



# Nanya Technology

## Morgan Stanley

## Hong Kong Investor Summit

Presentation to Investors and Analysts 16-17 March 2016

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

# Agenda



- |     |                              |
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| 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





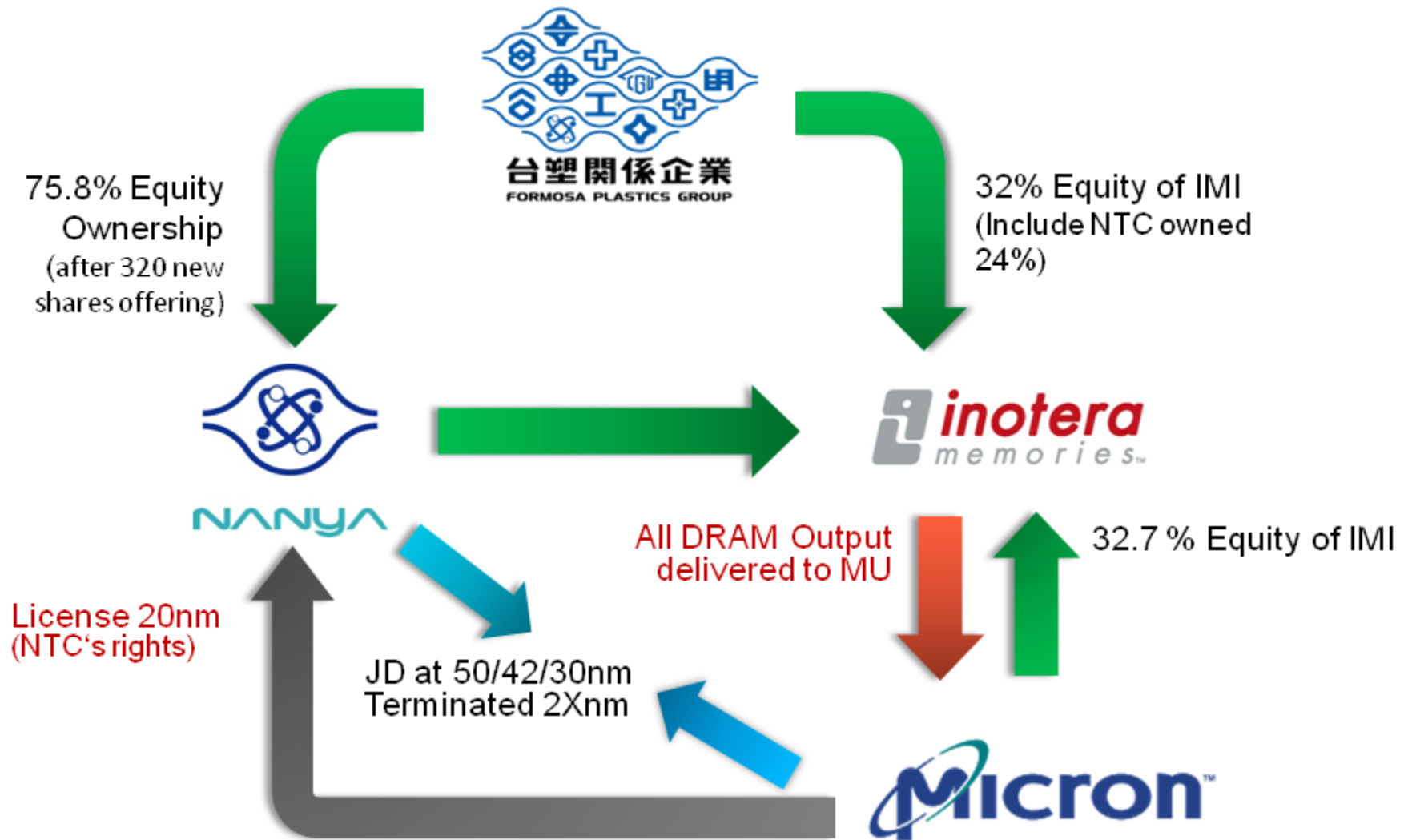
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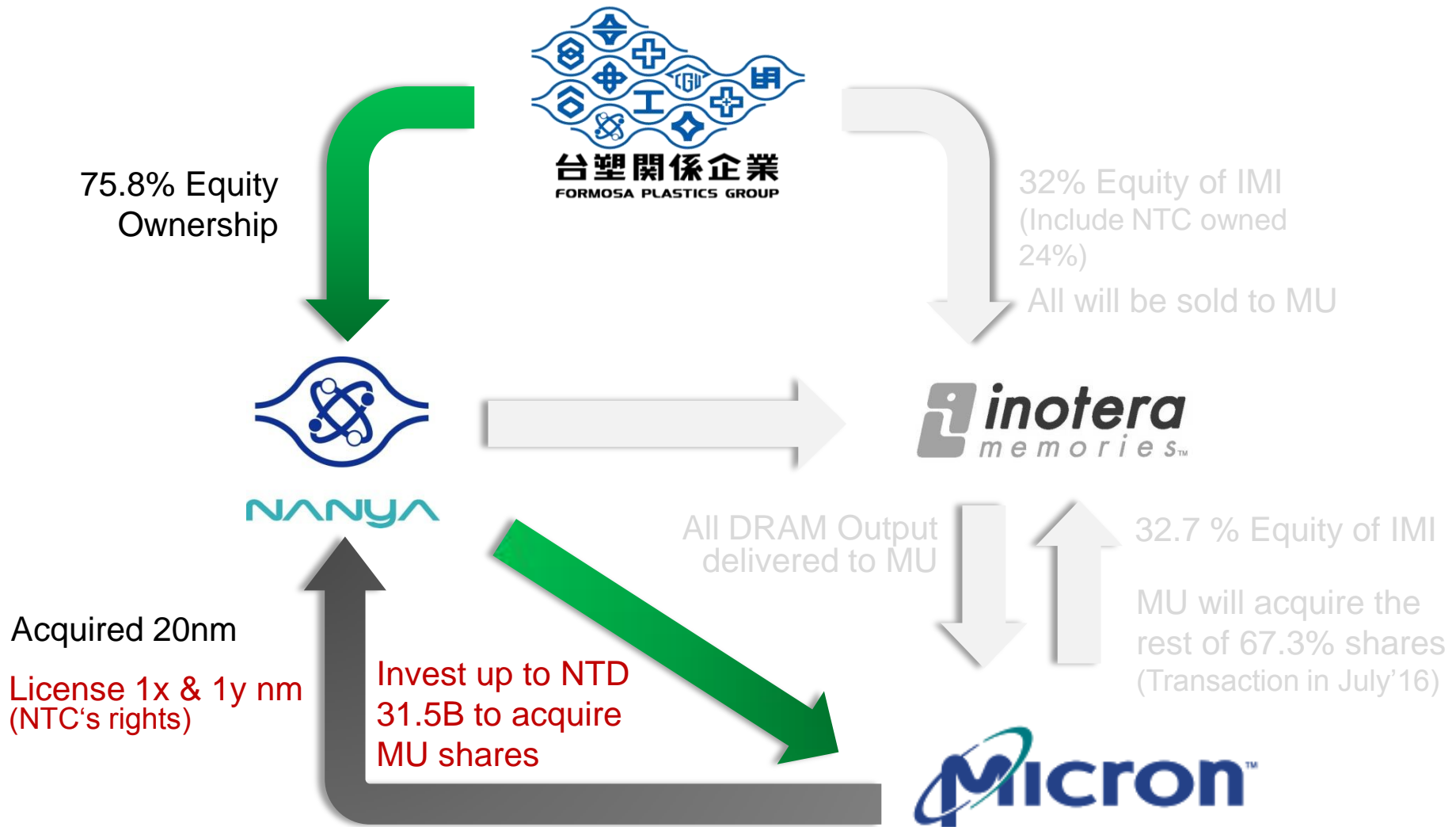
## INOTERA TRANSACTION UPDATE

