

TAIWAN

MediaTek Inc.

31 October 2008

2454 TT **Outperform**

Stock price as of 29 Oct 08	NT\$	295.00
12-month target	NT\$	500.00
Upside/downside	%	+79.9
Valuation	NT\$	500.00
- PER		

GICS sector	semiconductors & semiconductor equipment
Market cap	NT\$m 298,336
30-day avg turnover	NT\$m 2,132.3
Market cap	US\$m 8,916
Number shares on issue	m 1,073

Investment fundamentals

Year end 31 Dec		2007A	2008E	2009E	2010E
Total revenue	bn	80.4	95.0	104.4	117.6
Reported profit	bn	33.6	23.0	26.6	30.2
Profit bonus exp	bn	22.2	23.0	26.6	30.2
Bon exp/rep prof	%	33.9	0.0	0.0	0.0
Adjusted profit	bn	22.2	23.0	26.6	30.2
EPS rep	NT\$	32.64	21.45	24.79	28.15
EPS rep growth	%	45.7	-34.3	15.5	13.6
EPS bonus exp	NT\$	21.58	21.45	24.79	28.15
EPS bonus growth	%	40.9	-0.6	15.5	13.6
PE rep	x	8.5	13.0	11.2	9.9
PE bonus exp	x	12.9	13.0	11.2	9.9
Total DPS	NT\$	19.02	15.67	18.12	20.57
Total div yield	%	6.8	5.6	6.5	7.4
ROA	%	36.5	24.3	25.2	27.3
ROE	%	28.9	26.2	29.3	32.1
EV/EBITDA	x	7.0	9.6	8.8	7.8
Net debt/equity	%	-58.8	-49.6	-49.0	-49.0
Price/book	x	3.3	3.3	3.2	3.1

2454 TT rel Taix performance, & rec history



Source: Datastream, Macquarie Research, October 2008 (all figures in NT\$ unless noted)

Analyst

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Not that bad at all

Event

- MediaTek's (MTK) 3Q08 results and 4Q08 guidance are broadly in line with consensus and our expectation. We maintain our Outperform rating and TP of NT\$500.

Impact

- Well positioned to take advantage of the two long-term structural trends.** First, we believe MTK is likely to benefit from the current consolidation of the global handset chipset industry. Many IDMs are exiting or merging (Figs 1–2) to survive the highly competitive market. The recent plan by Freescale and TXN (merchant baseband) to sell off their handset IC business are good examples. MTK has been consistently gaining market share, and the company confirmed its SoC/ULC handset ICs will enter mass production in 1H09. This is to target a 30–40% CAGR market in 2007–2012, with a US\$5.2bn revenue opportunity in 2012 (Fig 4). Second, MTK is also one of a few IC vendors with two (TD-SCDMA and WCDMA) out of the three 3-G handset standard solutions. The former is already shipping and the latter is sampling out. Both are in addition to the complete solution MTK will launch for Blu-ray (BD) and CMMB mobile TV 4Q08.
- 4Q08 sales guidance** of a 9–16% QoQ decline and flat GM is broadly in line with consensus, and we do not rule out an upside possibility, factoring in the favourable NT\$/US\$. Indicated 15–20%+ YoY sales growth and flat GM are among the best of the major large-cap tech names in our Asian coverage. While consumer ICs (DVD players and DTVs) may show more weakness, handset IC shipments are expected to be better than the company average due to healthy demand in China and emerging markets. 3Q08 EPS of NT\$6.69 was 5% below our estimate, due largely to higher OPEX and inventory loss provision. GM of 54.3% (+0.5ppt) was in line with our street-high forecast. Worth noting, in our view, is that MTK has reduced its DOIs to 74 days at end-3Q08 (from 101/97 days at end-1Q/2Q08), better than our 80–85 day forecast (Fig 5).
- We also see a structural positive for MTK's earnings quality** for both the near term and long term. While the better sales mix (larger handset sales portion) and NT\$/US\$ may provide support for near-term GM, MTK's cost-down approaches are all on schedule, including the launch of SoC/ULC handset ICs and progressing into the 65nm process. The increasing of new products such as 3-G handset ICs and BD ICs will also add more fuel for GM improvement.

