

4Q11

Quarterly Management Report  
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Elizabeth Sun

Corporate Communication Division

TSMC

invest@tsmc.com

886-3-568-2085

**Topics in This Report**

- Revenue Analysis
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- CapEx & Capacity
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**Operating Results Review:****Summary:***(Amounts are on consolidated basis and are in NT billions except otherwise noted)*

	<u>4Q11</u>	<u>3Q11</u>	<u>4Q10</u>	<u>2011</u>	<u>2010</u>
EPS (NT\$ per common share)	1.22	1.17	1.57	5.18	6.23
(US\$ per ADR unit)	0.20	0.20	0.26	0.88	0.99
Consolidated Net Sales	104.71	106.48	110.14	427.08	419.54
Gross Profit	46.77	44.77	54.82	194.07	207.05
<i>Gross Margin</i>	<i>44.7%</i>	<i>42.0%</i>	<i>49.8%</i>	<i>45.4%</i>	<i>49.4%</i>
Operating Expense	(13.84)	(13.17)	(13.31)	(52.51)	(47.88)
Operating Income	32.93	31.60	41.51	141.56	159.18
<i>Operating Margin</i>	<i>31.4%</i>	<i>29.7%</i>	<i>37.7%</i>	<i>33.1%</i>	<i>37.9%</i>
Non-Operating Items	0.69	0.56	1.37	3.59	11.10
Net Income	31.58	30.40	40.72	134.20	161.61
<i>Net Profit Margin</i>	<i>30.2%</i>	<i>28.5%</i>	<i>37.0%</i>	<i>31.4%</i>	<i>38.5%</i>
Wafer Shipment (kpcs 8 inch-equiv.)	2,917	3,180	3,195	12,549	11,860

*Note: Total outstanding shares were 25,916mn units on 12/31/11***Financial Highlights:****Fourth Quarter 2011**

- Consolidated net sales were NT\$104.71 billion, representing a 1.7% decrease from NT\$106.48 billion in 3Q11 and a 4.9% decrease from NT\$110.14 billion in 4Q10.
- Gross margin was 44.7%, 2.7 percentage points higher than 3Q11 and 5.1 percentage points lower than 4Q10 level.
- Operating margin was 31.4%, up 1.7 percentage points from 3Q11 and down 6.3 percentage points from 4Q10.
- Non-operating income and long-term investment combined were a gain of NT\$0.69 billion, compared to a gain of NT\$0.56 billion in 3Q11 and NT\$1.37 billion in 4Q10.
- Consolidated net income attributable to shareholders of the parent company was NT\$31.58 billion, up 3.9% from 3Q11. Net profit margin was 30.2% and diluted EPS was NT\$1.22.

**Full Year 2011**

- Consolidated net sales were NT\$427.08 billion, representing a 1.8% increase from 2010. In US dollar terms, consolidated net sales increased 9.2% to US\$14.54 billion in 2011 from US\$13.32 billion in 2010.
- Gross margin was 45.4%, down 4.0 percentage points from 49.4% in 2010. Operating margin was 33.1%, down 4.8 percentage points from 2010.
- Diluted EPS was NT\$5.18, down 16.9% from NT\$6.23 in 2010. Net profit margin was 31.4%, down 7.1 percentage points from 2010.

## I. Revenue Analysis

<b>I. Wafer Sales Analysis</b>			
<b>By Application</b>	<b>4Q11</b>	<b>3Q11</b>	<b>4Q10</b>
Computer	20%	21%	24%
Communication	53%	48%	47%
Consumer	9%	10%	11%
Industrial/Standard	18%	21%	18%
<b>By Technology</b>			
<b>4Q11</b>	<b>3Q11</b>	<b>4Q10</b>	
28nm	2%	0%	0%
40/45nm	27%	27%	21%
65nm	30%	27%	31%
90nm	8%	9%	11%
0.11/0.13um	7%	9%	10%
0.15/0.18um	17%	18%	17%
0.25/0.35um	7%	8%	7%
0.50um and above	2%	2%	3%
<b>By Customer Type</b>			
<b>4Q11</b>	<b>3Q11</b>	<b>4Q10</b>	
Fabless/System	83%	81%	78%
IDM	17%	19%	22%
<b>By Geography</b>			
<b>4Q11</b>	<b>3Q11</b>	<b>4Q10</b>	
North America	70%	70%	70%
Asia Pacific	13%	14%	13%
China	4%	3%	3%
Europe	9%	9%	10%
Japan	4%	4%	4%

### **Revenue Analysis:**

Customers' inventory adjustments continued to affect the demand for TSMC's wafers in the fourth quarter. By application, Computer, Consumer, and Industrial declined 13%, 10%, and 14% from 3Q11, respectively, while Communication increased 6%, supported by the demand for smartphones.

