

Morgan Stanley Taiwan Limited+

Frank A.Y. Wang

Frank.Ay.Wang@morganstanley.com
+886 2 2730 2869

Jerry Su

Jerry.Su@morganstanley.com
+886 2 2730 2860

February 6, 2009

Stock Rating
Equal-weight

Industry View
Cautious

Winbond Electronics

Time to Pick a Side

Quick Comment – Conclusion: Since the 2000 tech bubble burst, Winbond has been in loss making with the exception of 2004/06 industry upturn. 2009 semiconductor industry decline will be the worst ever in history, dwarfing the 31% Y/Y decline in 2001 given global recession. Winbond's 12" fab has the smallest scale in Taiwan but it's ironically the busiest - producing all kinds of memories at all geometries - commodity, specialty, mobile, NOR, etc; 90/80/75/65 nm, etc; trench, buried wordline, etc. As fab capacity is now in excess, Winbond should restructure to become a fabless memory maker that creates shareholder value on product design not opportunistic fab return of commodity cycle. In the deepest ever DRAM downturn, we believe management needs to devise the right exit strategy before the situation becomes worse. Management is now expressing openness to 1) DRAM consolidation and 2) fab spin offs to become fabless design house - we view this as a step in the right direction.

Operational Insights: Management's interim strategy – 1) converting commodity DRAM production to 65 nm buried wordline (Qimonda) for ~15K wafers/mth (~50% of 12" fab) by 4Q09. Winbond will return to sell commodity DRAMs on Qimonda's exit. Given sunk costs, Winbond needs to produce commodity DRAM as fab fillers until its own developed specialty/mobile/flash takes the super-majority (could be years away). 2) converting its outsourced 8" foundry wafers (Vanguard) to its own 12" fab by end 2009 to improve margin. 3) expanding its low end flash presence using leading edge 90 nm technology in 12" fab (competitors are Macronix, SST, Eon, etc) by 4Q09. Winbond aims to gain share in the more commoditized PC peripheral use serial flash market using its cutting edge capacity.

What's New? Winbond reported 4Q08 LPS of (NT\$0.92) or net loss of (NT\$3.4) bn, more than our loss estimate given higher operating expense on NT\$560 mn Qimonda AR write down (Qimonda's petitioned for insolvency proceedings on January 23). Winbond stops wafer shipments to Qimonda on January 23.

Key Ratios and Statistics

Reuters: 2344.TW Bloomberg: 2344 TT

Taiwan DRAM

Price target	NT\$3.00
Upside to price target (%)	(5)
Shr price, close (Feb 4, 2009)	NT\$3.15
52-Week Range	NT\$9.70-1.94
Sh out, dil, curr (mn)	4,004
Mkt cap, curr (mn)	NT\$12,611
Avg daily trading volume (mn)	NT\$71

Fiscal Year ending	12/08	12/09e	12/10e	12/11e
ModelWare EPS (NT\$)	(1.84)	(2.67)	(1.36)	(0.52)
EPS, basic (NT\$)*	(1.98)	(2.87)	(1.46)	(0.56)
Consensus EPS (NT\$)§	(1.54)	(1.42)	(1.36)	-
Revenue, net (NT\$ mn)	21,828	11,592	14,618	15,308
EBITDA (NT\$ mn)	2,847	(1,511)	4,084	5,549
ModelWare net inc (NT\$ mn)	(7,365)	(10,679)	(5,436)	(2,075)
P/E	NM	NM	NM	NM
P/BV	0.3	0.4	0.5	0.6
RNOA (%)	(7.9)	(13.8)	(7.4)	(2.5)
ROE (%)	(14.5)	(27.0)	(18.9)	(8.9)
Div yld (%)	0.0	0.0	0.0	0.0
FCF yld ratio (%)	(101.8)	(55.5)	(50.8)	(43.6)
Leverage (EOP) (%)	42.3	80.5	123.8	158.2

Unless otherwise noted, all metrics are based on Morgan Stanley ModelWare framework (please see explanation later in this note).

§ = Consensus data is provided by FactSet Estimates.

* = GAAP or approximated based on GAAP

e = Morgan Stanley Research estimates

Morgan Stanley does and seeks to do business with companies covered in Morgan Stanley Research. As a result, investors should be aware that the firm may have a conflict of interest that could affect the objectivity of Morgan Stanley Research. Investors should consider Morgan Stanley Research as only a single factor in making their investment decision.

For analyst certification and other important disclosures, refer to the Disclosure Section, located at the end of this report.

+ = Analysts employed by non-U.S. affiliates are not registered with FINRA, may not be associated persons of the member and may not be subject to NASD/NYSE restrictions on communications with a subject company, public appearances and trading securities held by a research analyst account.

Value Added Data: 1. 4Q08 sales mix – commodity 34%, specialty 32%, mobile 18%, flash 13%, others 3%. 2. 1Q09 wafers allocation – commodity 59%, specialty 18%, mobile 16%, flash 7%. 3. 1Q09 memory geometry breakdown – 2% 65 nm, 44% 75 nm, 13% 80 nm, 14% 90 nm, 16% 110 nm, 11% 130 nm. **Guidance:** 1) 2009 memory bits growth 9% Y/Y (10% growth in 2008). 2) 2009 capex NT\$3-4 bn (2008 capex NT\$14.1 bn). 3) Winbond will shut down its internal 8" wafer testing facility and move wafer probing to Taichung facility and outsource related final testing.

