

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

October 29, 2008

Stock Rating  
Equal-weight-V

Industry View  
Cautious

## Winbond Electronics

### Time to Exit Commodity DRAM

**Quick Comment: Impact on our views.** Winbond may exit commodity DRAM as its technology source Qimonda will be exiting. Going forward, Winbond aims to de-emphasize commodity DRAM and focus on niche memory. In our view, Winbond should preserve its cash and consider fab divestments to become a leading fabless memory maker to differentiate in Taiwan DRAM. As all Taiwan DRAM makers are trading below replacement costs, there would be more than sufficient quality 12" DRAM fabs in Taiwan for Winbond to leverage on its niche memory designs.

**What's new:** Winbond reported in line 3Q08 LPS NT\$(0.24) vs NT\$(0.36) in 2Q08 with GM declined to (-11%) from 3% in 2Q08. **Value Added Data:** Revenue breakdown - 83% DRAM, 16% NOR Flash, 1% others. 3Q08 bit growth was 30%; Production breakdown for 31K 12" wafers/mth capacity – 58% in Commodity DRAM, 20% in Specialty DRAM, 13% in Mobile DRAM, and 9% in Flash; 3Q08 GM by products: (-40%) on Commodity, (-5%) on Specialty, 20% on Mobile, 25-27% on Flash.

**Guidance:** 4Q08 bits growth guidance 26% Q/Q, 21% Y/Y bits growth for 2008, and 18% Y/Y bits growth for 2009; 2008 capex guidance of NT\$16 bn, 2009 capex guidance of NT\$3.6 bn; For 4Q08 ASP, stable price for Specialty and Mobile, and 15-20% Q/Q ASP decline for Flash; By end-2008, Winbond targets 33K wafer/mth 12" fab capacity – 20K on Commodity, 7K on Specialty, 2K in Mobile, and 4K on Flash.

**Implications:** Winbond expects pilot run of Qimonda's new 65 nm buried wordline technology in November and mass production in 2Q09. Winbond ramped 70 nm input to 16K wafers/mth (~50% capacity) in October and target 20K wafers/mth (~65% capacity) on 70 nm by end-2008, well behind mainstream commodity DRAM production.

### Key Ratios and Statistics

Reuters: 2344.TW Bloomberg: 2344 TT

#### Taiwan DRAM

Price target	NT\$4.00
Upside to price target (%)	29
Shr price, close (Oct 28, 2008)	NT\$3.10
52-Week Range	NT\$11.15-2.91
Sh out, dil, curr (mn)	4,067
Mkt cap, curr (mn)	NT\$12,607
Avg daily trading volume (mn)	NT\$81

Fiscal Year ending	12/07	12/08e	12/09e	12/10e
ModelWare EPS (NT\$)	(1.40)	(1.22)	(0.76)	(0.03)
EPS, basic (NT\$)*	(1.50)	(1.31)	(0.82)	(0.03)
Consensus EPS (NT\$)§	(1.47)	(1.28)	(0.47)	(0.02)
Revenue, net (NT\$ mn)	32,104	23,222	20,995	23,912
EBITDA (NT\$ mn)	8,356	4,306	7,266	10,392
ModelWare net inc (NT\$ mn)	(5,812)	(4,894)	(3,047)	(123)
P/E	NM	NM	NM	NM
P/BV	0.7	0.3	0.3	0.3
RNOA (%)	(3.9)	(6.7)	(3.8)	(0.4)
ROE (%)	(10.2)	(9.6)	(7.0)	(0.3)
Div yld (%)	3.3	0.0	0.0	0.0
FCF yld ratio (%)	31.7	(117.1)	15.1	2.1
Leverage (EOP) (%)	0.9	35.6	32.3	30.2

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.

October 29, 2008

Winbond Electronics

According to Winbond, Qimonda will gradually transfer its R&D resource to 46 nm development post Inotera deal with Micron. Winbond aims to leverage Qimonda's commodity DRAM roadmap for specialty memory production on 65 nm technology through 2012.