Earnings revision

- 2008–10E EPS broadly unchanged.

Price catalyst

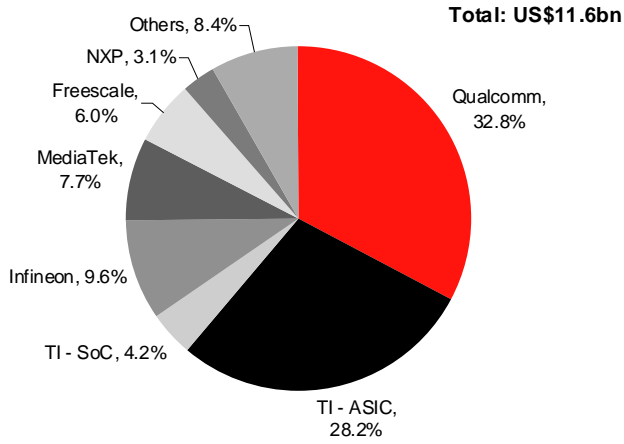
- 12-month price target: NT\$500.00 based on a PER methodology.
- Catalyst: Stable margin trend and ongoing market-share gain.

Action and recommendation

- On the broader scale of tech world, we believe MediaTek is one of the very few that has the ability to maintain solid profitability and withstand the poor macro outlook. We attribute this to its highly competitive product line-up, cost structure and its solid financials (US\$1.6bn net cash). Longer term, we see it continuing to benefit from the ongoing global handset consolidation and China 3G roll-out plan, as well as the new product cycle (such as BD and 3-G).

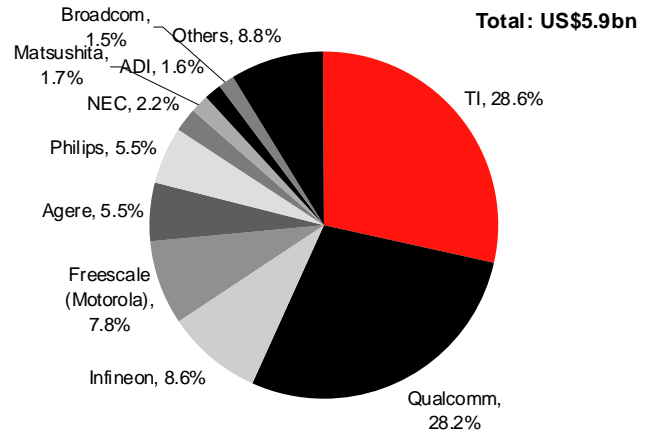
Please refer to the important disclosures and analyst certification on inside back cover of this document, or on our website www.macquarie.com.au/research/disclosures.

Fig 1 Handset baseband revenues shares, 2007



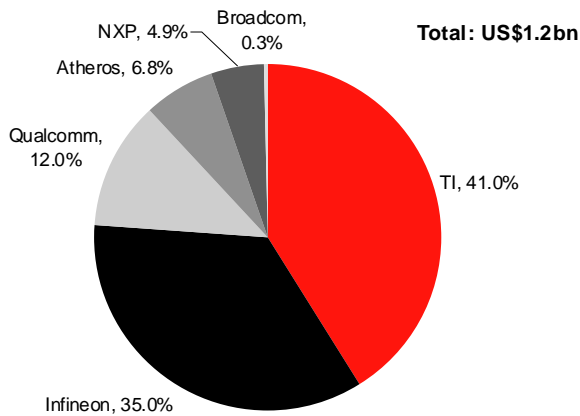
Source: Forward Concepts, Macquarie Research, October 2008

