment & Securities

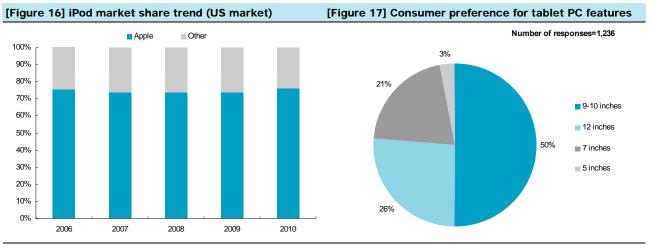
## [Figure 15] Valuation comparison

Company	Code	Market cap		P/E(x)			P/B(x)		F	ROE (%)		EV/	EBITDA	(x)	EPS	growth	(%)
		(USD mn)	2010A	2011F	2012F	2010A	2011F	2012F	2010A	2011F	2012F	2010A	2011F	2012F	2010A	2011F	2012F
Korea touc	hscreen																
Melfas	096640 KS	633	13.4	10.0	7.4	4.2	4.5	3.0	31.5	44.8	40.3	10.3	7.5	4.3	41.6	112.5	34.4
Iljin Display	020760 KS	228	28.6	7.4	5.0	8.6	4.5	2.6	22.6	61.1	51.5	17.4	5.6	3.4	n/a	265.8	48.3
S-MAC	097780 KS	82	7.7	6.6	3.9	2.5	2.2	1.5	34.4	33.0	38.7	7.6	4.5	2.1	n/a	10.8	69.3
ELK	094190 KS	285	9.3	9.0	8.1	2.3	2.7	2.0	29.7	35.5	28.8	8.3	7.3	5.5	26.2	63.0	11.5
Average			14.8	8.3	6.1	4.4	3.5	2.3	29.6	43.6	39.8	10.9	6.2	3.8	33.9	112.8	41.0
Touch IC cl	nip																
Broadcom	BRCM US	21,855	14.9	13.5	12.4	3.1	2.7	2.0	21.0	20.1	19.3	12.3	10.0	9.0	28.0	10.0	8.7
Atmel	ATML US	5,994	17.7	14.2	13.6	4.2	3.3	3.0	21.6	22.3	n/a	10.4	8.3	6.9	n/a	24.6	4.0
Cypress	CY US	3,437	16.9	13.9	11.1	4.4	3.7	2.9	29.0	28.5	n/a	10.2	7.7	6.8	149.6	21.7	24.6
Synaptics	SYNA US	915	11.1	10.9	6.4	2.6	1.9	n/a	19.5	14.1	n/a	n/a	n/a	n/a	54.3	2.6	68.9
Average			15.1	13.1	10.9	3.6	2.9	2.7	22.8	21.2	19.3	10.9	8.7	7.5	77.3	14.7	26.6
Glass-type	touchscreen																
Wintek	2384 TT	2,539	28.5	10.5	10.0	2.2	1.8	1.6	8.4	18.9	17.1	10.2	6.0	5.6	n/a	170.1	5.2
TPK	3673 TT	5,967	17.8	14.4	11.3	7.7	5.4	3.5	49.3	41.9	31.4	13.1	10.4	8.0	85.3	23.3	28.1
Sintek	3049 TT	805	n/a	27.4	15.0	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	82.6
Average			23.1	17.4	12.1	4.9	3.6	2.5	28.8	30.4	24.3	11.7	8.2	6.8	85.3	96.7	38.6
Film-type to	ouchscreen																
Young Fast	3622 TT	984	11.2	9.7	8.7	3.4	2.7	2.4	35.4	31.9	30.2	7.4	6.1	5.2	1.1	16.0	11.8
J-Touch	3584 TT	295	20.3	9.8	n/a	6.2	4.0	n/a	33.4	64.9	n/a	15.1	8.5	n/a	94.5	106.6	n/a
Average			15.8	9.8	8.7	4.8	3.4	2.4	34.4	48.4	30.2	11.3	7.3	5.2	47.8	61.3	11.8
Average			18.0	13.4	10.6	4.4	3.3	2.5	28.7	33.3	24.6	11.3	8.1	6.5	70.1	57.6	25.7

## II. Android to increase market share in tablet PC

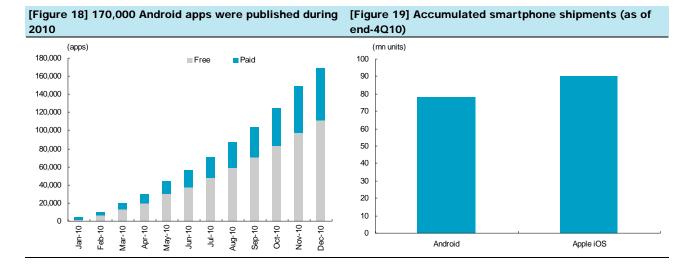
**Android vs. Apple.** We believe the market concerns on Android tablet PCs are overblown. We agree Apple should remain dominant in tablet PCs in 2011. However, we expect a 70% market share is the upper bound for Apple. Judging from the MP3 player market, Apple has been commanding a 70% market share over the past five years without any serious competition.

Android tablet PC's three positives. Unlike the MP3 market, we believe Android tablet PCs have more chances to erode Apple's market share in tablet PC based on the following: 1) Android's diverse product lineup. We note Apple has diversified its MP3 player portfolio from the low-end (iPod shuffle) to the high-end (iPod touch), but Apple has only one model in the tablet PC segment. 2) A skyrocketing number of free Android applications. During 2010, 170,000 applications were published on Android Market, and the percentage of free application (65%) is much higher than that of Apple (28%). We expect the increase rate to be much faster in tablet PCs, as developers only need to convert application versions. 3) High penetration rate of Android smartphones. Number of Android smartphones has reached 78.3mn units on accumulated base as of end-2010, only 13% less than that of iPhone. We believe the high penetration of Android smartphones will lower the entry barrier for the purchase of Android tablet PCs.





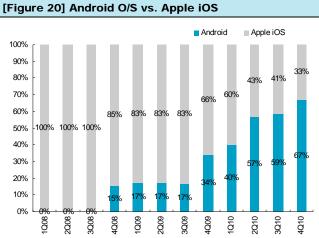
Source: Sybase, Korea Investment & Securities



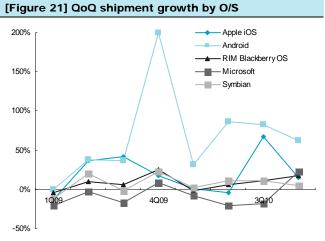
#### Korea Investment & Securities Co., Ltd.

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Source: Androidzoom.com, Korea Investment & Securities







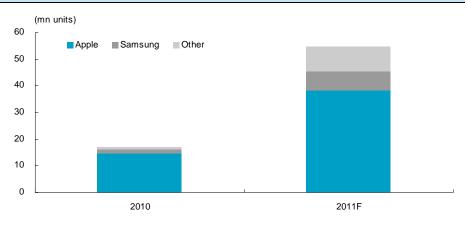
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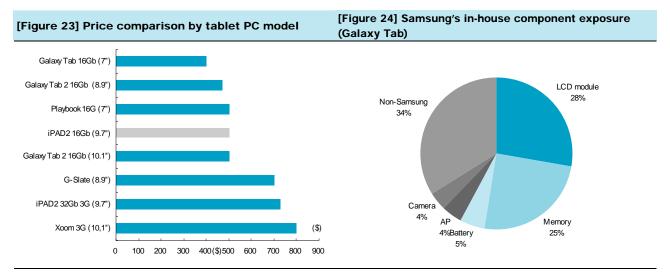
## III. Samsung is the most cost-competitive in Android tablet PCs

**Samsung is the most cost-competitive among Android tablet PC peers.** We think price cuts are inevitable for Android tablet PC makers to compete with Apple's iPad 2 as Apple retains its pricing advantage. We believe Samsung will outperform peers as we rate Samsung as the most cost-competitive among peers due to its high exposure to in-house production (66% of total BOM). Based on our BOM analysis of Galaxy Tab, Samsung uses an in-house LCD panel (28% of total BOM), memory (25%), battery (5%), AP (4%) and camera module (4%). We expect Samsung to maintain a global market share of 13% in 2011, 7.0mn unit shipments of tablet PCs. This is in line with the company's guidance.





