

TAIWAN

Taiwan TFT-LCDs

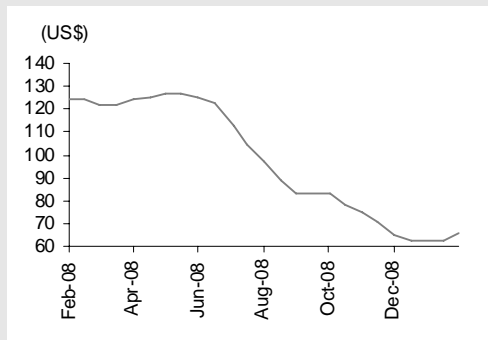
4 February 2009

Panel prices in February

Size (inches)		Price, avg (US\$)		% ch MoM
TV				
42	FHD	325	Flat	0-0%
32	WXGA	160	Flat	0-0%
Monitor				
22W	WSXGA+	91	Up	2-5%
19W	WXGA+	66	Up	3-6%
19	SXGA	78	Up	3-5%
17	SXGA	61	Up	3-7%
NB				
15.4W	WXGA	54	Up	0-2%
14.1W	WXGA	52	Up	0-2%

Indicative preliminary pricing for A-grade panels for the end of the month. Source: Macquarie Research, WitsView, February 2009

19" W monitor panel prices, average



Source: Macquarie Research, WitsView, February 2009

Key stocks

Stock code	Rating	Stock price (NT\$)	Target price (NT\$)	Upside (%)
AUO	2409 TT Outperform	25.5	33.0	29
CMO	3009 TT Outperform	10.6	20.4	93
CPT	2475 TT Outperform	3.2	4.2	32
HannStar	6116 TT Outperform	4.2	7.0	65
InnoLux	3481 TT Outperform	27.9	34.0	22
Wintek	2384 TT Outperform	6.1	12.6	107
PVI	8069 TT Underperform	15.5	9.5	-39
Giantplus	8105 TT Outperform	10.7	17.1	60

Share prices as of 4 February 2009.

Source: Macquarie Research, February 2009

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Panel prices in February

Event

- TFT-LCD monitor panels are likely to see price hikes across all sizes in February while TV panel prices remain flat. This should be in line with expectations.

Impact

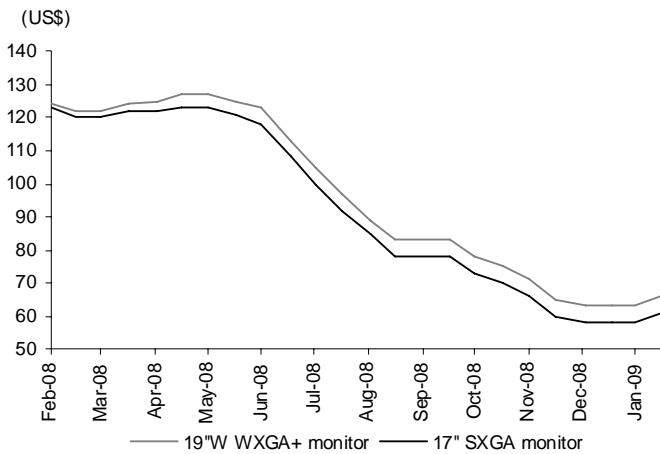
- For monitor panels, prices will likely rise by 2–7%** from end-January to end-February. Panel suppliers are trying to lift their prices by US\$1–4 across all sizes in the first half of February with the potential for more hikes in 2H. We believe monitor panel prices may rise by 10–15%, on average, from end-December to end-March with further price hikes in March.
- Monitor panel prices are rising due mainly to supply-side factors.** This is because prices have floored after reaching variable cash costs, inventories are low and thus require restocking and overall TFT-LCD sell-through in the holiday season was not bad in unit terms. Monitor panel prices have the most upside relative to NB and TV panels because their margins are currently the lowest and inventory the tightest.
- For TV panels, prices will likely be flat MoM.** However, prices for smaller sizes such as 26" and 32" may see a small increase led by Taiwanese suppliers. Taiwanese panel makers are seeing a pick-up in orders from China as the government there is targeting a significant boost to TV demand from the recently introduced rural household appliance subsidy. The Chinese government will grant a 13% subsidy to a number of different appliances including TVs. AUO and CMO inked memoranda of understanding (MOUs) in January for the supply of TV panels to a contingent of nine prominent Chinese TV brands including TCL, Haier, Chang-hong Electric, Konka and Skyworth. AUO and CMO will supply more than 12m TV panels in 2009 with a value of more than NT\$72bn (US\$2.2bn).
- For small/medium panels, the picture is mixed.** We are seeing rush orders from both China and global tier-one handset vendors starting from January to the benefit of Giantplus and Wintek, respectively. However, demand for medium panels, especially netbook products (8.9/10") is still sombre. We expect prices for small panels to flatten or drop slightly MoM in February and netbook panels to see a decline of less than 5% MoM.

