

1Q21

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
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Summary:

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

	1Q21	4Q20	1Q20	QoQ	YoY
EPS (NT\$ per common share)	5.39	5.51	4.51	-2.2%	19.4%
(US\$ per ADR unit)	0.96	0.97	0.75		
Net Revenue (US\$ billions)	12.92	12.68	10.31	1.9%	25.4%
Net Revenue	362.41	361.53	310.60	0.2%	16.7%
Gross Profit	189.84	195.24	160.78	-2.8%	18.1%
Gross Margin	52.4%	54.0%	51.8%		
Operating Expenses	(39.11)	(38.32)	(32.33)	2.1%	21.0%
Other Operating Income and Expenses	(0.19)	0.20	0.07		
Operating Income	150.54	157.12	128.52	-4.2%	17.1%
Operating Margin	41.5%	43.5%	41.4%		
Non-Operating Items	4.52	3.99	3.63		
Net Income Attributable to Shareholders of the Parent Company	139.69	142.77	116.99	-2.2%	19.4%
Net Profit Margin	38.6%	39.5%	37.7%		
Wafer Shipment (kpcs 12 inch-equiv.)	3,359	3,246	2,925	3.5%	14.8%

Note: Diluted weighted average outstanding shares were 25,930mn units in 1Q21

Financial Highlights:**First Quarter 2021**

- Net revenue was NT\$362.41 billion, representing a 0.2% increase from NT\$361.53 billion in 4Q20 and a 16.7% increase from NT\$310.60 billion in 1Q20.
- Gross margin was 52.4%, 1.6 percentage points lower than 4Q20 and 0.6 percentage point higher than 1Q20.
- Operating margin was 41.5%, down 2.0 percentage points from 4Q20 and up 0.1 percentage point from 1Q20.
- Non-operating items were a gain of NT\$4.52 billion, compared to a gain of NT\$3.99 billion in 4Q20 and a gain of NT\$3.63 billion in 1Q20.
- Net income attributable to shareholders of the parent company was NT\$139.69 billion, down 2.2% from 4Q20 and up 19.4% from 1Q20. Net profit margin was 38.6% and diluted EPS was NT\$5.39.

I. Revenue Analysis

Wafer Revenue by Technology	1Q21	4Q20	1Q20
5nm	14%	20%	0%
7nm	35%	29%	35%
10nm	0%	0%	0.5%
16nm	14%	13%	19%
20nm	0%	1%	1%
28nm	11%	11%	14%
40/45nm	7%	8%	10%
65nm	5%	5%	6%
90nm	3%	2%	3%
0.11/0.13um	3%	3%	2%
0.15/0.18um	6%	7%	8%
0.25um and above	2%	1%	2%

Net Revenue by Platform	1Q21	4Q20	1Q20
Smartphone	45%	51%	49%
High Performance Computing	35%	31%	30%
Internet of Things	9%	7%	9%
Automotive	4%	3%	4%
Digital Consumer Electronics	4%	4%	5%
Others	3%	4%	3%

Net Revenue by Geography	1Q21	4Q20	1Q20
North America	67%	73%	56%
Asia Pacific	17%	12%	11%
China	6%	6%	22%
EMEA	6%	5%	6%
Japan	4%	4%	5%

Revenue Analysis:

In the first quarter, revenue increased 0.2% quarter-over-quarter, supported by HPC-related demand, balanced by a milder smartphone seasonality than in recent years.

By technology, 5nm process technology contributed 14% of total wafer revenue in 1Q21 while 7nm accounted for 35%. Advanced technologies (7nm and below) accounted for 49% of total wafer revenue.

By platform, Smartphone and HPC represented 45% and 35% of net revenue respectively, while IoT, Automotive, DCE, and Others each represented 9%, 4%, 4%, and 3%.

Sequentially, revenue from Smartphone and Others decreased 11% and 13% respectively from 4Q20, while HPC, IoT, Automotive and DCE increased 14%, 10%, 31% and 11% respectively.

From a geographic perspective, revenue from customers based in North America accounted for 67% of total net revenue, while revenue from Asia Pacific, EMEA (Europe, Middle East, and Africa), China and Japan accounted for 17%, 6%, 6%, and 4% of total net revenue respectively.

II. Profit & Expense Analysis

II - 1. Gross Profit Analysis			
(In NT\$ billions)	1Q21	4Q20	1Q20
Net Revenue	362.41	361.53	310.60
Cost of Revenue	(172.57)	(166.29)	(149.82)
Gross Profit	189.84	195.24	160.78
Gross Margin	52.4%	54.0%	51.8%

Gross Profit Analysis:

Gross margin was 52.4% in 1Q21, 1.6 percentage points lower than 4Q20, mainly due to a relatively lower level of utilization and an unfavorable exchange rate.

