

**4Q08**Quarterly Management Report  
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- Revenue Analysis
- Profit & Expense Analysis
- Financial Condition Review
- Cash Flow
- CapEx & Capacity
- Recap of Recent Important Events & Announcements

**Operating Results Review:****Summary:***(Amounts are on consolidated basis and are in NT billions except otherwise noted)*

	<u>4Q08</u>	<u>3Q08</u>	<u>4Q07</u>	<u>2008</u>	<u>2007</u>
EPS (NT\$ per common share)	0.48	1.18	1.29	3.83	4.06
(US\$ per ADR unit)	0.07	0.19	0.20	0.61	0.62
Consolidated Net Sales	64.56	92.98	93.86	333.16	322.63
Gross Profit	20.19	43.09	44.84	141.75	142.35
<i>Gross Margin</i>	<i>31.3%</i>	<i>46.3%</i>	<i>47.8%</i>	<i>42.5%</i>	<i>44.1%</i>
Operating Expense	(8.17)	(10.18)	(8.08)	(37.31)	(30.63)
Operating Income	12.02	32.92	36.76	104.44	111.72
<i>Operating Margin</i>	<i>18.6%</i>	<i>35.4%</i>	<i>39.2%</i>	<i>31.4%</i>	<i>34.6%</i>
Non-Operating Items	1.07	1.51	2.57	7.04	9.92
Net Income	12.45	30.57	34.48	99.93	109.18
<i>Net Profit Margin</i>	<i>19.3%</i>	<i>32.9%</i>	<i>36.7%</i>	<i>30.0%</i>	<i>33.8%</i>
Wafer Shipment (kpcs 8 inch-equiv.)	1,532	2,411	2,357	8,467	8,005

*Note: Total outstanding shares were 25,625mn units on 12/31/08***Financial Highlights:****Fourth Quarter 2008**

- Consolidated net sales were NT\$64.6 billion, declining 30.6% quarter-over-quarter and declining 31.2% year-over-year;
- Gross margin was 31.3%, a decrease by 15.0 percentage points from 3Q08. Operating margin was 18.6%, declined by 16.8 percentage points from 3Q08. On a year-over-year basis, gross margin and operating margin declined by 16.5 and 20.6 percentage points respectively, although 4Q07 results did not include the expensing of employee profit sharing;
- EPS was NT\$0.48, with net profit margin of 19.3%

**Full Year 2008**

- Consolidated net sales were NT\$333.2 billion, up 3.3% from 2007;
- Gross margin and operating margin were 42.5% and 31.4%, declining 1.6 and 3.2 percentage points from 2007 respectively. Notice however, 2007 results did not include expensing of employee profit sharing;
- Earnings per share was NT\$3.83, with net profit margin of 30.0%

## I. Revenue Analysis

### I. Wafer Sales Analysis

By Application	4Q08	3Q08	4Q07
Computer	32%	33%	35%
Communication	43%	41%	42%
Consumer	19%	20%	15%
Industrial/Others	6%	6%	8%

By Technology	4Q08	3Q08	4Q07
65nm and below	27%	25%	10%
90nm	21%	26%	29%
0.11/0.13um	17%	15%	20%
0.15/0.18um	22%	22%	27%
0.25/0.35um	10%	9%	10%
0.50um+	3%	3%	4%

By Customer Type	4Q08	3Q08	4Q07
Fabless/System	72%	70%	68%
IDM	28%	30%	32%

By Geography	4Q08	3Q08	4Q07
North America	73%	74%	79%
Asia Pacific	13%	13%	11%
Europe	11%	10%	8%
Japan	3%	3%	2%

### Revenue Analysis:

**Application**—Fourth quarter revenue was NT\$64.6 billion. 4Q08 business saw a sharp decline in the demand for wafer while the NT dollar depreciated 5.6% against the US dollar. Weakness in demand was seen across all applications during the quarter. On a sequential basis, revenues from consumer, computer, and communication applications decreased 39%, 34% and 32%, respectively.

**Technology**—Revenue from 65nm reached 27% of total wafer sales during the quarter, up from 25% in the previous quarter. Meanwhile, revenue from 90nm declined from 26% to 21% of total wafer sales. Overall, revenues from advanced technologies (0.13-micron and below) accounted for 65% of total wafer sales, slightly below the 66% in 3Q08.

**Customer**—Revenues from IDM customers accounted for 28% of total wafer sales in 4Q08, slightly lower than 3Q08, due to increasing in-sourcing of those customers in the weak business environment.

**Geography**—On a sequential basis, there were no major changes on the geographic breakdown, while revenues from customers based in North America accounted for 73% of total wafer sales.

