



# Nanya Technology

## Bank of America Merrill Lynch 2016 Asia Pacific TMT Conference

Presentation to Investors and Analysts 14 March 2016

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

# Agenda



- |     |                              |
|-----|------------------------------|
| 01. | Overview                     |
| 02. | Inotera Transaction Update   |
| 03. | Accelerating 20nm Technology |
| 04. | DRAM Industry Environment    |
| 05. | Financial Performance        |
| 06. | Summary                      |



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# 01

## OVERVIEW



# NTC Overview



## Corporate Facts

- DRAM Design, Production & Sales
- Founded in 1995, IPO in 2000
- Headquarters: Taoyuan, Taiwan
- Formosa Plastic Group (FPG) has 75.8% equity ownership
- Technology:
  - Now: 30nm (>95%) & 42nm (<5%) (JD w/ Micron)
  - Next: 20nm scheduled for pilot run in 1Q 2017.  
1x/1ynm have license rights from MU
- Capacity : 60,000 WSPM\* (12" )
- NTC's 24% Inotera's share will sell to Micron
- Plan to invest Micron through private placement



## Product Mix

- High quality consumer & specialty DRAM products and multiple mobile memory solution.

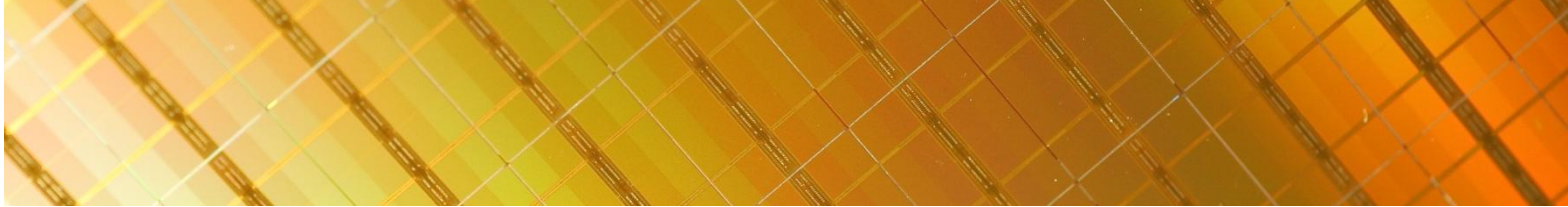


# Worldwide Coverage & Location





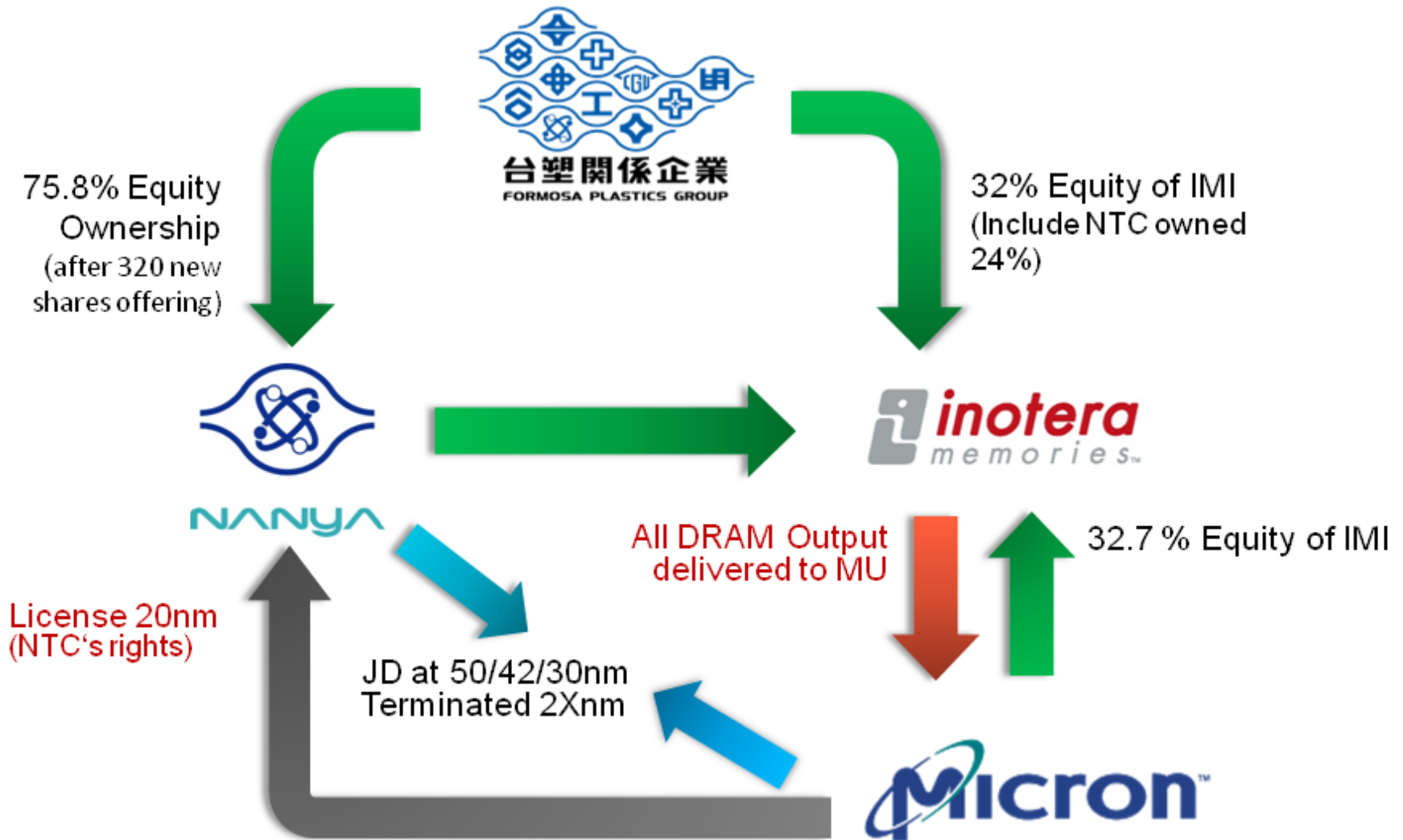
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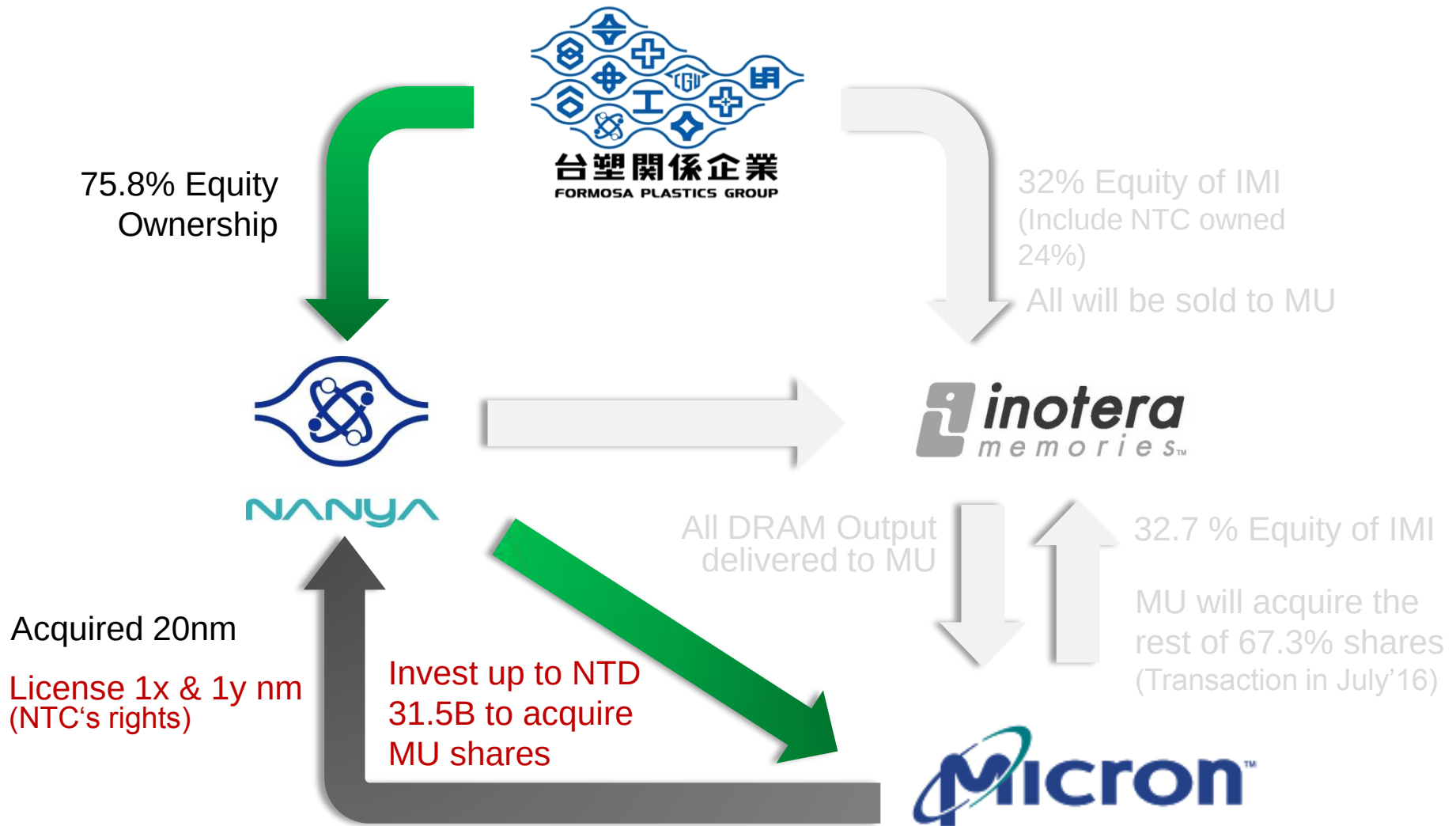
## INOTERA TRANSACTION UPDATE