II - 2. Operating Income Analysis

(In NT\$ billions)	<u>1Q21</u>	<u>4Q20</u>	<u>1Q20</u>
Total Operating Expenses	(39.11)	(38.32)	(32.33)
Research & Development	(30.76)	(29.94)	(24.97)
SG&A	(8.35)	(8.38)	(7.36)
Other Operating Income and Expenses	(0.19)	0.20	0.07
Operating Income	150.54	157.12	128.52
Operating Margin	41.5%	43.5%	41.4%
Total Operating Expenses as % of Net Revenue	10.8%	10.6%	10.4%

Operating Income Analysis:

Total operating expenses slightly increased NT\$0.79 billion to NT\$39.11 billion in 1Q21, mainly attributable to a higher level of R&D activities for the N5 family.

II - 3. Non-Operating Items

(In NT\$ billions)	<u>1Q21</u>	<u>4Q20</u>	<u>1Q20</u>
L-T Investments	1.26	1.36	0.73
SSMC	0.29	0.29	0.23
Others	0.97	1.07	0.50
Net Interest Income (Expenses)	0.69	0.88	2.46
Other Gains and Losses	2.57	1.75	0.44
Total Non-Operating Items	4.52	3.99	3.63

Non-Operating Items:

Total non-operating items were a gain of NT\$4.52 billion in 1Q21, compared to a gain of NT\$3.99 billion in 4Q20. The increase was mainly due to gains from foreign exchange after hedging.

(In NT\$ billions)	<u>1Q21</u>	<u>4Q20</u>	<u>1Q20</u>
Income before Tax	155.06	161.11	132.15
Income Tax Expenses	(15.32)	(18.29)	(15.09)
Effective Tax Rate	10.0%	11.4%	11.5%
Net Income Attributable to the Parent Company	139.69	142.77	116.99
Net Profit Margin	38.6%	39.5%	37.7%
EPS (NT\$ per common share)	5.39	5.51	4.51

Net Profit and EPS:

Net income attributable to shareholders of the parent company was NT\$139.69 billion in 1Q21, down 2.2% from 4Q20 and up 19.4% from 1Q20.

III. Financial Condition Review

III - 1. Liquidity Analysis			
(Balance Sheet Items)			
(In NT\$ billions)	<u>1Q21</u>	<u>4Q20</u>	<u>1Q20</u>
Cash & Marketable Securities	796.72	791.48	561.55
Accounts Receivable	167.48	146.04	146.42
Inventories	154.57	137.35	78.28
Other Current Assets	21.02	17.31	16.22
Total Current Assets	1,139.79	1,092.18	802.47
Short-term Loans	137.12	88.56	139.31
Accounts Payable	147.64	198.90	141.24
Current Portion of Bonds Payable	0.00	2.60	12.80
Dividends Payable	129.65	129.65	129.65
Accrued Liabilities and Others	247.24	197.44	166.47
Total Current Liabilities	661.65	617.15	589.47
Current Ratio (x)	1.7	1.8	1.4
Net Working Capital	478.14	475.03	213.00

Liquidity Analysis:

Cash and marketable securities increased by NT\$5.24 billion from 4Q20 to NT\$796.72 billion in 1Q21.

Total current liabilities increased by NT\$44.50 billion, mainly due to the increase of NT\$48.56 billion in short-term loans and the increase of NT\$49.80 billion in accrued liabilities and others, partially offset by the decrease of NT\$51.26 billion in accounts payable.

Net working capital was NT\$478.14 billion and current ratio was 1.7x in 1Q21.

III - 2. Receivable/Inventory Days			
(In Number of Days)			
	<u>1Q21</u>	<u>4Q20</u>	<u>1Q20</u>
Days of Receivable	40	39	42
Days of Inventory	83	73	53

Receivable and Inventory Days:

Days of receivable increased 1 day to 40 days in 1Q21.

Days of inventory increased 10 days to 83 days, primarily due to N5 wafer prebuild.

III - 3. Debt Service			
(In NT\$ billions)			
	<u>1Q21</u>	<u>4Q20</u>	<u>1Q20</u>
Cash & Marketable Securities	796.72	791.48	561.55
Interest-Bearing Debts	(416.59)	(347.23)	(201.58)
Net Cash Reserves	380.13	444.25	359.97

Debt Service:

Net cash reserves decreased NT\$64.12 billion to NT\$380.13 billion in 1Q21.

