

2Q16

Quarterly Management Report  
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Elizabeth Sun

Corporate Communications Division

TSMC

invest@tsmc.com

886-3-568-2085

## Topics in This Report:

- Revenue Analysis
- Profit & Expense Analysis
- Financial Condition Review
- Cash Flow
- CapEx
- Recap of Recent Important Events & Announcements

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

	<b>2Q16</b>	<b>1Q16</b>	<b>2Q15</b>	<b>QoQ</b>	<b>YoY</b>
EPS (NT\$ per common share)	2.80	2.50	3.06	11.9%	-8.7%
(US\$ per ADR unit)	0.43	0.38	0.50	11.9%	-8.7%
Net Revenue	221.81	203.50	205.44	9.0%	8.0%
Gross Profit	114.33	91.34	99.71	25.2%	14.7%
Gross Margin	51.5%	44.9%	48.5%		
Operating Expenses	(23.01)	(20.88)	(22.56)	10.2%	2.0%
Other Operating Income and Expenses	(0.00)	0.01	(0.08)		
Operating Income	91.32	70.47	77.07	29.6%	18.5%
Operating Margin	41.2%	34.6%	37.5%		
Non-Operating Items	2.09	1.79	21.06		
Net Income Attributable to Shareholders of the Parent Company	72.51	64.78	79.42	11.9%	-8.7%
Net Profit Margin	32.7%	31.8%	38.7%		
Wafer Shipment (kpcs 12 inch-equiv.)	2,297	2,056	2,240	11.7%	2.5%

*Note: Diluted weighted average outstanding shares were 25,930mn units in 2Q16***Financial Highlights:****Second Quarter 2016**

- Net revenue was NT\$221.81 billion, representing a 9.0% increase from NT\$203.50 billion in 1Q16 and an 8.0% increase from NT\$205.44 billion in 2Q15.
- Gross margin was 51.5%, 6.6 percentage points higher than 1Q16 and 3.0 percentage points higher than 2Q15.
- Operating margin was 41.2%, up 6.6 percentage points from 1Q16 and up 3.7 percentage points from 2Q15.
- Non-operating items were a gain of NT\$2.09 billion, compared to a gain of NT\$1.79 billion in 1Q16 and a gain of NT\$21.06 billion in 2Q15. The year-over-year decrease mainly reflected the disposal gains of ASML shares in 2Q15.
- Net income attributable to shareholders of the parent company was NT\$72.51 billion, up 11.9% from 1Q16 and down 8.7% from 2Q15. If the non-recurring gains in 2Q15 were excluded, 2Q16 net income and diluted EPS would have both increased by 17.2% year-over-year. Net profit margin was 32.7% and diluted EPS was NT\$2.80.

## I. Revenue Analysis

Wafer Revenue by Application	2Q16	1Q16	2Q15
Computer	8%	8%	7%
Communication	59%	64%	62%
Consumer	12%	7%	8%
Industrial/Standard	21%	21%	23%

Wafer Revenue by Technology	2Q16	1Q16	2Q15
16/20nm	23%	23%	20%
28nm	28%	30%	27%
40/45nm	15%	14%	14%
65nm	12%	10%	11%
90nm	5%	6%	7%
0.11/0.13um	2%	2%	3%
0.15/0.18um	11%	11%	13%
0.25um and above	4%	4%	5%

Net Revenue by Geography	2Q16	1Q16	2Q15
North America	61%	61%	66%
Asia Pacific	18%	16%	13%
China	10%	12%	8%
EMEA	6%	6%	7%
Japan	5%	5%	6%

### Revenue Analysis:

In the second quarter, revenue increased 9.0% quarter-over-quarter, reflecting customers' inventory restocking, preparation for new product launches, and recovery of the delayed shipments from the February 6 earthquake.

By application, Communication was flat sequentially, while Computer, Consumer, and Industrial/Standard increased 19%, 80%, and 12% respectively.

By technology, the combined 16/20nm contribution was 23% of total wafer revenue in the second quarter. Advanced technologies (28nm and below) accounted for 51% of total wafer revenue.

From a geographic perspective, revenue from customers based in North America accounted for 61% of total wafer revenue, while revenue from Asia Pacific, China, EMEA (Europe, Middle East, and Africa) and Japan accounted for 18%, 10%, 6%, and 5% of total net revenue, respectively.

