



Industry Leading Provider of Outsourced Semiconductor Assembly, Test & Bumping Services

#### **Safe Harbor Notice**

❖ This presentation contains certain forward-looking statements. These forward-looking statements may be identified by words such as 'believes,' 'expects,' 'anticipates,' 'projects,' 'intends,' 'should,' 'seeks,' 'estimates,' 'future' or similar expressions or by discussion of, among other things, strategy, goals, plans or intentions. These statements include financial projections and estimates and their underlying assumptions, statements regarding plans, objectives and expectations with respect to future operations, products and services, and statements regarding future performance. Actual results may differ materially in the future from those reflected in forward-looking statements contained in this document, due to various factors. Actual results may differ materially in the future from those reflected in forward-looking statements contained in this document, due to various factors. Further information regarding these risks, uncertainties and other factors are included in the Company's most recent Annual Report on Form 20-F filed with the U.S. Securities and Exchange commission (the "SEC") and in the Company's other filings with the SEC.



## **Group Snapshot**

#### Overview

Footprint in Taiwan & China

☐ Founded: 1997

☐ Headquarters : Hsinchu, Taiwan

☐ Ticker Symbol: TWSE: 8150.TW

**NASDAQ: IMOS (ADS)** 

☐ Market Cap.¹: 639.5MUSD

☐ Employee<sup>1</sup>: 5,545



Shanghai, China Unimos (JV with YMTC)

Hsinchu, Taiwan ChipMOS Taiwan

Tainan, Taiwan ChipMOS Taiwan



Hsinchu Tainan



Shanghai

Memory

Test

Assembly

**Test** 

Assembly

**Mixed-Signal** 

Test

Assembly

**Display Driver** 

Gold bump

COG/COF

**Business Focus** 

Taiwan and Global customers

China domestic market and YMTC's NAND project





<sup>(1)</sup> As of March 31, 2020.