## II. Profit & Expense Analysis

### II - 1. Gross Profit Analysis

(In NT billions)	4Q08	3Q08	4Q07	2008	2007
<b>COGS</b>	<b>44.37</b>	<b>49.89</b>	<b>49.02</b>	<b>191.41</b>	<b>180.28</b>
Depreciation	19.29	19.06	18.50	74.70	73.07
Other MFG Cost	25.08	30.83	30.52	116.71	107.21
<b>Gross Profit</b>	<b>20.19</b>	<b>43.09</b>	<b>44.84</b>	<b>141.75</b>	<b>142.35</b>
<b>Gross Margin</b>	<b>31.3%</b>	<b>46.3%</b>	<b>47.8%</b>	<b>42.5%</b>	<b>44.1%</b>

### Gross Profit Analysis:

Gross margin in 4Q08 was 31.3%, down 15.0 percentage points from 3Q08, mainly driven by a sharp decline of production activities, partially offset by cost improvement and a more favorable exchange rate.

Gross margin for full year 2008 was 42.5%, down 1.6 percentage points from 2007, reflecting the impact from the expensing of employee profit sharing (2.3 percentage points).

## II - 2. Operating Expenses

(In NT billions)	<u>4Q08</u>	<u>3Q08</u>	<u>4Q07</u>	<u>2008</u>	<u>2007</u>
<b>Total Operating Exp.</b>	<b>8.17</b>	<b>10.18</b>	<b>8.08</b>	<b>37.31</b>	<b>30.63</b>
SG&A	3.34	4.20	3.07	15.83	12.68
Research & Development	4.83	5.98	5.01	21.48	17.95
<b>Total Operating Exp. as a % of Sales</b>	<b>12.7%</b>	<b>10.9%</b>	<b>8.6%</b>	<b>11.1%</b>	<b>9.5%</b>

### *Operating Expenses:*

Total operating expenses for 4Q08 decreased by 19.7% sequentially to NT\$8.2 billion, or 12.7% of net sales, compared with 10.9% of net sales in 3Q08.

Research and development expenses decreased by NT\$1.2 billion quarter-over-quarter, mainly due to a lower level of employee profit sharing.

SG&A expenses decreased by NT\$849 million from 3Q08, also due to a sharply lower level of employee profit sharing.

On a full year basis, total operating expenses accounted for 11.1% of net sales in 2008, compared with 9.5% of net sales in 2007, mainly reflecting the impact from expensing of employee profit sharing in 2008 (2.2 percentage points).

## II - 3. Non-Operating Items

(In NT billions)	<u>4Q08</u>	<u>3Q08</u>	<u>4Q07</u>	<u>2008</u>	<u>2007</u>
<b>Non-Operating Inc./(Exp.)</b>	<b>1.41</b>	<b>1.33</b>	<b>1.69</b>	<b>6.34</b>	<b>7.41</b>
Net Interest Income/(Exp.)	1.18	1.15	1.21	4.76	4.81
Other Non-Operating	0.23	0.18	0.48	1.58	2.60
<b>L-T Investments</b>	<b>(0.34)</b>	<b>0.18</b>	<b>0.88</b>	<b>0.70</b>	<b>2.51</b>
SSMC	(0.07)	0.15	0.47	0.76	1.18
Others	(0.27)	0.03	0.41	(0.06)	1.33
<b>Total Non-Operating Items</b>	<b>1.07</b>	<b>1.51</b>	<b>2.57</b>	<b>7.04</b>	<b>9.92</b>

### *Non-Operating Items:*

For 4Q08, combined result from non-operating income and long-term investments income was a gain of NT\$1.1 billion.

Non-operating income was NT\$1.4 billion, up from NT\$1.3 billion in 3Q08, primarily due to foreign exchange gains and no additional impairment losses on idle assets as compared to 3Q08. Meanwhile, the gains were partially offset by impairment losses of financial assets from venture capital funds by about NT\$481 million in this quarter.

Net investment losses in the quarter were NT\$340 million, mainly from VIS and SSMC.

For full year 2008, non-operating income decreased by NT\$1.1 billion to NT\$6.3 billion, mostly due to impairment losses on financial assets and lower valuation on certain marketable securities, partially offset by an increase of foreign exchange gains. Net investment gains decreased by NT\$1.8 billion to NT\$702 million, mainly due to VIS and SSMC. Combining results from non-operating income and long-term investments, the gain was NT\$7.0 billion in 2008, compared with a gain of NT\$9.9 billion in 2007.