## II. Profit & Expense Analysis

### II - 1. Gross Profit Analysis

(In NT\$ billions)	2Q16	1Q16	2Q15
<b>Cost of Revenue</b>	<b>107.48</b>	<b>112.16</b>	<b>105.73</b>
<b>Gross Profit</b>	<b>114.33</b>	<b>91.34</b>	<b>99.71</b>
<b>Gross Margin</b>	<b>51.5%</b>	<b>44.9%</b>	<b>48.5%</b>

### Gross Profit Analysis:

Gross margin was 51.5% in 2Q16, 6.6 percentage points higher than 1Q16, mainly reflecting a higher level of capacity utilization and cost improvement, partially offset by an unfavorable foreign exchange rate.

## II - 2. Operating Income Analysis

(In NT\$ billions)	<u>2Q16</u>	<u>1Q16</u>	<u>2Q15</u>
<b>Total Operating Expenses</b>	<b>(23.01)</b>	<b>(20.88)</b>	<b>(22.56)</b>
Research & Development	(16.90)	(15.62)	(16.61)
SG&A	(6.11)	(5.26)	(5.95)
<b>Other Operating Income and Expenses</b>	<b>(0.00)</b>	<b>0.01</b>	<b>(0.08)</b>
<b>Operating Income</b>	<b>91.32</b>	<b>70.47</b>	<b>77.07</b>
<b>Operating Margin</b>	<b>41.2%</b>	<b>34.6%</b>	<b>37.5%</b>
<b>Total Operating Expenses as % of Net Revenue</b>	<b>10.3%</b>	<b>10.3%</b>	<b>11.0%</b>

### *Operating Income Analysis:*

Total operating expenses increased NT\$2.13 billion to NT\$23.01 billion in 2Q16, reflecting a higher level of development activities for 7nm technologies and higher opening expenses for 10nm capacity.

## II - 3. Non-Operating Items

(In NT\$ billions)	<u>2Q16</u>	<u>1Q16</u>	<u>2Q15</u>
<b>L-T Investments</b>	<b>0.89</b>	<b>0.84</b>	<b>0.82</b>
SSMC	0.48	0.35	0.57
Others	0.41	0.49	0.25
<b>Interest Expenses</b>	<b>(0.82)</b>	<b>(0.85)</b>	<b>(0.78)</b>
<b>Other Gains and Losses</b>	<b>2.02</b>	<b>1.80</b>	<b>21.02</b>
<b>Total Non-Operating Items</b>	<b>2.09</b>	<b>1.79</b>	<b>21.06</b>

### *Non-Operating Items:*

Total non-operating items were a gain of NT\$2.09 billion in 2Q16, compared to a gain of NT\$1.79 billion in 1Q16.

## III. Financial Condition Review

### III - 1. Liquidity Analysis (Balance Sheet Items)

(In NT\$ billions)	<u>2Q16</u>	<u>1Q16</u>	<u>2Q15</u>
Cash & Marketable Securities	667.86	648.39	550.35
Accounts Receivable	111.72	96.96	99.74
Inventories	60.71	57.24	66.28
Other Current Assets	12.23	9.90	15.00
<b>Total Current Assets</b>	<b>852.52</b>	<b>812.49</b>	<b>731.37</b>
Short-term Loans	38.74	34.69	5.59
Accounts Payable	71.25	53.58	64.71
Current Portion of Bonds Payable and Bank Loans	22.01	33.27	10.87
Dividends Payable	155.70	0.00	116.68
Accrued Liabilities and Others	111.04	114.35	111.53
<b>Total Current Liabilities</b>	<b>398.74</b>	<b>235.89</b>	<b>309.38</b>
Current Ratio (x)	2.1	3.4	2.4
<b>Net Working Capital</b>	<b>453.78</b>	<b>576.60</b>	<b>421.99</b>

### *Liquidity Analysis:*

At the end of 2Q16, cash and marketable securities increased by NT\$19.47 billion to NT\$667.86 billion, as cash increased by NT\$4.38 billion (please refer to page 4) and marketable securities increased by NT\$15.09 billion.

Total current liabilities increased by NT\$162.85 billion, mainly due to the accrual of NT\$155.70 billion cash dividend during the quarter.

Net working capital was NT\$453.78 billion and current ratio was 2.1x.

### III - 2. Receivable/Inventory Days

(In Number of Days)

	<u>2Q16</u>	<u>1Q16</u>	<u>2Q15</u>
Days of Receivable	43	41	44
Days of Inventory	54	54	62

### **Receivable and Inventory Days:**

Days of receivable increased 2 days to 43 days in 2Q16.

Days of inventory remained at 54 days in 2Q16.