Implications/risks: 1. Winbond is hopeful on Qimonda's restructuring and confident on 46 nm buried word line technology production merits. In the short term, given Qimonda no longer buys wafers (~16K wafers/mth or 50% fab) from Winbond's 12" fab foundry, Winbond is forced to sell the commodity DRAM wafers directly as fab fillers. This will worsen Winbond's loss as Qimonda no longer shares the loss burden (profits/loss sharing agreement on commodity foundry wafers). It will take time for Winbond to resign selling contract with Qimonda and re-establish commodity selling model that will lower Winbond's 1Q09 revenue. 2. Winbond's full transition of 65 nm buried wordline by 4Q09 may be optimistic as the company was late on transition in the past and producing buried wordline technology is a new experience compared to the traditional deep trench process.

NOR flash focus: Winbond plans for 90 nm NOR flash mass production in 2Q09; for 50% of its serial flash by 4Q09 or ~5% (or 2K wafers/mth) 12" fab capacity. 90 nm will reduce cost by 40% vs 130 nm. Winbond plans for 256 mb serial NOR flash on 58 nm by end 2010. Winbond targets marketshare gain in low density PC peripheral market but will stay away from parallel NOR flash for handsets. Winbond has a niche strategy of incubating low density NOR flash market by using cutting edge 12" fab. But the niche NOR flash business won't be sufficient for its 12" fab; it still needs commodity DRAM wafers as process driver and fab fillers. Winbond should spin off its DRAM fab and becoming a fabless memory maker focusing on product design expertise.

Spansion related impacts: 1. Spansion related risk is minimal at ~5% revenue. 2. Winbond focuses in lower end serial NOR flash for PC peripherals where Spansion focuses more on higher end parallel NOR flash in handsets.

Future technology roadmap: 1. If Qimonda successfully restructures and exits commodity DRAM, Winbond can still foundry graphics/specialty memories for Qimonda through 46 nm buried wordline technology as the sole production partner for Qimonda. 2. Post Qimonda's complete exit, Winbond will

have to decide Micron or Elpida as new process partner beyond 2012 for its specialty/mobile process drivers.

Exhibit 1

4Q08: Actual Results vs. Morgan Stanley Estimates

(NT\$m)	4Q08		Variance	Q/Q	Y/Y
	Actual	MS			
Total Revenue	3,778	3,573	6%	-25%	-45%
Cost of goods sold	4,610	5,459	-16%	-18%	-41%
Depreciation	1,858	1,886	-2%	-15%	-31%
Gross Profit	(832)	(1,886)	nm	nm	nm
Operating Expense	1,078	620	74%	68%	-42%
R&D	682	450	52%	69%	-50%
SG&A	396	170	133%	69%	-20%
Operating Profit	(1,910)	(2,506)	nm	nm	nm
Non Operating Income (Loss)	(1,528)	(538)	nm	nm	nm
Pre-Tax Profit	(3,438)	(3,044)	nm	nm	nm
Net Profit	(3,438)	(3,044)	nm	nm	nm
EPS	(0.92)	(0.82)	nm	nm	nm
Shares (mn)	3,727	3,727	0%	0%	-4%
Gross Margin	-22.0%	-52.8%	3080bp	-1100bp	-670bp
Operating Margin	-50.6%	-70.1%	1960bp	-2690bp	-810bp
Net Margin	-91.0%	-85.2%	-580bp	-7340bp	-3030bp
FX (NT/\$)	33.5	33.5	0.0%	8.1%	3.1%

Source: Company data, Morgan Stanley Research.

Company Description

Winbond Electronics designs, manufactures, and markets integrated circuits (ICs) for consumer, communication, and computing applications. Winbond is the largest semiconductor integrated design manufacturer (IDM) in Taiwan.

Taiwan DRAM

Industry View: Cautious

MSCI Country: Taiwan

Asia Strategist's Recommended Weight: 11.3%
MSCI Asia/Pac All Country Ex Jp Weight: 11.4%

February 6, 2009
Winbond Electronics

Exhibit 2

Winbond: Quarterly Income Statement (Reported)