<sup>(2)</sup> The exchange rate was NT\$30.25 against to US\$1.00

# **ChipMOS Footprints**

#### Headquarter

Hsinchu Science Park, Hsinchu City



Huko, Hsinchu County



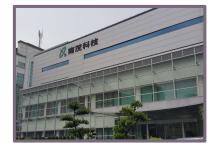
Wafer Test

Chupei II, Hsinchu County



Chupei I, Hsinchu County

Wafer Bumping





















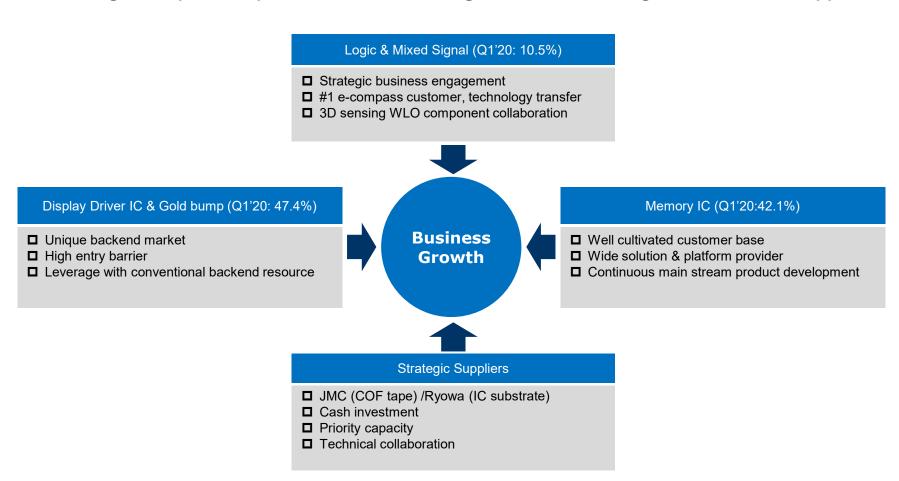
Assembly

Final Test



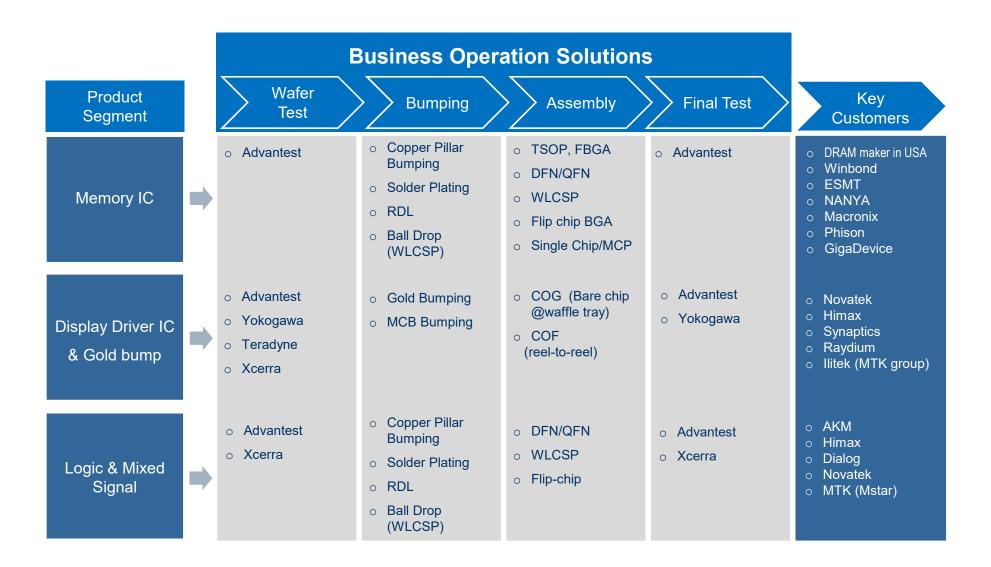
## **Positioned in Specialized OSAT Markets**

- □ Providing turnkey solutions for niche OSAT markets
- ☐ Owning specialized teams and resources to support customer in the fields
- ☐ Growing with operation performance and strategic alliance including customers and suppliers