Fig 2 Handset baseband revenues shares, 2003



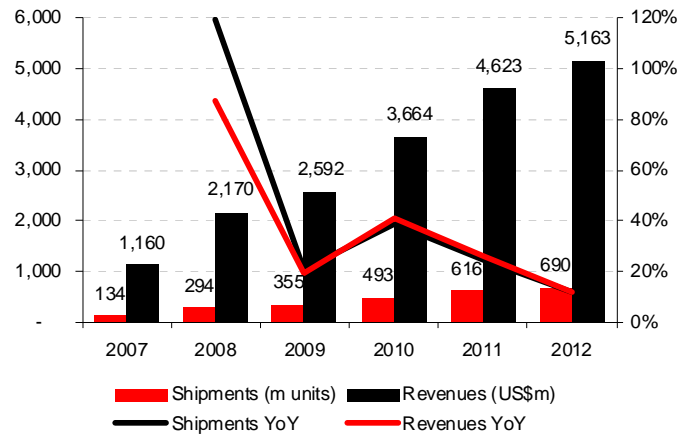
Source: IDC, Macquarie Research, October 2008

Fig 3 Handset BB/RF SoC revenue shares, 2007



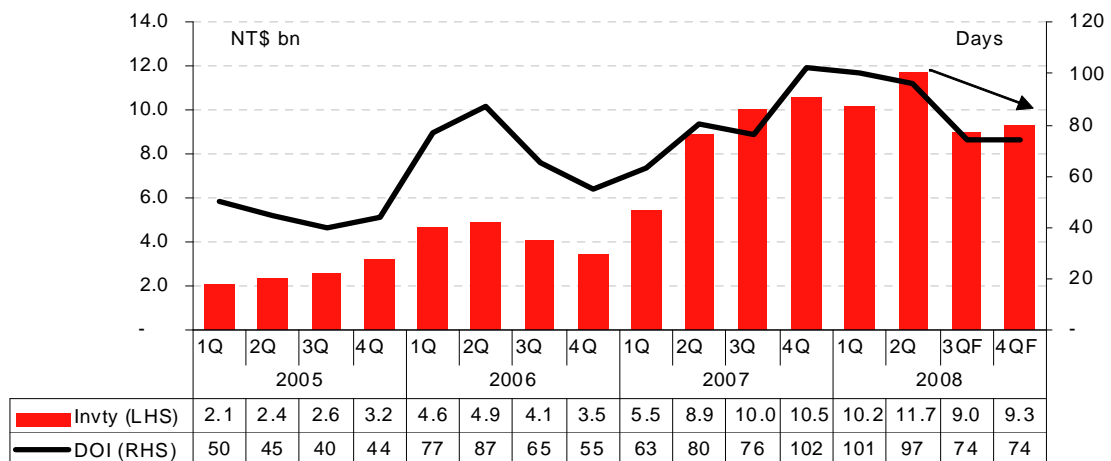
Source: Forward Concepts, Macquarie Research, October 2008

Fig 4 SoC/ULC market, 2007-2012



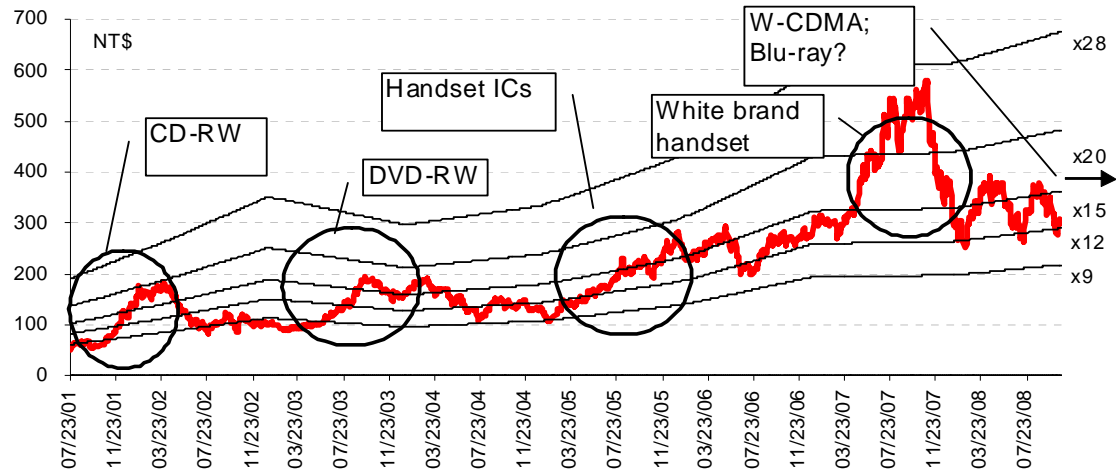
Source: Forward Concepts, Macquarie Research, October 2008