Outlook

- Regionally, we have a neutral view on the TFT-LCD sector. Price rises are led by supply-side factors and may not hold beyond 1Q09 since end-demand is weak. We recommend taking profit into this rally. We would turn positive if the price rebound is sustainable and demand is clearly recovering.
- We are more positive on Taiwanese panel makers, which have lower P/BV valuations. Our top picks remain AUO and InnoLux. In addition, tighter relationships with Chinese TV brands and a boost in demand from the rural subsidy should help AUO and CMO improve the strength of their customer base. This helps to narrow the advantages that Korean and Japanese panel makers have from supplying internally to their own affiliated brands.

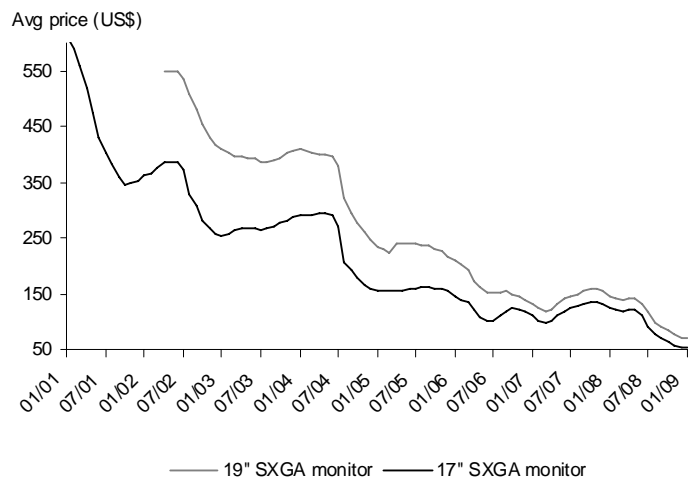
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Fig 1 Monitor panel prices, past 12 months



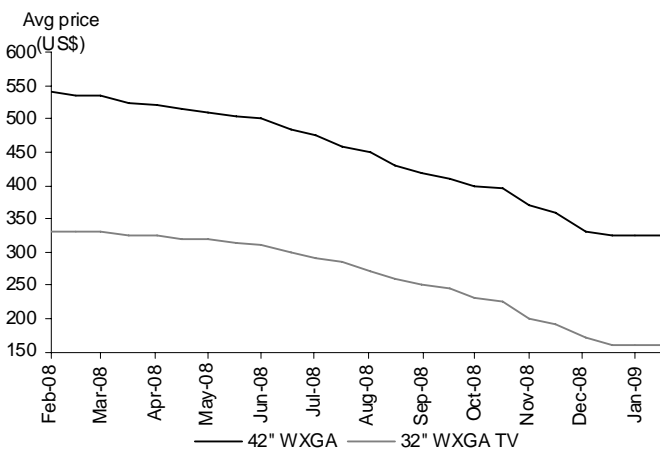
Source: WitsView, Macquarie Research, February 2009