### **Business Operation Solutions for Customers**





## **Diversified Product Application**

#### **Content Performance of Q1'20**

**Smart Mobile** 

36%

- Smart phone
- Tablet
- Wearable



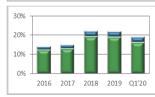


TV

19%

- UHD/4K TV
- 8K TV
- OLED TV



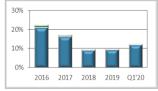


Computing

12%

- PC / server
- SSD





**Auto/Industrial** 

11%

- In-car infotainment
- ADAS / sensor
- industrial PC





Consumer

22%

- Game
- Smart speaker
- DSC
- STB





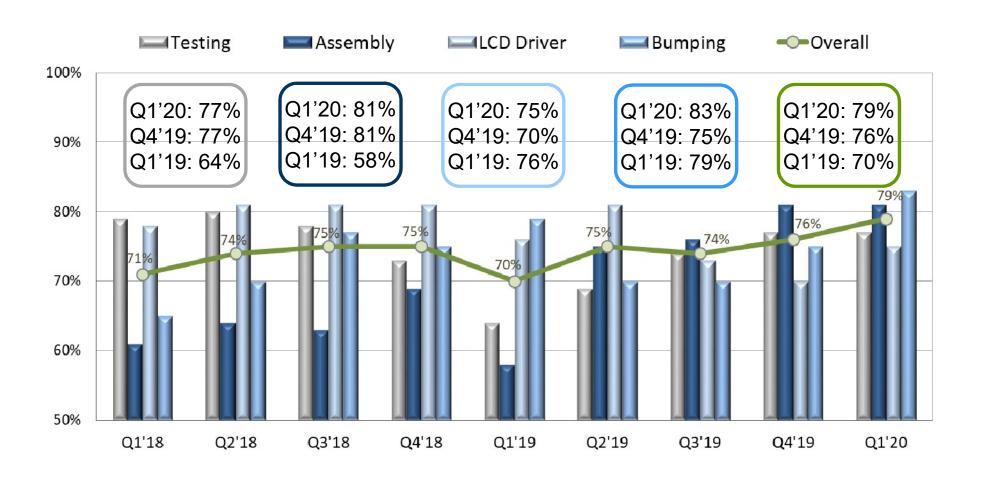




Memory & Mixed-signal



### **Utilization**

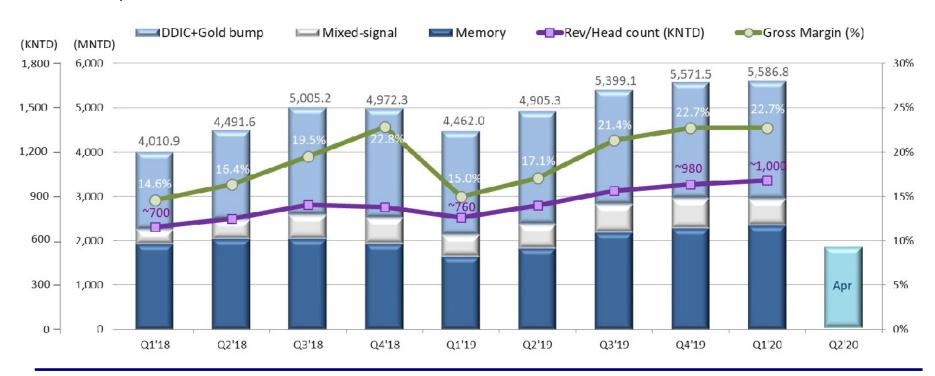




## Financial Highlight – Quarterly Revenue & Gross Margin

#### Revenue

- Q1' 20: NT\$ 5,586.8 M (QoQ +0.3%, YoY +25.2%) a five year high record level
- Apr'20: NT\$ 1,854.3 M (MoM -5.7%, YoY +18.9%) new record high for month of Apri
- ☐ Gross Margin: Q1'20: 22.7% (QoQ ~, YoY +7.7ppts)
- Rev. per head count: increased 32.9% from Q1'19 to Q1'20





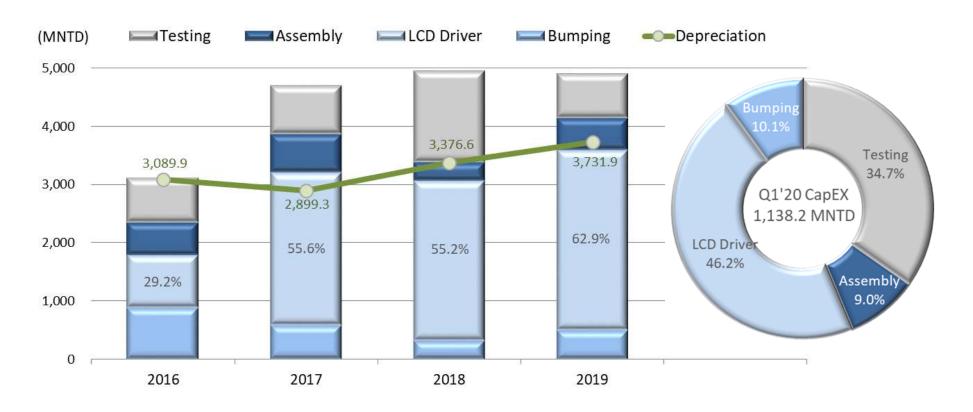
## Financial Highlight – Capital Expenditures & Depreciation