By technology, 28nm ramped strongly during the quarter and reached 2% of total wafer sales, compared to 0.5% in 3Q11. 40/45nm and 65nm represented 27% and 30%, respectively. Advanced technologies (65nm and below) represented 59% of total wafer sales, compared to 54% in 3Q11 and 52% in 4Q10.

Revenues from IDM customers accounted for 17% of total wafer sales in 4Q11.

From a geographic perspective, revenues from customers based in North America accounted for 70% of total wafer sales, while sales from Asia Pacific, China, Europe and Japan accounted for 13%, 4%, 9%, and 4% of total wafer sales, respectively.

## II. Profit & Expense Analysis

<b>II - 1. Gross Profit Analysis</b>					
(In NT billions)	<b>4Q11</b>	<b>3Q11</b>	<b>4Q10</b>	<b>2011</b>	<b>2010</b>
<b>COGS</b>	<b>57.94</b>	<b>61.71</b>	<b>55.32</b>	<b>233.01</b>	<b>212.49</b>
Depreciation/Amortization	25.47	25.92	21.57	99.53	81.43
Other MFG Cost	32.47	35.79	33.75	133.48	131.06
<b>Gross Profit</b>	<b>46.77</b>	<b>44.77</b>	<b>54.82</b>	<b>196.07</b>	<b>207.05</b>
<b>Gross Margin</b>	<b>44.7%</b>	<b>42.0%</b>	<b>49.8%</b>	<b>45.4%</b>	<b>49.4%</b>

### **Gross Profit Analysis:**

Gross margin was 44.7% in 4Q11, 2.7 percentage points higher than 3Q11, mainly attributed to a favorable foreign exchange rate and higher capacity utilization.

On a full year basis, gross margin for 2011 was 45.4%, down 4.0 percentage points from 2010, mainly due to lower capacity utilization and an unfavorable foreign exchange rate, partially balanced by cost improvements.

<b>II - 2. Operating Expenses</b>					
(In NT billions)	<u>4Q11</u>	<u>3Q11</u>	<u>4Q10</u>	<u>2011</u>	<u>2010</u>
<b>Total Operating Exp.</b>	<b>13.84</b>	<b>13.17</b>	<b>13.31</b>	<b>52.51</b>	<b>47.88</b>
SG&A	5.09	4.55	5.24	18.68	18.17
Research & Development	8.75	8.62	8.07	33.83	29.71
<b>Total Operating Exp. as a % of Sales</b>	<b>13.3%</b>	<b>12.3%</b>	<b>12.1%</b>	<b>12.3%</b>	<b>11.5%</b>

### ***Operating Expenses:***

Total operating expenses were NT\$13.84 billion in 4Q11, representing 13.3% of net sales.

SG&A expenses increased by NT\$535 million, primarily accounting for higher opening expenses for Fab 15 Phase 1.

Research and development expenditures increased slightly by NT\$135 million.

For full year 2011, total operating expenses were NT\$52.51 billion, increased by NT\$4.63 billion, mainly reflecting a higher level of 20nm technology activities and higher opening expenses for Fab 15 Phase 1 and Fab 10 Phase 2, partially balanced by less expenses from deconsolidation of GUC.

<b>II - 3. Non-Operating Items</b>					
(In NT billions)	<u>4Q11</u>	<u>3Q11</u>	<u>4Q10</u>	<u>2011</u>	<u>2010</u>
<b>Non-Operating Inc./(Exp.)</b>	<b>0.71</b>	<b>0.41</b>	<b>0.68</b>	<b>2.69</b>	<b>8.80</b>
Net Interest Income/(Exp.)	0.26	0.05	0.30	0.85	1.24
Other Non-Operating	0.45	0.36	0.38	1.84	7.56
<b>L-T Investments</b>	<b>(0.02)</b>	<b>0.15</b>	<b>0.69</b>	<b>0.90</b>	<b>2.30</b>
SSMC	0.23	0.25	0.44	1.14	1.31
Others	(0.25)	(0.10)	0.25	(0.24)	0.99
<b>Total Non-Operating Items</b>	<b>0.69</b>	<b>0.56</b>	<b>1.37</b>	<b>3.59</b>	<b>11.10</b>

### ***Non-Operating Items:***

Total non-operating items were a gain of NT\$0.69 billion in 4Q11.

