
# Nanya Technology

## Q4’ 2018 Investor Conference

Presentation to Investors and Analysts, 15 Jan. 2019

**Dr. Pei-Ing Lee** , President & Spokesman

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# Agenda

| | |
|---|---|
| 01. | Q4'18 Revenue & Results |
| 02. | 2018 Revenue & Results |
| 03. | CAPEX & Bit Shipment |
| 04. | Market Outlook |
| 05. | Business Review & Outlook |

# 01

# Q4’18 REVENUE & RESULTS

# Q4'18 Financial Results Summary

| Amount in Million NT$, except for EPS & BVPS | Q4'18 Unaudited | | Q3'18 Audited | | QoQ | Q4'17 Audited | | YoY |
|---|---|---|---|---|---|---|---|---|
| Net Sales | 16,958 | *100%* | 24,375 | *100%* | -30.4% | 16,769 | *100%* | 1.1% |
| Gross Profit (Loss) *Gross Margin(%)* | 8,972 | *52.9%* | 14,366 | *58.9%* | -37.5% | 8,318 | *49.6%* | 7.9% |
| Operating Income (Loss) *Operating Margin(%)* | 7,092 | *41.8%* | 12,434 | *51.0%* | -43.0% | 6,526 | *38.9%* | 8.7% |
| EBITDA* *EBITDA Margin (%)* | 10,217 | *60.2%* | 15,487 | *63.5%* | -34.0% | 9,407 | *56.1%* | 8.6% |
| Non-operating Income (Expense) | 894 | *5.3%* | 438 | *1.8%* | 103.9% | 15,457 | *92.2%* | |
| Income Tax Benefit (Expense) | -33 | *-0.2%* | 0 | *0%* | | -17 | *-0.1%* | |
| Net Income (Loss) *Net Margin (%)* | 7,953 | *46.9%* | 12,872 | *52.8%* | -38.2% | 21,971 | *131.0%* | -63.8% |
| Earnings Per Share (NT$) | 2.57** | | 4.15 | | | 7.42 | | |
| Book Value Per Share (NT$) | 54.01*** | | 51.52 | | | 44.54 | | |
| Shares Outstanding(million shares) | 3,053 | | 3,102 | | | 2,986 | | |

Note: * EBITDA = Operating income + Depreciation & Amortization Expenses

** EPS is based on weighted average outstanding shares of 3,090M

*** BVPS is calculated based on 3,053M outstanding shares after deduction of treasury stocks

# Quarterly Revenue Results

| | QoQ<br>Q4 ’18 vs. Q3’18 | YoY<br>Q4’18 vs. Q4’17 |
|---|---|---|
| Revenue | -30.4% | +1.1% |
| Shipment | decreased low twentys % | Flat |
| ASP | decreased low teens % | decreased low single digits |
| Exchange Rate | +0.58% | +2.5% |

- Q4’18 Revenue decreased by 30.4% QoQ
- Q4’18 Bit shipment decreased by low twentys % QoQ
- Q4’18 ASP decreased by low teens % QoQ