Fig 5 MTK's inventory level and DOI (days of inventory)



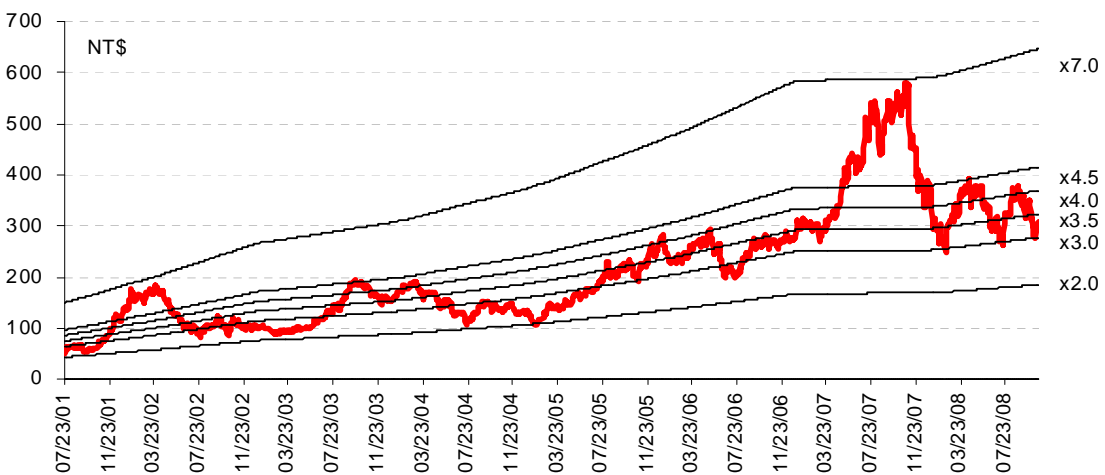
Source: Company data, Macquarie Research, October 2008

Fig 6 PER – bonus expensed



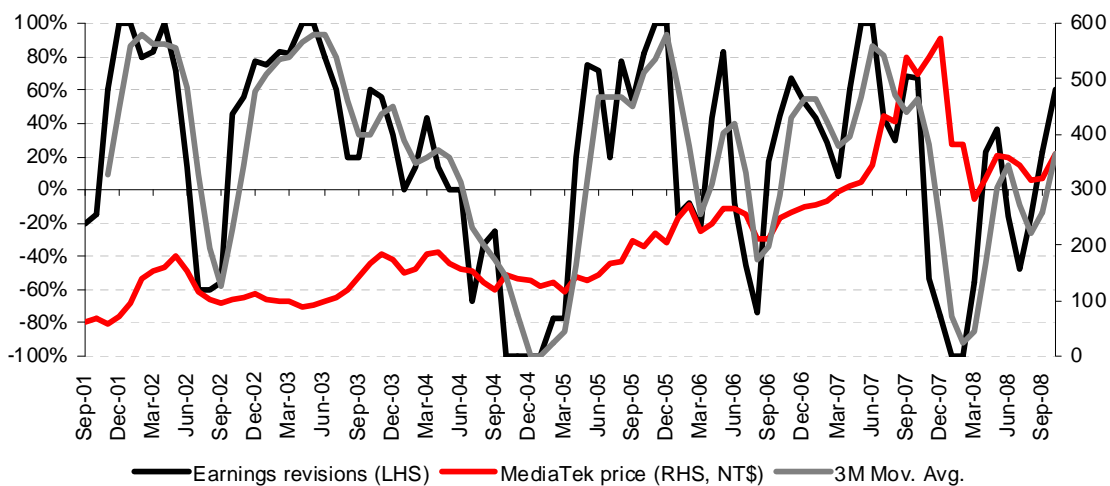
Source: TEJ, Macquarie Research, October 2008