Fig 2 Monitor panel prices, since January 2001



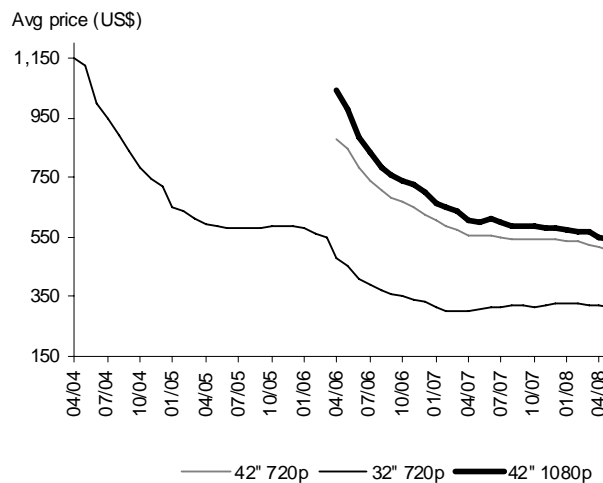
Source: DisplaySearch, Macquarie Research, February 2009

Fig 3 TV panel prices, past 12 months



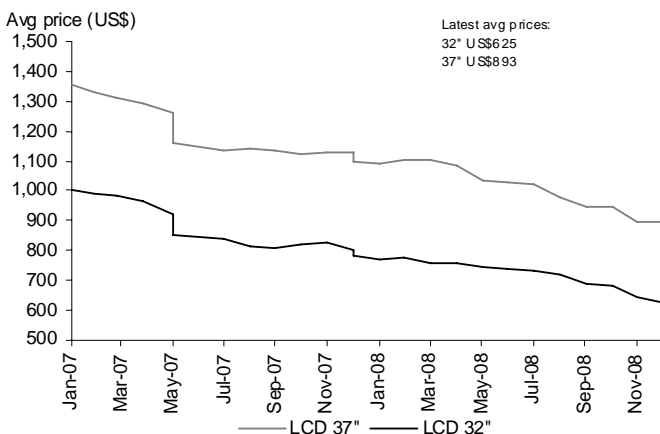
Source: WitsView, Macquarie Research, February 2009

Fig 4 TV panel prices, since April 2004



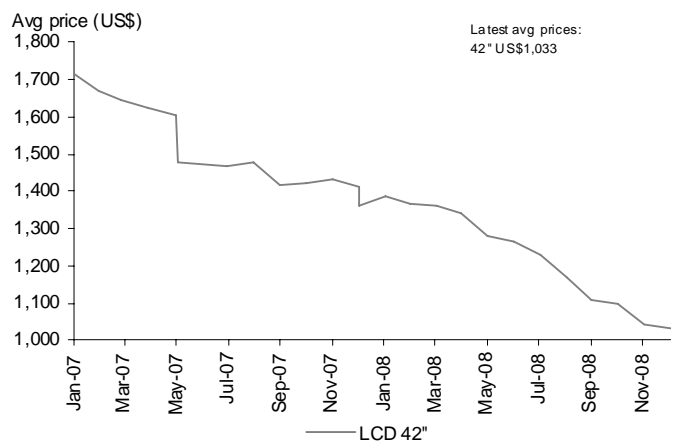
Source: DisplaySearch, Macquarie Research, February 2009

Fig 5 LCD TV retail prices, 32" and 37"



Source: WitsView, Macquarie Research, February 2009

Fig 6 LCD TV retail prices, 42"