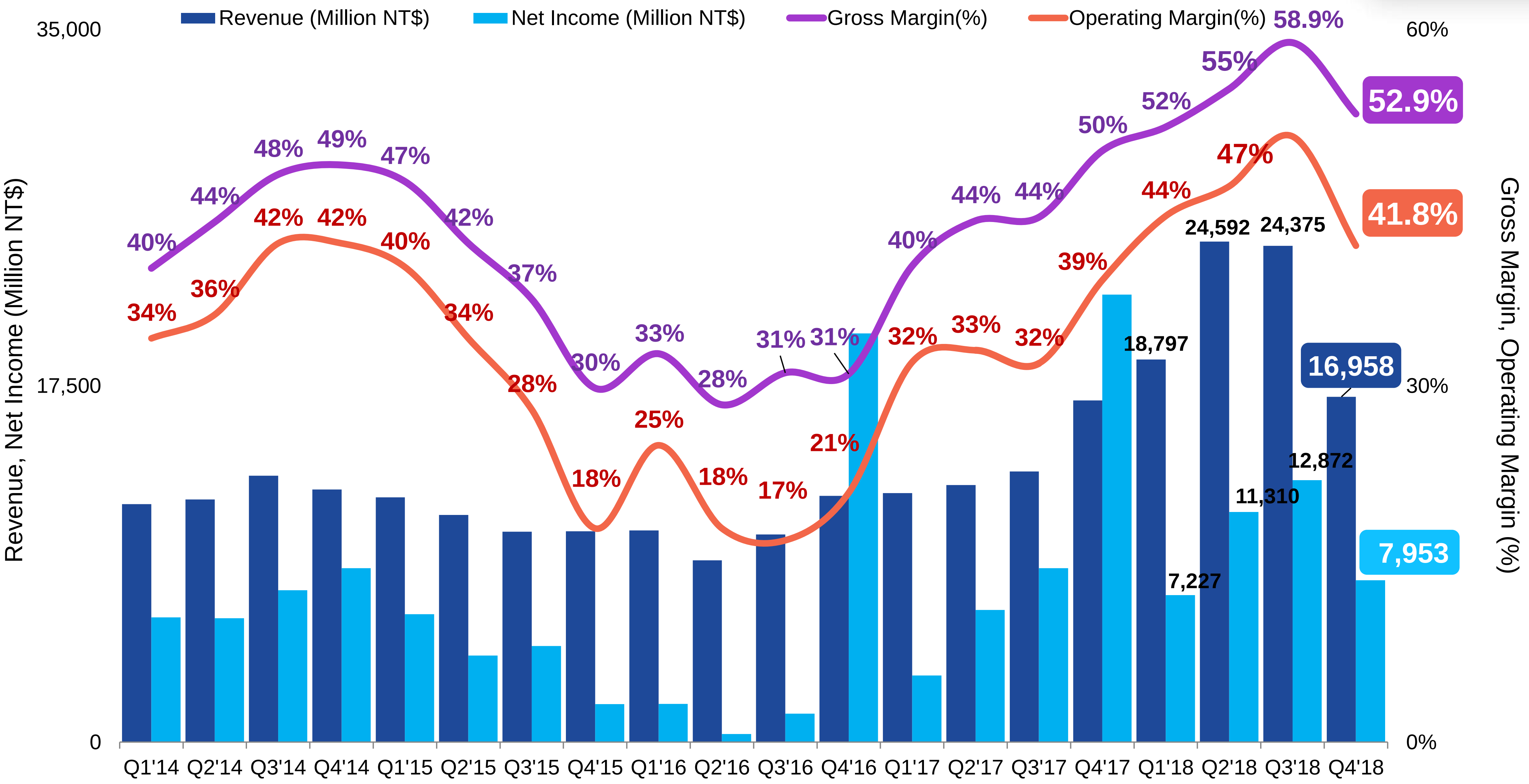
# Q4’18 vs. Q3’18 Results Comparison

| Amount in Million NT$ | Q4'18 Unaudited | | Q3'18 Audited | | QoQ (PPT* Delta) | Remarks |
|---|---|---|---|---|---|---|
| **Net Sales** | 16,958 | | 24,375 | | | ■ Bit shipment decreased by low twentys % range QoQ<br>■ ASP decreased by low teens% QoQ |
| **Gross Profit (Loss)**<br>Gross Margin(%) | 8,972 | ***52.9%*** | 14,366 | ***58.9%*** | -6.0% | ■ Q4’18 Gross profit decreased NT$ 5,394M, mainly due to shipment and ASP decline |
| **Operating Income (Loss)**<br>Operating Margin(%) | 7,092 | ***41.8%*** | 12,434 | ***51.0%*** | -9.2% | ■ Q4’18 OP Income decreased NT$ 5,342M<br>■ Gross profit decreased NT$ 5,394M<br>■ SG&A decreased NT$ 34M, R&D expense decreased NT$ 18M |
| **Net Income (Loss)**<br>Net Margin (%) | 7,953 | ***46.9%*** | 12,872 | ***52.8%*** | -5.9% | ■ Net Income decreased NT$ 4,919M<br>■ OP Income decreased NT$ 5,342M<br>■ FX** gain increased NT$ 370M (Q4’18: NT$ 483M; Q3’18: NT$ 113M)<br>■ Other Income increased NT$ 98M mainly from Interest Income |