Non-operating income was NT\$0.71 billion, up NT\$0.30 billion from 3Q11, mainly accounting for the receipt of NT\$0.45 billion from SMIC litigation settlement and higher net interest income, partially offset by impairment losses from certain venture capital assets.

Net investment loss was NT\$19 million, down NT\$0.17 billion sequentially, reflecting lower profits from certain invested companies.

On a full year basis, total non-operating items decreased by NT\$7.51 billion to NT\$3.59 billion in 2011, primarily due to the decrease of NT\$6.05 billion in compensation from the SMIC litigation settlement and the decrease of NT\$1.40 billion in net investment gain.

### III. Financial Condition Review

<b>III - 1. Liquidity Analysis</b>			
<b>(Balance Sheet Items)</b>			
(In NT billions)	<b>4Q11</b>	<b>3Q11</b>	<b>4Q10</b>
Cash & Marketable Securities	150.62	120.26	181.57
Accounts Receivable - Trade	40.95	45.46	42.98
Inventory	24.84	25.69	28.41
Other Current Assets	8.85	5.53	8.56
<b>Total Current Assets</b>	<b>225.26</b>	<b>196.94</b>	<b>261.52</b>
Short-term Loans	25.93	36.02	31.21
Accounts Payable	47.40	31.71	56.23
Accrued Employee Profit Sharing / Bonus	11.26	9.01	13.81
Accrued Liabilities and Others	32.42	31.63	21.94
<b>Total Current Liabilities</b>	<b>117.01</b>	<b>108.37</b>	<b>123.19</b>
Current Ratio (x)	1.9	1.8	2.1
<b>Net Working Capital</b>	<b>108.25</b>	<b>88.57</b>	<b>138.33</b>

#### *Liquidity Analysis:*

At the end of 4Q11, cash and marketable securities totaled NT\$150.62 billion, increased by NT\$30.36 billion from 3Q11, primarily due to free cash flow of NT\$43.07 billion generated during the quarter (please refer to page 6), partially offset by a decrease of NT\$10.09 billion in short-term loans.

Total current liabilities increased by NT\$8.64 billion, mainly attributed to an increase in accounts payable to contractors and equipment suppliers, partially offset by a decrease in short-term loans during the quarter.

Net working capital was NT\$108.25 billion and current ratio was 1.9x.

<b>III - 2. Receivable/Inventory Days</b>			
(In Number of Days)	<b>4Q11</b>	<b>3Q11</b>	<b>4Q10</b>
Days of Receivable	38	39	38
Days of Inventory	43	45	50

#### *Receivable and Inventory Days:*

Days of receivable decreased by one day to 38 days

Days of inventory decreased by 2 days to 43 days, mainly reflecting continued shipments of finished goods inventories during the quarter.

<b>III - 3. Debt Service</b>			
(In NT billions)	<b>4Q11</b>	<b>3Q11</b>	<b>4Q10</b>
Cash & Marketable Securities	150.62	120.26	181.57
Interest-Bearing Debt	54.35	67.35	44.06
<b>Net Cash Reserves</b>	<b>96.27</b>	<b>52.91</b>	<b>137.51</b>

#### *Debt Service:*

Net cash reserves, defined as cash and short-term marketable securities minus interest-bearing debt, increased NT\$43.36 billion to NT\$96.27 billion in 4Q11, reflecting an increase of NT\$ 30.36 billion in cash and marketable securities and a decrease of NT\$13.00 billion in interest-bearing debts.

## IV. Cash Flow

<b>IV - 1.1. Cash Flow Analysis</b>			
(In NT billions)	<b><u>4Q11</u></b>	<b><u>3Q11</u></b>	<b><u>4Q10</u></b>
Net Income	31.58	30.40	40.72
Depreciation & Amortization	27.74	27.97	23.30
Other Operating Sources/(Uses)	13.52	(3.16)	6.54
<b>Total Operating Sources/(Uses)</b>	<b><u>72.84</u></b>	<b><u>55.21</u></b>	<b><u>70.56</u></b>
Capital Expenditure	(29.77)	(38.05)	(45.94)
Marketable Financial Instruments	0.01	1.97	0.41
Other Investing Sources/(Uses)	(0.39)	(0.27)	(1.03)
<b>Net Investing Sources/(Uses)</b>	<b><u>(30.15)</u></b>	<b><u>(36.35)</u></b>	<b><u>(46.56)</u></b>
Short-term Loans	(10.09)	2.88	(6.70)
Cash Dividends	0.00	(77.73)	0.00
Proceeds from Issuance of Bonds	0.00	18.00	0.00
Acquisition of Treasury Stock	0.00	(0.07)	0.00
Other Financing Sources/(Uses)	(2.76)	0.03	(0.60)
<b>Net Financing Sources/(Uses)</b>	<b><u>(12.85)</u></b>	<b><u>(56.89)</u></b>	<b><u>(7.30)</u></b>
<b>Net Cash Position Changes</b>	<b>29.84</b>	<b>(38.03)</b>	<b>16.70</b>
<b>Exchange Rate Changes</b>	<b>(1.21)</b>	<b>3.36</b>	<b>(1.08)</b>
<b>Others</b>	<b>0.00</b>	<b>(1.47)</b>	<b>0.00</b>
<b>Ending Cash Balance</b>	<b>143.47</b>	<b>114.84</b>	<b>147.89</b>