Source: Gartner, Korea Investment & Securities



Source: Company data, Korea Investment & Securities

Source: iSuppi, Company data, Korea Investment & Securities

[Figure	251	Tablet	РС	product	line-up
L	1			P. 0	

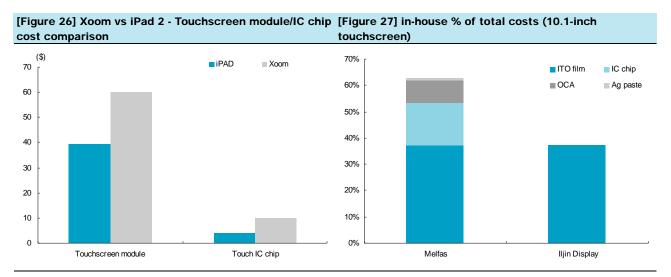
	iPad 2	Galaxy Tab 2	Xoom	OptimusPad 3G	Playbook
Manufacturer	Apple	Samsung	Motorola	LG Electronics	RIM
os	iOS 4.3	Android OS v3.0	Android OS v3.0	Android OS v3.0	RIM OS
Thickness (mm)	8.8	8.6	12.9	12.8	10.0
Weight (g)	600	595/475	730	630	425
Processor	1 GHz Apple A5 dual- core processor	1GHz Nvidia Tegra 2 processor	1GHz Nvidia Tegra 2 processor	1GHz Nvidia Tegra 2 processor	1GHz dual-core processor
Display (inch)	9.7	10.1/8.9	10.1	8.9	7.0
Display (pixel)	1024*768	1280 x 800	1280 x 800	1280 x 768	1024 x 600
Storage	16/32/64 GB	16/32 GB	32 GB	32 GB	16/32/64Gb
Internal memory	512 MB RAM	1 GB RAM	1 GB RAM	1 GB RAM	1 GB RAM
External memory	n/a	microSD, up to 32GB	microSD, up to 32GB	microSD, up to 32GB	n/a
Price	USD499-729	USD469-599	USD599-799	USD699	USD499-

Source: Company data, Korea Investment & Securities

## IV. Selective names with high exposure of inhouse components

**Price cut needed in touchscreen for Android to compete with iPad 2.** We believe the bulk of the cost difference between Android tablets and iPad 2 comes from the touchscreen module including IC chips. In the case of Motorola's Xoom, the touchscreen module cost USD26 more than iPad 2's (USD20 for the touchscreen module, USD6 for the touch IC chip), representing 60% of the total cost difference. As such, we view the price cut in the touchscreen module as the most critical factor for Android tablet makers to compete with iPad 2.

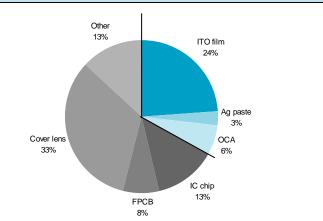
Winners in the Samsung supply chain. Given the high exposure to in-house component production, we rate Melfas and Iljin as the best-positioned players in Samsung's tablet PC supply chain. This is mainly due to the high exposure of in-house component production. For Melfas, it uses in-house IC chip and touchscreen sensor (DPW), which account for 67% of the total cost of a 10.1-inch touchscreen. We also like Iljin as it uses in-house ITO films. ITO film accounts for 37% of the total cost.

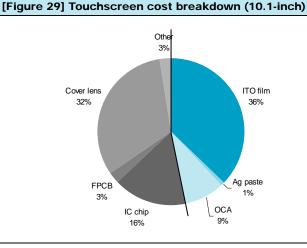


Source: Gartner, iSuppi, Korea Investment & Securities





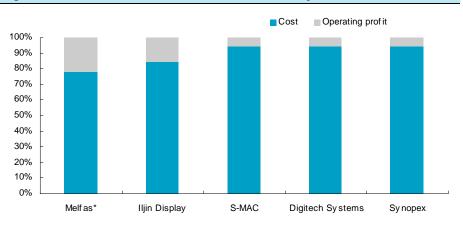




Source: Company data, Korea Investment & Securities

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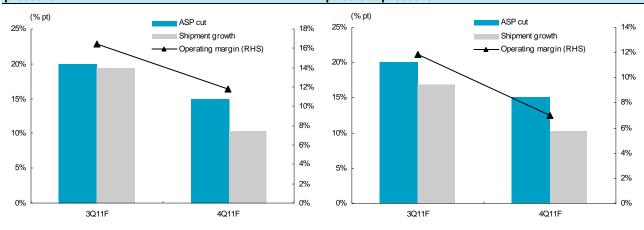
**Focus on shipment growth over price cut.** We estimate a 35% YoY price reduction of the touchscreen is required for Samsung to meet the touchscreen costs for Apple's iPad 2. Currently, five touchscreen makers are bidding for Samsung's new tablet PC business. Our cost analysis under the scenario suggests that only two makers remain profitable (4Q tablet PC operating margin: Melfas 12%, Iljin 7%) after the price cut. Accordingly, as Samsung focuses on price cut, we believe selective names should increase market share, offsetting the overall price-cut impact. In 3Q, we view Melfas and Iljin will maintain their operating margin thanks to strong QoQ shipment growth. Although the margin is likely to decline in 4Q as QoQ shipment growth slows due to the base effect, we note that we have yet incorporated increased production yield and component price reduction at the touchscreen level.



[Figure 30] Media tablet touchscreen module costs by vendor

\*Melfas - IC chip operating profit included. Source: Korea Investment & Securities

[Figure 31] Melfas – Shipment growth offsets price-cut [Figure 32] Iljin Display – Shipment growth offsets pressure price-cut pressure



Source: Korea Investment & Securities

Source: Korea Investment & Securities

Samsung's market share decline has less impact on EPS. There are concerns in the market that Samsung may lose market share in tablet PCs as the number of participants increase. Our analysis suggests that a 10% decline in shipments of Samsung tablet PCs would have 2% and 1.3% negative impacts on Melfas's 2011 EPS and Iljin's 2011 EPS, respectively. We maintained our 35% price-cut assumption.

[Figure 33] Sams	sung tablet PC	W/S sensitivi	ty		(W bn, KRW)
	Samsung t	ablet PC shipmer	nts		
(W bn)	7,000	6,300	5,600	4,900	4,200
Difference	0%	10%	20%	30%	40%
Melfas					
Tablet PC sales	102	91	81	70	60
Tablet PC OP	15	14	12	11	10
EPS	4,584	4,492	4,400	4,308	4,216
Change		-2.0%	-4.0%	-6.0%	-8.0%
Iljin Display					
Tablet PC sales	99	92	84	76	68
Tablet PC OP	11	10	10	9	9
EPS	1,446	1,428	1,410	1,392	1,373
Change		-1.3%	-2.5%	-3.8%	-5.0%

[Figure 33] Samsung tablet PC M/S sensitivity

Source: Korea Investment & Securities

(W bn. KRW)

# Company

M-1( (000040)		
Melfas (096640)	 	14
lljin Display (020760)	 	18
S-MAC (097780)	 	22
ELK (094190)		25

## **MELFAS inc. (096640)**

## BUY (Maintain), TP: W67,000 (Down)

## The best touchscreen player in Korea

#### Our top pick in Korea touchscreen

We believe Melfas is best positioned in the Samsung tablet PC supply chain given its competiveness in both IC chip and touchscreen. We recommend accumulating shares for the following reasons: 1) the rapid penetration of Melfas's touchscreen solution (DPW) as it reduces thickness and costs, 2) the growing market share of IC chips thanks to cost-competiveness and superior features.

We tweaked 2011EPS by 9% to reflect key customers' new models delay. As such, we trimmed our price target from W73,000 to W67,000 using 14.6x 2011EPS. We applied the 2011F average multiple of global touch IC chip/glass-type touchscreen makers (unchanged) given 1) superior IC chip performance and 2) a growing presence in glass-type touchscreen (DPW). Our price target implies 47% upside. Reiterate BUY.