■ CapEX

■ Q1'20: NT\$1,138.2M

Depreciation

■ Q1'20: NT\$1,004.9M



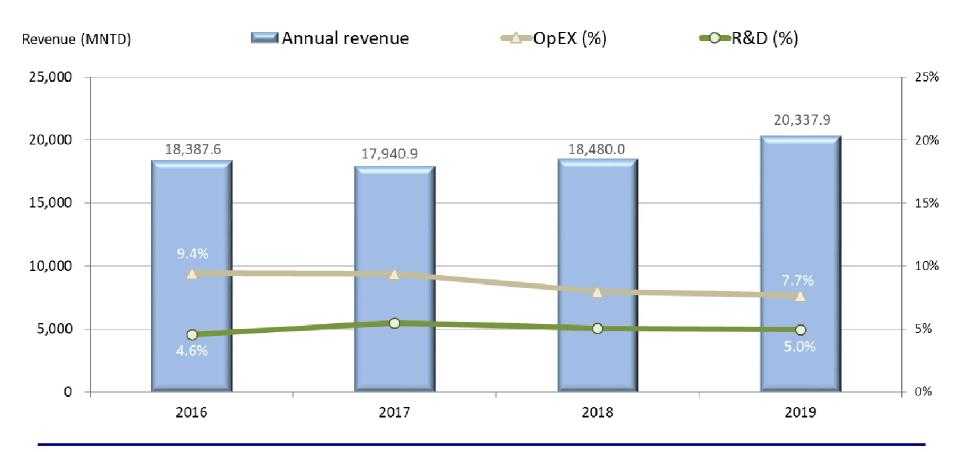


# Financial Highlight – OpEX & R&D

□ OpEX: Reduce from 9.4% (2016) to 7.7% (2019)

**Q4'19: 7.0%, Q1'20: 7.1%** 

□ R&D: 4.6~5%



#### **EPS & Dividend**

■ EPS: Q1'20 NT\$0.98

■ Payout ratio (2014~2019): > 40%, average: ~63%

■ 2020 pending dividend: 1.8NTD, payout ratio 50.6%

☐ Dividend yield (2014~2019): > 3%, average: ~5.2%

2020: 6.3% (as April/10)



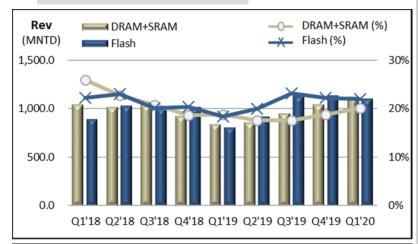
Note: 2019 Payout ratio = 2019 Dividend /2018 EPS

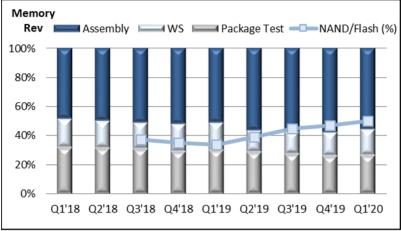


## **Operation Performance**

#### **Memory IC**

Q1'20: 42.1%





#### Key Message

- □ QoQ +2.9%, YoY +41.9%
- ☐ DRAM+SRAM: 20.1%
  - demand keep stable due to cloud storage and STB
- ☐ Flash: 22.0%
  - NOR Flash
    - ✓ 5G and game demand increasing
  - NAND Flash

Leverage Module/Brand customers' business to maintain healthy stable assembly UT level.

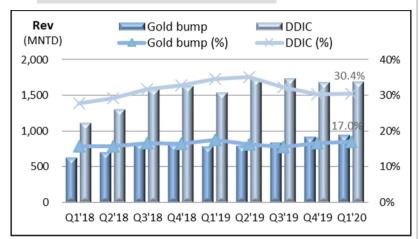
- ✓ customer maintain similar momentum of Q1'20
- ✓ NAND Flash represented about 50% of Q1 Flash revenue



# **Operation Performance (Cont'd)**

**DDIC & Gold bump** 

Q1'20: 47.4%





#### Key Message

- □ QoQ +1.3%, YoY +13.9%
- □ Large Panel Display (TV)
  - Large panel (TV) end-product demand soft recently
- ☐ Middle panel (Tablet/NB)
  - Demand stable for work and learning from home
- ☐ Small Panel Display (Smart phone):

