

2Q22

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)*

	<u>2Q22</u>	<u>1Q22</u>	<u>2Q21</u>	<u>QoQ</u>	<u>YoY</u>
EPS (NT\$ per common share)	9.14	7.82	5.18	16.9%	76.4%
(US\$ per ADR unit)	1.55	1.40	0.93		
Net Revenue (US\$ billions)	18.16	17.57	13.29	3.4%	36.6%
Net Revenue	534.14	491.08	372.15	8.8%	43.5%
Gross Profit	315.47	273.20	186.20	15.5%	69.4%
<i>Gross Margin</i>	<i>59.1%</i>	<i>55.6%</i>	<i>50.0%</i>		
Operating Expenses	(53.38)	(48.61)	(40.58)	9.8%	31.5%
Other Operating Income and Expenses	0.03	(0.80)	0.05		
Operating Income	262.12	223.79	145.67	17.1%	79.9%
<i>Operating Margin</i>	<i>49.1%</i>	<i>45.6%</i>	<i>39.1%</i>		
Non-Operating Items	3.88	3.04	3.72		
Net Income Attributable to Shareholders of the Parent Company	237.03	202.73	134.36	16.9%	76.4%
<i>Net Profit Margin</i>	<i>44.4%</i>	<i>41.3%</i>	<i>36.1%</i>		
Wafer Shipment (kpcs 12 inch-equiv.)	3,799	3,778	3,449	0.6%	10.1%
Average Exchange Rate--USD/NTD	29.42	27.95	28.01	5.2%	5.0%

*Note: Diluted weighted average outstanding shares were 25,929mn units in 2Q22***Financial Highlights:****Second Quarter 2022**

- Net revenue was NT\$534.14 billion, representing an 8.8% increase from NT\$491.08 billion in 1Q22 and a 43.5% increase from NT\$372.15 billion in 2Q21.
- Gross margin was 59.1%, 3.5 percentage points higher than 1Q22 and 9.1 percentage points higher than 2Q21.
- Operating margin was 49.1%, up 3.5 percentage points from 1Q22 and up 10.0 percentage points from 2Q21.
- Non-operating items were a gain of NT\$3.88 billion, compared to a gain of NT\$3.04 billion in 1Q22 and a gain of NT\$3.72 billion in 2Q21.
- Net income attributable to shareholders of the parent company was NT\$237.03 billion, up 16.9% from 1Q22 and up 76.4% from 2Q21. Net profit margin was 44.4% and diluted EPS was NT\$9.14.

I. Revenue Analysis

Wafer Revenue by Technology	2Q22	1Q22	2Q21
5nm	21%	20%	18%
7nm	30%	30%	31%
16nm	14%	14%	14%
28nm	10%	11%	11%
40/45nm	8%	8%	7%
65nm	5%	5%	5%
90nm	2%	2%	3%
0.11/0.13um	3%	3%	3%
0.15/0.18um	6%	6%	6%
0.25um and above	1%	1%	2%

Net Revenue by Platform	2Q22	1Q22	2Q21
Smartphone	38%	40%	42%
High Performance Computing	43%	41%	39%
Internet of Things	8%	8%	8%
Automotive	5%	5%	4%
Digital Consumer Electronics	3%	3%	4%
Others	3%	3%	3%

Net Revenue by Geography	2Q22	1Q22	2Q21
North America	64%	64%	64%
Asia Pacific	12%	15%	15%
China	13%	11%	11%
EMEA	6%	5%	6%
Japan	5%	5%	4%

Revenue Analysis:

In the second quarter, revenue increased 8.8% quarter-over-quarter, supported by strong HPC, IoT and Automotive-related demand.

By technology, 5nm process technology contributed 21% of total wafer revenue in 2Q22 while 7nm accounted for 30%. Advanced technologies (7nm and below) accounted for 51% of total wafer revenue.

By platform, Smartphone and HPC represented 38% and 43% of net revenue respectively, while IoT, Automotive, DCE, and Others each represented 8%, 5%, 3%, and 3%.

Sequentially, revenue from Smartphone, HPC, IoT, Automotive, DCE, and Others increased 3%, 13%, 14%, 14%, 5% and 7% respectively from 1Q22.

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 12%, 13%, 6%, and 5% of total net revenue respectively.

II. Profit & Expense Analysis

II - 1. Gross Profit Analysis			
(In NT\$ billions)	2Q22	1Q22	2Q21
Net Revenue	534.14	491.08	372.15
Cost of Revenue	(218.67)	(217.88)	(185.95)
Gross Profit	315.47	273.20	186.20
Gross Margin	59.1%	55.6%	50.0%

Gross Profit Analysis:

Gross margin was 59.1% in 2Q22, 3.5 percentage points higher than 1Q22, mainly reflecting a more favorable foreign exchange rate, cost improvement and value selling.