*PPT: Percentage Points, ** FX: Foreign Currency Exchange

# Quarterly Financial Highlights



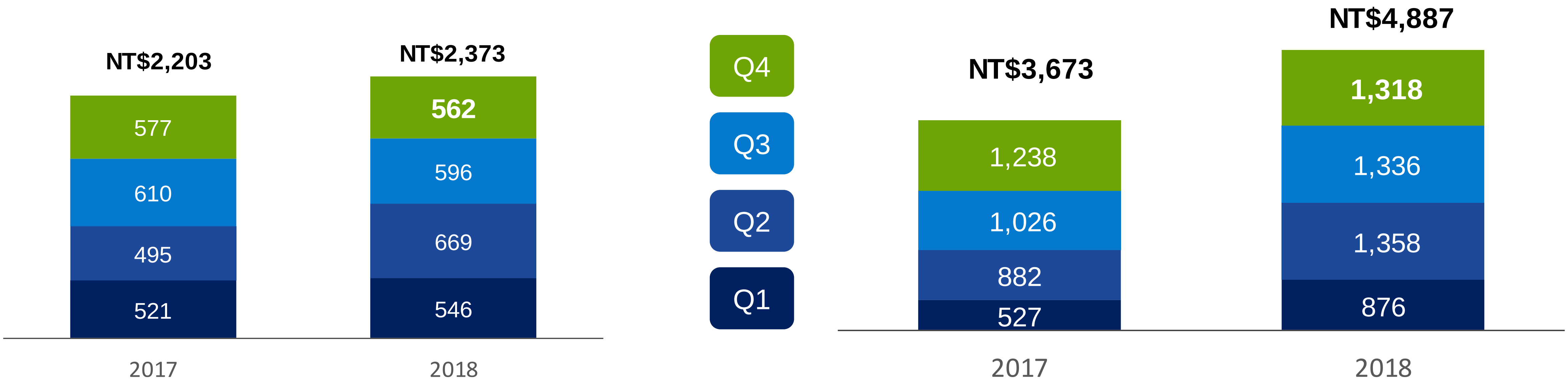
# Operating Expenses

## SG&A Expenses

(Million NT$) * Unaudited number

## R&D Expenses

(Million NT$) * Unaudited number




Note:
- Q4’18 SG&A expenses similar to those in Q3’18

Note:
- Q4’18 R&D expenses similar to those in Q3’18
- Y2018 R&D expenses increased by NT$1,214M; mainly for 20nm products deployment and next generation technology development

# Cash Flows

| Unit: Million NT$ | Q4'18 Unaudited & Consolidated | Q3'18 Audited & Consolidated |
|---|---|---|
| **Beginning Balance** | **57,259** | **61,537** |
| Cash from Operating Activities | 15,475 | 13,096 |
| Capital expenditures | -12,745 | -2,960 |
| Investments and others | -2,612* | -14,414 |
| **Ending Balance** | **57,376** | **57,259** |
| Free Cash Flow [1] | **2,729** | **10,136** |