Soft smartphone sale recently

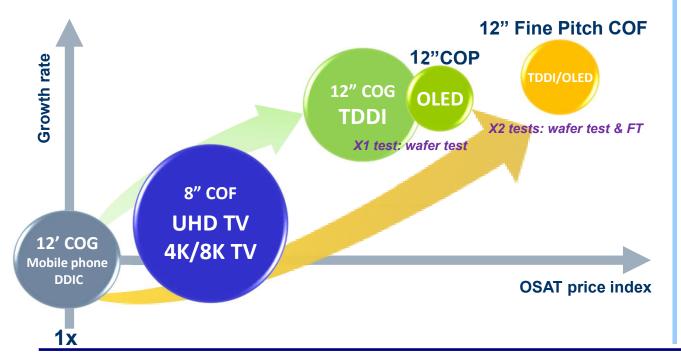
- TDDI continuously penetrates to HD grade panel, and growth in 2020
  - ✓ Represented around 29% of Q1 DDIC revenue
- OLED panel driver IC (COP) intensifying is emerging in FHD+ grade panel, and growth in 2020
  - ✓ Represented about 9.2% of Q1 DDIC revenue



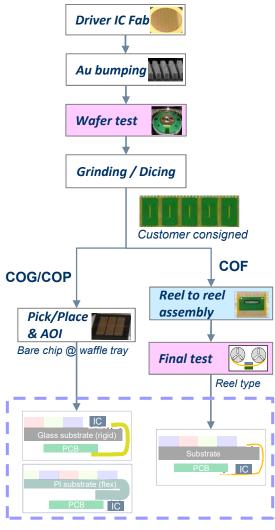
## Leverage DDIC Growth by COF & TDDI Penetration

- □ TV: 8K emerging FHD 34K 38K
- □ TDDI: ~3x wafer testing time compared to DDIC
  - Test items increasing for integrating additional functions
    - FHD >>> FHD+HD
- OLED: higher-end test platform using
  - COP is same as COG format and process flow in OSAT

#### Over flow business >> +China OLED supply chain

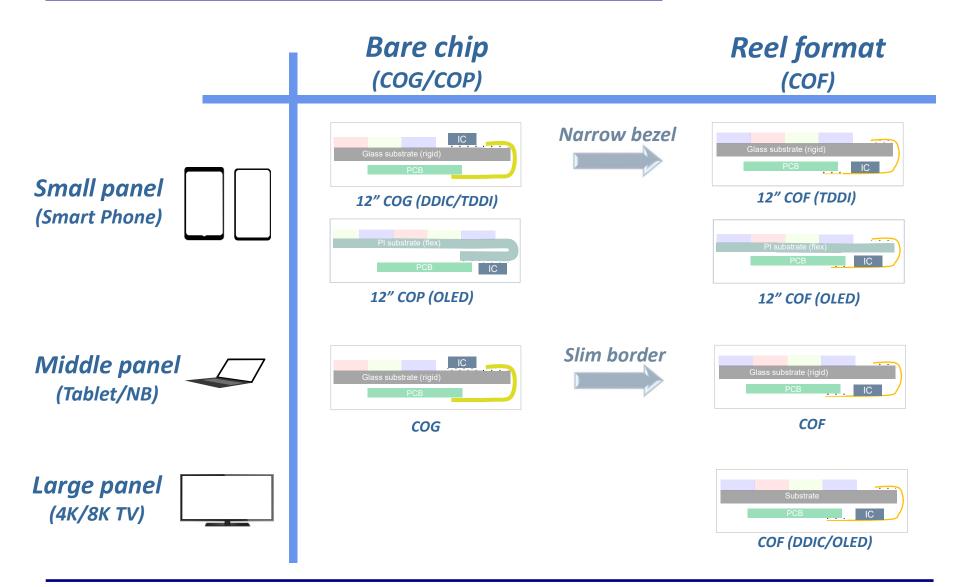


#### **DDIC OSAT Flow**





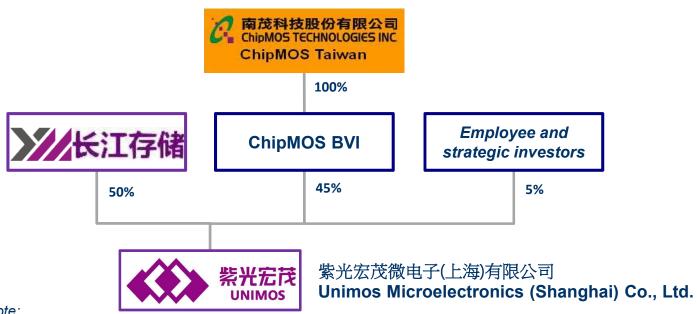
## **Display Driver IC vs Panel Comparison**





## **Corporate Holding Structure**

- Except for being the investors of Unimos, there are no other legal relationship between ChipMOS and Tsinghua Unigroup/YMTC.
- ☐ The technology transfer between ChipMOS and Unimos had been completed. ChipMOS no longer provides any technology to Unimos.
- ☐ Unimos becomes a long-term investment of ChipMOS and recognized profit/loss pro rata. ChipMOS is not responsible for the business performance of Unimos.