II - 2. Operating Income Analysis

(In NT\$ billions)	<u>2Q22</u>	<u>1Q22</u>	<u>2Q21</u>
Total Operating Expenses	(53.38)	(48.61)	(40.58)
Research & Development	(39.65)	(36.05)	(30.87)
SG&A	(13.73)	(12.56)	(9.71)
Other Operating Income and Expenses	0.03	(0.80)	0.05
Operating Income	262.12	223.79	145.67
Operating Margin	49.1%	45.6%	39.1%
Total Operating Expenses as % of Net Revenue	10.0%	9.9%	10.9%

Operating Income Analysis:

Total operating expenses increased NT\$4.77 billion to NT\$53.38 billion in 2Q22, accounting for 10.0% of net revenue, as compared to 9.9% in 1Q22. Operating margin improved 3.5 percentage points sequentially to 49.1% in 2Q22.

II - 3. Non-Operating Items

(In NT\$ billions)	<u>2Q22</u>	<u>1Q22</u>	<u>2Q21</u>
L-T Investments	2.26	1.73	1.17
Net Interest Income (Expenses)	0.64	(0.47)	0.29
Other Gains and Losses	0.98	1.78	2.26
Total Non-Operating Items	3.88	3.04	3.72

Non-Operating Items:

Total non-operating items were a gain of NT\$3.88 billion in 2Q22, compared to a gain of NT\$3.04 billion in 1Q22.

II - 4. Net Profit and EPS

(In NT\$ billions)	<u>2Q22</u>	<u>1Q22</u>	<u>2Q21</u>
Income before Tax	266.00	226.83	149.39
Income Tax Expenses	(28.82)	(23.96)	(14.91)
Effective Tax Rate	10.9%	10.6%	10.1%
Net Income Attributable to the Parent Company	237.03	202.73	134.36
Net Profit Margin	44.4%	41.3%	36.1%
EPS (NT\$ per common share)	9.14	7.82	5.18

Net Profit and EPS:

Net income attributable to shareholders of the parent company was NT\$237.03 billion in 2Q22, up 16.9% from 1Q22 and up 76.4% from 2Q21.

III. Financial Condition Review

III - 1. Liquidity Analysis			
(Balance Sheet Items)			
(In NT\$ billions)	<u>2Q22</u>	<u>1Q22</u>	<u>2Q21</u>
Cash & Marketable Securities	1,425.57	1,282.06	870.84
Accounts Receivable	222.07	213.43	178.26
Inventories	217.44	200.12	170.44
Other Current Assets	40.79	26.63	21.57
Total Current Assets	1,905.87	1,722.24	1,241.11
Short-term Loans	115.58	144.55	139.38
Accounts Payable	220.31	173.02	148.38
Current Portion of Bonds Payable and Bank Loans	17.06	16.79	0.00
Dividends Payable	142.81	142.62	136.13
Accrued Liabilities and Others	349.48	345.89	223.86
Total Current Liabilities	845.24	822.87	647.75
Current Ratio (x)	2.3	2.1	1.9
Net Working Capital	1,060.63	899.37	593.36

Liquidity Analysis:

Total current assets increased by NT\$183.63 billion, mainly due to the increase of NT\$143.51 billion in cash and marketable securities.

Total current liabilities increased by NT\$22.37 billion, mainly due to the increase of NT\$47.29 billion in accounts payable, partially offset by the decrease of NT\$28.97 billion in short-term loans.

Net working capital was NT\$1,060.63 billion and current ratio was 2.3x in 2Q22.

III - 2. Receivable/Inventory Days			
(In Number of Days)	<u>2Q22</u>	<u>1Q22</u>	<u>2Q21</u>
Days of Receivable	37	38	42
Days of Inventory	95	88	85

Receivable and Inventory Days:

Days of receivable decreased 1 day to 37 days in 2Q22.

Days of inventory increased 7 days to 95 days, primarily due to N5 wafer prebuild and an increase in raw materials.

III - 3. Debt Service			
(In NT\$ billions)	<u>2Q22</u>	<u>1Q22</u>	<u>2Q21</u>
Cash & Marketable Securities	1,425.57	1,282.06	870.84
Interest-Bearing Debts	(889.85)	(794.08)	(553.02)
Net Cash Reserves	535.72	487.98	317.82

Debt Service:

Net cash reserves increased NT\$47.74 billion to NT\$535.72 billion in 2Q22.