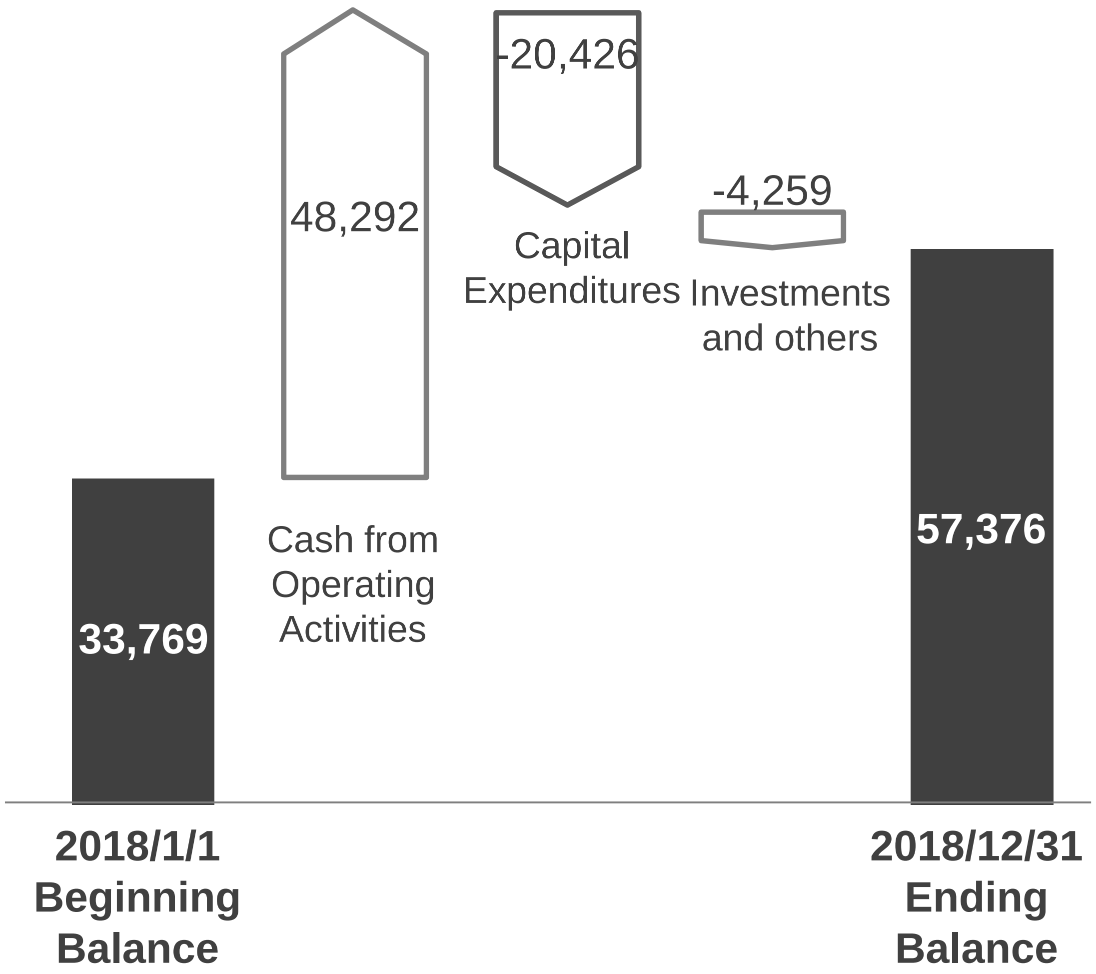
(1) Free Cash Flow = Cash from operating activities – Capital expenditures

* Mainly for share buyback of NT$ 2,783M

Note: Nanya Technology completed cash injection of US$ 1B into Nanya Technology International, to reduce FX heading costs.

## 2018 Cash Flow

Unit: Million NT$




**2018 Free Cash Flow NT$27,866 Million**

# Final Results of NTC 2018 Shares Buy-back Program

| Phase | Period | Purpose | Max # of shares back-back | Final # of shares being bought | W. average price of buy-back (NT$/share) | Total amount of buy-back (NT$) | Completion % | % of total outstanding shares |
|---|---|---|---|---|---|---|---|---|
| **1** | 11/13/2018 ~ 11/28/2018 | Employees' stock options | 20,000,000 | 20,000,000 | 57.35 | 1,146,932,497 | 100% | 0.64% |
| **2** | 11/29/2018 ~ 1/11/2019 | Safeguard shareholders' interests | 100,000,000 | 50,136,000 | 53.17 | 2,665,620,924 | 50.1% | 1.62% |
| Total | | | 120,000,000 | 70,136,000 | 54.36 | **3,812,553,421** | 58.5% | 2.26% |

Having considered the safeguard of shareholders' interests and market conditions, the Company did not fully complete the common stock repurchase before the expiry date.