#### Note:

- 1. ChipMOS Shanghai already changed company name to Unimos since Jul/4'18.
- 2. Unigroup transferred the equity of Unimos to YMTC (Yangtze Memory Technologies Co. Ltd.) since Dec. 2019



## **ChipMOS ESG Performance**

■ Environmental 環境面

國家企業環保獎金級獎 暨 榮譽環保企業獎座

Gold grade of National Enterprise Environmental Protection Award & Honorary Environmental Protection Enterprise Award

✓ Renewable energy (Solar energy generation)

7,126户家庭每月用電量 8年再生能源(太陽能)累計發電數

✓ Water resource recycle (Process recycling water)

**3,218座國際標準泳池** 12年製程回收水成果

✓ CO2 reduction

45座大安森林公園

8年來節能減碳成效

■ Social 社會面

人才發展品質管理系統 銀牌(TTQS)

Silver grade of Talent Quality: Management System (TTQS)

Excellent Gender Equality in Employment

推動職場工作平權優等 108年榮獲竹科/南科園區管理局肯定

✓ Grant university student 14,620,000元 7年產學合作青年培育總投入

✓ Family group insurance 21,427,416元

2019年家庭式團保支付總額

■ Governance 治理面

台灣TOP50 永續企業獎

Top 50 Taiwan Corporate Sustainability Awards of 2019 Taiwan Corporate Sustainability Awards (TCSA)

- ✓ Corporate Governance 21~35% 第5屆公司治理評鑑結果
- ✓ SDGs

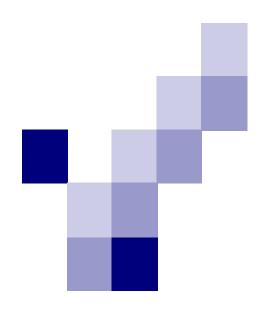
3年 連續3年榮獲TCSA台灣永續獎

Awarded TCSA Corporate Sustainability for 3 consecutive years

✓ 108年度績優營業人

獲財政部北區國稅局肯定





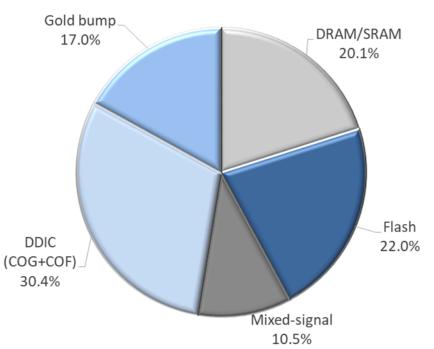
# **Q1'20 Financial Results**

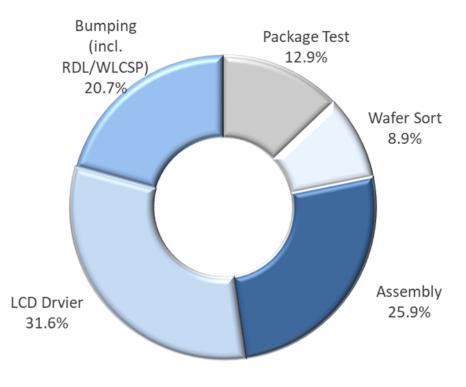
# Financial Highlight – Q1'20 Revenue Breakdown