# Nanya, Inotera & Micron (Now)





# Nanya, Inotera & Micron (After closing)





# Inotera Transaction Update

Transaction Price

NTD 30 per share in cash

## Status Update

Definitive  
Agreement

- Definitive share swap agreement signed on Feb. 3rd, 2016

Specail  
Shareholders'  
Meeting

- Subject to approval by 3/29 Inotera Extraordinary General Meeting

Certain condition  
precedents

- Approvals by the Investment Commission and Fair Trade Commission in Taiwan, or necessary regulatory authorities in other countries

Financing

- NTD 52.5B (approximately \$ 1.6B) cash on Micron's balance sheet (40%)
- Micron Taiwan will take NTD 80B (approximately \$2.4B) Taiwan debt financing (60%) (1 USD: 33.2 NTD)

Partnerships

- Nanya will invest Micron up to NTD 31.5B through private placement

Transaction Close

- Target to close in July 2016



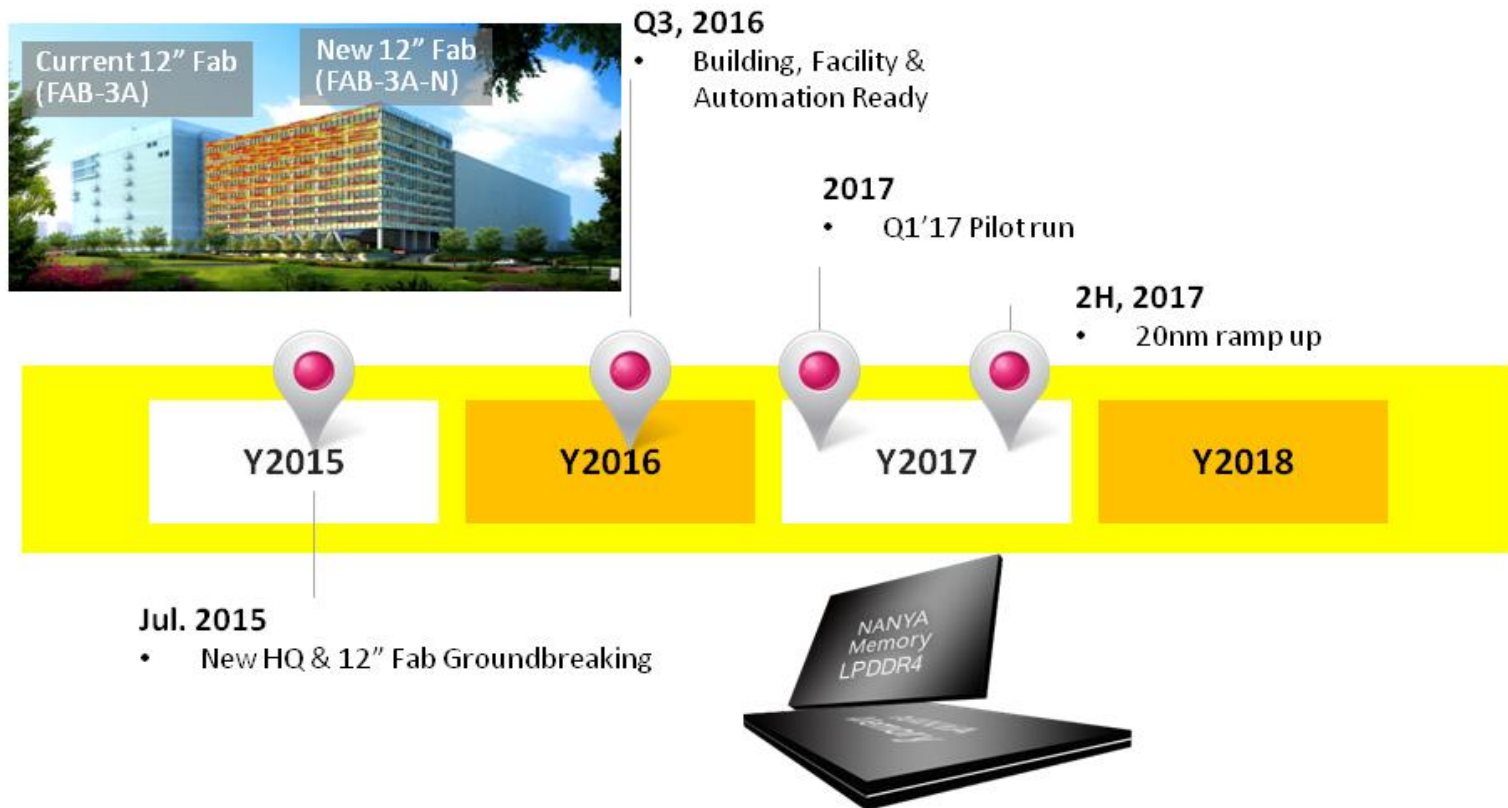
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# ACCELERATING 20NM TECHNOLOGY