## 1Q11: Strong operating margin eases concern on DPW production yield

In 1Q11, Melfas guides W65bn in sales (-17.5% QoQ, +36.8% YoY) with an operating margin of 13-14%. The QoQ sales growth will slightly miss our previous estimate mainly due to the delay in major customers' new models. However, we believe the continuing trend of strong operating margins will ease the industry concerns on DPW production yields. According to Melfas, the DPW production yield is up to 70% at present and has more room to improve, which lifts the operating margin.

## iPad 2 stimulates demand for Melfas's touchscreen solution (DPW)

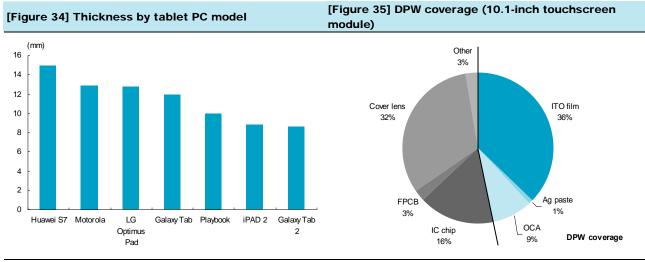
We believe Apple's iPad 2 impact on the tablet PC industry will boost demand for Melfas's touchscreen solution. As Apple retains its attractive pricing policy and reduces the thickness of iPad 2, Melfas's DPW touchscreen solution should garner more attention from Samsung. The company's DPW solution reduces costs by 20% through the elimination of key components such as ITO film, OCA lamination. Furthermore, it offers two additional benefits for set makers: 1) high transparency (DPW: 93% vs. film: 89%) and 2) slim design (DPW: 0.3mm vs. glass: 0.5mm).

## Taking the lead in touch IC chip

Melfas is widening the gap with competitors in the IC chip business. Based on our channel check, touchscreen makers in Samsung's supply chain have started to replace competitors' IC chips with Melfas's IC chip. We believe Melfas will continue to extend its portion in Samsung thanks to 1) attractive chip pricing, and 2) superior features over peers. Using Melfas's IC chip saves USD6 per tablet PC device as it requires only two chips (>8.9" screen size) while other IC chipmakers need four chips. Furthermore, Melfas's chip outperforms peers in 1) noise suppression algorithm, and 2) recognition accuracy thanks to an increased number of input channels. Based on these superior features, we believe Melfas will take at least a 60% share of Samsung's tablet PC IC chips.

Yr to	Sales	OP	EBT	NP	EPS	% chg.	EBITDA	P/E	EV/EBITDA	PBR	ROE
Dec	(W bn)	(W bn)	(W bn)	(W bn)	(won)	(YoY)	(W bn)	(x)	(x)	(x)	(%)
2008A	35	2	2	3	314	(66.1)	3	NM	NM	NM	16.0
2009A	152	17	17	16	1,523	385.0	18	42.0	14.4	12.2	28.9
2010F	252	38	40	36	2,157	41.6	39	13.4	10.3	4.2	31.5
2011F	531	82	85	76	4,584	112.5	87	10.0	7.5	4.5	45.0
2012F	801	133	135	102	6,162	34.4	138	7.4	4.3	3.0	40.3

April 4, 2011 / W45,650 / Mkt cap: USD706mn / 6M avg. daily turnover: USD14.9mn



Source: Korea Investment & Securities

Source: Korea Investment & Securities

## [Figure 36] Touchscreen comparison

	DPW	Film-type touchscreen
	Window lens	Window lens
Structure	sputtering & etching	ITO film ( 1 or 2 layer )
Transparency	93%	89%

Source: Company data, Korea Investment & Securities

# [Figure 37] Touchscreen IC chip comparison

Melfas - MMS 100 series	Atmel –maXtouch
30 points	>10 points
2	3-4
52 (X-Axis:30, Y-Axis:20)	30 (X-Axis:16, Y-Axis:14)
32bit ARM core	12bit in-house MCU
USD4	USD10
Dec-10	Sep-09
	30 points 2 52 (X-Axis:30, Y-Axis:20) 32bit ARM core USD4

Source: Company data, Korea Investment & Securities

## [Figure 38] Earnings revision

	1Q11F				2011F				2012F			
	Previous	Revised	Change	Change	Previous	Revised	Change	Change	Previous	Previous	Change	Change
Sales	77.8	68.0	(10)	-13%	570.7	531.1	(40)	-7%	848.9	800.8	(48)	-6%
TSP	71	61	(10)	-14%	532	495	(37)	-7%	805	767	(38)	-5%
Touch IC chip	2	2	0	2%	17	15	(2)	-14%	24	22	(2)	-8%
Touch key module	5	5	0	0%	21	21	0	0%	20	12	(8)	-40%
OP	12.0	9.3	(3)	-23%	91.0	82.2	(9)	-10%	146.4	132.6	(14)	-9%
OP margin	15.4%	13.6%	-1.8pp		15.9%	15.5%	-0.4pp		17.2%	16.6%	-0.6pp	
EBT	12.7	9.9	(3)	-22%	93.5	84.7	(9)	-9%	148.7	134.9	(14)	-9%
EBT margin	16.3%	14.6%	-1.7pp		16.4%	15.9%	-0.5pp		17.5%	16.8%	-0.7pp	
Net profit	11.4	8.9	(2)	-22%	84.0	76.1	(8)	-9%	112.7	102.3	(10)	-9%
Net margin	14.7%	13.1%	-1.6pp		14.7%	14.3%	-0.4pp		13.3%	12.8%	-0.5pp	

## Touchscreen

## [Figure 39] Quarterly earnings forecast

[Figure 39] Quarterly	[Figure 39] Quarterly earnings forecast												
	FY09	1Q10	2Q10	3Q10	4Q10	FY10	1Q11F	2Q11F	3Q11F	4Q11F	FY11F	FY12F	
Sales	151.5	49.7	46.5	73.0	82.5	251.7	68.0	112.9	176.4	173.8	531.1	800.8	
TSP	136.1	45.7	42.3	62.8	72.5	223.4	60.8	104.8	166.4	163.3	495.3	766.7	
Touch IC chip	5.2	2.0	1.2	2.2	1.9	7.3	1.8	2.8	4.4	5.5	14.6	22.1	
Touch key module	10.2	2.0	3.0	8.0	6.3	19.4	5.3	5.3	5.6	5.1	21.2	12.0	
Sales contribution (%)													
TSP	89.8%	92.0%	91.0%	86.0%	87.9%	88.7%	89.5%	92.8%	94.3%	93.9%	93.3%	95.7%	
Touch IC chip	3.4%	4.0%	2.5%	3.0%	2.3%	2.9%	2.7%	2.5%	2.5%	3.1%	2.7%	2.8%	
Touch key module	6.7%	4.0%	6.5%	11.0%	7.7%	7.7%	7.8%	4.7%	3.2%	2.9%	4.0%	1.5%	
Operating profit	16.7	5.2	7.3	12.3	12.8	37.6	9.3	17.8	28.4	26.7	82.2	132.6	
OP margin	11.0%	10.6%	15.8%	16.8%	15.5%	14.9%	13.6%	15.7%	16.1%	15.4%	15.5%	16.6%	
Earnings before tax	17.0	6.1	7.9	12.5	13.3	39.8	9.9	18.4	29.0	27.3	84.7	134.9	
EBT margin	11.2%	12.3%	17.0%	17.2%	16.1%	15.8%	14.6%	16.3%	16.4%	15.7%	15.9%	16.8%	
Net profit	16.5	5.5	7.1	11.3	11.9	35.8	8.9	16.5	26.1	24.5	76.1	102.3	
Net margin	10.9%	11.1%	15.3%	15.4%	14.4%	14.2%	13.1%	14.7%	14.8%	14.1%	14.3%	12.8%	