### III - 3. Debt Service

(In NT\$ billions)

	<u>2Q16</u>	<u>1Q16</u>	<u>2Q15</u>
Cash & Marketable Securities	667.86	648.39	550.35
Interest-Bearing Debts	<b>(242.05)</b>	<b>(249.14)</b>	<b>(219.13)</b>
<b>Net Cash Reserves</b>	<b>425.81</b>	<b>399.25</b>	<b>331.22</b>

### **Debt Service:**

Net cash reserves increased NT\$26.56 billion to NT\$425.81 billion in 2Q16, as cash & marketable securities increased NT\$19.47 billion, and the Company repaid NT\$11.47 billion of corporate bonds, while borrowing NT\$3.96 billion in short-term loans for hedging purpose.

## IV. Cash Flow

### IV - 1. Quarterly Cash Flow Analysis

(In NT\$ billions)

	<u>2Q16</u>	<u>1Q16</u>	<u>2Q15</u>
Income before Income Tax	93.41	72.26	98.13
Depreciation & Amortization	55.28	55.85	54.62
Other Operating Sources/(Uses)	(42.01)	(6.58)	(41.68)
<b>Total Operating Sources/(Uses)</b>	<b>106.68</b>	<b>121.53</b>	<b>111.07</b>
Capital Expenditures	(73.59)	(38.14)	(53.81)
Marketable Financial Instruments	(22.07)	(17.67)	45.14
Other Investing Sources/(Uses)	0.95	0.46	4.56
<b>Net Investing Sources/(Uses)</b>	<b>(94.71)</b>	<b>(55.35)</b>	<b>(4.11)</b>
Increase (Decrease) in Short-term Loans	3.96	(4.12)	(12.99)
Other Financing Sources/(Uses)	(12.06)	(0.69)	(0.41)
<b>Net Financing Sources/(Uses)</b>	<b>(8.10)</b>	<b>(4.81)</b>	<b>(13.40)</b>
<b>Exchange Rate Changes and Other</b>	<b>0.51</b>	<b>(6.08)</b>	<b>(2.07)</b>
<b>Net Cash Position Changes</b>	<b>4.38</b>	<b>55.29</b>	<b>91.49</b>
<b>Ending Cash Balance</b>	<b>622.36</b>	<b>617.98</b>	<b>528.90</b>

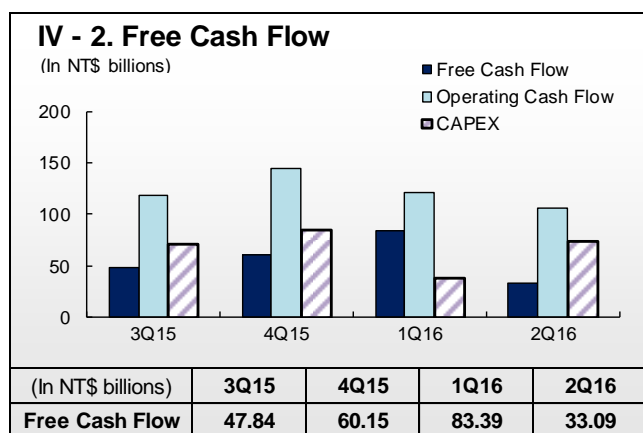
### **Summary of Cash Flow:**

During the second quarter, cash generated from operating activities totaled NT\$106.68 billion, including (1) NT\$55.28 billion from depreciation & amortization expenses and (2) NT\$42.01 billion for other operating uses, which included income tax payment of NT\$30.30 billion.

Net cash used in investing activities was NT\$94.71 billion in 2Q16, primarily including capital expenditures of NT\$73.59 billion and net purchases of NT\$15.97 billion in fixed income securities.

Net cash used in financing activities was NT\$8.10 billion, mainly reflecting the repayment of corporate bonds and the increase in short-term loans.

As a result, net cash position increased NT\$4.38 billion to NT\$622.36 billion at the end of 2Q16.



**Operating and Free Cash Flow:**

Free cash flow decreased NT\$50.30 billion to NT\$33.09 billion in 2Q16, mainly reflecting higher capital expenditures during the quarter.

**V. CapEx**

**V. Capital Expenditures**  
(in US\$ billions)

	<u>2Q16</u>	<u>1Q16</u>	<u>YTD</u>
<b>Capital Expenditures</b>	<b>2.26</b>	<b>1.15</b>	<b>3.41</b>

**Capital Expenditures:**

Capital expenditures for TSMC on a consolidated basis totaled US\$2.26 billion in 2Q16. The Company now expects its full year capital budget to be between US\$9.5 billion and US\$10.5 billion.

## VI. Recap of Recent Important Events & Announcements

- TSMC Doubles Its Green Power Purchase to 200 million kWh ( 2016/06/15 )
- TSMC Board of Directors Sets June 27 as Ex-dividend Date and July 3 as Record Date for Common Share Dividends ( 2016/06/07 )
- TSMC Shareholders Approve NT\$6 Cash Dividend ( 2016/06/07 )