# 20nm Technology Plan

- Plan to convert 30K WSPM to 20nm Technology.
- Additional clean room space will be needed, output schedule for 2H 2017.
- Total capacity remains at 60K WSPM. (30K convert to 20nm, 30K at 42/30nm)
- Anticipated Capex of NT\$ 23.63B for 20nm migration in 2016.





# Technology Ramp Progress

**30nm**

**Design Shrink**

- 30nm Design shrink to reach 70% in Q2 2016
- Target reach 80% by Q4 2016

**20nm**

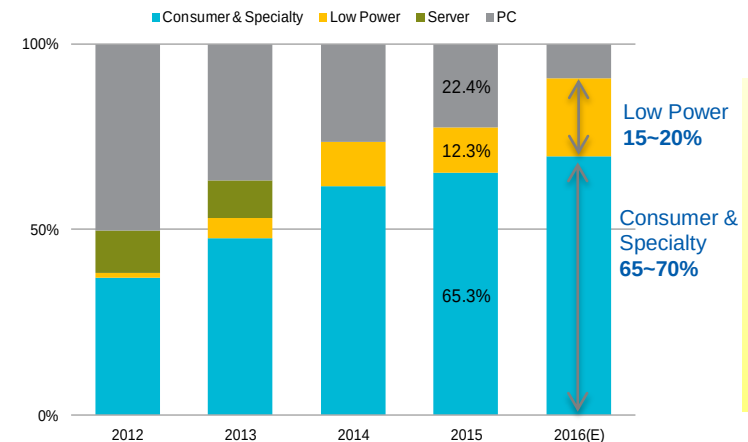
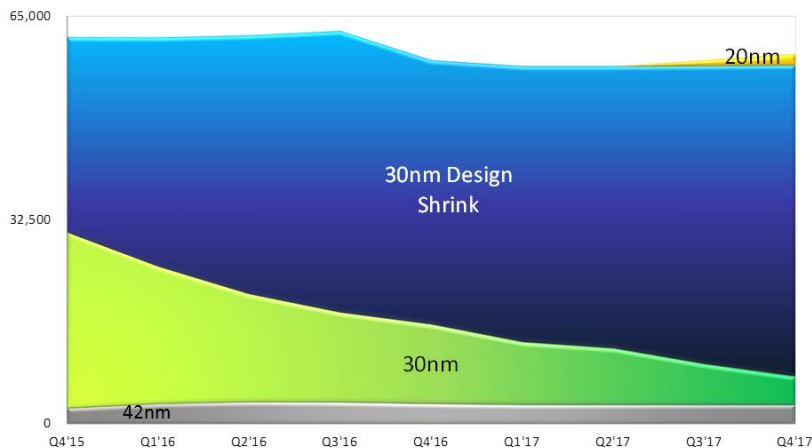
**Process Technology**