## **Balance Sheet**

Fiscal year ending Dec. (W bn)	2008A	2009A	2010F	2011F	2012F
Current assets	20	99	127	219	335
Cash & cash equivalent	0	2	11	51	116
Accounts receivable	5	11	19	39	59
Inventory	9	17	28	59	89
Fixed assets	11	15	47	67	87
Investments	2	2	2	2	2
Tangible assets	8	12	37	57	77
Intangible assets	0	1	1	1	1
Total assets	31	115	174	286	422
Current liabilities	11	19	39	81	119
Accounts payable	9	17	39	80	118
Short-term borrowing	1	0	0	0	0
Current portion of LT debt	0	0	0	0	0
Long-term debt	1	1	1	1	1
Debentures	0	0	0	0	0
Long-term borrowings	1	0	0	0	0
Total liabilities	12	20	40	81	119
Paid-in capital	2	3	8	8	8
Capital surplus	3	61	61	61	61
Capital adjustments	0	1	2	2	2
Retained earnings	15	31	63	134	232
Shareholders' equity	19	95	133	205	302

## Income Statement

Fiscal year ending Dec. (W bn)	2008A	2009A	2010F	2011F	2012F
Sales	35	152	252	531	801
Gross profit	8	29	58	132	211
SG&A expense	6	12	20	50	79
Operating profit	2	17	38	82	133
Non-op. profit	2	5	6	5	5
Interest income	0	0	2	1	1
FX gains	1	5	4	4	4
Equity gains	0	0	0	0	0
Non-op. expense	1	5	3	3	3
Interest expense	0	0	0	0	0
FX losses	1	2	3	3	3
Equity losses	0	0	0	0	0
Earnings before tax	2	17	40	85	135
Income taxes	(1)	0	4	9	33
Profit from discontinued	0	0	0	0	0
Net profit	3	16	36	76	102
EBITDA	3	18	39	87	138

## Cash Flow

Fiscal year ending Dec. (W bn)	2008A	2009A	2010F	2011F	2012F
C/F from operating	(2)	16	39	69	95
Net profits	3	16	36	76	102
Depreciation	1	1	2	5	5
Amortization	0	0	0	0	0
Net incr. in W/C	(5)	(6)	2	(11)	(13)
Others	(0)	4	(0)	(0)	(0)
C/F from investing	(3)	(71)	(26)	(25)	(25)
Capex	(8)	(6)	(25)	(20)	(20)
Decr. in fixed assets	1	1	(2)	(5)	(5)
Net incr. in current assets	3	(66)	0	0	0
Incr. in investment	2	(0)	0	0	0
Others	(0)	(1)	0	0	0
C/F from financing	1	58	(5)	(5)	(5)
Incr. in equity	0	59	0	0	0
Incr. in debts	1	(1)	0	0	0
Dividends	(0)	(0)	(5)	(5)	(5)
Others	(0)	0	0	0	0
Increase in cash	(4)	2	9	40	65

## **Key Financial Data**

			2010F	2011F	2012F
per share data (won)					
EPS	314	1,523	2,157	4,584	6,162
BPS	1,784	5,262	6,884	10,194	15,294
DPS	0	0	0	0	0
SPS	10,143	37,772	14,799	31,615	47,667
Growth (%)					
Sales growth	(1.2)	333.8	66.1	111.0	50.8
OP growth	(79.0)	770.7	124.8	118.5	61.4
NP growth	(68.3)	477.7	118.4	111.2	34.4
EPS growth	(66.1)	385.0	41.6	112.5	34.4
EBITDA growth	(72.3)	604.7	116.2	120.9	57.9
Profitability (%)					
OP margin	5.5	11.0	14.9	15.5	16.6
NP margin	8.2	10.9	14.3	14.3	12.8
EBITDA margin	7.4	12.1	15.7	16.4	17.2
ROA	11.3	22.7	25.0	33.1	28.9
ROE	16.0	28.9	31.5	45.0	40.3
Dividend yield	NM	0.0	0.0	0.0	0.0
Stability					
Net debt (W bn)	(2)	(68)	(77)	(117)	(182)
Int. coverage (x)	39.4	141.0	2,299.0	NM	NM
D/E ratio (%)	8.6	0.6	0.4	0.3	0.2
Valuation (x)					
PER	NM	42.0	13.4	10.0	7.4
PBR	NM	12.2	4.2	4.5	3.0
PSR	NM	1.7	2.0	1.4	1.0
EV/EBITDA	NM	14.4	10.3	7.5	4.3

## Iljin Display (020760)

## BUY (Initiate), TP: W14,500

## Dual hearts - touchscreen and sapphire wafer

## Beneficiary of Samsung tablet PC and LED industry recovery

We initiate coverage of Iljin with BUY and a 12-month price target of W14,500 derived by using 9.8x 2011EPS. We applied the 2011F average multiple of global film-type touchscreen makers. Our investment points on Iljin are: 1) margin improvement driven by the utilization rate hike of sapphire wafer thanks to the overall LED industry recovery, 2) robust shipment growth of touchscreen modules given its cost competitiveness. We have incorporated a 22% increase in the number of outstanding shares into our valuation due to the possible BW rights exercise. Our price target implies 35% upside. Key risks include: 1) Samsung's lackluster tablet PC shipments, 2) poor production yields of in-house components.

### 1Q11: Strong growth at sapphire wafer and touchscreen

In 1Q, we expect Iljin to post W50bn sales (-0.8% QoQ, +313.6% YoY) with an operating margin of 12%. This is generally in line with the 4Q10 results and mainly driven by robust sapphire wafer sales in spite of the weak seasonality. Going forward, we sense strong growth in both sapphire wafer and touchscreen thanks to 1) faster recovery in the utilization rate of sapphire wafer and 2) an increased number of touchscreen models. From 2Q, touchscreen modules should become a main growth driver as Iljin receives eight smartphone models and begin to replace Galaxy Tab (7-inch) with the new Galaxy Tab series.

#### Touchscreen – Cost competitiveness leads greater shipments

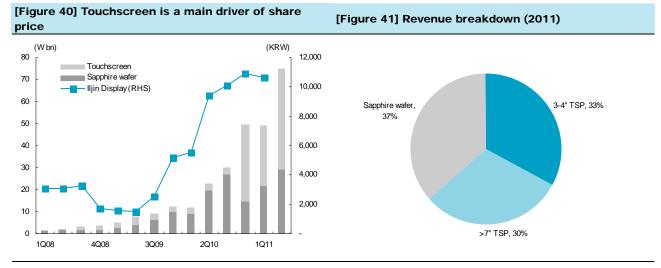
In 2011, we believe price reduction is the key factor for Samsung to compete with Apple's iPad2 as Apple retains its pricing advantage. We like Iljin among the Samsung tablet PC supply chain given its high exposure to in-house components which should enable it bear price-cut pressure. Iljin uses an in-house ITO sensor which accounts for 37% of total costs (10.1-inch touchscreen). The more Samsung focuses on price-cut, the more volumes Iljin enjoys, in our view. We expect Iljin to ship 2.3mn units in 2011, representing 34% of Samsung's tablet PC shipments.

### Sapphire wafer – Bottoming out

Historically, the utilization rate has been the main driver of sapphire wafer operating margin. We forecast the utilization rate to pick up from 1Q as we expect LED chipmakers to increase utilization rates given capex cuts and the fast transition to LED TV at set makers. We estimate the utilization rate to reach 85% in 3Q, the highest since 3Q10. Accordingly, we expect the operating margin to revamp from 5% in 4Q10 to 13% in 3Q11. We are also positive on Iljin's diverse client list; the contribution of Korea's top three LED chipmakers (Samsung LED, LG Innotek, Seoul Opto-device) account for 60% of its 2011 sapphire wafer sales. In addition, we forecast its market share in customers will reach 30-50%.