Exhibit 1

## 3Q08: Actual Results vs. Morgan Stanley Estimates

(NT\$m)	3Q08		Variance	Q/Q	Y/Y
	Actual	MS			
Total Revenue	5,066	5,066	0%	-21%	-41%
Cost of goods sold	5,629	5,444	3%	-10%	-29%
Depreciation	2,151	2,151	0%	10%	-20%
Gross Profit	(563)	(378)	nm	nm	nm
Operating Expense	636	618	3%	-40%	-52%
R&D	407	446	-9%	-40%	-51%
SG&A	229	172	33%	-41%	-52%
Operating Profit	(1,199)	(996)	nm	nm	nm
Non Operating Income (Loss)	308	25	1138%	nm	429%
Pre-Tax Profit	(891)	(971)	nm	nm	nm
Net Profit	(891)	(971)	nm	nm	nm
EPS	(0.24)	(0.26)	nm	nm	nm
Shares (mn)	3,735	3,735	0%	-1%	-3%
Gross Margin	-11.1%	-7.5%	-370bps	-1380bps	-1830bps
Operating Margin	-23.7%	-19.7%	-400bps	-980bps	-1530bps
Net Margin	-17.6%	-19.2%	160bps	230bps	-990bps
FX (NT/\$)	31.0	31.0	0.0%	1.9%	-5.8%

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: 12.9%  
MSCI Asia/Pac All Country Ex Jp Weight: 13.0%