(NT\$m)	1Q2008	2Q2008	3Q2008	4Q2008	1Q2009E	2Q2009E	3Q2009E	4Q2009E	1Q10E	2Q10E	3Q10E	4Q10E	2008	2009E	2010E	2011E
Sales	6,569	6,416	5,066	3,778	2,561	2,741	3,195	3,094	3,831	3,554	3,866	3,367	21,828	11,592	14,618	15,308
COGS	7,430	6,245	5,624	4,610	5,252	4,938	4,798	4,520	4,382	4,421	4,376	4,145	23,909	19,507	17,324	15,375
Depreciation	1,929	1,958	2,177	1,858	1,922	1,922	1,922	1,890	1,892	1,969	2,056	2,125	7,922	7,657	8,042	6,072
Non Depreciation Cost	5,500	4,287	3,448	2,752	3,330	3,015	2,876	2,630	2,490	2,453	2,320	2,020	15,988	11,851	9,282	9,303
Gross Profit	-861	171	-558	-832	-2,690	-2,197	-1,602	-1,426	-551	-867	-510	-778	-2,081	-7,916	-2,707	-67
Total Operating Exp	1,160	1,062	641	1,078	620	620	620	620	620	620	620	620	3,940	2,480	2,480	1,684
R&D	808	680	403	682	450	450	450	450	450	450	450	450	2,573	1,800	1,800	1,225
SG&A	361	386	234	396	170	170	170	170	170	170	170	170	1,376	680	680	459
Other Operating expenses	-9	-4	5	0	0	0	0	0	0	0	0	0	-8	0	0	0
EBIT	-2,021	-891	-1,199	-1,910	-3,310	-2,817	-2,222	-2,046	-1,171	-1,487	-1,130	-1,398	-6,021	-10,396	-5,187	-1,750
Non-Oper. Income (Loss)	262	-387	308	-1,528	-95	-89	-33	-67	-96	-70	-27	-56	-1,344	-284	-250	-325
Net Interest	(215)	(122)	107	(175)	(183)	(189)	(198)	(207)	(214)	(223)	(232)	(241)	(404)	(777)	(911)	(1,055)
Net Investment Income/(Loss)	(519)	(322)	453	(10)	(50)	(50)	(55)	(60)	(34)	(34)	(35)	(35)	(399)	(215)	(138)	(140)
Other Non-Op. Income/(Loss)	996	57	(252)	(1,343)	138	150	220	200	152	188	240	220	(541)	708	800	870
Pretax Income	(1,759)	(1,278)	(891)	(3,438)	(3,405)	(2,906)	(2,256)	(2,113)	(1,268)	(1,557)	(1,157)	(1,454)	(7,365)	(10,679)	(5,436)	(2,075)
Income Taxes Exp. /(Gains)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Extraordinary item	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Net Income after Extraord.	(1,759)	(1,278)	(891)	(3,438)	(3,405)	(2,906)	(2,256)	(2,113)	(1,268)	(1,557)	(1,157)	(1,454)	(7,365)	(10,679)	(5,436)	(2,075)
EBITDA	140	1,299	1,209	180	(1,156)	(662)	(68)	76	953	714	1,158	959	2,828	(1,811)	3,784	5,249
Reported EPS	(0.46)	(0.34)	(0.24)	(0.92)	(0.91)	(0.78)	(0.61)	(0.57)	(0.34)	(0.42)	(0.31)	(0.39)	(1.98)	(2.87)	(1.46)	(0.56)
Weighted Average Shares	3,791	3,777	3,735	3,727	3,727	3,727	3,727	3,727	3,727	3,727	3,727	3,727	3,727	3,727	3,727	3,727
Fully Diluted EPS	(0.43)	(0.32)	(0.22)	(0.86)	(0.85)	(0.73)	(0.56)	(0.53)	(0.32)	(0.39)	(0.29)	(0.36)	(1.84)	(2.86)	(1.46)	(0.52)
Fully Diluted Shares	4,067	4,053	4,011	4,004	4,004	4,004	4,004	4,004	4,004	4,004	4,004	4,004	4,004	3,728	3,728	4,004
Margin(%)																
EBITDA Margin	2.1%	20.2%	23.9%	4.8%	-45.1%	-24.2%	-2.1%	2.5%	0.0%	0.0%	0.0%	0.0%	13.0%	-15.6%	25.9%	34.3%
Gross Margin	-13.1%	2.7%	-11.0%	-22.0%	-105.0%	-80.1%	-50.2%	-46.1%	-14.4%	-24.4%	-13.2%	-23.1%	-9.5%	-68.3%	-18.5%	-0.4%
Operating Margin	-30.8%	-13.9%	-23.7%	-50.6%	-129.2%	-102.7%	-69.6%	-66.1%	-30.6%	-41.8%	-29.2%	-41.5%	-27.6%	-89.7%	-35.5%	-11.4%
Tax Rate	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Net Margin	-26.8%	-19.9%	-17.6%	-91.0%	-132.9%	-106.0%	-70.6%	-68.3%	-33.1%	-43.8%	-29.9%	-43.2%	-33.7%	-92.1%	-37.2%	-13.6%
QoQ(%)																
Sales QOQ	-4%	-2%	-21%	-25%	-32%	7%	17%	-3%	24%	-7%	9%	-13%				
COGS QOQ	-6%	-16%	-10%	-18%	14%	-6%	-3%	-6%	-3%	1%	-1%	-5%				
Gross Profit QOQ	nm	nm	nm	nm	nm	nm	nm	nm	nm	nm	nm	nm				
Operating Profit QOQ	nm	nm	nm	nm	nm	nm	nm	nm	nm	nm	nm	nm				
Net Profit QOQ	nm	nm	nm	nm	nm	nm	nm	nm	nm	nm	nm	nm				
YoY(%)																
Sales YOY	-31%	-12%	-41%	-45%	-61%	-57%	-37%	-18%	50%	30%	21%	9%	-32%	-47%	26%	5%
COGS YOY	2%	-11%	-29%	-41%	-29%	-21%	-15%	-2%	-17%	-10%	-9%	-8%	-21%	-18%	-11%	-11%
Gross Profit YOY	nm	-19%	nm	nm	nm	nm	nm	nm	nm	nm	nm	nm	nm	nm	nm	nm
Operating Profit YOY	nm	nm	nm	nm	nm	nm	nm	nm	nm	nm	nm	nm	nm	nm	nm	nm
Net Profit YOY	nm	nm	nm	nm	nm	nm	nm	nm	nm	nm	nm	nm	nm	nm	nm	nm

E=Morgan Stanley Research estimates
Source: Company data, Morgan Stanley Research

February 6, 2009
Winbond Electronics

Exhibit 3

Winbond: Quarterly Income Statement (Reported- Including Logic Business)