Yr to	Sales	OP	EBT	NP	EPS	% chg.	EBITDA	P/E	EV/EBITDA	PBR	ROE
Dec	(W bn)	(W bn)	(W bn)	(W bn)	(won)	(YoY)	(W bn)	(x)	(x)	(x)	(%)
2009A	34	1	1	1	25	NM	4	225.2	37.0	7.4	1.9
2010A	114	13	10	10	395	1,480.0	19	28.6	17.4	8.6	22.6
2011F	333	47	45	45	1,445	265.8	55	7.4	5.6	4.5	61.1
2012F	521	73	76	67	2,142	48.3	81	5.0	3.4	2.6	51.5
2013F	599	99	102	78	2,479	15.7	107	4.3	2.2	1.7	38.3

April 4, 2011 / W10,700 / Mkt cap: USD254mn / 6M avg. daily turnover: USD3.9mn



Source: Korea Investment & Securities

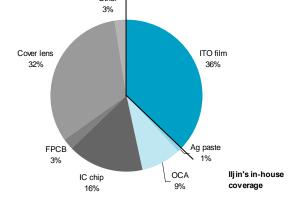
Source: Korea Investment & Securities

[Figure 42] Touchscreen - Near-term growth driver



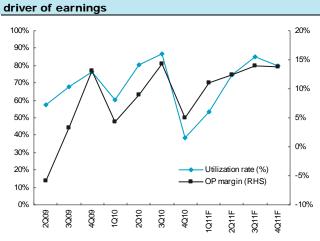


[Figure 43] Touchscreen - In-house coverage (10.1-

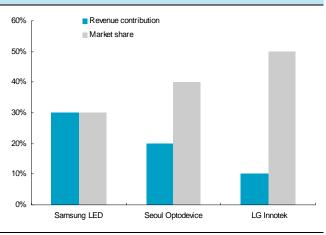


Source: Korea Investment & Securities





## [Figure 45] Sapphire wafer - Well diversified portfolio



Source: Korea Investment & Securities

## Touchscreen

## [Figure 46] Quarterly earnings forecast

[Figure 46] Quarterly	[Figure 46] Quarterly earnings forecast (W												
	FY09	1Q10	2Q10	3Q10	4Q10	FY10	1Q11F	2Q11F	3Q11F	4Q11F	FY11F	FY12F	
Sales	33.8	11.8	22.6	30.1	49.4	114.0	49.0	74.8	108.0	101.6	333.4	520.7	
3-4 inch touchscreen	10.7	2.6	2.9	3.3	4.1	12.9	6.0	28.1	41.2	39.3	114.6	153.1	
>7 inch touchscreen	0.0	0.0	0.0	0.0	30.6	30.6	21.0	17.6	30.8	30.0	99.4	170.9	
Sapphire wafer	23.1	9.2	19.7	26.8	14.7	70.5	22.0	29.1	36.0	32.3	119.3	196.6	
Sales contribution (%)													
3-4 inch touchscreen	31.7%	22.0%	12.8%	11.0%	8.3%	11.3%	12.2%	37.6%	38.2%	38.7%	34.4%	29.4%	
>7 inch touchscreen	0.0%	0.0%	0.0%	0.0%	61.9%	26.8%	42.8%	23.5%	28.6%	29.5%	29.8%	32.8%	
Sapphire wafer	68.3%	78.0%	87.2%	89.0%	29.8%	61.8%	44.9%	38.9%	33.3%	31.8%	35.8%	37.8%	
Operating profit	0.6	0.5	2.0	4.3	6.3	13.1	6.0	10.9	16.2	13.6	46.7	73.2	
OP margin	1.7%	4.2%	9.0%	14.3%	12.7%	11.5%	12.2%	14.6%	15.0%	13.4%	14.0%	14.0%	
Earnings before tax	0.5	0.4	0.8	3.8	5.2	10.2	5.5	10.5	15.8	13.3	45.2	76.3	
EBT margin	1.6%	3.2%	3.7%	12.7%	10.5%	9.0%	11.3%	14.1%	14.7%	13.1%	13.6%	14.6%	
Net profit	0.5	0.4	0.8	3.8	5.1	10.2	5.5	10.5	15.8	13.3	45.2	67.1	
Net margin	1.5%	3.2%	3.7%	12.7%	10.4%	8.9%	11.3%	14.1%	14.7%	13.1%	13.6%	12.9%	

**Balance Sheet** 

Fiscal year ending Dec. (W bn)	2009A	2010A	2011F	2012F	2013F
Current assets	32	69	209	328	408
Cash & cash equivalent	5	10	46	75	118
Accounts receivable	8	21	60	94	108
Inventory	7	28	83	129	148
Fixed assets	38	75	93	113	133
Investments	0	0	0	0	0
Tangible assets	19	55	75	95	115
Intangible assets	19	18	18	18	18
Total assets	70	144	302	441	541
Current liabilities	28	88	169	241	264
Accounts payable	11	33	123	195	217
Short-term borrowing	12	16	44	44	44
Current portion of LT debt	1	28	0	0	0
Long-term debt	3	4	38	38	38
Debentures	0	0	0	0	0
Long-term borrowings	2	3	36	36	36
Total liabilities	31	92	207	279	301
Paid-in capital	13	13	13	13	13
Capital surplus	36	28	28	28	28
Capital adjustments	(0)	(0)	(0)	(0)	(0)
Retained earnings	(11)	10	55	122	200
Shareholders' equity	38	51	97	164	241

## Cash Flow

Fiscal year ending Dec. (W bn)	2009A	2010A	2011F	2012F	2013F
C/F from operating	3	7	34	62	75
Net profits	1	10	45	67	78
Depreciation	2	4	7	7	7
Amortization	1	1	1	1	1
Net incr. in W/C	(0)	(12)	(23)	(17)	(15)
Others	(0)	3	4	4	4
C/F from investing	(16)	(36)	(32)	(32)	(32)
Capex	(10)	(41)	(20)	(20)	(20)
Decr. in fixed assets	2	0	0	0	0
Net incr. in current assets	(8)	6	(10)	(10)	(10)
Incr. in investment	0	0	0	0	0
Others	(1)	(2)	(2)	(2)	(2)
C/F from financing	17	33	33	0	0
Incr. in equity	23	0	0	0	0
Incr. in debts	(6)	33	33	0	0
Dividends	0	0	0	0	0
Others	0	0	0	0	0
Increase in cash	4	4	36	30	43

## **Income Statement**

Fiscal year ending Dec. (W bn)	2009A	2010A	2011F	2012F	2013F
Sales	34	114	333	521	599
Gross profit	6	21	57	83	110
SG&A expense	5	8	10	10	11
Operating profit	1	13	47	73	99
Non-op. profit	2	1	3	5	5
Interest income	0	0	0	0	0
FX gains	1	1	1	1	1
Equity gains	0	0	0	0	0
Non-op. expense	2	4	5	2	2
Interest expense	1	3	3	0	0
FX losses	0	1	2	2	2
Equity losses	0	0	0	0	0
Earnings before tax	1	10	45	76	102
Income taxes	0	0	0	9	25
Profit from discontinued	0	0	0	0	0
Net profit	1	10	45	67	78
EBITDA	4	19	55	81	107

## Key Financial Data

Fiscal year ending Dec.	2009A	2010A	2011F	2012F	2013F
per share data (won)					
EPS	25	395	1,445	2,142	2,479
BPS	762	1,316	2,363	4,157	6,468
DPS	0	0	0	0	0
SPS	1,624	4,436	12,959	20,236	23,272
Growth (%)					
Sales growth	241.1	237.5	192.6	56.2	15.0
OP growth	NM	2,246.2	256.5	56.7	35.7
NP growth	NM	1,850.1	346.2	48.3	15.7
EPS growth	NM	1,480.0	265.8	48.3	15.7
EBITDA growth	NM	379.1	192.7	48.3	32.1
Profitability (%)					
OP margin	1.7	11.5	14.0	14.0	16.6
NP margin	1.5	8.9	13.6	12.9	13.0
EBITDA margin	11.6	16.4	16.5	15.6	17.9
ROA	0.9	9.5	20.3	18.1	15.8
ROE	1.9	22.6	61.1	51.5	38.3
Dividend yield	0.0	0.0	0.0	0.0	0.0
Stability					
Net debt (W bn)	(0)	34	32	2	(41)
Int. coverage (x)	0.4	4.5	18.0	NM	NM
D/E ratio (%)	37.4	91.2	83.0	49.0	33.2
Valuation (x)					
PER	225.2	28.6	7.4	5.0	4.3
PBR	7.4	8.6	4.5	2.6	1.7
PSR	3.5	2.5	0.8	0.5	0.5
EV/EBITDA	37.0	17.4	5.6	3.4	2.2

## S-MAC (097780)

## BUY (Initiate), TP: W18,000

## Under the Samsung umbrella

## Samsung smartphone play

We initiate coverage of S-MAC with BUY and a 12-month price target of W18,000 using 8.8x 2011EPS, applying a 10% discount to the 2011F average multiple of global film-type touchscreen makers. We incorporated S-MAC's low adoption rate of in-house ITO sensor at present into our valuation. We believe S-MAC will benefit from: 1) the highest smartphone shipment growth within the Samsung supply chain, 2) profitability improvement due to the increase of the in-house ITO sensor adoption rate, and 3) an increasingly diversified customer base based on global customers. We have incorporated an 11% increase in the number of outstanding shares into our valuation due to the possible BW rights exercise. Our price target implies 33% upside. Key risks include: 1) Samsung's lackluster smartphone shipment 2) poor production yields of in-house components.

