

2Q21

Quarterly Management Report
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Operating Results Review:

CONTACT

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Topics in This Report:

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

Summary:

(Amounts are on consolidated basis and are in NT\$ billions unless otherwise noted)

	2Q21	1Q21	2Q20	QoQ	YoY
EPS (NT\$ per common share)	5.18	5.39	4.66	-3.8%	11.2%
(US\$ per ADR unit)	0.93	0.96	0.78		
Net Revenue (US\$ billions)	13.29	12.92	10.38	2.9%	28.0%
Net Revenue	372.15	362.41	310.70	2.7%	19.8%
Gross Profit	186.20	189.84	164.62	-1.9%	13.1%
Gross Margin	50.0%	52.4%	53.0%		
Operating Expenses	(40.58)	(39.11)	(33.52)	3.8%	21.1%
Other Operating Income and Expenses	0.05	(0.19)	(0.01)		
Operating Income	145.67	150.54	131.09	-3.2%	11.1%
Operating Margin	39.1%	41.5%	42.2%		
Non-Operating Items	3.72	4.52	5.31		
Net Income Attributable to Shareholders of the Parent Company	134.36	139.69	120.82	-3.8%	11.2%
Net Profit Margin	36.1%	38.6%	38.9%		
Wafer Shipment (kpcs 12 inch-equiv.)	3,449	3,359	2,985	2.7%	15.5%
Average Exchange Rate--USD/NTD	28.01	28.05	29.92	-0.2%	-6.4%

Note: Diluted weighted average outstanding shares were 25,930mn units in 2Q21

Financial Highlights:**Second Quarter 2021**

- Net revenue was NT\$372.15 billion, representing a 2.7% increase from NT\$362.41 billion in 1Q21 and a 19.8% increase from NT\$310.70 billion in 2Q20.
- Gross margin was 50.0%, 2.4 percentage points lower than 1Q21 and 3.0 percentage points lower than 2Q20.
- Operating margin was 39.1%, down 2.4 percentage points from 1Q21 and down 3.1 percentage points from 2Q20.
- Non-operating items were a gain of NT\$3.72 billion, compared to a gain of NT\$4.52 billion in 1Q21 and a gain of NT\$5.31 billion in 2Q20.
- Net income attributable to shareholders of the parent company was NT\$134.36 billion, down 3.8% from 1Q21 and up 11.2% from 2Q20. Net profit margin was 36.1% and diluted EPS was NT\$5.18.

I. Revenue Analysis

Wafer Revenue by Technology	2Q21	1Q21	2Q20
5nm	18%	14%	0%
7nm	31%	35%	36%
10nm	0%	0%	0%
16nm	14%	14%	18%
20nm	0%	0%	1%
28nm	11%	11%	14%
40/45nm	7%	7%	9%
65nm	5%	5%	6%
90nm	3%	3%	3%
0.11/0.13um	3%	3%	3%
0.15/0.18um	6%	6%	8%
0.25um and above	2%	2%	2%

Net Revenue by Platform	2Q21	1Q21	2Q20
Smartphone	42%	45%	47%
High Performance Computing	39%	35%	33%
Internet of Things	8%	9%	8%
Automotive	4%	4%	4%
Digital Consumer Electronics	4%	4%	5%
Others	3%	3%	3%

Net Revenue by Geography	2Q21	1Q21	2Q20
North America	64%	67%	58%
Asia Pacific	15%	17%	10%
China	11%	6%	21%
EMEA	6%	6%	6%
Japan	4%	4%	5%

Revenue Analysis:

In the second quarter, revenue increased 2.7% quarter-over-quarter, driven by continued strength in HPC and Automotive-related demand.

By technology, 5nm process technology contributed 18% of total wafer revenue in 2Q21 while 7nm accounted for 31%. Advanced technologies (7nm and below) accounted for 49% of total wafer revenue.

By platform, Smartphone and HPC represented 42% and 39% of net revenue respectively, while IoT, Automotive, DCE, and Others each represented 8%, 4%, 4%, and 3%.

Sequentially, revenue from HPC, Automotive and Others increased 12%, 12% and 4% respectively from 1Q21, while Smartphone, IoT and DCE decreased 3%, 2% and 12% respectively.

From a geographic perspective, revenue from customers based in North America accounted for 64% of total net revenue, while revenue from Asia Pacific, China, EMEA (Europe, Middle East, and Africa) and Japan accounted for 15%, 11%, 6%, and 4% of total net revenue respectively.