October 29, 2008  
Winbond Electronics

Exhibit 2

## Winbond: Quarterly Income Statement (Reported)

(NT\$m)	1Q2007	2Q2007	3Q2007	4Q2007	1Q2008	2Q2008	3Q2008	4Q2008E	1Q2009E	2Q2009E	3Q2009E	4Q2009E	2007	2008E	2009E	2010E
<b>Sales</b>	<b>9,498</b>	<b>7,267</b>	<b>8,520</b>	<b>6,820</b>	<b>6,569</b>	<b>6,416</b>	<b>5,066</b>	<b>5,172</b>	<b>4,647</b>	<b>5,126</b>	<b>5,431</b>	<b>5,791</b>	<b>32,104</b>	<b>23,222</b>	<b>20,995</b>	<b>23,912</b>
COGS	7,288	7,056	7,908	7,864	7,430	6,245	5,629	5,555	5,220	5,781	5,012	5,510	30,116	24,859	21,523	21,700
Depreciation	2,606	2,636	2,690	2,705	1,929	1,958	2,151	2,234	2,269	2,270	2,269	2,238	10,636	8,272	9,046	9,432
Non Depreciation Cost	4,682	4,420	5,218	5,159	5,500	4,287	3,478	3,322	2,951	3,511	2,742	3,272	19,480	16,587	12,477	12,268
<b>Gross Profit</b>	<b>2,210</b>	<b>211</b>	<b>612</b>	<b>-1,044</b>	<b>-861</b>	<b>171</b>	<b>-563</b>	<b>-383</b>	<b>-573</b>	<b>-655</b>	<b>419</b>	<b>281</b>	<b>1,989</b>	<b>-1,637</b>	<b>-528</b>	<b>2,213</b>
Total Operating Exp	1,233	1,285	1,325	1,848	1,160	1,062	636	620	620	620	620	620	5,692	3,477	2,480	2,480
R&D	888	798	837	1,371	808	680	407	450	450	450	450	450	3,894	2,345	1,800	1,800
SG&A	324	497	481	496	361	386	229	170	170	170	170	170	1,798	1,145	680	680
Other Operating expenses	21	-10	7	-19	-9	-4	0	0	0	0	0	0	0	-13	0	0
<b>EBIT</b>	<b>977</b>	<b>-1,074</b>	<b>-713</b>	<b>-2,893</b>	<b>-2,021</b>	<b>-891</b>	<b>-1,199</b>	<b>-1,003</b>	<b>-1,193</b>	<b>-1,275</b>	<b>-201</b>	<b>-339</b>	<b>-3,703</b>	<b>-5,114</b>	<b>-3,008</b>	<b>-267</b>
<b>Non-Oper. Income (Loss)</b>	<b>-618</b>	<b>-300</b>	<b>58</b>	<b>-1,249</b>	<b>262</b>	<b>-387</b>	<b>308</b>	<b>36</b>	<b>-51</b>	<b>-40</b>	<b>33</b>	<b>18</b>	<b>-2,109</b>	<b>220</b>	<b>-40</b>	<b>145</b>
Net Interest	(150)	(153)	(182)	(184)	(215)	(122)	(125)	(134)	(139)	(140)	(137)	(132)	(669)	(595)	(548)	(517)
Net Investment Income/(Loss)	(384)	(318)	(56)	(341)	(519)	(322)	(50)	(10)	(50)	(50)	(50)	(50)	(1,098)	(902)	(200)	(138)
Other Non-Op. Income/(Loss)	(85)	171	296	(724)	996	57	483	180	138	150	220	200	(342)	1,717	708	800
<b>Pretax Income</b>	<b>358</b>	<b>(1,374)</b>	<b>(655)</b>	<b>(4,141)</b>	<b>(1,759)</b>	<b>(1,278)</b>	<b>(891)</b>	<b>(967)</b>	<b>(1,244)</b>	<b>(1,315)</b>	<b>(168)</b>	<b>(321)</b>	<b>(5,812)</b>	<b>(4,894)</b>	<b>(3,047)</b>	<b>(123)</b>