# 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

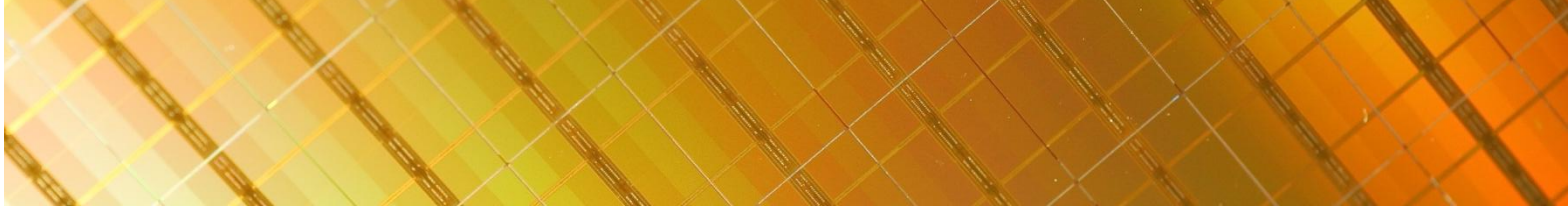
- Target to close in July 2016

### Gain on Disposal

- Approximately NTD 19.9B( Income before tax) will be recognized in Q3



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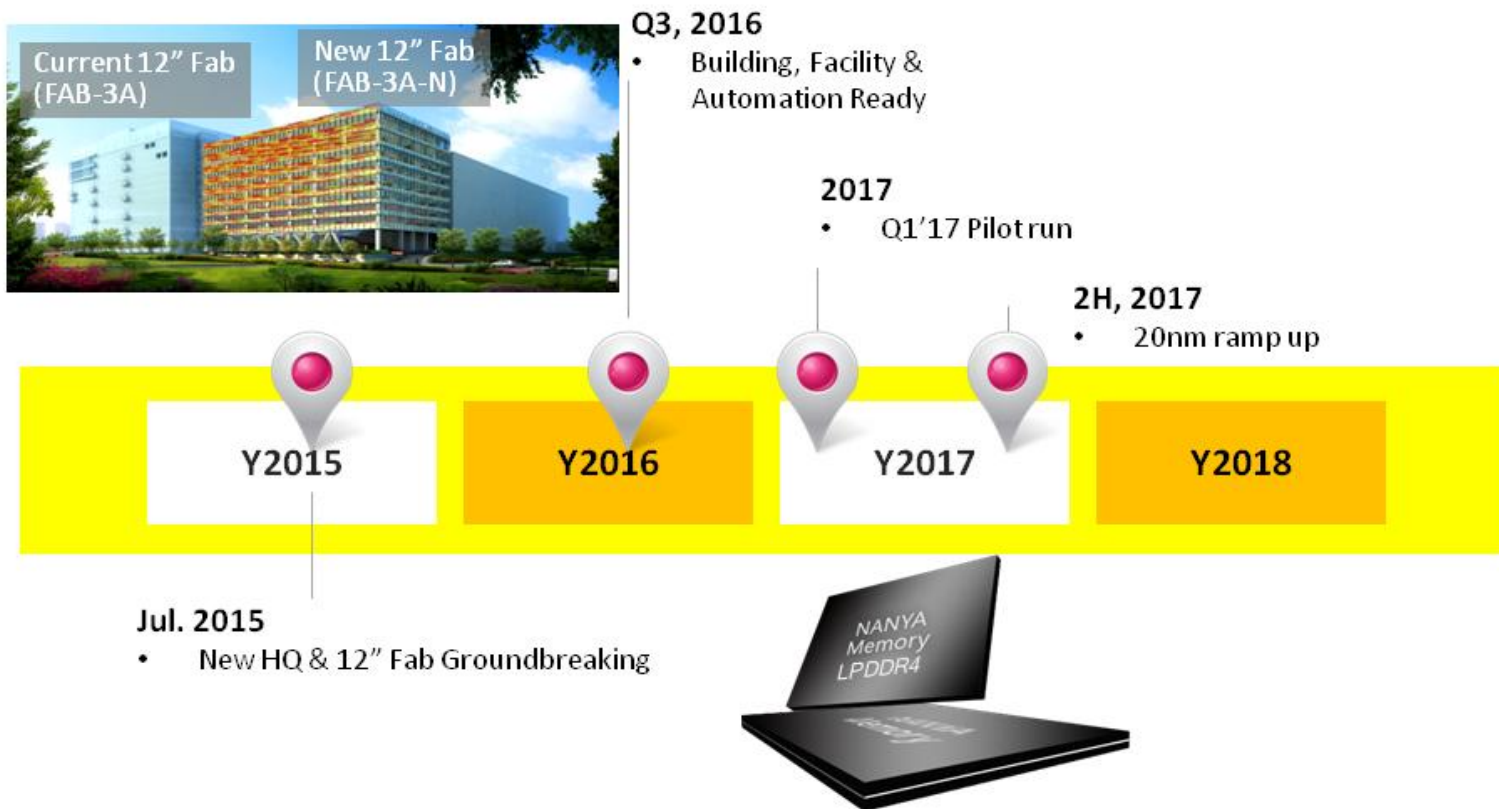