Source: WitsView, Macquarie Research, February 2009

Fig 7 Comparison of panel suppliers

	Stock code	Rating	Currency	Stock price (lcy)	Target price (lcy)	Upside (%)	Market cap (US\$m)	P/BV (x)	ROE (%)	EV/IC (x)	ROIC (%)	EV/EBITDA (x)	EBITDA ch (%)
AUO	2409 TT	Outperform	NT\$	25.5	33.0	29	6,442	0.8	-5	0.8	-3	3.7	-27
CMO	3009 TT	Outperform	NT\$	10.6	20.4	93	2,290	0.4	4	0.6	4	2.8	5
CPT	2475 TT	Outperform	NT\$	3.2	4.2	32	898	0.4	-15	0.7	-9	5.7	-25
HannStar	6116 TT	Outperform	NT\$	4.2	7.0	65	694	0.4	-5	0.4	-4	2.1	-21
InnoLux	3481 TT	Outperform	NT\$	27.9	34.0	22	2,575	0.9	5	0.9	5	5.0	21
Wintek	2384 TT	Outperform	NT\$	6.1	12.6	107	202	0.3	4	0.6	4	4.1	52
PVI	8069 TT	Underperform	NT\$	15.5	9.5	-39	311	1.4	-3	1.2	0	7.1	52
Giantplus	8105 TT	Outperform	NT\$	10.7	17.1	60	128	0.5	2	0.6	3	2.3	-2
SEC	005930 KS	Underperform	Won	490,000	350,000	-29	55,365	1.4	1	1.6	3	8.9	-32
LGD	034220 KS	Neutral	Won	27,350	22,000	-20	7,413	1.1	-1	1.1	0	4.5	-36
Sharp	6753 JP	Underperform	Yen	662	430	-35	8,662	0.6	3	0.7	3	2.8	17

Financials for Sharp are for FY03/10. Share prices are as of 4 February 2009.

* Note that the recommendation for LG Display (LGD) is out of line with Macquarie's standard recommendation price range bands. LG Display is covered by Michael Bang.

Source: Macquarie Research, February 2009

Important disclosures:

Recommendation definitions	Volatility index definition*	Financial definitions				
<p>Macquarie - Australia/New Zealand Outperform – return >5% in excess of benchmark return Neutral – return within 5% of benchmark return Underperform – return >5% below benchmark return</p> <p>Macquarie – Asia/Europe Outperform – expected return >+10% Neutral – expected return from -10% to +10% Underperform – expected return <-10%</p> <p>Macquarie First South - South Africa Outperform – expected return >+10% Neutral – expected return from -10% to +10% Underperform – expected return <-10%</p> <p>Macquarie - Canada Outperform – return >5% in excess of benchmark return Neutral – return within 5% of benchmark return Underperform – return >5% below benchmark return</p> <p>Macquarie - USA Outperform (Buy) – return >5% in excess of benchmark return Neutral (Hold) – return within 5% of benchmark return Underperform (Sell)– return >5% below benchmark return</p> <p>Recommendations – 12 months</p> <p>Note: Quant recommendations may differ from Fundamental Analyst recommendations</p>	<p>Volatility index definition* This is calculated from the volatility of historical price movements.</p> <p>Very high–highest risk – Stock should be expected to move up or down 60–100% in a year – investors should be aware this stock is highly speculative.</p> <p>High – stock should be expected to move up or down at least 40–60% in a year – investors should be aware this stock could be speculative.</p> <p>Medium – stock should be expected to move up or down at least 30–40% in a year.</p> <p>Low–medium – stock should be expected to move up or down at least 25–30% in a year.</p> <p>Low – stock should be expected to move up or down at least 15–25% in a year. * Applicable to Australian/NZ/Canada stocks only</p>	<p>Financial definitions All "Adjusted" data items have had the following adjustments made: Added back: goodwill amortisation, provision for catastrophe reserves, IFRS derivatives & hedging, IFRS impairments & IFRS interest expense Excluded: non recurring items, asset revals, property revals, appraisal value uplift, preference dividends & minority interests</p> <p>EPS = adjusted net profit / efpowa* ROA = adjusted ebit / average total assets ROA Banks/Insurance = adjusted net profit / average total assets ROE = adjusted net profit / average shareholders funds Gross cashflow = adjusted net profit + depreciation *equivalent fully paid ordinary weighted average number of shares</p> <p>All Reported numbers for Australian/NZ listed stocks are modelled under IFRS (International Financial Reporting Standards).</p>				
Recommendation proportions – For quarter ending 31 December 2008						
	AU/NZ	Asia	RSA	USA	CA	EUR
Outperform	38.55%	50.61%	64.52%	53.13%	65.55%	43.00%
Neutral	41.82%	15.92%	25.81%	40.63%	27.73%	48.00%
Underperform	19.64%	33.47%	9.68%	6.25%	6.72%	9.00%

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