### Strong touchphone order flow from Samsung

At present, S-MAC is mass producing 15 models (vs. average of <10 models), guiding 4.6mn units of 3-4" touchscreen modules with 23% QoQ growth in 1Q. This is mainly due to S-MAC's fast response and strong ties with Samsung. Although 7" touchscreen module sales will likely decline as Samsung launches the new Galaxy Tab series in April, we believe robust smartphone shipments at Samsung will offset the decline in tablet PC sales.

### In-house ITO sensor lifts margin

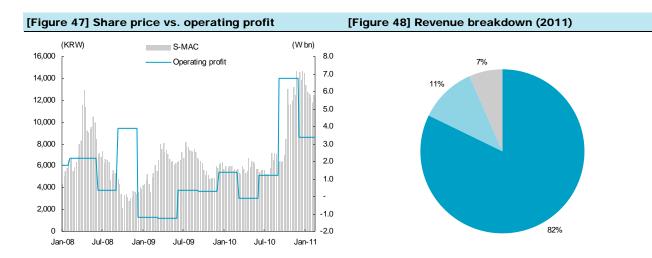
Historically, an operating margin of 5% has been a hurdle for S-MAC as it outsources key components from third parties. However, as S-MAC gets approval for its in-house ITO sensor from Samsung in 1Q, we believe the operating margin will gradually improve going forward. Based on 3.5-inch touchscreen, ITO film accounts for 24% of total costs. The company expects a 20% adoption rate of inhouse ITO sensor in 2011. Hence, we see the operating margin growing by 1.5%p YoY in 2011.

### Adding more global customers

From 1Q11, S-MAC has started to supply touchscreen modules to Sony Ericsson. We estimate the revenue contribution of Sony Ericsson will account for 10% of 2011 sales. Besides, S-MAC plans to ship mid- to large-size touchscreen modules to one of Korea panel makers from 3Q11. Although the revenue contribution of non-Samsung customers will remain low in the near term, we view this as an encouraging step for the company. In addition, the operating margin should enhance as S-MAC uses an in-house ITO sensor for those customers.

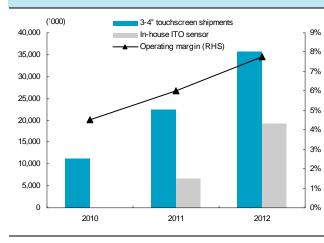
Yr to	Sales	OP	EBT	NP	EPS	% chg.	EBITDA	P/E	EV/EBITDA	PBR	ROE
Dec	(W bn)	(W bn)	(W bn)	(W bn)	(won)	(YoY)	(W bn)	(x)	(x)	(x)	(%)
2009A	143	(2)	(1)	(1)	(239)	(123.8)	0	NM	136.0	1.4	(5.6)
2010A	205	9	12	12	1,853	NM	12	7.7	7.6	2.5	34.4
2011F	319	18	18	15	1,881	1.5	18	6.5	4.2	2.0	30.7
2012F	421	36	41	31	3,792	101.5	36	3.2	1.6	1.4	41.9
2013F	484	42	46	35	4,302	13.4	42	2.8	0.8	0.9	32.8

April 4, 2011 / W13,500 / Mkt cap: USD85mn / 6M avg. daily turnover: USD4.3mn



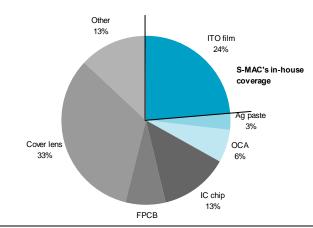
Source: Korea Investment & Securities

[Figure 49] In-house ITO sensor lifts profitability



Source: Korea Investment & Securities

Source: Korea Investment & Securities



Source: Company data, Korea Investment & Securities



[i igule 5 i] Qual terry e	ai illings ioi	ccast										(10 10)
	FY09	1Q10	2Q10	3Q10	4Q10	FY10	1Q11F	2Q11F	3Q11F	4Q11F	FY11F	FY12F
Sales	143.2	37.0	28.6	37.1	102.2	204.8	73.0	77.4	86.6	70.8	307.9	431.7
Touchscreen	69.8	28.6	21.8	31.2	93.8	175.4	65.0	75.4	82.6	65.8	288.9	415.7
Touch key module	73.4	8.4	6.8	5.9	8.4	29.4	8.0	2.0	4.0	5.0	19.0	16.0
Sales contribution (%)												
Touchscreen	48.8%	77.4%	76.2%	84.1%	91.8%	85.6%	89.0%	97.4%	95.4%	92.9%	93.8%	96.3%
Touch key module	51.2%	22.6%	23.8%	15.9%	8.2%	14.4%	11.0%	2.6%	4.6%	7.1%	6.2%	3.7%
Operating profit	-1.8	1.4	-0.1	1.2	6.7	9.2	3.4	4.2	5.8	5.1	18.5	33.5
OP margin	-1.3%	3.8%	-0.4%	3.3%	6.6%	4.5%	4.6%	5.4%	6.7%	7.2%	6.0%	7.8%
Earnings before tax	-1.5	2.9	-0.1	1.6	7.3	11.6	3.5	4.2	5.9	5.2	18.7	37.7
EBT margin	-1.0%	7.7%	-0.5%	4.4%	7.1%	5.7%	4.7%	5.5%	6.8%	7.3%	6.1%	8.7%
Net profit	-1.4	2.6	0.2	1.6	7.3	11.6	3.1	3.8	5.3	4.7	16.9	28.6
Net margin	-1.0%	7.0%	0.5%	4.4%	7.1%	5.7%	4.3%	4.9%	6.1%	6.6%	5.5%	6.6%

Source: Company data, Korea Investment & Securities

Kores Investment 23

(W bn)

[Figure 50] Touchscreen - In-house coverage (3.5inch)

## Touchscreen

## **Balance Sheet**

Fiscal year ending Dec. (W bn)	2009A	2010A	2011F	2012F	2013F
Current assets	27	78	104	143	184
Cash & cash equivalent	2	26	27	38	64
Accounts receivable	12	30	46	64	74
Inventory	10	16	23	33	38
Fixed assets	25	28	38	48	58
Investments	3	4	4	4	4
Tangible assets	22	24	34	44	54
Intangible assets	0	0	0	0	0
Total assets	52	106	142	192	242
Current liabilities	24	56	78	103	114
Accounts payable	10	45	69	93	105
Short-term borrowing	3	6	7	7	7
Current portion of LT debt	10	1	0	0	0
Long-term debt	3	7	4	1	1
Debentures	0	0	0	0	0
Long-term borrowings	3	6	3	0	0
Total liabilities	27	63	82	104	115
Paid-in capital	3	4	4	4	4
Capital surplus	7	13	13	13	13
Capital adjustments	(0)	(0)	1	1	1
Retained earnings	14	26	43	71	110
Shareholders' equity	25	43	60	88	127

## Cash Flow

Fiscal year ending Dec. (W bn)	2009A	2010A	2011F	2012F	2013F
C/F from operating	(8)	25	16	29	39
Net profits	(1)	12	17	29	39
Depreciation	2	2	0	0	0
Amortization	1	0	0	0	0
Net incr. in W/C	(10)	6	(2)	(1)	(1)
Others	2	5	1	1	1
C/F from investing	(10)	(5)	(12)	(14)	(13)
Capex	(11)	(6)	(10)	(10)	(10)
Decr. in fixed assets	1	2	0	0	0
Net incr. in current assets	1	(0)	(2)	(4)	(3)
Incr. in investment	0	0	0	0	0
Others	(0)	(0)	0	0	0
C/F from financing	12	4	(3)	(3)	0
Incr. in equity	0	6	0	0	0
Incr. in debts	12	(3)	(3)	(3)	0
Dividends	(1)	0	0	0	0
Others	0	1	0	0	0
Increase in cash	(5)	23	1	11	26