Fig 7 MediaTek's P/BV



Source: TEJ, Macquarie Research, October 2008

Fig 8 MediaTek's stock price & earnings revision cycle



Source: Datastream, Macquarie Research, October 2008

Fig 9 MACQ's earnings model for MTK

Assumptions	1Q07A	2Q07A	3Q07A	4Q07A	1Q08A	2Q08A	3Q08A	4Q08E	1Q09E	2Q09E	3Q09E	4Q09E	2007A	2008E	2009E	2010E
Shipments (m)																
PC-OSDs	25.7	27.6	35.8	29.5	27.9	32.9	37.1	32.7	29.9	32.8	38.7	37.3	118.7	130.6	138.7	148.4
Consumer OSDs	13.9	17.7	22.3	17.7	15.8	18.9	20.0	17.1	14.9	16.4	19.4	17.4	71.6	71.8	68.2	69.7
Handsets - total	21.0	30.0	54.0	40.5	44.9	55.1	72.2	65.6	55.9	63.1	75.4	75.4	145.5	237.9	269.9	311.2
D-TV	1.7	2.5	4.8	5.4	5.2	5.9	6.3	5.4	5.0	5.7	6.8	6.6	14.3	22.8	24.2	28.3
Sales (%)																
PC-OSDs	26.3	23.0	20.2	20.6	19.9	19.5	17.6	17.1	18.4	18.6	19.5	19.6	22.1	18.4	19.1	18.9
Consumer OSDs	13.8	14.2	11.9	11.7	10.5	10.4	9.0	8.5	8.4	8.2	7.8	6.7	12.8	9.5	7.7	6.3
Handsets	51.3	51.3	55.4	54.3	52.7	54.0	57.4	58.7	56.8	56.9	56.7	58.0	53.5	56.0	57.1	59.0
Handsets - ADI	0.0	0.0	0.0	0.0	5.3	5.2	5.3	5.3	5.3	5.1	4.7	4.5	0.0	5.2	4.8	4.7
D-TV	8.6	11.2	11.4	12.7	10.6	9.1	8.3	7.7	8.0	8.0	7.7	7.2	11.2	8.8	7.7	7.3
Others	0.0	0.2	1.0	0.7	1.0	1.8	2.5	2.7	3.1	3.2	3.7	4.1	0.5	2.1	3.6	3.9
<i>Forex</i>	32.9	33.1	33.0	32.2	31.5	30.5	31.7	32.8	32.5	32.5	32.5	32.5	32.8	31.6	32.5	32.5
P&L (NT\$bn)																
Revenue	14.9	18.4	26.7	20.4	19.4	22.3	28.1	25.2	21.5	24.1	29.3	29.5	80.4	95.0	104.4	117.6
COGS	6.4	8.1	11.5	9.2	9.3	10.3	12.8	11.4	9.9	11.0	13.5	13.6	35.2	43.8	48.0	54.1
Gross profit	8.6	10.3	15.2	11.1	10.1	12.0	15.2	13.9	11.7	13.0	15.8	15.9	45.2	51.2	56.4	63.5
OPN expense	5.0	5.4	7.3	6.8	6.0	6.2	7.6	6.8	6.4	6.9	8.1	8.2	24.6	26.6	29.6	33.1
OPN profit	3.5	4.9	7.9	4.3	4.1	5.8	7.6	7.0	5.3	6.1	7.7	7.7	20.6	24.6	26.8	30.3
PBT	5.1	5.8	8.1	4.6	4.3	6.2	7.6	7.0	5.6	6.5	8.1	8.0	23.7	25.0	28.3	32.3
Net income	5.2	5.0	7.8	4.2	4.0	5.1	7.2	6.7	5.4	5.8	7.7	7.7	22.2	23.0	26.6	30.2
EPS (NT\$)	5.03	4.88	7.61	4.06	3.76	4.75	6.69	6.26	5.03	5.37	7.21	7.18	21.58	21.45	24.79	28.15
Profitability																
Gross margin	57.3%	55.9%	57.1%	54.7%	52.1%	53.8%	54.3%	55.0%	54.2%	54.1%	54.0%	53.8%	56.2%	53.9%	54.0%	54.0%
OP margin	23.5%	26.6%	29.5%	21.2%	21.2%	26.1%	27.2%	27.9%	24.6%	25.5%	26.3%	26.1%	25.6%	25.9%	25.7%	25.8%
PBT margin	34.4%	31.5%	30.4%	22.7%	22.1%	27.6%	27.0%	27.7%	26.2%	27.1%	27.6%	27.3%	29.4%	26.3%	27.1%	27.5%
Net margin	34.7%	27.3%	29.4%	20.5%	20.8%	22.8%	25.6%	26.6%	25.1%	23.9%	26.5%	26.1%	27.6%	24.2%	25.5%	25.7%
QoQ chg.																
Revenue	-1%	23%	45%	-24%	-5%	15%	26%	-10%	-15%	12%	22%	1%	-	-	-	-
Gross profit	-2%	20%	48%	-27%	-9%	19%	27%	-9%	-16%	12%	21%	1%	-	-	-	-
OP profit	-17%	40%	61%	-45%	-4.8%	42%	31%	-8%	-25%	16%	26%	0%	-	-	-	-
PBT profit	12%	13%	40%	-43%	-7.2%	44%	23%	-8%	-19%	16%	24%	0%	-	-	-	-
Net profit	13%	-3%	56%	-47%	-3.5%	26%	41%	-7%	-20%	7%	34%	0%	-	-	-	-
YoY chg.																
Revenue	35%	57%	77%	35%	30%	21%	5%	24%	11%	8%	4%	17%	52%	18%	10%	13%
Gross profit	32%	52%	75%	28%	18%	17%	0%	25%	16%	9%	4%	14%	47%	13%	10%	13%
OP profit	1%	24%	70%	2%	17.2%	19%	-3%	63%	29%	5%	1%	9%	26%	19%	9%	13%
PBT profit	51%	38%	62%	0%	-16.6%	6%	-7%	51%	32%	6%	7%	15%	37%	6%	13%	14%
Net profit	47%	73%	76%	-9%	-22.2%	1%	-8%	61%	34%	13%	8%	15%	44%	4%	16%	14%