<b>II - 4. PSE Impact</b>					
	<u>4Q08</u>	<u>3Q08</u>	<u>4Q07</u>	<u>2008</u>	<u>2007</u>
Gross Margin w/ PSE	31.3%	46.3%	43.0%	42.5%	39.7%
Gross Margin w/o PSE	32.8%	48.9%	47.8%	44.8%	44.1%
PSE Impact	-1.5%	-2.6%	-4.8%	-2.3%	-4.4%
<b>Operating Margin w/ PSE</b>	<b>18.6%</b>	<b>35.4%</b>	<b>29.8%</b>	<b>31.4%</b>	<b>26.0%</b>
Operating Margin w/o PSE	21.5%	40.3%	39.2%	35.9%	34.6%
PSE Impact	-2.9%	-4.9%	-9.4%	-4.5%	-8.6%
* PSE: Profit Sharing Expenses					
** 2007 PSE impact is estimated using the 6/12/2008 closing share price adjusted for dividends					

### *The Impact of Employee Profit Sharing:*

Total impact from employee profit sharing expensing (PSE) on gross margin in 4Q08 was 1.5 percentage points, down 1.1 percentage points from 3Q08, due to an overall decrease in net income. Similarly, total PSE impact on operating margin was 2.9 percentage points in 4Q08.

For full year 2008, total impacts from PSE on gross margin and operating margin were 2.3 percentage points and 4.5 percentage points, respectively.

## **III. Financial Condition Review**

<b>III - 1. Liquidity Analysis</b>			
<b>(Selected Balance Sheet Items)</b>			
(In NT billions)	<u>4Q08</u>	<u>3Q08</u>	<u>4Q07</u>
Cash & Marketable Securities	211.45	158.17	174.83
Accounts Receivable - Trade	18.50	45.33	42.42
Inventory	14.88	21.82	23.86
<b>Total Current Assets</b>	<b>252.62</b>	<b>232.35</b>	<b>249.82</b>
Accounts Payable	14.04	17.75	19.33
Current Portion of Bonds Payable	8.00	8.00	0.00
Accrued Bonus to Employees, Directors and Supervisors	15.37	13.46	0.00
Accrued Liabilities and Others	19.40	22.92	29.38
<b>Total Current Liabilities</b>	<b>56.81</b>	<b>62.13</b>	<b>48.71</b>
Current Ratio (x)	4.4	3.7	5.1
<b>Net Working Capital</b>	<b>195.81</b>	<b>170.22</b>	<b>201.11</b>

### *Liquidity Analysis:*

At the end of 4Q08, total current assets increased by NT\$ 20.3 billion to NT\$252.6 billion, mainly due to the free cash flow of NT\$52.0 billion generated in this quarter.

Total current liabilities decreased by NT\$5.3 billion in 4Q08, primarily due to declines in accounts payable and in accruals due to lower levels of production activities.

Net working capital was NT\$195.8 billion and current ratio increased to 4.4 at the end of this quarter.

<b>III - 2. Receivable/Inventory Days</b>			
(In Number of Days)	<u>4Q08</u>	<u>3Q08</u>	<u>4Q07</u>
Days of Receivable	46	43	42
Days of Inventory	40	45	48

### *Receivable and Inventory Days:*

Sequentially, days of receivable increased by three days to 46 days in 4Q08, mainly due to a sharp decline of revenue in the quarter.

Days of inventory decreased by five days to 40 days, mostly due to a lower level of production activities resulted from continued weaker demand environment.

### III - 3. Debt Service

(In NT billions)	<u>4Q08</u>	<u>3Q08</u>	<u>4Q07</u>
Cash & Marketable Securities	211.45	158.17	174.83
Interest-Bearing Debt	23.44	23.41	23.06
Net Cash Reserves	188.01	134.76	151.77

