

2Q18

Quarterly Management Report
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Topics in This Report:

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- Profit & Expense Analysis
- Financial Condition Review
- Cash Flow
- CapEx
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Operating Results Review:**Summary:***(Amounts are on consolidated basis and are in NT\$ billions unless otherwise noted)*

	2Q18	1Q18	2Q17	QoQ	YoY
EPS (NT\$ per common share)	2.79	3.46	2.56	-19.5%	9.1%
(US\$ per ADR unit)	0.47	0.59	0.42	-19.5%	9.1%
Net Revenue (US\$ billions)	7.85	8.46	7.06	-7.2%	11.2%
Net Revenue	233.28	248.08	213.86	-6.0%	9.1%
Gross Profit	111.53	124.86	108.71	-10.7%	2.6%
<i>Gross Margin</i>	<i>47.8%</i>	<i>50.3%</i>	<i>50.8%</i>		
Operating Expenses	(26.44)	(26.73)	(25.37)	-1.1%	4.2%
Other Operating Income and Expenses	(0.66)	(1.30)	(0.08)		
Operating Income	84.43	96.83	83.26	-12.8%	1.4%
<i>Operating Margin</i>	<i>36.2%</i>	<i>39.0%</i>	<i>38.9%</i>		
Non-Operating Items	3.16	3.11	2.86		
Net Income Attributable to Shareholders of the Parent Company	72.29	89.79	66.27	-19.5%	9.1%
<i>Net Profit Margin</i>	<i>31.0%</i>	<i>36.2%</i>	<i>31.0%</i>		
Wafer Shipment (kpcs 12 inch-equiv.)	2,674	2,680	2,533	-0.2%	5.6%

*Note: Diluted weighted average outstanding shares were 25,930mn units in 2Q18***Financial Highlights:****Second Quarter 2018**

- Net revenue was NT\$233.28 billion, representing a 6.0% decrease from NT\$248.08 billion in 1Q18 and a 9.1% increase from NT\$213.86 billion in 2Q17.
- Gross margin was 47.8%, 2.5 percentage points lower than 1Q18 and 3.0 percentage points lower than 2Q17.
- Operating margin was 36.2%, down 2.8 percentage points from 1Q18 and down 2.7 percentage points from 2Q17.
- Non-operating items were a gain of NT\$3.16 billion, compared to a gain of NT\$3.11 billion in 1Q18 and a gain of NT\$2.86 billion in 2Q17.
- Net income attributable to shareholders of the parent company was NT\$72.29 billion, down 19.5% from 1Q18 but up 9.1% from 2Q17. Net profit margin was 31.0% and diluted EPS was NT\$2.79.

I. Revenue Analysis

Wafer Revenue by Application	2Q18	1Q18	2Q17
Computer	21%	15%	8%
Communication	48%	55%	58%
Consumer	8%	7%	9%
Industrial/Standard	23%	23%	25%

Wafer Revenue by Technology	2Q18	1Q18	2Q17
10nm	13%	19%	1%
16/20nm	25%	22%	26%
28nm	23%	20%	27%
40/45nm	11%	11%	13%
65nm	9%	9%	10%
90nm	5%	5%	5%
0.11/0.13um	2%	2%	3%
0.15/0.18um	9%	9%	11%
0.25um and above	3%	3%	4%

Net Revenue by Geography	2Q18	1Q18	2Q17
North America	53%	59%	59%
Asia Pacific	10%	8%	14%
China	23%	19%	11%
EMEA	7%	7%	8%
Japan	7%	7%	8%

Revenue Analysis:

In the second quarter, revenue decreased 6.0% quarter-over-quarter, primarily attributable to a lower seasonality in our mobile sector, while the strength in cryptocurrency mining and a more favorable currency exchange rate moderated the mobile softness.

By application, Computer and Consumer increased 34% and 23% respectively, while Communication and Industrial/Standard decreased 14% and 1% respectively.

By technology, 10nm process technology contributed 13% of total wafer revenue in 2Q18. The combined 16/20nm contribution was 25% of total wafer revenue. Advanced technologies (28nm and below) accounted for 61% of total wafer revenue.

From a geographic perspective, revenue from customers based in North America accounted for 53% of total net revenue, while revenue from Asia Pacific, China, EMEA (Europe, Middle East, and Africa) and Japan accounted for 10%, 23%, 7%, and 7% of total net revenue respectively.