- Start 20nm technology pilot run in Q1 2017
- 20nm DRAM ramp in 2H 2017

**1Xnm/1Ynm**

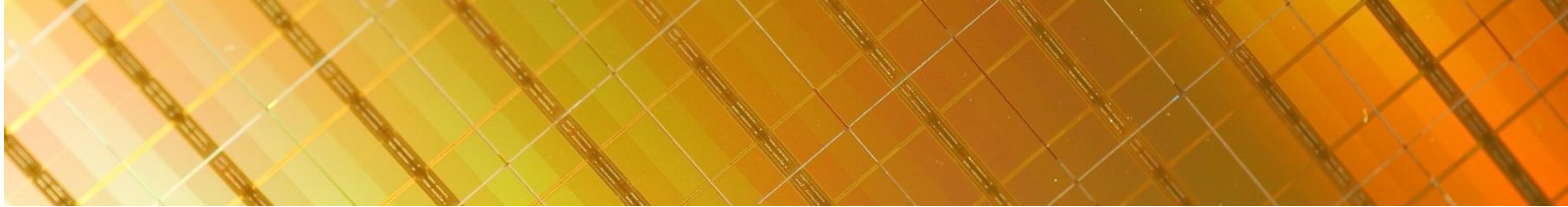
**Process Technology**

- Signed 1x and 1y Technology transfer & license option agreement with Micron





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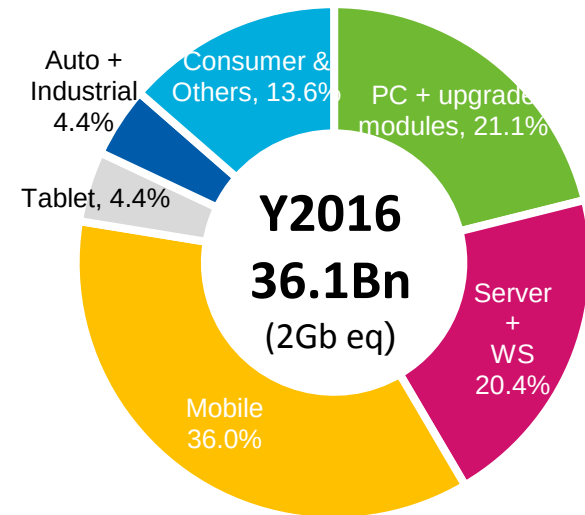
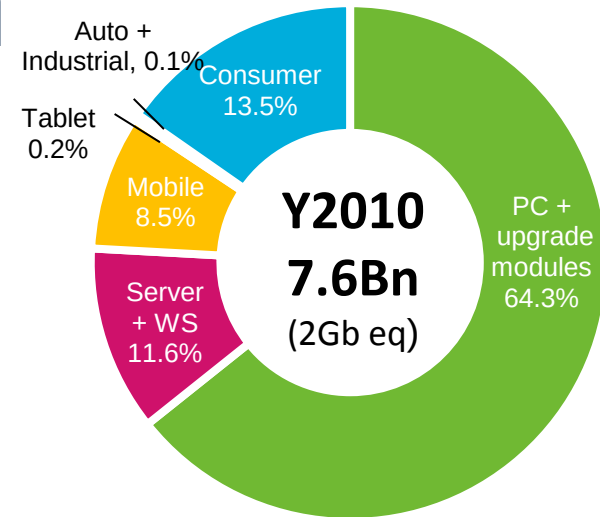


# 04

## DRAM INDUSTRY ENVIRONMENT

# Demand Diversifying

|                          |                                                                                               | Y2015 |      | Y2016 |     | YoY      |          |            |
|--------------------------|-----------------------------------------------------------------------------------------------|-------|------|-------|-----|----------|----------|------------|
| Unit : QTY(Mu)   C/B(GB) |                                                                                               | QTY,  | C/B  | QTY   | C/B | QTY(Y/Y) | C/B(Y/Y) | Bit Growth |
| Cloud                    | Server       | 15.6  | 85.1 | 16.8  | 110 | 7.7%     | 29.3%    | 39.2%      |
|                          | PC           | 288   | 4.7  | 283   | 5.2 | -1.7%    | 9.4%     | 8.7%       |
|                          | Tablet       | 202   | 1.8  | 194   | 2.0 | -3.9%    | 11.1%    | 6.7%       |
|                          | Smart Phone  | 1,398 | 1.6  | 1,546 | 2.0 | 10.5%    | 25.0%    | 38.2%      |
|                          | LCD TV     | 214   | 1.5  | 223   | 1.8 | 4.2%     | 20%      | 25.0%      |
| M2M                      | Car        | 87.4  | 0.3  | 90.5  | 0.6 | 3.5%     | 100%     | 107.1%     |



Bit growth of 2016 in other consumer segments forecast to increase 16.9% yoy.

Source: Gartner, IHS, NTC MKT

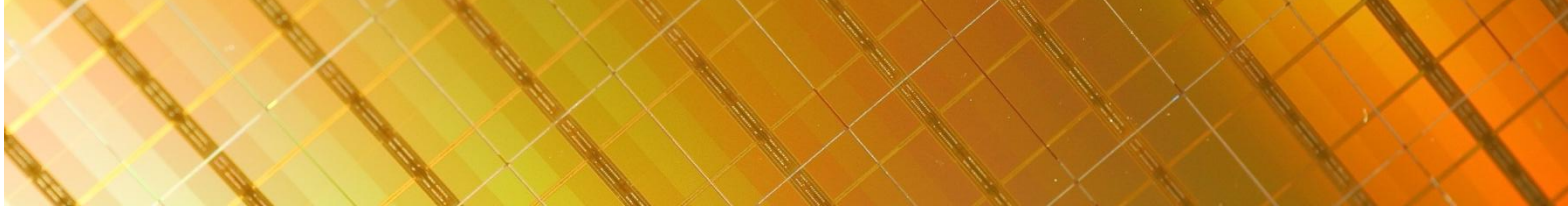
# DRAM Market Outlook

- Overall worldwide economic is conservative, low to moderate demand growth expected in 2016.
- Short term seasonal demand and demand in China market marginally improved in Q1'16, follow by potential consumer demand from Summer Olympics in 2016.
- Demand remain sluggish in PC segment, cloud computing growth under expectation, mobile unit shipment shows flattish but grow in content.
- Expect DRAM price fall moderately in Q2, price uncertainty expected in 2H'16 due to new capacity introduced by major suppliers.