(NT\$m)	1Q2008	2Q2008	3Q2008	4Q2008	1Q2009E	2Q2009E	3Q2009E	4Q2009E	1Q10E	2Q10E	3Q10E	4Q10E	2008	2009E	2010E	2011E
Sales	6,569	6,416	7,066	5,578	4,535	4,885	5,395	5,094	6,004	5,898	6,266	5,567	25,628	19,909	23,736	25,226
COGS	7,430	6,245	6,824	5,690	6,495	6,289	6,118	5,720	5,751	5,875	5,816	5,465	26,189	24,621	22,907	21,447
Depreciation	1,929	1,958	2,177	1,858	1,922	1,922	1,922	1,890	1,892	1,969	2,056	2,125	7,922	7,657	8,042	6,072
Non Depreciation Cost	5,500	4,287	4,648	3,832	4,573	4,366	4,196	3,830	3,859	3,906	3,760	3,340	18,268	16,965	14,865	15,376
Gross Profit	-861	171	242	-112	-1,960	-1,403	-722	-626	253	24	450	102	-561	-4,712	828	3,778
Total Operating Exp	1,160	1,062	1,241	1,618	1,212	1,263	1,280	1,220	1,272	1,323	1,340	1,280	5,080	4,975	5,215	4,659
R&D	808	680	763	1,006	805	836	846	810	841	872	882	846	3,257	3,297	3,441	3,010
SG&A	361	386	474	612	407	427	434	410	431	451	458	434	1,832	1,678	1,774	1,649
Other Operating expenses	-9	-4	5	0	0	0	0	0	0	0	0	0	-8	0	0	0
EBIT	-2,021	-891	-999	-1,730	-3,172	-2,666	-2,002	-1,846	-1,019	-1,300	-890	-1,178	-5,641	-9,687	-4,387	-881
Non-Oper. Income (Loss)	262	-387	108	-1,708	-233	-239	-253	-267	-248	-257	-267	-276	-1,724	-992	-1,049	-1,195
Net Interest	(215)	(122)	107	(175)	(183)	(189)	(198)	(207)	(214)	(223)	(232)	(241)	(404)	(777)	(911)	(1,055)
Net Investment Income/(Loss)	(519)	(322)	453	(10)	(50)	(50)	(55)	(60)	(34)	(34)	(35)	(35)	(399)	(215)	(138)	(140)
Other Non-Op. Income/(Loss)	996	57	(452)	(1,523)	(0)	(0)	(0)	(0)	0	0	0	0	(921)	(0)	0	0
Pretax Income	(1,759)	(1,278)	(891)	(3,438)	(3,405)	(2,906)	(2,256)	(2,113)	(1,268)	(1,557)	(1,157)	(1,454)	(7,365)	(10,679)	(5,436)	(2,075)
Income Taxes Exp. /(Gains)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Extraordinary item	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Net Income after Extraord.	(1,759)	(1,278)	(891)	(3,438)	(3,405)	(2,906)	(2,256)	(2,113)	(1,268)	(1,557)	(1,157)	(1,454)	(7,365)	(10,679)	(5,436)	(2,075)
EBITDA	140	1,299	1,284	255	(1,081)	(587)	7	151	1,028	789	1,233	1,034	3,128	(1,511)	4,084	5,549
Reported EPS	(0.46)	(0.34)	(0.24)	(0.92)	(0.91)	(0.78)	(0.61)	(0.57)	(0.34)	(0.42)	(0.31)	(0.39)	(1.98)	(2.87)	(1.46)	(0.56)
Weighted Average Shares	3,791	3,777	3,735	3,727	3,727	3,727	3,727	3,727	3,727	3,727	3,727	3,727	3,727	3,727	3,727	3,727
Fully Diluted EPS	(0.43)	(0.32)	(0.24)	(0.92)	(0.91)	(0.78)	(0.61)	(0.57)	(0.34)	(0.42)	(0.31)	(0.39)	(1.98)	(2.87)	(1.46)	(0.56)
Fully Diluted Shares	4,067	4,053	3,735	3,727	3,727	3,727	3,727	3,727	3,727	3,727	3,727	3,727	3,727	3,727	3,727	3,727
Margin(%)																
EBITDA Margin	2.1%	20.2%	21.0%	7.8%	-20.8%	-8.9%	4.2%	6.9%	19.7%	16.6%	23.5%	22.5%	13.7%	-4.0%	20.6%	25.4%
Gross Margin	-13.1%	2.7%	3.4%	-2.0%	-43.2%	-28.7%	-13.4%	-12.3%	4.2%	0.4%	7.2%	1.8%	-2.2%	-23.7%	3.5%	15.0%
Operating Margin	-30.8%	-13.9%	-14.1%	-31.0%	-69.9%	-54.6%	-37.1%	-36.2%	-17.0%	-22.0%	-14.2%	-21.2%	-22.0%	-48.7%	-18.5%	-3.5%
Tax Rate	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Net Margin	-26.8%	-19.9%	-12.6%	-61.6%	-75.1%	-59.5%	-41.8%	-41.5%	-21.1%	-26.4%	-18.5%	-26.1%	-28.7%	-53.6%	-22.9%	-8.2%
QoQ(%)																
Sales QOQ	-4%	-2%	10%	-21%	-19%	8%	10%	-6%	18%	-2%	6%	-11%				
COGS QOQ	-6%	-16%	9%	-17%	14%	-3%	-3%	-6%	1%	2%	-1%	-6%				
Gross Profit QOQ	nm	nm	42%	nm	nm	nm	nm	nm	nm	-91%	1802%	-77%				
Operating Profit QOQ	nm	nm	nm	nm	nm	nm	nm	nm	nm	nm	nm	nm				
Net Profit QOQ	nm	nm	nm	nm	nm	nm	nm	nm	nm	nm	nm	nm				
YoY(%)																
Sales YOY	-31%	-12%	-17%	-18%	-31%	-24%	-24%	-9%	32%	21%	16%	9%	-20%	-22%	19%	6%
COGS YOY	2%	-11%	-14%	-28%	-13%	1%	-10%	1%	-11%	-7%	-5%	-4%	-13%	-6%	-7%	-6%
Gross Profit YOY	nm	-19%	-60%	nm	nm	nm	nm	nm	nm	nm	nm	nm	nm	nm	nm	356%
Operating Profit YOY	nm	nm	nm	nm	nm	nm	nm	nm	nm	nm	nm	nm	nm	nm	nm	nm
Net Profit YOY	nm	nm	nm	nm	nm	nm	nm	nm	nm	nm	nm	nm	nm	nm	nm	nm