II. Profit & Expense Analysis

II - 1. Gross Profit Analysis

(In NT\$ billions)	2Q18	1Q18	2Q17
Cost of Revenue	121.75	123.22	105.15
Gross Profit	111.53	124.86	108.71
Gross Margin	47.8%	50.3%	50.8%

Gross Profit Analysis:

Gross margin was 47.8% in 2Q18, compared to 50.3% in 1Q18. Within the 2.5 percentage point difference, about 2 percentage points reflected the absence of the favorable inventory valuation that was embedded in 1Q18 gross margin, while the remainder was attributed to a lower level of capacity utilization, partially offset by cost improvement efforts and a favorable foreign exchange rate.

II - 2. Operating Income Analysis

(In NT\$ billions)	<u>2Q18</u>	<u>1Q18</u>	<u>2Q17</u>
Total Operating Expenses	(26.44)	(26.73)	(25.37)
Research & Development	(19.89)	(20.43)	(19.06)
SG&A	(6.55)	(6.30)	(6.31)
Other Operating Income and Expenses	(0.66)	(1.30)	(0.08)
Operating Income	84.43	96.83	83.26
Operating Margin	36.2%	39.0%	38.9%
Total Operating Expenses as % of Net Revenue	11.3%	10.8%	11.9%

Operating Income Analysis:

Total operating expenses remained at a similar level to 1Q18 and represented 11.3% of net revenue in 2Q18, up from 10.8% in 1Q18, due to the decrease in net revenue.

II - 3. Non-Operating Items

(In NT\$ billions)	<u>2Q18</u>	<u>1Q18</u>	<u>2Q17</u>
L-T Investments	0.27	0.68	0.62
SSMC	0.36	0.35	0.43
Others	(0.09)	0.33	0.19
Net Interest Income (Expenses)	2.94	2.34	1.64
Other Gains and Losses	(0.05)	0.09	0.60
Total Non-Operating Items	3.16	3.11	2.86

Non-Operating Items:

Total non-operating items were a gain of NT\$3.16 billion in 2Q18, compared to a gain of NT\$3.11 billion in 1Q18.

II - 4. Net Profit and EPS

(In NT\$ billions)	<u>2Q18</u>	<u>1Q18</u>	<u>2Q17</u>
Income before Income Tax	87.59	99.94	86.12
Income Tax Expenses	(15.30)	(10.15)	(19.85)
Effective Tax Rate	17.5%	10.2%	23.2%
Net Income Attributable to the Parent Company	72.29	89.79	66.27
Net Profit Margin	31.0%	36.2%	31.0%
EPS (NT\$ per common share)	2.79	3.46	2.56

Net Profit and EPS:

Net income attributable to shareholders of the parent company was NT\$72.29 billion, down 19.5% from 1Q18, reflecting higher income tax expenses during the second quarter, which included the 10% tax on undistributed retained earnings.

The second quarter tax rate of 17.5% was 5.7 percentage points lower than 23.2% in 2Q17, reflecting higher cumulative translation loss as a result of NT dollar appreciation against the U.S. dollar, as well as a higher dividend payout ratio for 2017 profit distribution than 2016.

III. Financial Condition Review

III - 1. Liquidity Analysis			
(Balance Sheet Items)			
(In NT\$ billions)	<u>2Q18</u>	<u>1Q18</u>	<u>2Q17</u>
Cash & Marketable Securities	748.92	684.38	658.95
Accounts Receivable	88.20	107.78	110.33
Inventories	99.03	85.22	61.01
Other Current Assets	22.89	51.74	7.76
Total Current Assets	959.04	929.12	838.05
Short-term Loans	30.84	56.73	54.74
Accounts Payable	70.26	76.87	75.99
Current Portion of Bonds Payable and Bank Loans	15.90	49.36	79.87
Dividends Payable	207.52	0.00	181.63
Accrued Liabilities and Others	138.48	159.28	131.28
Total Current Liabilities	463.00	342.24	523.51
Current Ratio (x)	2.1	2.7	1.6
Net Working Capital	496.04	586.88	314.54

Liquidity Analysis:

At the end of 2Q18, cash and marketable securities increased by NT\$64.54 billion to NT\$748.92 billion, as cash increased by NT\$54.45 billion (please refer to page 5) and marketable securities increased by NT\$10.09 billion.

Total current liabilities increased by NT\$120.76 billion, mainly reflecting the accrual of NT\$207.52 billion for cash dividends, partially offset by the decrease of NT\$25.89 billion in short-term loans for hedging purpose and the decrease of NT\$33.46 billion in the current portion of bonds payable.

Net working capital was NT\$496.04 billion and current ratio was 2.1x.

III - 2. Receivable/Inventory Days			
(In Number of Days)	<u>2Q18</u>	<u>1Q18</u>	<u>2Q17</u>
Days of Receivable	38	42	47
Days of Inventory	74	63	52

Receivable and Inventory Days:

Days of receivable decreased 4 days from 1Q18 to 38 days in 2Q18.