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# 05

## FINANCIAL PERFORMANCE

# 2015 P&L Results

|  |  |               |             |             |                |
|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------|-------------|-------------|----------------|
|                                                                                   | Unit: NT\$B                                                                         |               |             |             |                |
|                                                                                   | Q1'15                                                                               | Q2'15         | Q3'15       | Q4'15       | 2015           |
| <b>Revenue</b>                                                                    | 12B                                                                                 | 11.2B         | 10.3B       | 10.3B       | 43.9B          |
| <b>Gross Profit</b><br><i>Gross Margin (%)</i>                                    | 5.7B<br>47%                                                                         | 4.7B<br>42%   | 3.9B<br>37% | 3.1B<br>30% | 17.3B<br>39.5% |
| <b>Operating Income</b><br><i>Operating Margin (%)</i>                            | 4.8B<br>40%                                                                         | 3.9B<br>35%   | 3.0B<br>29% | 1.9B<br>18% | 13.5B<br>30.7% |
| <b>Non-operating Income</b>                                                       | 1.5B                                                                                | 0.8B          | 1.8B        | 0.03B       | 4.2B           |
| <b>Net Income</b><br><i>Net Margin (%)</i>                                        | 6.3B<br>52%                                                                         | 4.3B<br>38.1% | 4.7B<br>46% | 1.9B<br>18% | 17.1B<br>39.1% |
| <b>Capital</b>                                                                    | 24B*                                                                                |               |             |             |                |
| <b>EPS</b>                                                                        | 2.61                                                                                | 1.75          | 1.94        | 0.77        | 7.07           |

## •Company highlights:

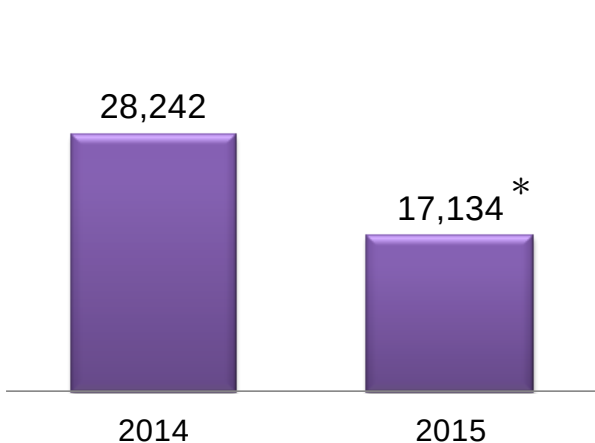
- Debt ratio : debt ratio 42% after equity funding.
- EBITDA Margin: 32.2% of Q4'15, BVPS: NT\$22.54 of Q4'15.

\*BVPS: Book value per share

# 2015 Financial Highlights

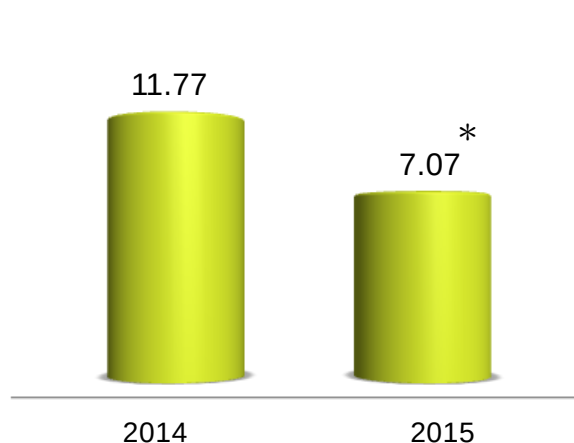
## Net Income

(Million NT\$)