# 02

# 2018 REVENUE & RESULTS

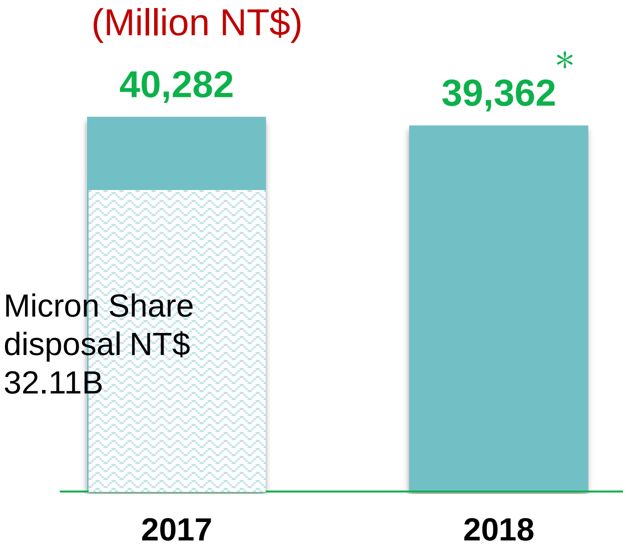
# 2018 vs. 2017 Results Comparison

| Amount in Million NT$ | 2018 Unaudited | | 2017 Audited | | QoQ (PPT* Delta) | Remarks |
|---|---|---|---|---|---|---|
| **Net Sales** | **84,722** | | **54,918** | | | ■ ASP increased by mid teens % YoY<br>■ Bit shipment increased mid thirty YoY |
| **Gross Income (Loss)**<br>Gross Margin(%) | **46,616** | ***55.0%*** | **24,668** | ***44.9%*** | **+10.1%** | ■ Gross Income increased mainly due to ASP & shipment increase and cost improvement thanks to 20nm contribution |
| **Operating Income (Loss)**<br>Operating Margin(%) | **39,355** | ***46.5%*** | **18,791** | ***34.2%*** | **+12.3%** | ■ Operating Income increased mainly due to ASP & shipment increase and higher GM<br>■ Note:<br>1) R&D expenses increased by NT$ 1,214M; mainly for 20nm products deployment and next generation technology development<br>2) SG&A expenses increased by NT$ 170M |
| **Net Income (Loss)**<br>Net Margin (%) | **39,362** | ***46.5%*** | **40,282** | ***73.3%*** | **-26.8%** | ■ Net Income decreased by NT$ 920M mainly due to:<br>■ Operating Income increased NT$ 20,564M<br>■ Y2017 other non-operating gain NT$ 24,647M<br>■ FX positive NT$ 2,134M (2018: NT$ 1,186M 2017: NT$ -948M)<br>■ Other income increase approx. NT$ 1,000M mainly from Interest Income |