### **Product Segment**











# **Consolidated Operating Results Summary** (unaudited)

(NT\$ Millions)	Q1'20	Q4'19	Q1'19	
Revenue	5,586.8	5,571.5	4,462.0	
Profit Attributable to the Company	712.7	530.0	193.7	
EPS Attributable to the Company - Basic (NT\$)	0.98	0.73	0.27	
Earnings per ADS equivalent - Basic (US\$) <sup>(1)</sup>	0.65	0.48	0.18	
Depreciation & Amortization CapEx EBITDA <sup>(2)</sup>	1,004.9 1,138.2 1,905.0	958.1 1,703.7 1,858.7	899.3 628.5 1,217.5	
Return on Equity (%) <sup>(3)</sup>	14.3%	10.9%	4.3%	

#### Notes:

- (1) The exchange rate was NT\$30.25 against to US\$1.00
- (2) EBITDA = Operating Profit + Depreciation & Amortization
- (3) Annualized return on equity to the Company for the quarter



# **Consolidated Statements of Comprehensive Income** (unaudited)

Selected Items from Consolidated Statements of Comprehensive Income

(NT\$ Millions)	Q1'20	Q4'19	QoQ	Q1'19	YoY
Revenue	5,586.8	5,571.5	0.3%	4,462.0	25.2%
Gross Profit	1,270.7	1,266.9	0.3%	668.3	90.1%
Gross Margin	22.7%	22.7%	0.0ppts	15.0%	7.7ppts
Operating Expenses	-395.9	-392.0	-1.0%	-360.5	-9.8%
Operating Profit	900.1	900.6	-0.1%	318.2	182.9%
Operating Profit Margin	16.1%	16.2%	-0.1ppts	7.1%	9.0ppts
Non-operating Income (Expenses)	-4.3	-224.7	98.1%	-64.3	93.3%
Profit Attributable to the Company	712.7	530.0	34.5%	193.7	267.9%
EPS Attributable to the Company - Basic (NT\$)	0.98	0.73	34.2%	0.27	263.0%
Weighted Average Shares Outstanding (in thousands) - Basic	727,240	727,240	0.0%	726,925	0.04%
EPS Attributable to the Company - Diluted (NT\$)	0.97	0.73	32.9%	0.27	259.3%
Weighted Average Shares Outstanding (in thousands) - Diluted	731,001	729,443	0.2%	728,302	0.4%



## **Consolidated Statements of Financial Position & Key Indices (unaudited)**

#### Selected Items from Consolidated Statements of Financial Position

	Q1'2	Q1'20 Q4'19 Q1'19		Q4'19		9
(NT\$ Millions)	Amount	%	Amount	%	Amount	%
				_		_
Current Assets	15,543.1	40.7%	11,762.4	34.3%	11,619.4	34.7%
Non-current Assets	22,691.0	59.3%	22,543.5	65.7%	21,904.3	65.3%
Total Assets	38,234.1	100.0%	34,305.9	100.0%	33,523.7	100.0%
Current Liabilities	4,510.8	11.8%	4,901.7	14.3%	4,525.3	13.5%
Non-current Liabilities	13,412.8	35.1%	9,753.0	28.4%	10,688.1	31.9%
Total Liabilities	17,923.6	46.9%	14,654.7	42.7%	15,213.4	45.4%
Total Equity	20,310.5	53.1%	19,651.2	57.3%	18,310.3	54.6%
Total Liabilities and Equity	38,234.1	100.0%	34,305.9	100.0%	33,523.7	100.0%
Key Indices						
A/R Turnover Days	75		80		91	
Inventory Turnover Days	44		38		42	

# Consolidated Statements of Cash Flows (unaudited)

(NT\$ Millions)	Q1'20	Q1'19	
Cash and Cash Equivalents at Beginning of Period	4,704.1	4,642.5	
Net Cash Generated from (used in) Operating Activities	732.3	1,703.7	
Net Cash Generated from (used in) Investing Activities	-1,433.1	-1,564.9	
Net Cash Generated from (used in) Financing Activities	3,507.0	286.9	
Effect of Exchange Rate Change on Cash	1.9	0.8	
Cash and Cash Equivalents at End of Period	7,512.2	5,069.0	
Free Cash Flow	553.4	500.0	



# **Company Website**

# ■ https://www.chipmos.com