Source: Company data, Macquarie Research, September 2008; All figures are under bonus-expensed basis

MediaTek Inc. (2454 TT, Outperform, Target price: NT\$500.00)

Quarterly Results					Profit & Loss						
		3Q/08A	4Q/08E	1Q/09E	2Q/09E		2007A	2008E	2009E	2010E	
Revenue	m	28,052	25,247	21,535	24,070	Revenue	m	80,409	94,995	104,362	117,614
Gross Profit	m	15,219	13,880	11,672	13,031	Gross Profit	m	45,222	51,210	56,383	63,472
Operating Expenses	m	-7,580	-6,844	-6,381	-6,898	Operating Expenses	m	-13,230	-26,598	-29,564	-33,128
Operating Income	m	7,639	7,035	5,291	6,134	Operating Income	m	31,992	24,612	26,818	30,345
Net Non-operating income	m	-72	-50	345	385	Net Non-operating income	m	3,068	384	1,471	1,990
Pre-Tax Income	m	7,567	6,985	5,636	6,519	Pre-Tax Income	m	35,060	24,996	28,290	32,335
Tax Expense	m	-385	-270	-241	-758	Tax Expense	m	-1,467	-1,973	-1,690	-2,122
Exceptionals	m	0	0	0	0	Exceptionals	m	0	0	0	0
Minority Interests	m	0	0	0	0	Minority Interests	m	0	0	0	0
Reported Earnings	m	7,182	6,714	5,395	5,761	Reported Earnings	m	33,593	23,023	26,599	30,213
Reported Earnings (bonus exp)	m	7,182	6,714	5,395	5,761	Reported Earnings (bonus exp)	m	22,214	23,023	26,599	30,213
Bonus exp / Reported Earnings	%	0.0	0.0	0.0	0.0	Bonus exp / Reported Earnings	%	33.9	0.0	0.0	0.0
Adjusted Earnings	m	7,182	6,714	5,395	5,761	Adjusted Earnings	m	22,214	23,023	26,599	30,213
EBITDA	m	8,228	7,515	5,894	6,712	EBITDA	m	33,879	26,740	29,145	32,981
EPS (rep)	NT\$	6.69	6.26	5.03	5.37	EPS (rep)	NT\$	32.64	21.45	24.79	28.15
EPS pcp growth (rep)	%	-41.9	2.0	33.8	13.0	EPS growth (rep)	%	45.7	-34.3	15.5	13.6
EPS (rep bonus exp)	NT\$	6.69	6.26	5.03	5.37	EPS (rep bonus exp)	NT\$	21.58	21.45	24.79	28.15
EPS pcp growth (rep bonus exp)	%	-12.1	54.2	33.8	13.0	EPS growth (rep bonus exp)	%	40.9	-0.6	15.5	13.6
EPS (adj)	NT\$	6.69	6.26	5.03	5.37	EPS (adj)	NT\$	21.58	21.45	24.79	28.15
EPS pcp growth (adj)	%	-12.1	54.2	33.8	13.0	EPS growth (adj)	%	40.9	-0.6	15.5	13.6
Revenue pcp growth	%	5.1	23.9	11.1	7.8	PE (rep)	x	8.5	13.0	11.2	9.9
Operating Income pcp growth	%	-35.8	9.0	28.7	5.3	PE (rep bonus adj)	x	12.9	13.0	11.2	9.9
Reported Earnings pcp growth	%	-39.4	6.3	33.8	13.0	PE (adj)	x	12.9	13.0	11.2	9.9
Gross Profit Margin	%	54.3	55.0	54.2	54.1	Total DPS	NT\$	19.02	15.67	18.12	20.57
Operating Income Margin	%	27.2	27.9	24.6	25.5	Total Div Yield	%	6.8	5.6	6.5	7.4
Reported Earnings Margin	%	25.6	26.6	25.1	23.9	Weighted Average Shares	m	1,029	1,073	1,073	1,073