II. Profit & Expense Analysis

II - 1. Gross Profit Analysis

(In NT\$ billions)	2Q21	1Q21	2Q20
Net Revenue	372.15	362.41	310.70
Cost of Revenue	(185.95)	(172.57)	(146.08)
Gross Profit	186.20	189.84	164.62
Gross Margin	50.0%	52.4%	53.0%

Gross Profit Analysis:

Gross margin was 50.0% in 2Q21, 2.4 percentage points lower than 1Q21, mainly due to N5 dilution, the slower rate of cost improvement, and the absence of positive inventory re-valuation.

II - 2. Operating Income Analysis

(In NT\$ billions)	<u>2Q21</u>	<u>1Q21</u>	<u>2Q20</u>
Total Operating Expenses	(40.58)	(39.11)	(33.52)
Research & Development	(30.87)	(30.76)	(24.89)
SG&A	(9.71)	(8.35)	(8.63)
Other Operating Income and Expenses	0.05	(0.19)	(0.01)
Operating Income	145.67	150.54	131.09
Operating Margin	39.1%	41.5%	42.2%
Total Operating Expenses as % of Net Revenue	10.9%	10.8%	10.8%

Operating Income Analysis:

Total operating expenses increased NT\$1.47 billion to NT\$40.58 billion in 2Q21, accounting for 10.9% of net revenue, as compared to 10.8% in 1Q21.

II - 3. Non-Operating Items

(In NT\$ billions)	<u>2Q21</u>	<u>1Q21</u>	<u>2Q20</u>
L-T Investments	1.17	1.26	0.68
SSMC	0.26	0.29	0.18
Others	0.91	0.97	0.50
Net Interest Income (Expenses)	0.29	0.69	2.07
Other Gains and Losses	2.26	2.57	2.56
Total Non-Operating Items	3.72	4.52	5.31

Non-Operating Items:

Total non-operating items were a gain of NT\$3.72 billion in 2Q21, compared to a gain of NT\$4.52 billion in 1Q21. The decrease was mainly due to higher interest expenses and lower gains from foreign exchange after hedging.

II - 4. Net Profit and EPS

(In NT\$ billions)	<u>2Q21</u>	<u>1Q21</u>	<u>2Q20</u>
Income before Tax	149.39	155.06	136.40
Income Tax Expenses	(14.91)	(15.32)	(15.51)
Effective Tax Rate	10.1%	10.0%	11.4%
Net Income Attributable to the Parent Company	134.36	139.69	120.82
Net Profit Margin	36.1%	38.6%	38.9%
EPS (NT\$ per common share)	5.18	5.39	4.66

Net Profit and EPS:

Net income attributable to shareholders of the parent company was NT\$134.36 billion in 2Q21, down 3.8% from 1Q21 and up 11.2% from 2Q20.

III. Financial Condition Review

III - 1. Liquidity Analysis			
(Balance Sheet Items)			
(In NT\$ billions)	<u>2Q21</u>	<u>1Q21</u>	<u>2Q20</u>
Cash & Marketable Securities	870.84	796.72	605.02
Accounts Receivable	178.26	167.48	149.60
Inventories	170.44	154.57	85.79
Other Current Assets	21.57	21.02	19.62
Total Current Assets	1,241.11	1,139.79	860.03
Short-term Loans	139.38	137.12	169.55
Accounts Payable	148.38	147.64	137.27
Current Portion of Bonds Payable	0.00	0.00	12.80
Dividends Payable	136.13	129.65	129.65
Accrued Liabilities and Others	223.86	247.24	165.53
Total Current Liabilities	647.75	661.65	614.80
Current Ratio (x)	1.9	1.7	1.4
Net Working Capital	593.36	478.14	245.23

Liquidity Analysis:

Total current assets increased by NT\$101.32 billion, mainly due to the increase of NT\$74.12 billion in cash and marketable securities.

Total current liabilities decreased by NT\$13.90 billion, mainly due to the decrease of NT\$23.38 billion in accrued liabilities and others, partially offset by the increase of NT\$6.48 billion in dividends payable.

Net working capital was NT\$593.36 billion and current ratio was 1.9x in 2Q21.

III - 2. Receivable/Inventory Days			
(In Number of Days)	<u>2Q21</u>	<u>1Q21</u>	<u>2Q20</u>
Days of Receivable	42	40	44
Days of Inventory	85	83	55

Receivable and Inventory Days:

Days of receivable increased 2 days to 42 days in 2Q21.

Days of inventory increased 2 days to 85 days, primarily due to N5 wafer prebuild.

III - 3. Debt Service			
(In NT\$ billions)	<u>2Q21</u>	<u>1Q21</u>	<u>2Q20</u>
Cash & Marketable Securities	870.84	796.72	605.02
Interest-Bearing Debts	(553.02)	(416.59)	(271.28)
Net Cash Reserves	317.82	380.13	333.74

Debt Service:

Net cash reserves decreased NT\$62.31 billion to NT\$317.82 billion in 2Q21.