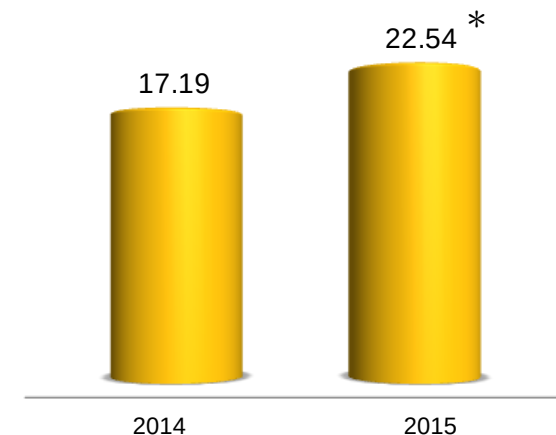
## Earnings Per Share

(NT\$)



## Book Value Per Share

(NT\$)



## Y2015 Performance

- Net income of NT\$17.134 billion(B)
- Net Margin 39.1%
- EPS NT\$ 7.07, BVPS NT\$ 22.54
- Debt ratio 47% vs. 60 % in 2014

## Key Messages

- Shipment up 16.3% YoY.
- Cost /bit improved >20% YoY.
- Recognized IMI's profit of NT\$ 4.4B

# 2015 Cash Flows

| (Unit: Million NT\$)           | Q1'15                  | Q2'15                  | Q3'15                  | Q4'15                    |
|--------------------------------|------------------------|------------------------|------------------------|--------------------------|
|                                | Audited & Consolidated | Audited & Consolidated | Audited & Consolidated | Unaudited & Consolidated |
| <b>Beginning Balance</b>       | <b>7,268</b>           | <b>7,429</b>           | <b>7,189</b>           | <b>3,747</b>             |
| Cash from Operating Activities | 5,311                  | 4,418                  | 4,622                  | 3,539                    |
| Capital expenditures           | -964                   | -782                   | -1,320                 | -776                     |
| Long-term & Short-term loans   | -4,541                 | -3,993                 | -1,853                 | -3,994                   |
| Investments and others         | 356                    | 118                    | -4,890*                | 583                      |
| <b>Ending Balance</b>          | <b>7,429</b>           | <b>7,189</b>           | <b>3,747</b>           | <b>3,100</b>             |
| Free Cash Flow <sup>(1)</sup>  | <b>4,346</b>           | <b>3,636</b>           | <b>3,302</b>           | <b>2,764</b>             |

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

\* Mainly due to cash dividend payout to shareholders



# Business Highlights

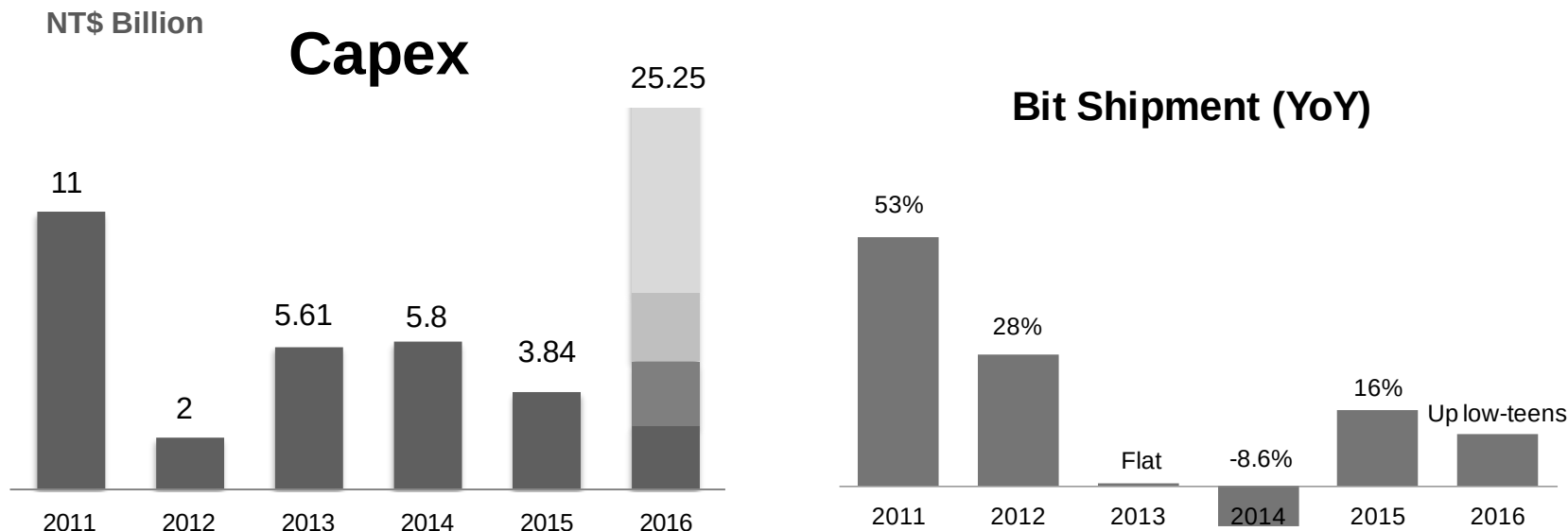
## Rights Offering

- Completed 320 million new common shares issuance at NT\$ 36.5 per share
- Received NT\$11.68 billion
- Investors including: Kingston, ADATA, Cathay Life Insurance, Mercuries Life Insurance, Taiwan Post, etc.