EBITDA Margin	%	29.3	29.8	27.4	27.9	Period End Shares	m	1,029	1,073	1,073	1,073
Profit and Loss Ratios		2007A	2008E	2009E	2010E	Cashflow Analysis		2007A	2008E	2009E	2010E
Revenue Growth	%	51.7	18.1	9.9	12.7	Reported Earnings	m	33,593	23,023	26,599	30,213
Gross Profit Growth	%	47.2	13.2	10.1	12.6	Depreciation & Amortisation	m	1,888	2,128	2,326	2,636
Operating Income Growth	%	36.5	-23.1	9.0	13.1	Chgs in Working Cap	m	-7,158	-802	-1,924	-908
Reported Earnings Growth	%	48.8	-31.5	15.5	13.6	Other	m	-1,369	5,857	1,275	408
EBITDA Growth	%	36.2	-21.1	9.0	13.2	Operating Cashflow	m	26,954	30,205	28,277	32,349
Gross Profit Margin	%	56.2	53.9	54.0	54.0	Acquisitions	m	-3,798	-1,563	-2,815	-3,315
Operating Income Margin	%	39.8	25.9	25.7	25.8	Capex	m	-1,612	-838	-944	-1,062
Reported Earnings Margin	%	41.8	24.2	25.5	25.7	Asset Sales	m	0	0	0	0
EBITDA Margin	%	42.1	28.1	27.9	28.0	Other	m	-3,541	-11,667	0	0
Payout Ratio	%	88.1	73.1	73.1	73.1	Investing Cashflow	m	-8,951	-14,068	-3,759	-4,377
EV/EBITDA	x	7.0	9.6	8.8	7.8	Dividend (Ordinary)	m	-14,525	-19,776	-16,820	-19,448
EV/EBIT	x	7.3	10.4	9.5	8.4	Equity Raised	m	0	0	0	0
Balance Sheet Ratios						Debt Movements	m	0	0	0	0
ROE	%	28.9	26.2	29.3	32.1	Other	m	187	-3,146	-8,887	-8,893
ROA	%	36.5	24.3	25.2	27.3	Financing Cashflow	m	-14,338	-22,922	-25,707	-28,342
ROIC	%	148.2	63.9	56.0	60.3	Net Chg in Cash/Debt	m	3,750	-6,228	874	1,694
Net Debt/Equity	%	-58.8	-49.6	-49.0	-49.0	Free Cashflow	m	25,342	29,367	27,333	31,287
Interest Cover	x	nmf	nmf	nmf	nmf	FCF per Share	NT\$	24.62	27.36	25.47	29.15
Price/Book	x	3.3	3.3	3.2	3.1	P/FCF	x	11.3	10.2	10.9	9.5
Book Value per Share	NT\$	83.6	83.3	86.0	89.3	Balance Sheet		2007A	2008E	2009E	2010E
						Cash	m	50,588	44,360	45,234	46,928
						Receivables	m	7,192	8,757	10,232	10,961
						Inventories	m	10,540	9,266	11,102	11,830
						Investments	m	9,918	9,320	11,328	13,770
						Fixed Assets	m	6,680	7,519	8,462	9,524
						Intangibles	m	1,723	12,247	8,632	5,041
						Other Assets	m	12,080	12,292	13,788	15,650
						Total Assets	m	98,721	103,761	108,777	113,704
						Payables	m	7,508	6,998	8,384	8,933
						Short Term Debt	m	0	0	0	0
						Long Term Debt	m	0	0	0	0
						Provisions	m	0	0	0	0
						Other Liabilities	m	5,164	7,389	8,107	8,905
						Total Liabilities	m	12,672	14,386	16,491	17,838
						Total S/H Equity	m	86,049	89,375	92,286	95,866
						Total Liab & S/H Funds	m	98,721	103,761	108,777	113,704