Interest-bearing debts increased NT\$136.43 billion, mainly due to the issuance of NT\$136.71 billion in corporate bonds.

IV. Cash Flow

IV - 1. Quarterly Cash Flow Analysis

(In NT\$ billions)	<u>2Q21</u>	<u>1Q21</u>	<u>2Q20</u>
Income before Tax	149.39	155.06	136.40
Depreciation & Amortization	103.81	100.90	70.88
Other Operating Sources/(Uses)	(65.76)	(28.14)	(36.94)
Net Operating Sources/(Uses)	187.44	227.82	170.34
Capital Expenditures	(166.97)	(248.03)	(126.70)
Marketable Financial Instruments	0.09	3.51	0.84
Other Investing Sources/(Uses)	(2.87)	0.27	(3.89)
Net Investing Sources/(Uses)	(169.75)	(244.25)	(129.75)
Short-term Loans	3.55	52.07	32.23
Cash Dividends	(64.83)	(64.83)	(64.83)
Bonds Payable	136.71	18.50	36.00
Other Financing Sources/(Uses)	(0.40)	8.88	2.51
Net Financing Sources/(Uses)	75.03	14.62	5.91
Exchange Rate Changes	(9.47)	6.37	(9.67)
Cash Position Net Changes	83.25	4.56	36.83
Ending Cash Balance	747.98	664.73	467.61

Summary of Cash Flow:

During the second quarter, cash generated from operating activities totaled NT\$187.44 billion, including (1) NT\$149.39 billion from income before tax, (2) NT\$103.81 billion from depreciation & amortization expenses, and (3) NT\$65.76 billion for other operating uses. The other operating uses were mainly attributable to the income tax payment of NT\$53.57 billion.

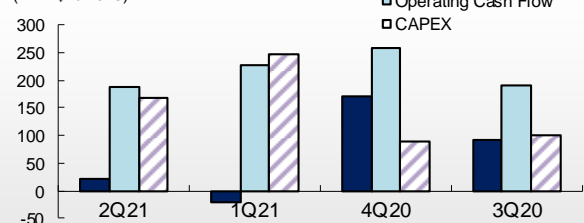
Net cash used in investing activities was NT\$169.75 billion in 2Q21, primarily attributable to capital expenditures of NT\$166.97 billion.

Net cash generated from financing activities was NT\$75.03 billion, mainly reflecting the net changes in bonds payable of NT\$136.71 billion, partially offset by the payment of 3Q20 cash dividends.

As a result, cash position increased NT\$83.25 billion to NT\$747.98 billion at the end of 2Q21.

IV - 2. Free Cash Flow

(In NT\$ billions)



(In NT\$ billions)	<u>2Q21</u>	<u>1Q21</u>	<u>4Q20</u>	<u>3Q20</u>
Free Cash Flow	20.47	(20.21)	170.45	90.87

Operating and Free Cash Flow:

Free cash flow increased NT\$40.68 billion to an inflow of NT\$20.47 billion in 2Q21, mainly due to lower capital expenditures during the quarter.

V. CapEx

V. Capital Expenditures

(in US\$ billions)

	<u>2Q21</u>	<u>1Q21</u>	<u>YTD</u>
Capital Expenditures	5.97	8.84	14.81

Capital Expenditures:

Capital expenditures for TSMC on a consolidated basis totaled US\$5.97 billion in 2Q21.

VI. Recap of Recent Important Events & Announcements

- TSMC, Hon Hai/YongLin Foundation Donate BNT Vaccine to Taiwan CDC for COVID-19 Epidemic Prevention (2021/07/12)
- In Response to the COVID-19 Pandemic and Relevant Orders Issued by the Government, TSMC Board of Directors Approved a Change to the Date of TSMC's 2021 Annual Shareholders' Meeting from June 8, 2021 to July 26, 2021 (2021/06/09)
- TSMC Board of Directors Approved NT\$2.75 Cash Dividend for the First Quarter of 2021 and Set September 16 as Ex-Dividend Date, September 22 as the Record Date and October 14, 2021 as the Distribution Date (2021/06/09)
- NXP Ramps Automotive Processing Innovation with Two Processors on TSMC FinFET Technology (2021/06/02)
- TSMC Unveils Innovation at 2021 Online Technology Symposium (2021/06/02)
- TSMC Board of Directors Approved the Issuance of No More Than 2,600,000 Common Shares of Employee Restricted Stock Awards (RSAs) for the Year 2021, Which Will be Submitted to the 2021 Annual Shareholders' Meeting for Approval (2021/04/22)
- TSMC Announces 10 Candidates for Board of Directors, Who Will Stand for Election at TSMC's Annual Shareholders' Meeting (2021/04/16)