## **Income Statement**

Fiscal year ending Dec. (W bn)	2009A	2010A	2011F	2012F	2013F
Sales	143	205	308	432	496
Gross profit	3	16	29	55	72
SG&A expense	5	7	11	21	25
Operating profit	(2)	9	19	33	47
Non-op. profit	5	6	4	8	8
Interest income	0	0	0	0	0
FX gains	3	3	4	4	4
Equity gains	1	1	0	0	0
Non-op. expense	5	4	4	4	4
Interest expense	1	1	1	1	1
FX losses	3	2	3	3	3
Equity losses	1	0	0	0	0
Earnings before tax	(1)	12	19	38	51
Income taxes	(0)	0	2	9	12
Profit from discontinued	0	0	0	0	0
Net profit	(1)	12	17	29	39
EBITDA	0	12	19	33	47

## Key Financial Data

Fiscal year ending Dec.	2009A	2010A	2011F	2012F	2013F
per share data (won)					
EPS	(239)	1,853	2,053	3,475	4,794
BPS	4,021	5,746	6,213	8,977	13,239
DPS	0	150	150	150	150
SPS	23,791	32,735	41,981	58,864	67,693
Growth (%)					
Sales growth	0.8	43.4	50.0	40.2	15.0
OP growth	(122.0)	(611.9)	100.2	80.8	40.9
NP growth	(123.7)	(908.2)	45.2	69.3	36.3
EPS growth	(123.8)	(875.3)	10.8	69.3	37.9
EBITDA growth	(96.4)	3,275.8	55.7	80.8	40.9
Profitability (%)					
OP margin	(1.3)	4.5	6.0	7.8	9.5
NP margin	(1.0)	5.7	5.5	6.6	7.8
EBITDA margin	0.2	5.8	6.0	7.8	9.5
ROA	(3.1)	14.7	13.6	17.1	17.9
ROE	(5.6)	34.4	33.0	38.7	36.2
Dividend yield	0.0	1.0	1.1	1.1	1.1
Stability					
Net debt (W bn)	13	(13)	(17)	(32)	(57)
Int. coverage (x)	(3.2)	10.4	22.1	40.0	56.3
D/E ratio (%)	62.7	30.5	16.8	7.9	5.5
Valuation (x)					
PER	(23.6)	7.7	6.6	3.9	2.8
PBR	1.4	2.5	2.2	1.5	1.0
PSR	0.2	0.4	0.3	0.2	0.2
EV/EBITDA	136.0	7.6	4.5	2.1	0.9

## ELK (094190)

## BUY (Maintain), TP: W27,000 (Up)

## The most client-diverse play

#### Diverse client base leads stable growth – Raise price target to W27,000

We maintain our BUY on ELK and raise our price target to W27,000 from W22,000. We revised up 2011F EPS by 19% to reflect shipment growth at non-Motorola customers. We applied the 2011F average multiple (9.8x) of global film-type touchscreen makers. Our investment points are 1) a varied client base and 2) comparable capacity to global film-type touchscreen makers (7mn units of 4-inch touchscreens).

That said, we see limited upside for ELK as it reaches the average multiple level of global peers. The share price recently surged 35% from the trough in March. Key risks to our rating are: 1) lackluster smartphone shipments at LGE and Motorola, 2) poor production yields of its in-house ITO sensor.

#### 1Q11: Faster-than-expected margin improvement

In 1Q, ELK guides W60bn in sales (-10.3% QoQ, +51.5% YoY) with an operating margin of 11.5%. Top-line growth is likely to miss our estimate given the delay in LGE's tablet PC launch. However, profitability is climbing back faster than we anticipated thanks to 1) increased production yields and 2) a smartphone-centric product mix improvement.

## 2011 – Market share decline in Motorola vs. increased sales portion in LGE

Motorola, ELK's major client, recently added a few Taiwanese glass-type touchscreen makers into its supply chain. We view ELK's market share decline in Motorola as near-term weakness. According to ELK, LGE's smartphone growth is the company's main driver in 2011, offsetting the market share decline in Motorola. However, we are cautious on LGE's smartphone outlook in 2011 as industry leaders such as Apple and HTC should expand market share with more diversified distribution channels. From the long-term perspective, we believe increased sales to LGE will offset the drop in its supply share in Motorola as we see LGE narrowing the gap with industry leaders (Apple, HTC) from 2012.

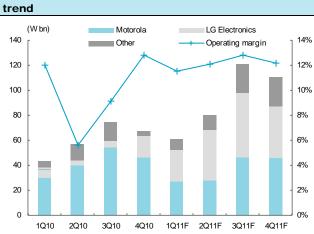
## Stable margin trend thanks to diversified client portfolio

We believe ELK will post a 12-13% operating margin through the year. We attribute this to its diverse customer base. In 2Q10, the operating margin contracted to 5.9% mainly due to more low-margin orders from its captive buyer Motorola, which lowered production yield and increased outsourcing costs. From 2011, we believe ELK will become more selective as it adds global customers. ELK has recently received W9.8bn worth of orders from Flextronics, the global ODM maker. In addition, ELK plans to supply touchscreen modules to Sony Ericsson from 2Q.

Yr to	Sales	OP	EBT	NP	EPS	% chg.	EBITDA	P/E	EV/EBITDA	PBR	ROE
Dec	(W bn)	(W bn)	(W bn)	(W bn)	(won)	(YoY)	(W bn)	(x)	(x)	(x)	(%)
2009A	119	17	14	13	1,316	NM	20	18.5	14.2	8.3	46.6
2010A	239	25	18	19	1,661	26.2	30	9.3	8.3	2.3	29.7
2011F	371	45	44	38	2,707	63.0	54	9.0	7.3	2.7	35.5
2012F	446	57	56	42	3,019	11.5	67	8.1	5.5	2.0	28.8
2013F	513	65	64	49	3,480	15.3	76	7.0	4.5	1.5	25.3

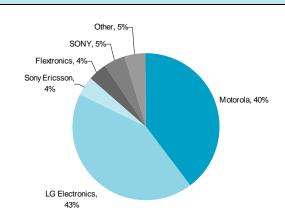
April 4, 2011 / W23,000 / Mkt cap: USD285mn / 6M avg. daily turnover: USD3.6mn

## Touchscreen





Source: Company data, Korea Investment & Securities



Source: Company data, Korea Investment & Securities

## [Figure 54] Earnings revision

[Figure 54] Earning	gs revision											(W bn)
	1Q11F				2010F				2011F			
	Previous	Revised	Change	Change	Previous	Revised	Change	Change	Previous	Revised	Change	Change
Sales	76.4	60.5	(16)	-21%	340.4	371.3	31	9%	388.6	445.8	57	15%
Operating profit	8.2	7.0	(1)	-15%	40.3	45.3	5	13%	48.5	56.8	8	17%
OP margin	10.7%	11.5%	0.8pp		11.8%	12.2%	0.4pp		12.5%	12.8%	0.3pp	
Earnings before tax	7.7	6.3	(1)	-18%	38.6	43.7	5	13%	46.8	55.9	9	19%
EBT margin	10.1%	10.4%	0.3pp		11.3%	11.8%	0.4pp		12.0%	12.5%	0.5pp	
Net profit	6.7	5.5	(1)	-18%	33.6	38.0	4	13%	35.5	42.4	7	19%
Net margin	8.8%	9.1%	0.3pp		9.9%	10.2%	0.4pp		9.1%	9.5%	0.4pp	