All figures in NT\$ unless noted.
Source: Macquarie Research, October 2008

Important disclosures:

Recommendation definitions	Volatility index definition*	Financial definitions
<p>Macquarie - Australia/New Zealand Outperform – return >5% in excess of benchmark return (>2.5% in excess for listed property trusts) Neutral – return within 5% of benchmark return (within 2.5% for listed property trusts) Underperform – return >5% below benchmark return (>2.5% below for listed property trusts)</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 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>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.</p> <p>* Applicable to Australian/NZ/Canada stocks only</p>	<p>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 / epowa* 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 30 September 2008

	AU/NZ	Asia	RSA	USA	CA	EUR
Outperform	43.17%	61.57%	63.08%	53.60%	71.54%	43.00%
Neutral	41.37%	16.43%	30.77%	37.60%	24.61%	48.00%
Underperform	15.47%	22.00%	6.15%	8.80%	3.85%	9.00%

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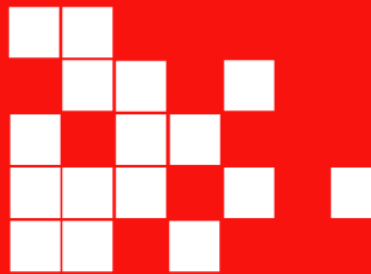
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