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# ACCELERATING 20NM TECHNOLOGY

# 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**

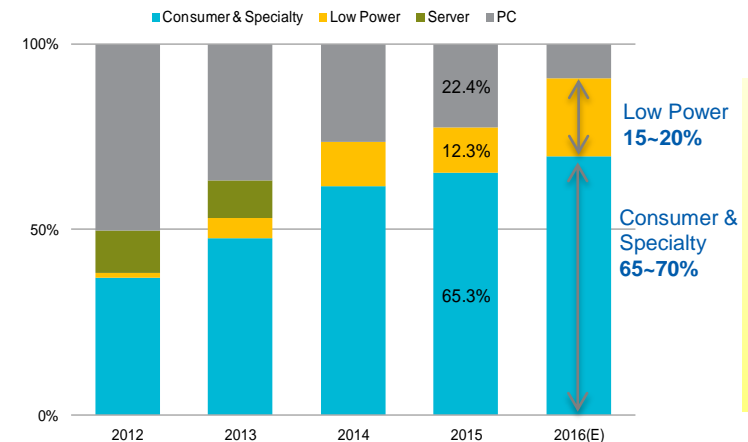
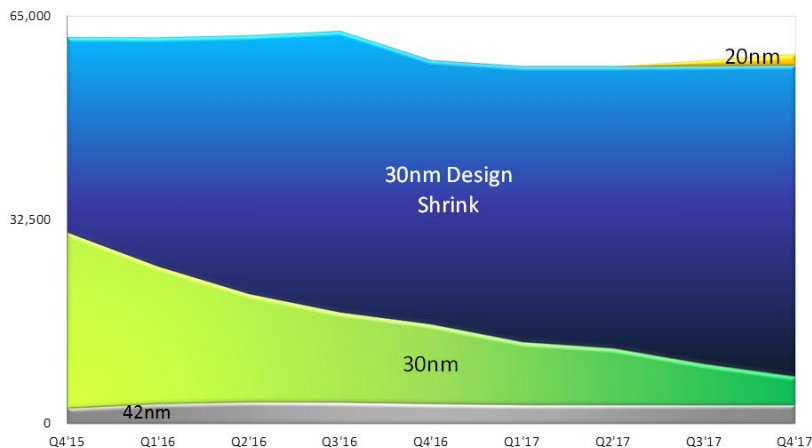
**Process Technology**