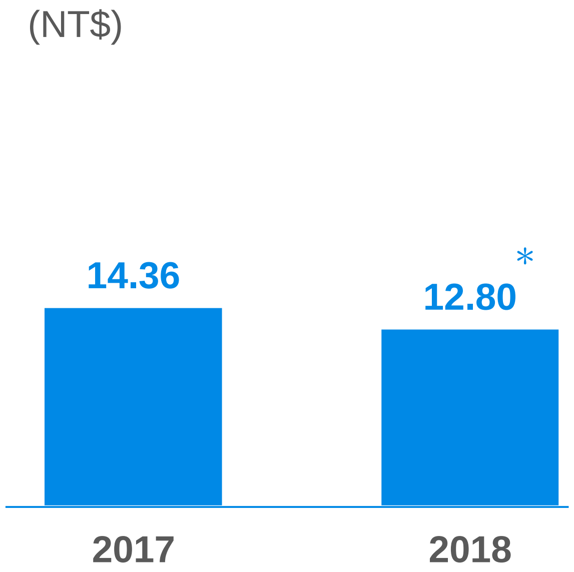
 

# 2018 Financial Highlights

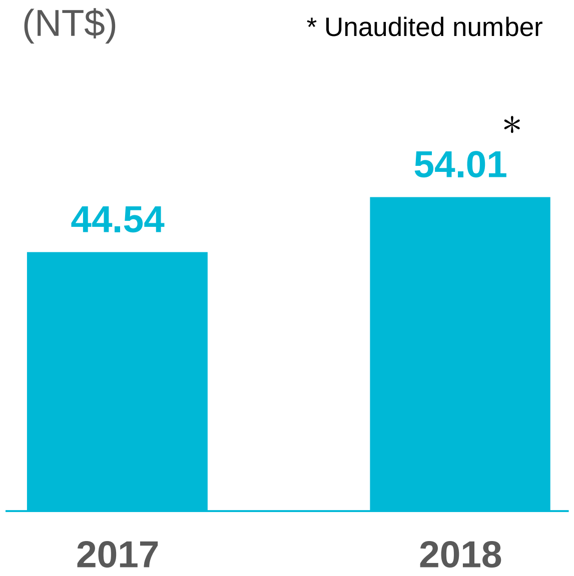
## Net Income




## Earnings Per Share




## Book Value Per Share



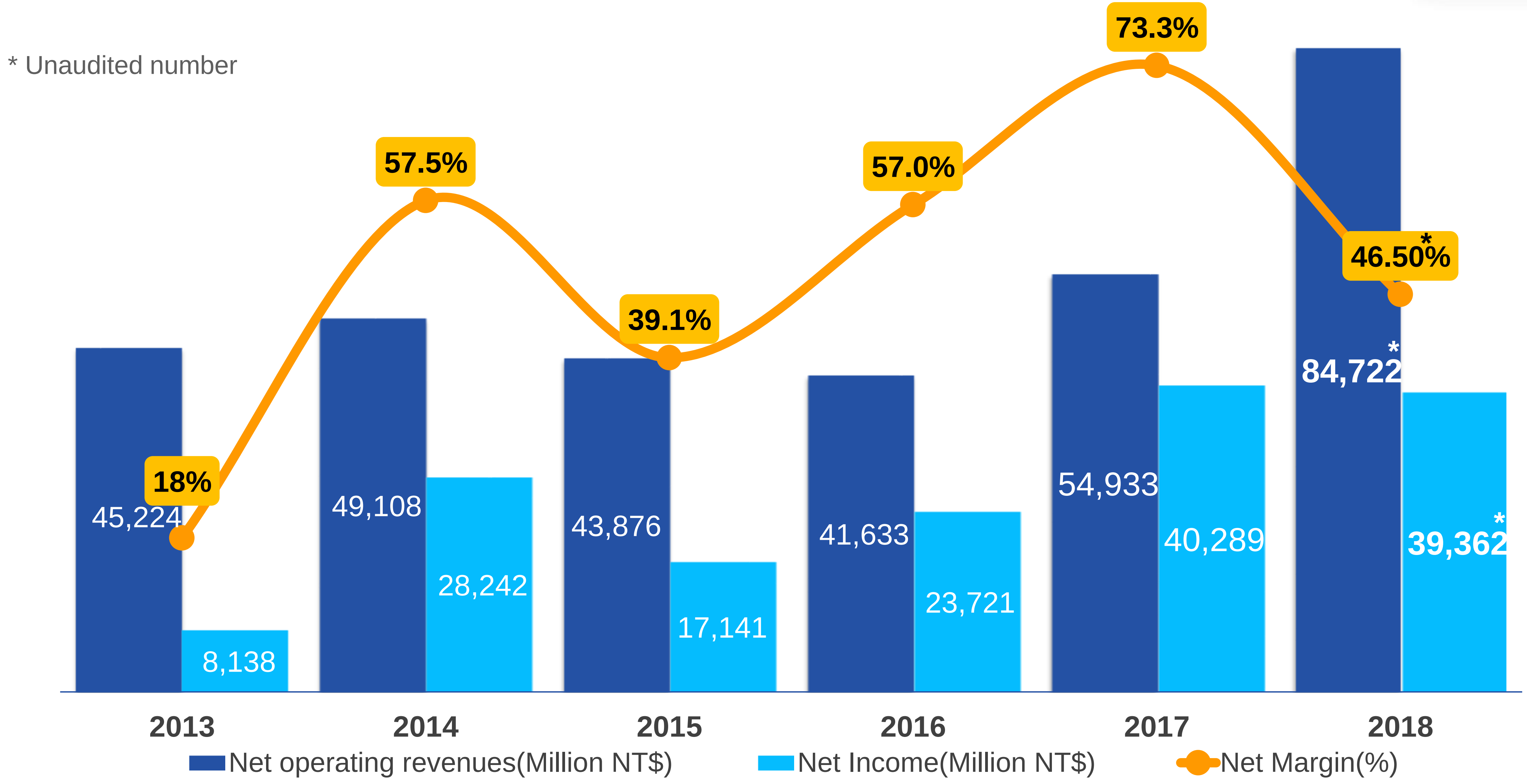

## Y2018 Performance

- Revenue NT$ 84.722B
- Net income NT$39.36B
  - Y2018 Operating Income NT$39.36B increased by 109.4% yoy (Y2017 Operating Income NT$ 18.79B)
- Gross Margin 55%, Operating Margin 46.5%, Net Margin 46.5%
- EPS NT$ 12.80, BVPS NT$ 54.01