Interest-bearing debts increased NT\$95.77 billion in 2Q22, mainly due to the issuance of NT\$108.84 billion in corporate bonds, partially offset by the decrease in short-term loans of NT\$28.97 billion.

IV. Cash Flow

IV - 1. Quarterly Cash Flow Analysis			
(In NT\$ billions)	<u>2Q22</u>	<u>1Q22</u>	<u>2Q21</u>
Income before Tax	266.00	226.83	149.39
Depreciation & Amortization	113.23	111.10	103.81
Other Operating Sources/(Uses)	(40.38)	34.24	(65.76)
Net Operating Sources/(Uses)	338.85	372.17	187.44
Capital Expenditures	(217.73)	(262.13)	(166.97)
Marketable Financial Instruments	(59.59)	(26.74)	0.09
Other Investing Sources/(Uses)	1.39	0.80	(2.87)
Net Investing Sources/(Uses)	(275.93)	(288.07)	(169.75)
Short-term Loans	(26.48)	30.53	3.55
Cash Dividends	(71.31)	(71.31)	(64.83)
Bonds Payable	108.84	19.60	136.71
Other Financing Sources/(Uses)	8.03	2.09	(0.40)
Net Financing Sources/(Uses)	19.08	(19.09)	75.03
Exchange Rate Changes	19.60	21.59	(9.47)
Cash Position Net Changes	101.60	86.60	83.25
Ending Cash Balance	1,253.19	1,151.59	747.98

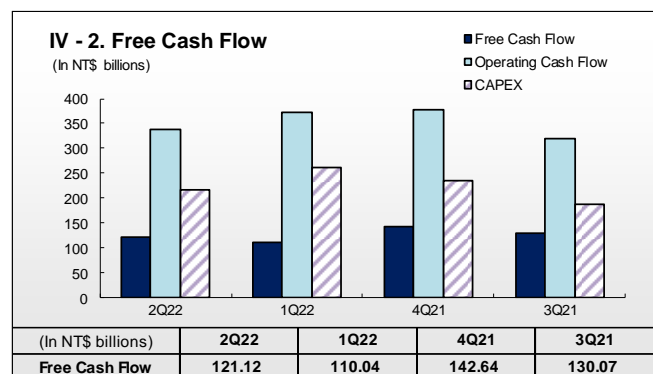
Summary of Cash Flow:

During the second quarter, cash generated from operating activities totaled NT\$338.85 billion, including (1) NT\$266.00 billion from income before tax, (2) NT\$113.23 billion from depreciation & amortization expenses, and (3) NT\$40.38 billion for other operating uses. The other operating uses were mainly attributable to the income tax payment.

Net cash used in investing activities was NT\$275.93 billion in 2Q22, primarily attributable to capital expenditures of NT\$217.73 billion and the net increase in marketable financial instruments of NT\$59.59 billion.

Net cash generated from financing activities was NT\$19.08 billion, mainly reflecting net increase in bonds payable of NT\$108.84 billion, partially offset by the payment of 3Q21 cash dividends and the decrease in short-term loans of NT\$26.48 billion.

As a result, cash position increased NT\$101.60 billion to NT\$1,253.19 billion at the end of 2Q22.



Operating and Free Cash Flow:

Free cash flow increased NT\$11.08 billion to NT\$121.12 billion in 2Q22, as the decrease in capital expenditures outpaced the decrease in operating cash flow during the quarter.

V. CapEx

V. Capital Expenditures			
(in US\$ billions)	<u>2Q22</u>	<u>1Q22</u>	<u>YTD</u>
Capital Expenditures	7.34	9.38	16.72

Capital Expenditures:

Capital expenditures for TSMC on a consolidated basis totaled US\$7.34 billion in 2Q22.

VI. Recap of Recent Important Events & Announcements

- TSMC Japan 3DIC R&D Center Completes Clean Room Construction in AIST Tsukuba Center (2022/06/24)
- TSMC FINFLEX™, N2 Process Innovations Debut at 2022 North American Technology Symposium (2022/06/17)
- TSMC Board of Directors Approved NT\$2.75 Cash Dividend for the First Quarter of 2022 and Set September 15 as Ex-Dividend Date, September 21 as the Record Date and October 13, 2022 as the Distribution Date (2022/05/10)
- TSMC Board of Directors Approved the Global Employee Stock Purchase Plan Which Applies to All Regular Employees of TSMC and Its Wholly Owned Subsidiaries (2022/05/10)