Days of inventory increased 11 days to 74 days due to a higher level of work-in-process inventories, driven by 7nm ramping, and an increase in raw wafers.

III - 3. Debt Service			
(In NT\$ billions)	<u>2Q18</u>	<u>1Q18</u>	<u>2Q17</u>
Cash & Marketable Securities	748.92	684.38	658.95
Interest-Bearing Debts	(130.14)	(189.49)	(233.93)
Net Cash Reserves	618.78	494.89	425.02

Debt Service:

Net cash reserves increased NT\$123.89 billion to NT\$618.78 billion in 2Q18, reflecting the increase in cash and marketable securities, the decrease in short-term loans and the decrease in the current portion of bonds payable.

IV. Cash Flow

IV - 1. Quarterly Cash Flow Analysis

(In NT\$ billions)	<u>2Q18</u>	<u>1Q18</u>	<u>2Q17</u>
Income before Income Tax	87.59	99.94	86.12
Depreciation & Amortization	71.41	71.50	57.99
Other Operating Sources/(Uses)	(29.23)	(10.71)	(40.71)
Total Operating Sources/(Uses)	129.77	160.73	103.40
Capital Expenditures	(59.68)	(71.85)	(105.19)
Marketable Financial Instruments	(3.36)	(3.89)	5.18
Other Investing Sources/(Uses)	2.97	2.28	1.79
Net Investing Sources/(Uses)	(60.07)	(73.46)	(98.22)
Increase (Decrease) in Short-term Loans	(27.97)	(5.78)	(0.04)
Other Financing Sources/(Uses)	(1.38)	(51.85)	(0.60)
Net Financing Sources/(Uses)	(29.35)	(57.63)	(0.64)
Exchange Rate Changes	14.10	(5.25)	1.20
Net Cash Position Changes	54.45	24.39	5.74
Ending Cash Balance	632.23	577.78	570.47

Summary of Cash Flow:

During the second quarter, cash generated from operating activities totaled NT\$129.77 billion, including (1) NT\$87.59 billion from income before income tax, (2) NT\$71.41 billion from depreciation & amortization expenses, and (3) NT\$29.23 billion for other operating uses, which included income tax payment of NT\$31.33 billion.

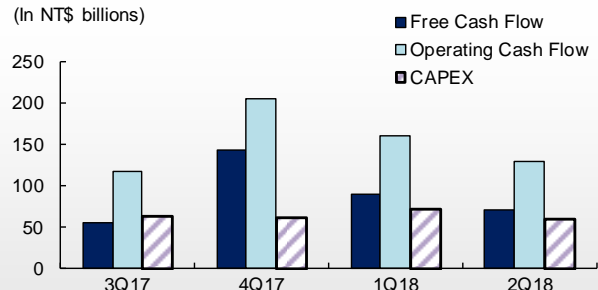
Net cash used in investing activities was NT\$60.07 billion in 2Q18, primarily including capital expenditures of NT\$59.68 billion.

Net cash used in financing activities was NT\$29.35 billion, mainly attributable to a decrease in short-term loans.

As a result, net cash position increased NT\$54.45 billion to NT\$632.23 billion at the end of 2Q18.

IV - 2. Free Cash Flow

(In NT\$ billions)



(In NT\$ billions)	<u>3Q17</u>	<u>4Q17</u>	<u>1Q18</u>	<u>2Q18</u>
Free Cash Flow	55.07	142.95	88.88	70.09

Operating and Free Cash Flow:

Free cash flow was NT\$70.09 billion in 2Q18, a decrease of NT\$18.79 billion from last quarter, mainly reflecting lower operating cash flow generated in 2Q18.

V. CapEx

V. Capital Expenditures

(in US\$ billions)

	<u>2Q18</u>	<u>1Q18</u>	<u>YTD</u>
Capital Expenditures	2.01	2.45	4.46

Capital Expenditures:

Capital expenditures for TSMC on a consolidated basis totaled US\$2.01 billion in 2Q18.

VI. Recap of Recent Important Events & Announcements

- TSMC Dedicates Headquarters as “Morris Chang Building” (2018/07/10)
- TSMC Sets June 25 as Ex-Dividend Date and July 1 as Record Date for Common Share Dividends (2018/06/06)
- TSMC Shareholders Approve NT\$8 Cash Dividend and Elect Board of Directors; Board of Directors Elect Mark Liu as Chairman and C.C. Wei as CEO and Vice Chairman (2018/06/05)