## IV. Cash Flow

### IV - 1.1. Cash Flow Analysis

(In NT billions)	<u>4Q08</u>	<u>3Q08</u>	<u>4Q07</u>
Net Income	12.45	30.57	34.49
Depreciation & Amortization	20.96	20.69	20.28
Other Operating Sources/(Uses)	29.83	4.64	4.99
<b>Total Operating Sources/(Uses)</b>	<b><u>63.24</u></b>	<b><u>55.90</u></b>	<b><u>59.76</u></b>
Capital Expenditure	(11.26)	(10.38)	(19.78)
Marketable Financial Instruments	30.31	(18.07)	8.20
Other Investing Sources/(Uses)	(1.04)	1.93	(1.08)
<b>Net Investing Sources/(Uses)</b>	<b><u>18.01</u></b>	<b><u>(26.52)</u></b>	<b><u>(12.66)</u></b>
Cash Dividends	0.00	(76.78)	0.00
Employee Profit Sharing	0.00	(3.94)	0.00
Repayment of Bonds Payable	0.00	0.00	(4.50)
Purchase of Treasury Stock	0.00	(23.81)	(45.41)
Other Financing Sources/(Uses)	(0.30)	(0.43)	(0.20)
<b>Net Financing Sources/(Uses)</b>	<b><u>(0.30)</u></b>	<b><u>(104.96)</u></b>	<b><u>(50.11)</u></b>
<b>Net Cash Position Changes</b>	<b>80.95</b>	<b>(75.58)</b>	<b>(3.01)</b>
<b>Exchange Rate Changes &amp; Others</b>	<b>1.21</b>	<b>2.68</b>	<b>(0.33)</b>
<b>Ending Cash Balance</b>	<b>194.61</b>	<b>112.45</b>	<b>94.99</b>

### IV - 1.2. Cash Flow Analysis

(In NT billions)	<u>2008</u>	<u>2007</u>
Net Income	99.93	109.18
Depreciation & Amortization	81.51	80.01
Other Operating Sources/(Uses)	40.05	(5.42)
<b>Total Operating Sources/(Uses)</b>	<b><u>221.49</u></b>	<b><u>183.77</u></b>
Capital Expenditure	(59.22)	(84.00)
Marketable Financial Instruments	52.35	24.68
Other Investing Sources/(Uses)	(1.17)	(11.37)
<b>Net Investing Sources/(Uses)</b>	<b><u>(8.04)</u></b>	<b><u>(70.69)</u></b>
Cash Dividends	(76.78)	(77.39)
Employee Profit Sharing	(3.94)	(4.57)
Repayment of Bonds Payable	0.00	(7.00)
Repurchase of Treasury Stock	(33.48)	(45.41)
Other Financing Sources/(Uses)	(1.19)	(1.04)
<b>Net Financing Sources/(Uses)</b>	<b><u>(115.39)</u></b>	<b><u>(135.41)</u></b>
<b>Net Cash Position Changes</b>	<b>98.06</b>	<b>(22.33)</b>
<b>Exchange Rate Changes &amp; Others</b>	<b>1.56</b>	<b>(0.52)</b>
<b>Ending Cash Balance</b>	<b>194.61</b>	<b>94.99</b>

### Debt Service:

Net cash reserves - defined as the excess of cash and short-term marketable securities over interest-bearing debt – increased by NT\$53.2 billion to NT\$188.0 billion at the end of 4Q08, primarily due to free cash flow of NT\$52.0 billion generated in this quarter.

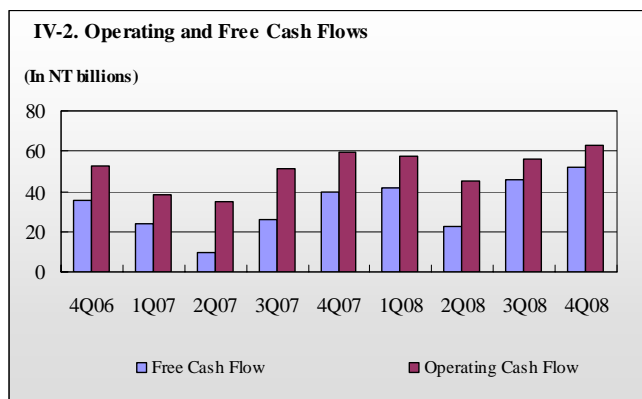
### Summary of Cash Flow:

Cash generated from operating activities totaled NT\$63.2 billion during 4Q08, up from NT\$55.9 billion in 3Q08, mainly due to a sharp decline of non-cash working capital as a result of much lowered levels of production activities.

Net cash generated from investing activities was NT\$18.0 billion in 4Q08, reflecting the capital expenditure of NT\$11.3 billion and a net decrease of NT\$30.3 billion in marketable financial instruments.

As a result, TSMC ended 4Q08 with a cash balance of NT\$194.6 billion.

On a full year basis, cash generated from operating activities increased by NT\$37.7 billion in 2008, meanwhile, capital expenditures and marketable financial instruments decreased by NT\$24.8 billion and NT\$27.7 billion, respectively. Cash dividends paid in 2008 were NT\$76.8 billion. TSMC also spent NT\$33.5 billion in share buybacks.



**Operating and Free Cash Flows:**

Cash flows generated from operating activities were NT\$63.2 billion during the quarter. Free cash flow, defined as the excess of operating cash flows over capital expenditures, totaled NT\$52.0 billion in 4Q08, compared to NT\$45.5 billion in 3Q08.