## NTD 12 Billion Syndicated Loan

- Nanya signed an NTD 12 billion five-year syndicated loan agreement with 15 Banks

# Capex & Bit Shipment



## ■ Capital Expenditure (Capex)

- NT\$3,842M Capex of Y2015.
- Estimated NT\$25,253M for 2016 Capex. (20nm Conversion Capex in 2016 guided for NT\$ 23,632M)

## ■ Bit Shipment

- 16.3% bit shipment growth in 2015.
- 2016 bit shipment guidance to increase low-teens yoy.
- Estimated bit shipment flat in Q1'16.



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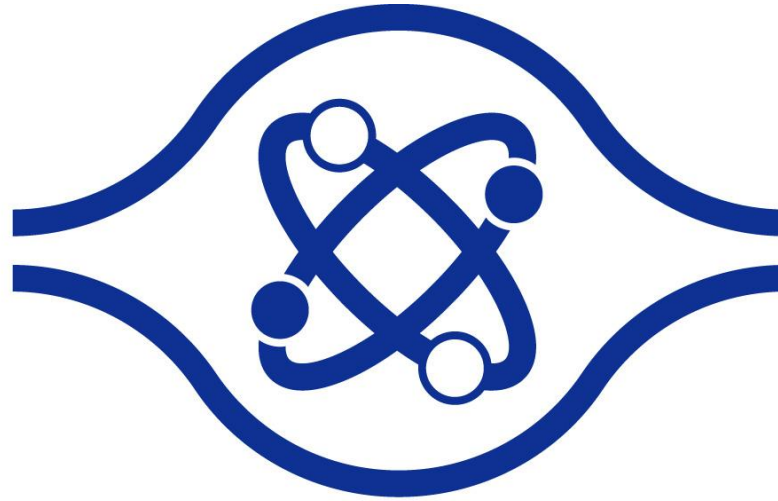
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## SUMMARY

# Key Takeaways

- **Support Inotera share swap transaction target to close in July, 2016.**
- **Start 20nm technology pilot run in Q1 2017.**
- **Expect DRAM price fall moderately in Q2, price uncertainty expected in 2H'16 due to new capacity introduced by major suppliers.**





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# Thanks & Questions

“The slides herein and the presentation made during the conference contain forward-looking statements and are provided for information purposes only. Neither Nanya Technology Corp. nor any other person assumes responsibility for the accuracy and completeness of the forward-looking statements or undertakes duty to update the statements. Investor(s) is urged to review carefully the information provided herein and shall make investment decision after conducting their own investigation.”

# 2015 Income Statement

| Amount: Million NT\$                                | Y2015                    |        | Y2014                  |        | YoY    |
|-----------------------------------------------------|--------------------------|--------|------------------------|--------|--------|
|                                                     | Unaudited & Consolidated |        | Audited & Consolidated |        |        |
| Net Sales                                           | 43,869                   | 100.0% | 49,108                 | 100.0% | -10.7% |
| Cost of Goods Sold                                  | 26,547                   | 60.5%  | 26,939                 | 54.9%  |        |
| Gross Margin                                        | 17,323                   | 39.5%  | 22,169                 | 45.1%  | -21.9% |
| SG&A Expenses                                       | 1,885                    | 4.3%   | 1,987                  | 4.0%   |        |
| R&D Expenses                                        | 1,954                    | 4.5%   | 1,378                  | 2.8%   |        |
| Operating Income                                    | 13,483                   | 30.7%  | 18,805                 | 38.3%  | -28.3% |
| Non-operating Income (Exp.)                         | 4,194                    | 9.6%   | 12,928                 | 26.3%  |        |
| Income before Tax                                   | 17,677                   | 40.3%  | 31,733                 | 64.6%  | -44.3% |
| Income Tax Benefit (Expense)                        | -513                     | -1.2%  | -2,481                 | -5.1%  |        |
| Profit from Continuing Operation                    | 17,164                   | 39.1%  | 29,251                 | 59.6%  |        |
| Income (Loss) from Discontinued Operation           | 0                        | 0.0%   | -1,056                 | -2.2%  |        |
| Net income attributable to noncontrolling interests | 30                       | 0.1%   | -47                    | -0.1%  |        |
| Net Income attributable to NTC                      | 17,134                   | 39.1%  | 28,242                 | 57.5%  | -39.3% |
| EPS(NT\$)                                           | 7.07                     |        | 11.77                  |        |        |