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

**1Xnm/1Ynm**

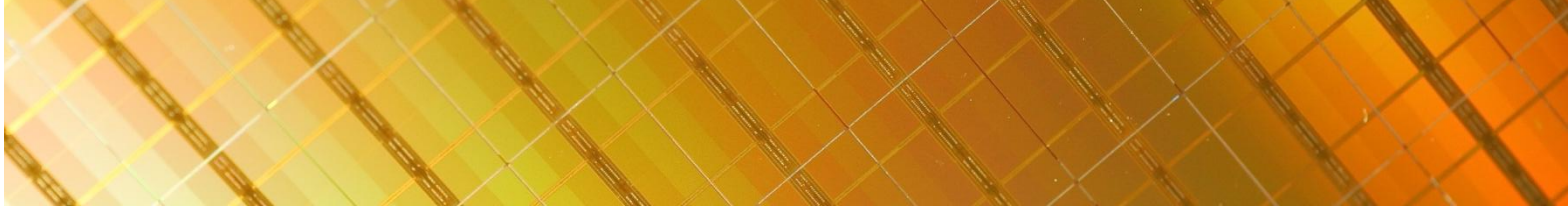
**Process Technology**

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





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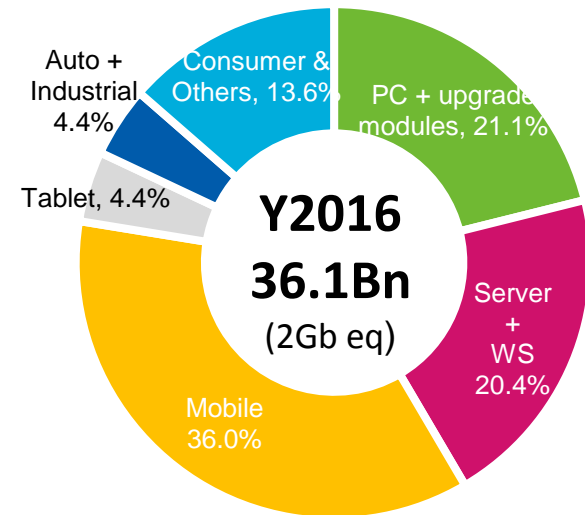
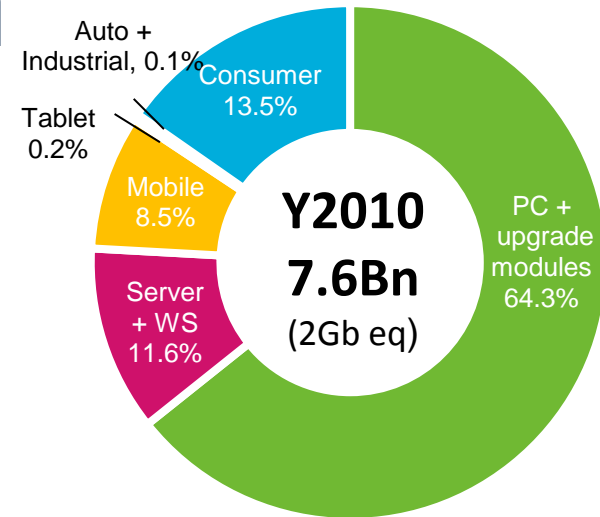


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## DRAM INDUSTRY ENVIRONMENT