Source: Company data, Korea Investment & Securities

## [Figure 55] Quarterly earnings forecast

[Figure 55] Quarterly earnings forecast (W												
	FY09	1Q10	2Q10	3Q10	4Q10	FY10	1Q11F	2Q11F	3Q11F	4Q11F	FY11F	FY12F
Sales by product	119.3	40.0	57.1	74.2	67.5	238.7	60.5	79.7	120.6	110.4	371.3	445.8
3-4 inch touchscreen	102.6	37.6	52.3	68.9	63.5	222.2	57.0	64.0	97.5	94.1	312.6	370.7
>7 inch touchscreen	0.0	0.4	1.3	2.5	0.0	4.3	0.0	12.4	20.1	13.5	46.0	65.5
EL	15.8	1.8	3.4	2.8	2.7	10.6	2.2	1.9	1.7	1.5	7.3	4.2
Sales contribution (%)												
3-4 inch touchscreen	86.1%	94.1%	91.5%	92.9%	94.0%	93.1%	94.1%	80.3%	80.8%	85.2%	84.2%	83.1%
>7 inch touchscreen	0.0%	1.1%	2.3%	3.4%	0.0%	1.8%	0.0%	15.6%	16.6%	12.2%	12.4%	14.7%
EL	13.2%	4.5%	6.0%	3.7%	4.0%	4.5%	3.6%	2.4%	1.4%	1.4%	2.0%	0.9%
Operating profit	17.2	4.8	3.2	6.8	8.6	23.4	7.0	9.6	15.4	13.4	45.3	56.8
OP margin	14.4%	12.0%	5.6%	9.1%	12.8%	9.8%	11.5%	12.0%	12.8%	12.1%	12.2%	12.8%
Earnings before tax	14.3	3.9	4.2	1.9	7.2	17.2	6.3	9.1	15.1	13.2	43.7	55.9
EBT margin	12.0%	9.6%	7.4%	2.6%	10.7%	7.2%	10.4%	11.4%	12.5%	11.9%	11.8%	12.5%
Net profit	12.9	3.6	4.2	1.7	7.9	17.5	5.5	7.9	13.1	11.5	38.0	42.4
Net margin	10.8%	9.1%	7.4%	2.3%	11.7%	7.3%	9.1%	10.0%	10.9%	10.4%	10.2%	9.5%

Source: Company data, Korea Investment & Securities

[Figure 53] Revenue breakdown (2011)

**Balance Sheet** 

Fiscal year ending Dec. (W bn)	2009A	2010A	2011F	2012F	2013F
Current assets	68	121	167	206	245
Cash & cash equivalent	12	22	15	24	36
Accounts receivable	20	27	42	50	58
Inventory	28	62	96	115	132
Fixed assets	52	85	96	95	115
Investments	2	2	2	2	2
Tangible assets	44	75	87	87	107
Intangible assets	6	6	6	6	6
Total assets	120	206	263	301	360
Current liabilities	59	74	94	90	100
Accounts payable	22	34	59	70	81
Short-term borrowing	23	21	31	15	15
Current portion of LT debt	3	9	9	9	9
Long-term debt	24	44	44	44	44
Debentures	13	8	8	8	8
Long-term borrowings	11	36	36	36	36
Total liabilities	83	118	138	134	144
Paid-in capital	5	7	7	7	7
Capital surplus	33	62	62	62	62
Capital adjustments	(8)	(7)	(7)	(7)	(7)
Retained earnings	7	26	64	106	155
Shareholders' equity	37	88	126	168	217

#### Sales Gross profit SG&A expense Operating profit Non-op. profit Interest income FX gains Equity gains Non-op. expense Interest expense FX losses Equity losses Earnings before tax Income taxes (0) Profit from discontinued Net profit

Fiscal year ending Dec. (W bn) 2009A 2010A 2011F 2012F 2013F

### Cash Flow

Fiscal year ending Dec. (W bn)	2009A	2010A	2011F	2012F	2013F
C/F from operating	11	(5)	13	33	43
Net profits	13	19	38	42	49
Depreciation	3	5	7	9	9
Amortization	1	1	1	1	1
Net incr. in W/C	(8)	(32)	(33)	(19)	(16)
Others	3	2	0	0	0
C/F from investing	(22)	(41)	(20)	(24)	(30)
Capex	(20)	(37)	(20)	(10)	(20)
Decr. in fixed assets	0	0	0	0	0
Net incr. in current assets	1	0	0	(14)	(10)
Incr. in investment	0	(3)	0	0	0
Others	(3)	(2)	0	0	0
C/F from financing	17	56	(4)	(4)	(4)
Incr. in equity	4	25	0	0	0
Incr. in debts	26	35	0	0	0
Dividends	0	0	0	0	0
Others	(13)	(4)	(4)	(4)	(4)
Increase in cash	7	10	(10)	5	9

## **Key Financial Data**

EBITDA

**Income Statement** 

Fiscal year ending Dec.	2009A	2010A	2011F	2012F	2013F
per share data (won)					
EPS	1,316	1,661	2,707	3,019	3,480
BPS	2,939	6,625	8,922	12,065	16,197
DPS	0	100	100	100	100
SPS	12,175	19,278	27,542	33,072	38,032
Growth (%)					
Sales growth	240.2	100.1	55.6	20.1	15.0
OP growth	529.3	42.5	84.9	25.4	15.0
NP growth	(179.6)	44.4	104.2	11.5	15.3
EPS growth	(172.0)	26.2	63.0	11.5	15.3
EBITDA growth	382.2	48.9	76.8	25.1	12.7
Profitability (%)					
OP margin	14.4	10.3	12.2	12.8	12.8
NP margin	10.8	7.8	10.2	9.5	9.5
EBITDA margin	17.1	12.7	14.5	15.1	14.8
ROA	13.8	11.4	16.2	15.0	14.8
ROE	46.6	29.7	35.5	28.8	25.3
Dividend yield	0.0	0.6	0.4	0.4	0.4
Stability					
Net debt (W bn)	38	51	67	44	16
Int. coverage (x)	8.1	7.2	16.6	NM	NM
D/E ratio (%)	135.0	84.2	66.1	40.4	24.3
Valuation (x)					
PER	18.5	9.3	9.0	8.1	7.0
PBR	8.3	2.3	2.7	2.0	1.5
PSR	2.0	0.8	0.9	0.7	0.6
EV/EBITDA	14.2	8.3	7.3	5.5	4.5

## Touchscreen

## Changes to recommendation and price target

Company (Code)	Date	Recommendation	Price target	Company (Code)	Date	Recommendation	Price target
Iljin Display (020760)	12-29-10	NM	NM		10-17-10	BUY	W38,000
	04-04-11	BUY	W14,500		11-04-10	BUY	W41,000
ELK (094190)	04-09-10	BUY	W33,000		01-14-11	BUY	W51,000
	07-30-10	BUY	W22,000		03-02-11	BUY	W73,000
	04-04-11	BUY	W27,000		04-04-11	BUY	W67,000
Melfas inc (096640)	02-18-10	BUY	W112,000	S-MAC (097780)	11-24-10	NM	NM
	08-03-10	BUY	W91,000		04-04-11	BUY	W18,000
	09-20-10	BUY	W35,000				

## Iljin Display(020760)

ELK(094190)



Aug-10

Dec-10



## MELFAS inc.(096640)

## S-MAC(097780)

120,000

100,000

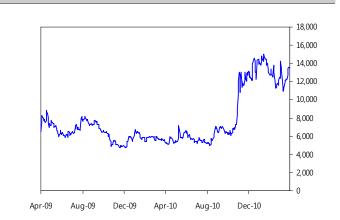
80,000

60,000

40,000

20,000

0



Dec-09

Apr-10

- Guide to Korea Investment & Securities Co., Ltd. stock ratings based on absolute 12-month forward share price performance
  - BUY: Expected to give a return of +15% or more
  - Hold: Expected to give a return between -15% and +15%
  - Underweight: Expected to give a return of -15% or less
- Guide to Korea Investment & Securities Co., Ltd. sector ratings for the next 12 months
  - Overweight: Recommend increasing the sector's weighting in the portfolio compared to its respective weighting in the Kospi (Kosdaq) based on market capitalization.
  - Neutral: Recommend maintaining the sector's weighting in the portfolio in line with its respective weighting in the Kospi (Kosdaq) based on market capitalization.
    Underweight: Recommend reducing the sector's weighting in the portfolio compared to its respective weighting in the Kospi (Kosdaq) based on market
- capitalization.

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