### *Summary of Cash Flow:*

Cash generated from operating activities totaled NT\$72.84 billion during the quarter, an increase of NT\$17.63 billion from 3Q11, primarily attributed to higher other operating sources. The higher other operating sources mainly reflected the payment of 2010 employee profit sharing expenses in 3Q11 and the change in accounts receivable during the quarter.

Net cash used in investing activities decreased NT\$6.20 billion to NT\$30.15 billion in 4Q11, primarily reflecting lower capital expenditures.

Net cash used in financing activities totaled NT\$12.85 billion during the quarter, primarily resulting from the decrease in short-term loans.

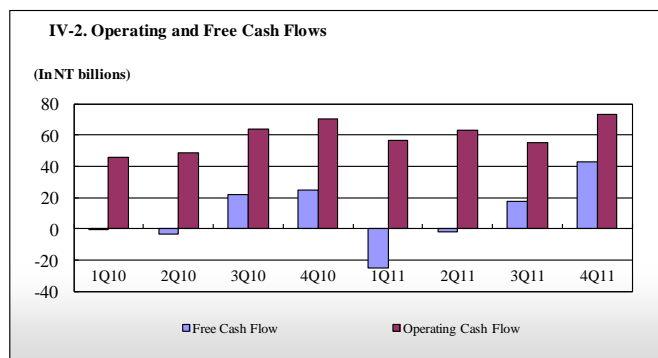
At the end of 4Q11, TSMC's cash balance was NT\$143.47 billion.

<b>IV - 1.2. Cash Flow Analysis</b>			
(In NT billions)	<b><u>2011</u></b>	<b><u>2010</u></b>	<b><u>Diff.</u></b>
Net Income	134.20	161.61	(27.41)
Depreciation & Amortization	107.68	87.81	19.87
Other Operating Sources/(Uses)	5.71	(19.94)	25.65
<b>Total Operating Sources/(Uses)</b>	<b><u>247.59</u></b>	<b><u>229.48</u></b>	<b><u>18.11</u></b>
Capital Expenditure	(213.96)	(186.94)	(27.02)
Marketable Financial Instruments	28.42	1.32	27.10
Other Investing Sources/(Uses)	3.02	(8.62)	11.64
<b>Net Investing Sources/(Uses)</b>	<b><u>(182.52)</u></b>	<b><u>(202.09)</u></b>	<b><u>19.57</u></b>
Short-term Loans	(5.28)	31.21	(36.49)
Cash Dividends	(77.73)	(77.71)	(0.02)
Proceeds from Issuance of Bonds	18.00	0.00	18.00
Repurchase of Treasury Stock	0.00	0.00	0.00
Other Financing Sources/(Uses)	(2.85)	(2.14)	(0.71)
<b>Net Financing Sources/(Uses)</b>	<b><u>(67.86)</u></b>	<b><u>(48.64)</u></b>	<b><u>(19.22)</u></b>
<b>Net Cash Position Changes</b>	<b>(2.79)</b>	<b>(21.25)</b>	<b>18.46</b>
<b>Exchange Rate Changes</b>	<b>(0.16)</b>	<b>(2.14)</b>	<b>1.98</b>
<b>Others</b>	<b>(1.47)</b>	<b>0.00</b>	<b>(1.47)</b>
<b>Ending Cash Balance</b>	<b>143.47</b>	<b>147.89</b>	<b>(4.42)</b>

On a full year basis, cash generated from operating activities increased NT\$18.11 billion to NT\$247.59 billion in 2011. The increase mainly reflected increased depreciation and amortization and higher other operating sources, partially offset by lower net income.