E=Morgan Stanley Research estimates
Source: Company data, Morgan Stanley Research



Morgan Stanley ModelWare is a proprietary analytic framework that helps clients uncover value, adjusting for distortions and ambiguities created by local accounting regulations. For example, ModelWare EPS adjusts for one-time events, capitalizes operating leases (where their use is significant), and converts inventory from LIFO costing to a FIFO basis. ModelWare also emphasizes the separation of operating performance of a company from its financing for a more complete view of how a company generates earnings.

Disclosure Section

The information and opinions in Morgan Stanley Research were prepared or are disseminated by Morgan Stanley Asia Limited (which accepts the responsibility for its contents) and/or Morgan Stanley Asia (Singapore) Pte. (Registration number 199206298Z, regulated by the Monetary Authority of Singapore, which accepts the responsibility for its contents), and/or Morgan Stanley Asia (Singapore) Securities Pte Ltd (Registration number 200008434H, regulated by the Monetary Authority of Singapore, which accepts the responsibility for its contents), and/or Morgan Stanley Taiwan Limited and/or Morgan Stanley & Co International plc, Seoul Branch, and/or Morgan Stanley Australia Limited (A.B.N. 67 003 734 576, holder of Australian financial services license No. 233742, which accepts responsibility for its contents), and/or Morgan Stanley India Company Private Limited and their affiliates (collectively, "Morgan Stanley").

For important disclosures, stock price charts and rating histories regarding companies that are the subject of this report, please see the Morgan Stanley Research Disclosure Website at www.morganstanley.com/researchdisclosures, or contact your investment representative or Morgan Stanley Research at 1585 Broadway, (Attention: Equity Research Management), New York, NY, 10036 USA.

Analyst Certification

The following analysts hereby certify that their views about the companies and their securities discussed in this report are accurately expressed and that they have not received and will not receive direct or indirect compensation in exchange for expressing specific recommendations or views in this report: Frank A.Y. Wang.

Unless otherwise stated, the individuals listed on the cover page of this report are research analysts.

Global Research Conflict Management Policy

Morgan Stanley Research has been published in accordance with our conflict management policy, which is available at www.morganstanley.com/institutional/research/conflictpolicies.

Important US Regulatory Disclosures on Subject Companies

In the next 3 months, Morgan Stanley expects to receive or intends to seek compensation for investment banking services from Inotera Memories, Inc., Nanya Technology Corp..

Within the last 12 months, Morgan Stanley has provided or is providing investment banking services to, or has an investment banking client relationship with, the following company: Inotera Memories, Inc., Nanya Technology Corp..

Within the last 12 months, Morgan Stanley has either provided or is providing non-investment banking, securities-related services to and/or in the past has entered into an agreement to provide services or has a client relationship with the following company: Powerchip, Winbond Electronics.

The research analysts, strategists, or research associates principally responsible for the preparation of Morgan Stanley Research have received compensation based upon various factors, including quality of research, investor client feedback, stock picking, competitive factors, firm revenues and overall investment banking revenues.

Certain disclosures listed above are also for compliance with applicable regulations in non-US jurisdictions.

STOCK RATINGS

Morgan Stanley uses a relative rating system using terms such as Overweight, Equal-weight, Not-Rated or Underweight (see definitions below). Morgan Stanley does not assign ratings of Buy, Hold or Sell to the stocks we cover. Overweight, Equal-weight, Not-Rated and Underweight are not the equivalent of buy, hold and sell. Investors should carefully read the definitions of all ratings used in Morgan Stanley Research. In addition, since Morgan Stanley Research contains more complete information concerning the analyst's views, investors should carefully read Morgan Stanley Research, in its entirety, and not infer the contents from the rating alone. In any case, ratings (or research) should not be used or relied upon as investment advice. An investor's decision to buy or sell a stock should depend on individual circumstances (such as the investor's existing holdings) and other considerations.

Global Stock Ratings Distribution

(as of January 31, 2009)

For disclosure purposes only (in accordance with NASD and NYSE requirements), we include the category headings of Buy, Hold, and Sell alongside our ratings of Overweight, Equal-weight, Not-Rated and Underweight. Morgan Stanley does not assign ratings of Buy, Hold or Sell to the stocks we cover. Overweight, Equal-weight, Not-Rated and Underweight are not the equivalent of buy, hold, and sell but represent recommended relative weightings (see definitions below). To satisfy regulatory requirements, we correspond Overweight, our most positive stock rating, with a buy recommendation; we correspond Equal-weight and Not-Rated to hold and Underweight to sell recommendations, respectively.