Interest-bearing debts increased NT\$69.36 billion, mainly due to the increase in short-term loans of NT\$48.56 billion and the issuance of NT\$21.10 billion in corporate bonds, partially offset by NT\$2.6 billion repayment of bonds.

IV. Cash Flow

IV - 1. Quarterly Cash Flow Analysis			
(In NT\$ billions)	1Q21	4Q20	1Q20
Income before Tax	155.06	161.11	132.15
Depreciation & Amortization	100.90	97.56	68.55
Other Operating Sources/(Uses)	(28.14)	0.46	2.33
Net Operating Sources/(Uses)	227.82	259.13	203.03
Capital Expenditures	(248.03)	(88.68)	(192.56)
Marketable Financial Instruments	3.51	(1.52)	0.66
Other Investing Sources/(Uses)	0.27	(0.76)	2.91
Net Investing Sources/(Uses)	(244.25)	(90.96)	(188.99)
Short-term Loans	52.07	(67.35)	20.35
Cash Dividends	(64.83)	(64.83)	(64.83)
Bonds Payable	18.50	30.50	2.40
Other Financing Sources/(Uses)	8.88	0.47	1.32
Net Financing Sources/(Uses)	14.62	(101.21)	(40.76)
Exchange Rate Changes	6.37	(10.99)	2.10
Cash Position Net Changes	4.56	55.97	(24.62)
Ending Cash Balance	664.73	660.17	430.78

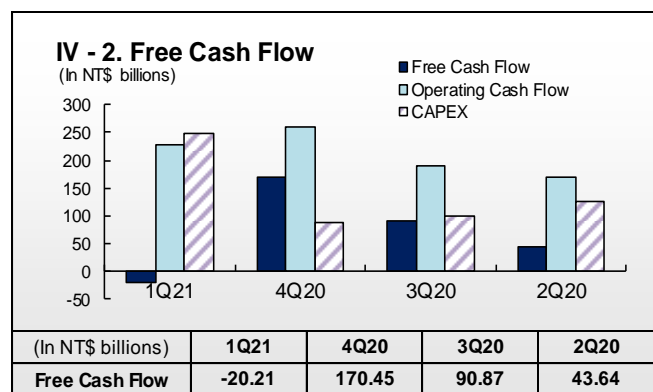
Summary of Cash Flow:

During the first quarter, cash generated from operating activities totaled NT\$227.82 billion, including (1) NT\$155.06 billion from income before tax, (2) NT\$100.90 billion from depreciation & amortization expenses, and (3) NT\$28.14 billion for other operating uses. The other operating uses were mainly attributable to the increase of NT\$21.44 billion in accounts receivable.

Net cash used in investing activities was NT\$244.25 billion in 1Q21, primarily attributable to capital expenditures of NT\$248.03 billion.

Net cash generated from financing activities was NT\$14.62 billion, mainly reflecting the increase of NT\$52.07 billion in short-term loans and the net changes in bonds payable of NT\$18.50 billion, partially offset by the payment of 2Q20 cash dividends.

As a result, cash position increased NT\$4.56 billion to NT\$664.73 billion at the end of 1Q21.



Operating and Free Cash Flow:

Free cash flow was an outflow of NT\$20.21 billion in 1Q21, as capital expenditures were slightly higher than operating cash flow during the quarter.

V. CapEx

V. Capital Expenditures		
(in US\$ billions)	1Q21	4Q20
Capital Expenditures	8.84	3.19

Capital Expenditures:

Capital expenditures for TSMC on a consolidated basis totaled US\$8.84 billion in 1Q21.

VI. Recap of Recent Important Events & Announcements

- TSMC Board of Directors Approved the Convening of the 2021 AGM on June 8, 2021 (2021/02/09)
- TSMC Board of Directors Approved the Issuance of Unsecured Corporate Bonds in the Domestic Market for an Amount not to Exceed NT\$120 Billion (approximately US\$4.4 billion) and US Dollar-Denominated Senior Unsecured Corporate Bonds for an Amount not to Exceed US\$4.5 Billion (2021/02/09)
- TSMC Board of Directors Approved the Establishment of a Wholly-owned Subsidiary in Japan to Expand TSMC's 3DIC Material Research, with a Paid-in Capital of not More than ¥18.6 Billion (approximately US\$186 million) (2021/02/09)
- TSMC Board of Directors Approved NT\$2.5 Cash Dividend for Fourth Quarter of 2020 and Set June 17 as Ex-Dividend Date, June 23 as the Record Date and July 15, 2021 as the Distribution Date (2021/02/09)