Income Taxes Exp. /(Gains)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Extraordinary item	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Net Income after Extraord.</b>	<b>358</b>	<b>(1,374)</b>	<b>(655)</b>	<b>(4,141)</b>	<b>(1,759)</b>	<b>(1,278)</b>	<b>(891)</b>	<b>(967)</b>	<b>(1,244)</b>	<b>(1,315)</b>	<b>(168)</b>	<b>(321)</b>	<b>(5,812)</b>	<b>(4,894)</b>	<b>(3,047)</b>	<b>(123)</b>
<b>EBITDA</b>	<b>3,800</b>	<b>1,779</b>	<b>2,194</b>	<b>584</b>	<b>140</b>	<b>1,299</b>	<b>1,184</b>	<b>1,462</b>	<b>1,308</b>	<b>1,227</b>	<b>2,300</b>	<b>2,131</b>	<b>8,356</b>	<b>4,085</b>	<b>6,966</b>	<b>10,092</b>
<b>Reported EPS</b>	<b>0.09</b>	<b>(0.36)</b>	<b>(0.17)</b>	<b>(1.07)</b>	<b>(0.46)</b>	<b>(0.34)</b>	<b>(0.24)</b>	<b>(0.26)</b>	<b>(0.33)</b>	<b>(0.35)</b>	<b>(0.05)</b>	<b>(0.09)</b>	<b>(1.50)</b>	<b>(1.31)</b>	<b>(0.82)</b>	<b>(0.03)</b>
Weighted Average Shares	3,871	3,871	3,871	3,871	3,791	3,777	3,735	3,727	3,727	3,727	3,727	3,727	3,871	3,727	3,727	3,727
Fully Diluted EPS	0.09	(0.33)	(0.16)	(1.02)	(0.43)	(0.32)	(0.22)	(0.24)	(0.31)	(0.33)	(0.04)	(0.08)	(1.40)	(1.22)	(0.82)	(0.03)
Fully Diluted Shares	4,147	4,147	4,147	4,067	4,067	4,053	4,011	4,004	4,004	4,004	4,004	4,004	4,147	4,004	3,728	3,728
<b>Margin(%)</b>																
EBITDA Margin	40.0%	24.5%	25.7%	8.6%	2.1%	20.2%	23.4%	28.3%	28.2%	23.9%	42.4%	36.8%	26.0%	17.6%	33.2%	42.2%
Gross Margin	23.3%	2.9%	7.2%	-15.3%	-13.1%	2.7%	-11.1%	-7.4%	-12.3%	-12.8%	7.7%	4.9%	6.2%	-7.0%	-2.5%	9.3%
Operating Margin	10.3%	-14.8%	-8.4%	-42.4%	-30.8%	-13.9%	-23.7%	-19.4%	-25.7%	-24.9%	-3.7%	-5.8%	-11.5%	-22.0%	-14.3%	-1.1%
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	3.8%	-18.9%	-7.7%	-60.7%	-26.8%	-19.9%	-17.6%	-18.7%	-26.8%	-25.6%	-3.1%	-5.5%	-18.1%	-21.1%	-14.5%	-0.5%
<b>QoQ(%)</b>																
Sales QOQ	-15%	-23%	17%	-20%	-4%	-2%	-21%	2%	-10%	10%	6%	7%				
COGS QOQ	0%	-3%	12%	-1%	-6%	-16%	-10%	-1%	-6%	11%	-13%	10%				
Gross Profit QOQ	-43%	-90%	191%	nm	nm	nm	nm	nm	nm	nm	nm	-33%				
Operating Profit QOQ	-58%	nm	nm	nm	nm	nm	nm	nm	nm	nm	nm	nm				
Net Profit QOQ	-79%	nm	nm	nm	nm	nm	nm	nm	nm	nm	nm	nm				
<b>YoY(%)</b>																
Sales YOY	53%	-7%	-9%	-39%	-31%	-12%	-41%	-24%	-29%	-20%	7%	12%	-7%	-28%	-10%	14%
COGS YOY	56%	15%	20%	8%	2%	-11%	-29%	-29%	-30%	-7%	-11%	10%	22%	-17%	-13%	1%
Gross Profit YOY	45%	-87%	-78%	nm	nm	-19%	nm	nm	nm	nm	nm	nm	-80%	nm	nm	nm
Operating Profit YOY	913%	nm	nm	nm	nm	nm	nm	nm	nm	nm	nm	nm	nm	nm	nm	nm
Net Profit YOY	188%	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