* Unaudited number

# Annual Financial Highlights

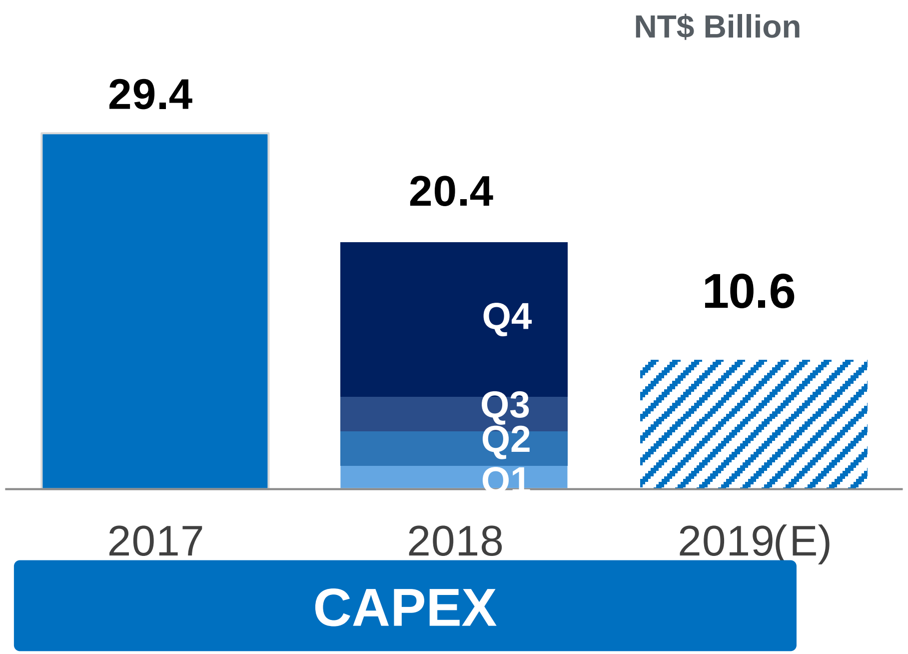


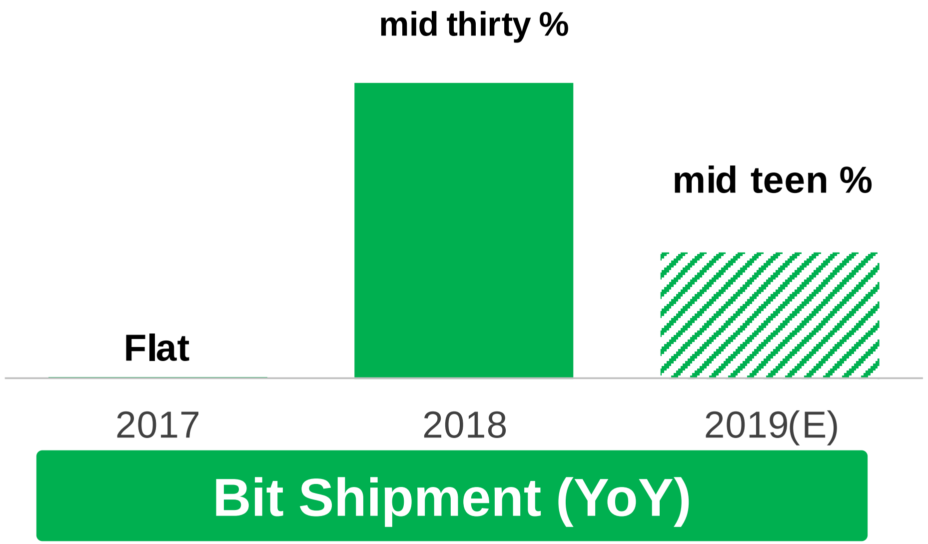
# 03

# CAPEX & BIT SHIPMENT

# CAPEX & Bit Shipment




**Capital Expenditure** (CAPEX)

- Q4'18 CAPEX NT$ 12.7Billion (B)
- 2018 CAPEX NT$ 20.4B (trim down 15%)
- 2019 CAPEX estimated NT$ 10.6B, subject to BoD approval

**Bit Shipment**

- Q4'18 Bit shipment decreased by low twenty %
- 2018 Bit shipment increased by mid thirty %
- 2019 Bit shipment growth guided for mid teen %, Q1'19 bit shipment growth guided for flat to mid single digits %

# 04

# MARKET OUTLOOK

# DRAM Market outlook – 2019

| | |
|---|---|
| **Global Watch** | ■ 1H 2019 DRAM market expected to be conservative, due to the global economic slowdown, US-China trade disputes, tariff increases resulted in supply chain adjustments and CPU shortages. |
| **Supply** | ■ Major suppliers delay capacity expansion since Q4’18 and conservative CAPEX plan in 2019 |
| **Demand** | ■ **Mobile Market：** Smartphone with multi-lens, AI lead to memory specification upgrade. As 5G mobile phone commercialize, will stimulate DRAM demand. 2019 Android flagship model equipped with10~12GB. DRAM content growth expected<br>■ **Server Market：** Inventory adjustment in server markets in Q1’19. AI & networking will sustain sever market long-term growth<br>■ **PC Market：** PC shipments impact by CPU shortage prolonged, expected to be eased by mid-2019<br>■ **Consumer Market：** US-China trade factors continue to interfere consumer market in short-term. Set-top boxes, smart speakers, SSDs, and IP CAMs grown will increase DRAM demand in the long run |