Net cash used in investing activities was NT\$182.52 billion in 2011, NT\$19.57 billion lower than that in 2010, primarily due to higher proceeds from net disposal of marketable financial instruments, the absence of long-term investment in Motech and Stion, and lower deposits paid to equipment vendors, partially offset by higher capital expenditures during the year.

Net cash used in financing activities increased NT\$19.22 billion to NT\$67.86 billion, mainly reflecting less short-term borrowing, partially offset by the proceeds from issuance of corporate bonds during 2011.



**Operating and Free Cash Flows:**

Free cash flow, defined as the excess of operating cash flows over capital expenditures, was NT\$43.07 billion in 4Q11, increased by NT\$25.91 billion compared to 3Q11, as a result of the higher operating cash flow and lower capital expenditures.

Total free cash flow generated in 2011 was NT\$33.63 billion, declined NT\$8.91 billion from NT\$42.54 billion in 2010. The year-over-year decline was primarily due to higher capital expenditures in 2011.

**V. CapEx & Capacity**

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

	1Q11	2Q11	3Q11	4Q11	2011
TSMC	2,635	2,149	1,236	882	6,902
TSMC China & WaferTech	95	92	47	47	281
Other TSMC Subsidiaries	44	12	23	24	103
<b>Total TSMC</b>	<b>2,774</b>	<b>2,253</b>	<b>1,306</b>	<b>953</b>	<b>7,286</b>

**Capital Expenditures:**

Capital expenditures for TSMC on a consolidated basis totaled US\$0.95 billion in 4Q11 and US\$7.29 billion for the year.

**V-2. Capacity**

Fab / (Wafer size)	1Q11 (A)	2Q11 (A)	3Q11 (A)	4Q11 (A)	2011 (A)	1Q12 (F)
Fab-2 (6") <sup>(1)</sup>	238	252	255	255	1,000	247
Fab-3 (8")	275	301	304	304	1,184	298
Fab-5 (8")	137	133	141	136	547	145
Fab-6 (8")	274	283	286	286	1,128	298
Fab-8 (8")	240	254	254	255	1,003	262
Fab-12 (12") <sup>(2)</sup>	322	337	338	337	1,334	373
Fab-14 (12") <sup>(2)</sup>	427	488	509	504	1,927	539
WaferTech (8")	106	108	109	107	429	110
TSMC China (8")	148	179	216	230	772	222
<b>TSMC total capacity (8" equiv. Kpcs)</b>	<b>2,999</b>	<b>3,254</b>	<b>3,358</b>	<b>3,352</b>	<b>12,963</b>	<b>3,529</b>
SSMC (8")	64	64	65	65	258	64
<b>Total managed capacity (8" equiv. Kpcs)</b>	<b>3,063</b>	<b>3,318</b>	<b>3,423</b>	<b>3,417</b>	<b>13,221</b>	<b>3,592</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 managed capacity declined slightly to 3,417K 8-inch equivalent wafers in 4Q11, as a result of capacity conversion in 12" fabs and annual maintenance in certain 8" fabs. TSMC managed capacity in 1Q12 is expected to increase by 5.1% sequentially to 3,592K 8-inch equivalent wafers, mostly attributed to an 8.5% increase in 12" wafer capacity.

Total managed capacity in 2011 increased 17% sequentially to 13,221K 8-inch equivalent wafers, compared with 11,329K 8-inch equivalent wafers in 2010. 12-inch wafer capacity increased 29% in 2011.

**VI. Recap of Recent Important Events & Announcements**

- TSMC wins the Executive Yuan Council of Labor Affairs' First Employee Assistance Plan Outstanding Business Award ( 2011/12/21 )
- TSMC Wins Taiwan EPA "Energy Conservation and Carbon Reduction Action Mark" ( 2011/12/20 )
- TSMC F12P4 Office Building Wins Executive Yuan Outstanding Green Building Design Award ( 2011/12/16 )
- TSMC Expands Investment in Taiwan with New Milestone for Taichung GigaFab ( 2011/12/09 )
- Record Result for TSMC at the IR Magazine Greater China Awards ( 2011/12/02 )
- TSMC Recognizes Outstanding Suppliers at Supply Chain Management Forum ( 2011/12/02 )
- TSMC Wins 2011 Taiwan Corporate Sustainability Report "Gold Award" ( 2011/11/29 )
- TSMC Wins Six Prizes from Ministry of Economic Affairs' 1st National Industrial Innovation Award ( 2011/11/25 )
- TSMC Holds Free Classes to Share Water Conservation Experience ( 2011/11/11 )
- TSMC Leads in ISO 50001 Certification for Data Center ( 2011/11/03 )