October 29, 2008  
Winbond Electronics

Exhibit 3

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

(NT\$m)	1Q2007	2Q2007	3Q2007	4Q2007	1Q2008	2Q2008	3Q2008	4Q2008E	1Q2009E	2Q2009E	3Q2009E	4Q2009E	2007	2008E	2009E	2010E
<b>Sales</b>	<b>9,498</b>	<b>7,267</b>	<b>8,520</b>	<b>6,820</b>	<b>6,569</b>	<b>6,416</b>	<b>7,066</b>	<b>6,972</b>	<b>6,621</b>	<b>7,270</b>	<b>7,631</b>	<b>7,791</b>	<b>32,104</b>	<b>27,022</b>	<b>29,313</b>	<b>33,030</b>
COGS	7,288	7,056	7,908	7,864	7,430	6,245	6,829	6,635	6,463	7,132	6,332	6,710	30,116	27,139	26,637	27,282
Depreciation	2,606	2,636	2,690	2,705	1,929	1,958	2,151	2,234	2,269	2,270	2,269	2,238	10,636	8,272	9,046	9,432
Non Depreciation Cost	4,682	4,420	5,218	5,159	5,500	4,287	4,678	4,402	4,194	4,862	4,062	4,472	19,480	18,867	17,591	17,851
<b>Gross Profit</b>	<b>2,210</b>	<b>211</b>	<b>612</b>	<b>-1,044</b>	<b>-861</b>	<b>171</b>	<b>237</b>	<b>337</b>	<b>157</b>	<b>138</b>	<b>1,299</b>	<b>1,081</b>	<b>1,989</b>	<b>-117</b>	<b>2,676</b>	<b>5,748</b>
Total Operating Exp	1,233	1,285	1,325	1,848	1,160	1,062	1,236	1,160	1,212	1,263	1,280	1,220	5,692	4,617	4,975	5,215
R&D	888	798	837	1,371	808	680	767	774	805	836	846	810	3,894	3,029	3,297	3,441
SG&A	324	497	481	496	361	386	469	386	407	427	434	410	1,798	1,601	1,678	1,774
Other Operating expenses	21	-10	7	-19	-9	-4	0	0	0	0	0	0	0	-13	0	0
<b>EBIT</b>	<b>977</b>	<b>-1,074</b>	<b>-713</b>	<b>-2,893</b>	<b>-2,021</b>	<b>-891</b>	<b>-999</b>	<b>-823</b>	<b>-1,055</b>	<b>-1,125</b>	<b>19</b>	<b>-139</b>	<b>-3,703</b>	<b>-4,734</b>	<b>-2,299</b>	<b>532</b>
<b>Non-Oper. Income (Loss)</b>	<b>-618</b>	<b>-300</b>	<b>58</b>	<b>-1,249</b>	<b>262</b>	<b>-387</b>	<b>108</b>	<b>-144</b>	<b>-189</b>	<b>-190</b>	<b>-187</b>	<b>-182</b>	<b>-2,109</b>	<b>-160</b>	<b>-748</b>	<b>-655</b>
Net Interest	(150)	(153)	(182)	(184)	(215)	(122)	(125)	(134)	(139)	(140)	(137)	(132)	(669)	(595)	(548)	(517)
Net Investment Income/(Loss)	(384)	(318)	(56)	(341)	(519)	(322)	(50)	(10)	(50)	(50)	(50)	(50)	(1,098)	(902)	(200)	(138)
Other Non-Op. Income/(Loss)	(85)	171	296	(724)	996	57	283	(0)	(0)	(0)	(0)	(0)	(342)	1,337	(0)	0
<b>Pretax Income</b>	<b>358</b>	<b>(1,374)</b>	<b>(655)</b>	<b>(4,141)</b>	<b>(1,759)</b>	<b>(1,278)</b>	<b>(891)</b>	<b>(967)</b>	<b>(1,244)</b>	<b>(1,315)</b>	<b>(168)</b>	<b>(321)</b>	<b>(5,812)</b>	<b>(4,894)</b>	<b>(3,047)</b>	<b>(123)</b>