Stock Rating Category	Coverage Universe		Investment Banking Clients (IBC)		
	Count	% of Total	Count	% of Total IBC	% of Rating Category
Overweight/Buy	773	33%	223	37%	29%
Equal-weight/Hold	1044	44%	266	44%	25%
Not-Rated/Hold	33	1.4%	8	1.3%	24.2%
Underweight/Sell	498	21%	101	17%	20%
Total	2,348		598		

Data include common stock and ADRs currently assigned ratings. An investor's decision to buy or sell a stock should depend on individual circumstances (such as the investor's existing holdings) and other considerations. Investment Banking Clients are companies from whom Morgan Stanley or an affiliate received investment banking compensation in the last 12 months.

Analyst Stock Ratings

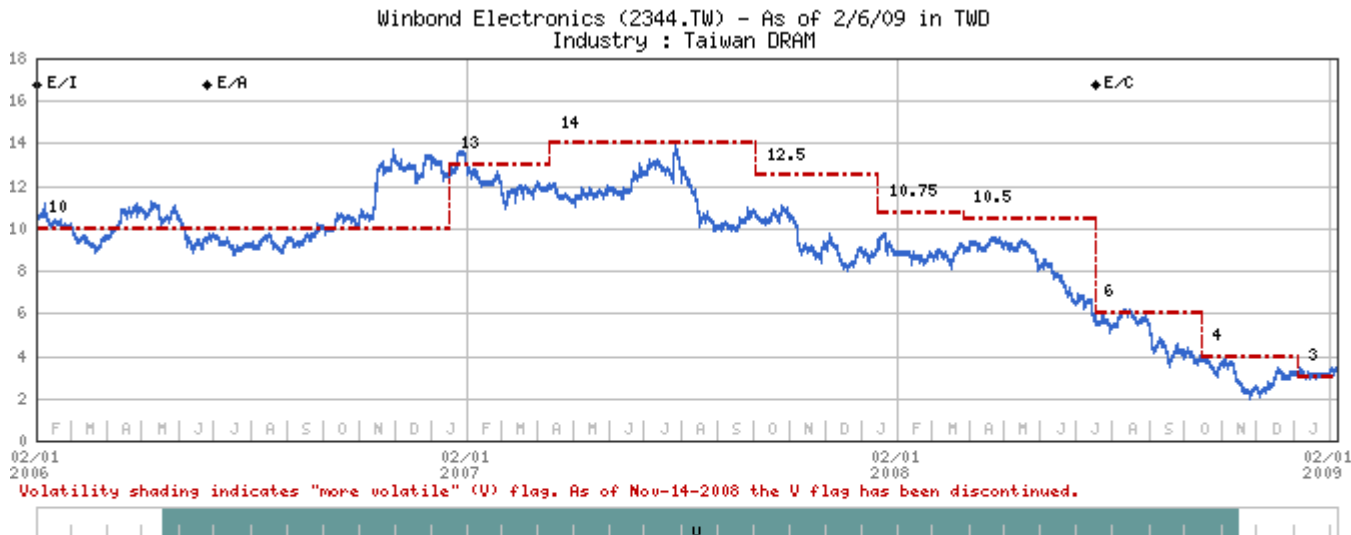
February 6, 2009
Winbond Electronics

Overweight (O or Over) - The stock's total return is expected to exceed the total return of the relevant country MSCI Index, on a risk-adjusted basis over the next 12-18 months.
 Equal-weight (E or Equal) - The stock's total return is expected to be in line with the total return of the relevant country MSCI Index, on a risk-adjusted basis over the next 12-18 months.
 Not-Rated/Hold (NA or NAV) - Currently the analyst does not have adequate conviction about the stock's total return relative to the relevant country MSCI Index, on a risk-adjusted basis, over the next 12-18 months. Please note that NA or NAV may also be used to designate stocks where a rating is not currently available for policy reasons. For the current list of Not-Rated/Hold stocks as counted above in the Global Stock Ratings Distribution Table, please email morganstanley.research@morganstanley.com.
 Underweight (U or Under) - The stock's total return is expected to be below the total return of the relevant country MSCI Index, on a risk-adjusted basis, over the next 12-18 months.
 Unless otherwise specified, the time frame for price targets included in Morgan Stanley Research is 12 to 18 months.

Analyst Industry Views

Attractive (A): The analyst expects the performance of his or her industry coverage universe over the next 12-18 months to be attractive vs. the relevant broad market benchmark, as indicated below.
 In-Line (I): The analyst expects the performance of his or her industry coverage universe over the next 12-18 months to be in line with the relevant broad market benchmark, as indicated below.
 Cautious (C): The analyst views the performance of his or her industry coverage universe over the next 12-18 months with caution vs. the relevant broad market benchmark, as indicated below.
 Benchmarks for each region are as follows: North America - S&P 500; Latin America - relevant MSCI country index or MSCI Latin America Index; Europe - MSCI Europe; Japan - TOPIX; Asia - relevant MSCI country index.