# 05
# BUSINESS REVIEW & OUTLOOK

# Nanya Business Review & Outlook

- 2018 Achieved record-high on revenue, gross margin and operating income
- Share buyback NT$3.8 billion of common stock, reduced total shares by 70 million or approximately 2.26% of shares outstanding
- DRAM demand impacted by conservative global economic outlook, tariffs trade war and CPU shortages in 1H19
- Conservative Y2019 CAPEX plan, YoY bit output below industry average

# Thanks & Questions

# Q4’18 Consolidated Income Statement

| Amount: Million NT$ | Q4'18 Unaudited | | Q3'18 Audited | | QoQ | Q4’17 Audited | | YoY |
|---|---|---|---|---|---|---|---|---|
| Net Sales | 16,958 | 100.0% | 24,375 | 100.0% | -30.4% | 16,769 | 100.0% | 1.1% |
| Cost of Goods Sold | 7,986 | 47.1% | 10,008 | 41.1% | | 8,451 | 50.4% | |
| Gross Margin | 8,972 | 52.9% | 14,366 | 58.9% | -37.5% | 8,318 | 49.6% | 7.9% |
| SG&A Expenses | 562 | 3.3% | 596 | 2.4% | | 554 | 3.3% | |
| R&D Expenses | 1,318 | 7.8% | 1,336 | 5.5% | | 1,238 | 7.4% | |
| Operating Income | 7,092 | 41.8% | 12,434 | 51.0% | -43.0% | 6,526 | 38.9% | 8.7% |
| Non-operating Income (Exp.) | 894 | 5.3% | 438 | 1.8% | | 15,457 | 92.2% | |
| Income before Tax | 7,986 | 47.1% | 12,872 | 52.8% | -38.0% | 21,984 | 131.1% | -63.7% |
| Income Tax Benefit (Expense) | -33 | -0.2% | 0 | 0.0% | | -17 | -0.1% | |
| Net Income | 7,953 | 46.9% | 12,872 | 52.8% | | 21,967 | 131.0% | |
| Net income attributable to noncontrolling interests | 0 | 0.0% | 0 | 0.0% | | -4 | 0.0% | |
| Net Income attributable to NTC | 7,953 | 46.9% | 12,872 | 52.8% | -38.2% | 21,971 | 131.0% | -63.8% |
| EPS(NT$) | 2.57 | | 4.15 | | | 7.42 | | |
| Book Value Per Share | 54.01 | | 51.52 | | | 44.54 | | |

# 2018 Income Statement

| Amount: Million NT$ | Y2018 Unaudited & Consolidated | | Y2017 Audited & Consolidated | | YoY |
|---|---|---|---|---|---|
| Net Sales | 84,722 | 100.0% | 54,918 | 100.0% | 54.3% |
| Cost of Goods Sold | 38,106 | 45.0% | 30,250 | 55.1% | |
| Gross Margin | 46,616 | 55.0% | 24,668 | 44.9% | 89.0% |
| SG&A Expenses | 2,373 | 2.8% | 2,203 | 4.0% | |
| R&D Expenses | 4,887 | 5.8% | 3,673 | 6.7% | |
| Operating Income | 39,355 | 46.5% | 18,791 | 34.2% | 109.4% |
| Non-operating Income (Exp.) | 2,230 | 2.6% | 23,039 | 42.0% | |
| Income before Tax | 41,586 | 49.1% | 41,831 | 76.2% | -0.6% |
| Income Tax Benefit (Expense) | -2,224 | -2.6% | -1,536 | -2.8% | |
| Net Income | 39,361 | 46.5% | 40,295 | 73.4% | |
| Net Income attributable to noncontrolling interests | -1 | 0.0% | 13 | 0.0% | |
| Net Income attributable to NTC | 39,362 | 46.5% | 40,282 | 73.3% | -2.3% |
| EPS(NT$) | 12.80 | | 14.36 | | |