Income Taxes Exp. /(Gains)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Extraordinary item	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Net Income after Extraord.</b>	<b>358</b>	<b>(1,374)</b>	<b>(655)</b>	<b>(4,141)</b>	<b>(1,759)</b>	<b>(1,278)</b>	<b>(891)</b>	<b>(967)</b>	<b>(1,244)</b>	<b>(1,315)</b>	<b>(168)</b>	<b>(321)</b>	<b>(5,812)</b>	<b>(4,894)</b>	<b>(3,047)</b>	<b>(123)</b>
<b>EBITDA</b>	<b>3,800</b>	<b>1,779</b>	<b>2,194</b>	<b>584</b>	<b>140</b>	<b>1,299</b>	<b>1,259</b>	<b>1,537</b>	<b>1,383</b>	<b>1,302</b>	<b>2,375</b>	<b>2,206</b>	<b>8,356</b>	<b>4,386</b>	<b>7,266</b>	<b>10,392</b>
<b>Reported EPS</b>	<b>0.09</b>	<b>(0.36)</b>	<b>(0.17)</b>	<b>(1.07)</b>	<b>(0.46)</b>	<b>(0.34)</b>	<b>(0.24)</b>	<b>(0.26)</b>	<b>(0.33)</b>	<b>(0.35)</b>	<b>(0.05)</b>	<b>(0.09)</b>	<b>(1.50)</b>	<b>(1.31)</b>	<b>(0.82)</b>	<b>(0.03)</b>
Weighted Average Shares	3,871	3,871	3,871	3,871	3,791	3,777	3,735	3,727	3,727	3,727	3,727	3,727	3,871	3,727	3,727	3,727
Fully Diluted EPS	0.09	(0.33)	(0.16)	(1.02)	(0.43)	(0.32)	(0.24)	(0.26)	(0.33)	(0.35)	(0.05)	(0.09)	(1.40)	(1.31)	(0.82)	(0.03)
Fully Diluted Shares	4,147	4,147	4,147	4,067	4,067	4,053	3,735	3,727	3,727	3,727	3,727	3,727	4,147	3,727	3,727	3,727
<b>Margin(%)</b>																
EBITDA Margin	40.0%	24.5%	25.7%	8.6%	2.1%	20.2%	20.6%	24.6%	23.0%	20.0%	34.0%	30.9%	26.0%	17.6%	27.2%	33.9%
Gross Margin	23.3%	2.9%	7.2%	-15.3%	-13.1%	2.7%	3.4%	4.8%	2.4%	1.9%	17.0%	13.9%	6.2%	-0.4%	9.1%	17.4%
Operating Margin	10.3%	-14.8%	-8.4%	-42.4%	-30.8%	-13.9%	-14.1%	-11.8%	-15.9%	-15.5%	0.2%	-1.8%	-11.5%	-17.5%	-7.8%	1.6%
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	3.8%	-18.9%	-7.7%	-60.7%	-26.8%	-19.9%	-12.6%	-13.9%	-18.8%	-18.1%	-2.2%	-4.1%	-18.1%	-18.1%	-10.4%	-0.4%
<b>QoQ(%)</b>																
Sales QOQ	-15%	-23%	17%	-20%	-4%	-2%	10%	-1%	-5%	10%	5%	2%				
COGS QOQ	0%	-3%	12%	-1%	-6%	-16%	9%	-3%	-3%	10%	-11%	6%				
Gross Profit QOQ	-43%	-90%	191%	nm	nm	nm	39%	42%	-53%	-12%	840%	-17%				
Operating Profit QOQ	-58%	nm	nm	nm	nm	nm	nm	nm	nm	nm	nm	nm				
Net Profit QOQ	-79%	nm	nm	nm	nm	nm	nm	nm	nm	nm	nm	nm				
<b>YoY(%)</b>																
Sales YOY	53%	-7%	-9%	-39%	-31%	-12%	-17%	2%	1%	13%	8%	12%	-7%	-16%	8%	13%
COGS YOY	56%	15%	20%	8%	2%	-11%	-14%	-16%	-13%	14%	-7%	1%	22%	-10%	-2%	2%
Gross Profit YOY	45%	-87%	-78%	nm	nm	-19%	-61%	nm	nm	-19%	448%	221%	-80%	nm	nm	115%
Operating Profit YOY	913%	nm	nm	nm	nm	nm	nm	nm	nm	nm	nm	nm	nm	nm	nm	nm
Net Profit YOY	188%	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