Total free cash flow generated in 2008 reached NT\$162.3 billion, compared with NT\$99.8 billion in 2007.

**V. CapEx & Capacity**

**V - 1. Capital Expenditures**  
(In US millions)

	1Q08	2Q08	3Q08	4Q08	2008	2007
TSMC	452	712	317	326	1,807	2,475
XinTec and GUC	13	5	3	2	23	47
TSMC Shanghai & WaferTech	18	11	11	12	52	31
Other TSMC Subsidiaries	1	0	1	2	4	4
<b>Total TSMC</b>	<b>484</b>	<b>728</b>	<b>332</b>	<b>342</b>	<b>1,886</b>	<b>2,557</b>

**Capital Expenditures:**

Capital expenditures for TSMC on a consolidated basis totaled US\$342 million in 4Q08.

For year 2008, total capital expenditures for TSMC consolidated group was US\$1.9 billion, compared with US\$2.6 billion spent in 2007.

**V-2. Capacity**

Fab / (Wafer size)	1Q08 (A)	2Q08 (A)	3Q08 (A)	4Q08 (A)	2008 (A)	1Q09 (F)
Fab-2 (6") <sup>(1)</sup>	248	267	270	272	1,056	274
Fab-3 (8")	277	281	268	274	1,100	286
Fab-5 (8")	163	165	161	161	650	162
Fab-6 (8")	265	267	268	282	1,082	295
Fab-8 (8")	262	275	267	272	1,076	275
Fab-12 (12") <sup>(2)</sup>	197	207	214	221	840	218
Fab-14 (12") <sup>(2)</sup>	167	185	229	236	818	238
WaferTech (8")	105	105	106	106	420	106
TSMC (Shanghai) (8")	88	110	128	128	453	128
<b>TSMC total capacity (8" equiv. Kpcs)</b>	<b>2,117</b>	<b>2,236</b>	<b>2,346</b>	<b>2,405</b>	<b>9,104</b>	<b>2,431</b>
SSMC (8")	63	67	69	73	272	64
<b>Total managed capacity (8" equiv. Kpcs)</b>	<b>2,180</b>	<b>2,303</b>	<b>2,416</b>	<b>2,478</b>	<b>9,377</b>	<b>2,495</b>

(1) Figures represent number of 6" wafers. Conversion to 8"-equivalent wafers is obtained by dividing this number by 1.78  
(2) Figures represent number of 12" wafers. Conversion to 8"-equivalent wafers is obtained by multiplying this number by 2.25

**Capacity:**

Total TSMC managed capacity was 2,478K 8-inch equivalent wafers in the fourth quarter, 3% more than 3Q08. TSMC managed capacity in 1Q09 is expected to increase by 1% to reach 2,495K 8-inch equivalent wafers, mainly due to productivity improvement.

Total managed capacity in 2008 was 9,377K 8-inch equivalent wafers, representing an increase of 13% from 8,290K 8-inch equivalent wafers in 2007, while capacity for 12-inch wafer fabs increased by 27%.

## VI. Recap of Recent Important Events & Announcements

- TSMC Wins the Award of “Grand Prix for Best Overall Investor Relations at a Taiwanese Company - Large-Cap” by IR Magazine (2008/12/11)
- TSMC Chairman Dr. Morris Chang Receives Semiconductor Industry Association’s Highest Honor “The 2008 Robert N. Noyce Award” (2008/11/18)
- TSMC Ramps 40nm Volume Production to Promote Innovation as Foundries Assume a Larger Role for \$300 Billion Industry - Most Advanced Cellular, Wireless, and Consumer Electronic Innovations Targeted for Foundry’s First 40 Nanometer (nm) Logic Process (2008/11/17)
- TSMC Recognizes Outstanding Suppliers at Supply Chain Management Forum (2008/11/14)
- TSMC Board Approves Cancellation of Treasury Shares to Reduce Total Issued Shares by 1.07 Percent (2008/11/11)
- TSMC Adds New High Voltage Features to Advanced 0.13-micron Processes Aimed at High Resolution Display Drivers (2008/11/05)
- TSMC Holds 2008 Green Forum on "Present and Future of Green Factories" to Launch Taiwan Corporate Sustainability Forum Series (2008/10/16)
- TSMC and MAPPER Take Next Step in Exploring Multiple E-beam Lithography for IC Manufacturing at 22 nanometer node and Beyond (2008/10/13)

\* Please visit TSMC's Web site (<http://www.tsmc.com>) for details about these and other announcements.