Stock Price, Price Target and Rating History (See Rating Definitions)



Stock Rating History: 2/1/06 : E/I; 6/26/06 : E/A; 7/17/08 : E/C

Price Target History: 11/24/05 : 10; 1/17/07 : 13; 4/11/07 : 14; 10/4/07 : 12.5; 1/15/08 : 10.75; 3/27/08 : 10.5; 7/17/08 : 6; 10/16/08 : 4; 1/5/09 : 3

Source: Morgan Stanley Research Date Format : MM/DD/YY Price Target --- No Price Target Assigned (NA)
 Stock Price (Not Covered by Current Analyst) — Stock Price (Covered by Current Analyst) ■
 Stock Ratings abbreviated as below (Effective 3/18/02, ratings appear as Stock Ratings/Industry View) ♦
 Stock Ratings as of 3/18/02: Overweight (O) Equal-weight (E) Underweight (U) More Volatile (V) No Rating Available (NAU)
 Stock Ratings prior to 3/18/02: Strong Buy (SB) Outperform (OP) Neutral (N) Underperform (UP) No Rating Available (NAU)
 Industry View: Attractive (A) In-line (I) Cautious (C) No Rating (NR)

Other Important Disclosures

Morgan Stanley produces a research product called a "Tactical Idea." Views contained in a "Tactical Idea" on a particular stock may be contrary to the recommendations or views expressed in this or other research on the same stock. This may be the result of differing time horizons, methodologies, market events, or other factors. For all research available on a particular stock, please contact your sales representative or go to Client Link at www.morganstanley.com.

For a discussion, if applicable, of the valuation methods used to determine the price targets included in this summary and the risks related to achieving these targets, please refer to the latest relevant published research on these stocks.

Morgan Stanley Research does not provide individually tailored investment advice. Morgan Stanley Research has been prepared without regard to the individual financial circumstances and objectives of persons who receive it. The securities/instruments discussed in Morgan Stanley Research may not be suitable for all investors. Morgan Stanley Research recommends that investors independently evaluate particular investments and strategies, and encourages investors to seek the advice of a financial adviser. The appropriateness of a particular investment or strategy will depend on an investor's individual circumstances and objectives. The securities, instruments, or strategies discussed in Morgan Stanley Research may not be suitable for all investors, and certain investors may not be eligible to purchase or participate in some or all of them.

Morgan Stanley Research is not an offer to buy or sell or the solicitation of an offer to buy or sell any security/instrument or to participate in any particular trading strategy. The "Important US Regulatory Disclosures on Subject Companies" section in Morgan Stanley Research lists all companies mentioned where Morgan Stanley owns 1% or more of a class of common securities of the companies. For all other companies mentioned in Morgan Stanley Research, Morgan Stanley may have an investment of less than 1% in securities or derivatives of securities of companies and may trade them in ways different from those discussed in Morgan Stanley Research. Employees of Morgan Stanley not involved in the preparation of Morgan Stanley Research may have investments in securities or derivatives of securities of companies mentioned and may trade them in ways different from those discussed in Morgan Stanley Research. Derivatives may be issued by Morgan Stanley or associated persons.

February 6, 2009
Winbond Electronics

Morgan Stanley and its affiliate companies do business that relates to companies/instruments covered in Morgan Stanley Research, including market making and specialized trading, risk arbitrage and other proprietary trading, fund management, commercial banking, extension of credit, investment services and investment banking. Morgan Stanley sells to and buys from customers the securities/instruments of companies covered in Morgan Stanley Research on a principal basis.

With the exception of information regarding Morgan Stanley, research prepared by Morgan Stanley Research personnel are based on public information. Morgan Stanley makes every effort to use reliable, comprehensive information, but we make no representation that it is accurate or complete. We have no obligation to tell you when opinions or information in Morgan Stanley Research change apart from when we intend to discontinue research coverage of a subject company. Facts and views presented in Morgan Stanley Research have not been reviewed by, and may not reflect information known to, professionals in other Morgan Stanley business areas, including investment banking personnel.

Morgan Stanley Research personnel conduct site visits from time to time but are prohibited from accepting payment or reimbursement by the company of travel expenses for such visits.

The value of and income from your investments may vary because of changes in interest rates or foreign exchange rates, securities prices or market indexes, operational or financial conditions of companies or other factors. There may be time limitations on the exercise of options or other rights in your securities transactions. Past performance is not necessarily a guide to future performance. Estimates of future performance are based on assumptions that may not be realized. Unless otherwise stated, the cover page provides the closing price on the primary exchange for the subject company's securities/instruments.

To our readers in Taiwan: Information on securities/instruments that trade in Taiwan is distributed by Morgan Stanley Taiwan Limited ("MSTL"). Such information is for your reference only. Information on any securities/instruments issued by a company owned by the government of or incorporated in the PRC and listed in on the Stock Exchange of Hong Kong ("SEHK"), namely the H-shares, including the component company stocks of the Stock Exchange of Hong Kong ("SEHK")'s Hang Seng China Enterprise Index; or any securities/instruments issued by a company that is 30% or more directly- or indirectly-owned by the government of or a company incorporated in the PRC and traded on an exchange in Hong Kong or Macau, namely SEHK's Red Chip shares, including the component company of the SEHK's China-affiliated Corp Index is distributed only to Taiwan Securities Investment Trust Enterprises ("SITE"). The reader should independently evaluate the investment risks and is solely responsible for their investment decisions. Morgan Stanley Research may not be distributed to the public media or quoted or used by the public media without the express written consent of Morgan Stanley. Information on securities/instruments that do not trade in Taiwan is for informational purposes only and is not to be construed as a recommendation or a solicitation to trade in such securities/instruments. MSTL may not execute transactions for clients in these securities/instruments.

To our readers in Hong Kong: Information is distributed in Hong Kong by and on behalf of, and is attributable to, Morgan Stanley Asia Limited as part of its regulated activities in Hong Kong. If you have any queries concerning Morgan Stanley Research, please contact our Hong Kong sales representatives.