	<p><b>Morgan Stanley ModelWare is a proprietary analytic framework that helps clients uncover value, adjusting for distortions and ambiguities created by local accounting regulations.</b> 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.</p>
---	--

## 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](http://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/conflictolicies](http://www.morganstanley.com/institutional/research/conflictolicies).

### 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 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: 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 or Underweight (see definitions below). Morgan Stanley does not assign ratings of Buy, Hold or Sell to the stocks we cover. Overweight, Equal-weight 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 September 30, 2008)

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 and Underweight. Morgan Stanley does not assign ratings of Buy, Hold or Sell to the stocks we cover.

Overweight, Equal-weight, 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 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
<b>Overweight/Buy</b>	<b>892</b>	<b>40%</b>	<b>292</b>	<b>44%</b>	<b>33%</b>
<b>Equal-weight/Hold</b>	<b>937</b>	<b>42%</b>	<b>278</b>	<b>42%</b>	<b>30%</b>
<b>Underweight/Sell</b>	<b>387</b>	<b>17%</b>	<b>90</b>	<b>14%</b>	<b>23%</b>
<b>Total</b>	<b>2,216</b>		<b>660</b>		

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

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.

October 29, 2008  
Winbond Electronics

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.

More volatile (V) - We estimate that this stock has more than a 25% chance of a price move (up or down) of more than 25% in a month, based on a quantitative assessment of historical data, or in the analyst's view, it is likely to become materially more volatile over the next 1-12 months compared with the past three years. Stocks with less than one year of trading history are automatically rated as more volatile (unless otherwise noted). We note that securities that we do not currently consider "more volatile" can still perform in that manner.

Unless otherwise specified, the time frame for price targets included in Morgan Stanley Research is 12 to 18 months.

## Analyst Industry Views

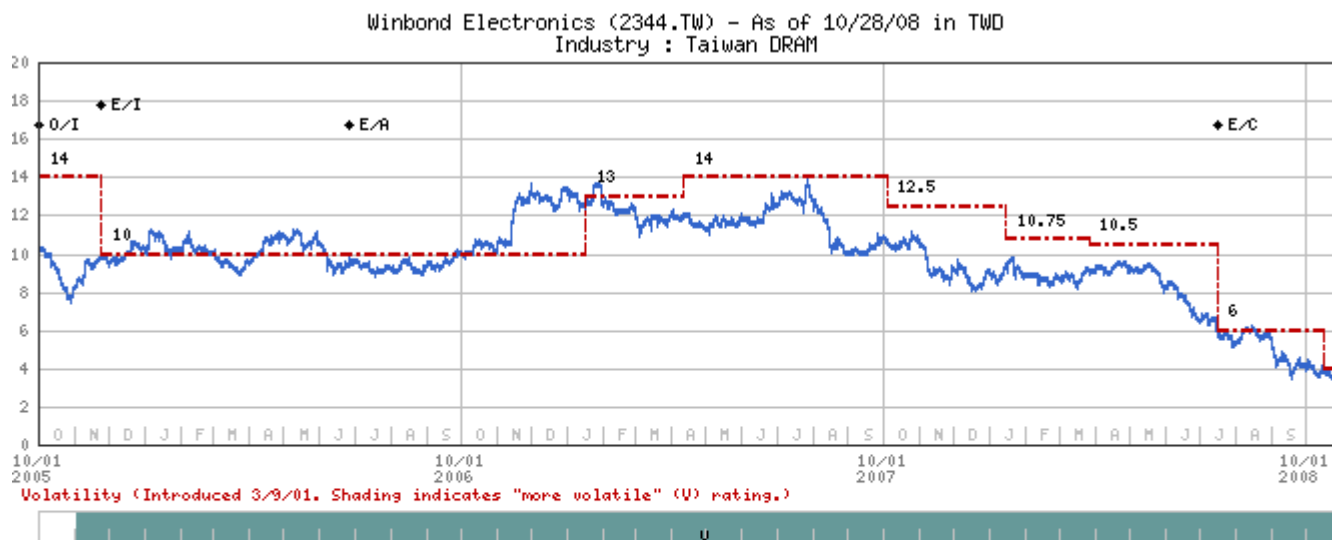
Attractive (A): The analyst expects the performance of his or her industry coverage universe over the next 12-18 months to be attractive vs. the relevant broad market benchmark, as indicated below.

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: 10/1/05 : O/I; 11/24/05 : E/I; 6/26/06 : E/A; 7/17/08 : E/C

Price Target History: 7/13/05 : 14; 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

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](http://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 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.

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.

October 29, 2008

Winbond Electronics

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**

Three Exchange Square  
 Central  
**Hong Kong**  
 Tel: +852 2848 5200

**Industry Coverage: Taiwan DRAM**

Company (Ticker)	Rating (as of)	Price (10/28/2008)
<b>Frank A.Y. Wang</b>		
Inotera Memories, Inc. (3474.TW)	O-V (06/26/2006)	NT\$7.46
Nanya Technology Corp. (2408.TW)	U-V (07/17/2008)	NT\$5.52
Powerchip (5346.TWO)	U-V (07/17/2008)	NT\$3.72
Winbond Electronics (2344.TW)	E-V (11/24/2005)	NT\$3.1

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