Certain information in Morgan Stanley Research was sourced by employees of the Shanghai Representative Office of Morgan Stanley Asia Limited for the use of Morgan Stanley Asia Limited.

Morgan Stanley Research is disseminated in Japan by Morgan Stanley Japan Securities Co., Ltd.; in Hong Kong by Morgan Stanley Asia Limited (which accepts responsibility for its contents); in Singapore by Morgan Stanley Asia (Singapore) Pte. (Registration number 199206298Z) and/or Morgan Stanley Asia (Singapore) Securities Pte Ltd (Registration number 200008434H), regulated by the Monetary Authority of Singapore, which accepts responsibility for its contents; in Australia by Morgan Stanley Australia Limited A.B.N. 67 003 734 576, holder of Australian financial services licence No. 233742, which accepts responsibility for its contents; in Korea by Morgan Stanley & Co International plc, Seoul Branch; in India by Morgan Stanley India Company Private Limited; in Canada by Morgan Stanley Canada Limited, which has approved of, and has agreed to take responsibility for, the contents of Morgan Stanley Research in Canada; in Germany by Morgan Stanley Bank AG, Frankfurt am Main, regulated by Bundesanstalt fuer Finanzdienstleistungsaufsicht (BaFin); in Spain by Morgan Stanley, S.V., S.A., a Morgan Stanley group company, which is supervised by the Spanish Securities Markets Commission (CNMV) and states that Morgan Stanley Research has been written and distributed in accordance with the rules of conduct applicable to financial research as established under Spanish regulations; in the United States by Morgan Stanley & Co. Incorporated, which accepts responsibility for its contents. Morgan Stanley & Co. International plc, authorized and regulated by Financial Services Authority, disseminates in the UK research that it has prepared, and approves solely for the purposes of section 21 of the Financial Services and Markets Act 2000, research which has been prepared by any of its affiliates. Private U.K. investors should obtain the advice of their Morgan Stanley & Co. International plc representative about the investments concerned. In Australia, Morgan Stanley Research, and any access to it, is intended only for "wholesale clients" within the meaning of the Australian Corporations Act. RMB Morgan Stanley (Proprietary) Limited is a member of the JSE Limited and regulated by the Financial Services Board in South Africa. RMB Morgan Stanley (Proprietary) Limited is a joint venture owned equally by Morgan Stanley International Holdings Inc. and RMB Investment Advisory (Proprietary) Limited, which is wholly owned by FirstRand Limited.

The information in Morgan Stanley Research is being communicated by Morgan Stanley & Co. International plc (DIFC Branch), regulated by the Dubai Financial Services Authority (the DFSA), and is directed at wholesale customers only, as defined by the DFSA. This research will only be made available to a wholesale customer who we are satisfied meets the regulatory criteria to be a client.

The information in Morgan Stanley Research is being communicated by Morgan Stanley & Co. International plc (QFC Branch), regulated by the Qatar Financial Centre Regulatory Authority (the QFCRA), and is directed at business customers and market counterparties only and is not intended for Retail Customers as defined by the QFCRA.

As required by the Capital Markets Board of Turkey, investment information, comments and recommendations stated here, are not within the scope of investment advisory activity. Investment advisory service is provided in accordance with a contract of engagement on investment advisory concluded between brokerage houses, portfolio management companies, non-deposit banks and clients. Comments and recommendations stated here rely on the individual opinions of the ones providing these comments and recommendations. These opinions may not fit to your financial status, risk and return preferences. For this reason, to make an investment decision by relying solely to this information stated here may not bring about outcomes that fit your expectations.

The trademarks and service marks contained in Morgan Stanley Research are the property of their respective owners. Third-party data providers make no warranties or representations of any kind relating to the accuracy, completeness, or timeliness of the data they provide and shall not have liability for any damages of any kind relating to such data. The Global Industry Classification Standard ("GICS") was developed by and is the exclusive property of MSCI and S&P.

Morgan Stanley has based its projections, opinions, forecasts and trading strategies regarding the MSCI Country Index Series solely on publicly available information. MSCI has not reviewed, approved or endorsed the projections, opinions, forecasts and trading strategies contained herein. Morgan Stanley has no influence on or control over MSCI's index compilation decisions.

Morgan Stanley Research, or any portion hereof may not be reprinted, sold or redistributed without the written consent of Morgan Stanley.

Morgan Stanley Research is disseminated and available primarily electronically, and, in some cases, in printed form.

Additional information on recommended securities/instruments is available on request.

The Americas

1585 Broadway
New York, NY 10036-8293
United States
Tel: +1 (1) 212 761 4000

Europe

20 Bank Street, Canary Wharf
London E14 4AD
United Kingdom
Tel: +44 (0) 20 7 425 8000

Japan

4-20-3 Ebisu, Shibuya-ku
Tokyo 150-6008
Japan
Tel: +81 (0) 3 5424 5000

Asia/Pacific

1 Austin Road West
Kowloon
Hong Kong
Tel: +852 2848 5200

Industry Coverage: Taiwan DRAM

Company (Ticker)	Rating (as of)	Price (02/06/2009)
Frank A.Y. Wang		
Inotera Memories, Inc. (3474.TW)	O (06/26/2006)	NT\$12.55
Nanya Technology Corp. (2408.TW)	U (07/17/2008)	NT\$6.51
Powerchip (5346.TWO)	U (07/17/2008)	NT\$3.76
Winbond Electronics (2344.TW)	E (11/24/2005)	NT\$3.3

Stock Ratings are subject to change. Please see latest research for each company.