# 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%
P2P	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

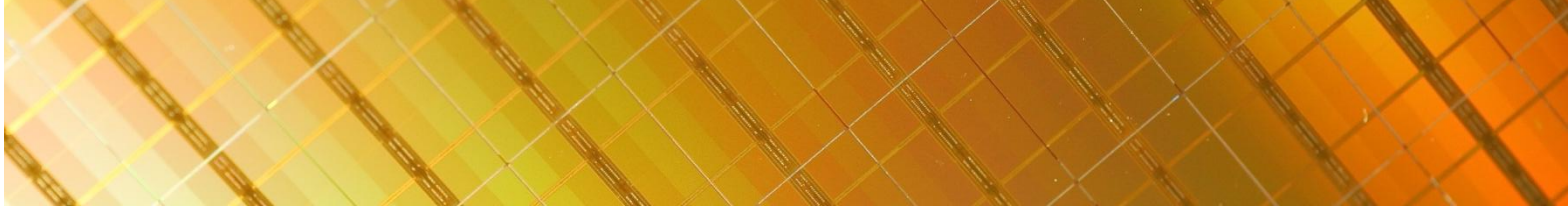


# DRAM Market Outlook

- 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	10.4B	43.9B
<b>Gross Profit</b> <i>Gross Margin (%)</i>	5.7B 47%	4.7B 42%	3.9B 37%	3.1B 30%	17.3B 39.4%
<b>Operating Income</b> <i>Operating Margin (%)</i>	4.8B 40%	3.9B 35%	3.0B 29%	1.9B 18%	13.5B 30.7%
<b>Non-operating Income</b>	1.5B	0.8B	1.8B	0.03B	4.2B
<b>Net Income</b> <i>Net Margin (%)</i>	6.3B 52%	4.3B 38.1%	4.7B 46%	1.9B 18%	17.1B 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\$22.55 of Q4'15.

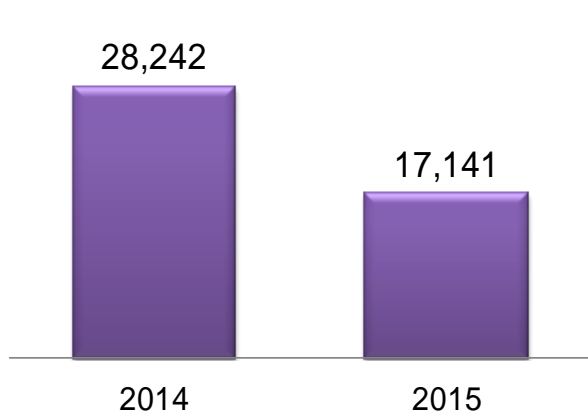
\*BVPS: Book value per share



# 2015 Financial Highlights

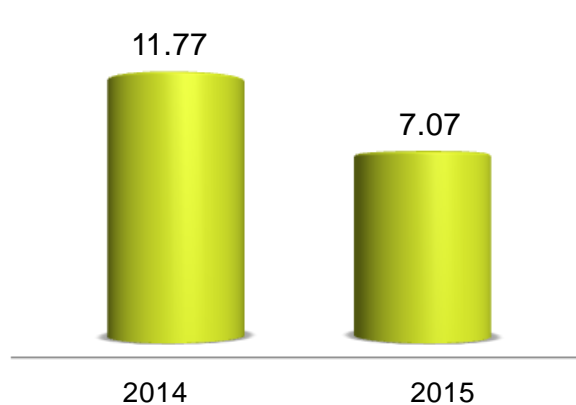
## Net Income

(Million NT\$)



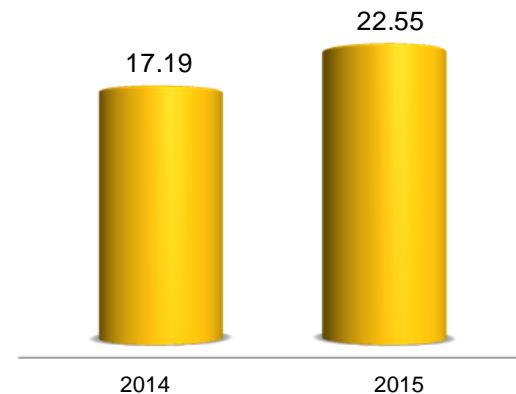
## Earnings Per Share

(NT\$)



## Book Value Per Share

(NT\$)



## Y2015 Performance

- Net income of NT\$17.141 billion(B)
- Net Margin 39.1%
- EPS NT\$ 7.07, BVPS NT\$ 22.55
- 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 Audited & Consolidated	Q2'15 Audited & Consolidated	Q3'15 Audited & Consolidated	Q4'15 Audited & 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	4,171
Capital expenditures	-964	-782	-1,320	-775
Long-term & Short-term loans	-4,541	-3,993	-1,853	-3,994
Investments and others	356	118	-4,890*	-46
<b>Ending Balance</b>	<b>7,429</b>	<b>7,189</b>	<b>3,747</b>	<b>3,104</b>
Free Cash Flow <sup>(1)</sup>	<b>4,346</b>	<b>3,636</b>	<b>3,302</b>	<b>3,397</b>

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

\* Mainly due to cash dividend payout to shareholders

# Business Highlights

## Rights Offering

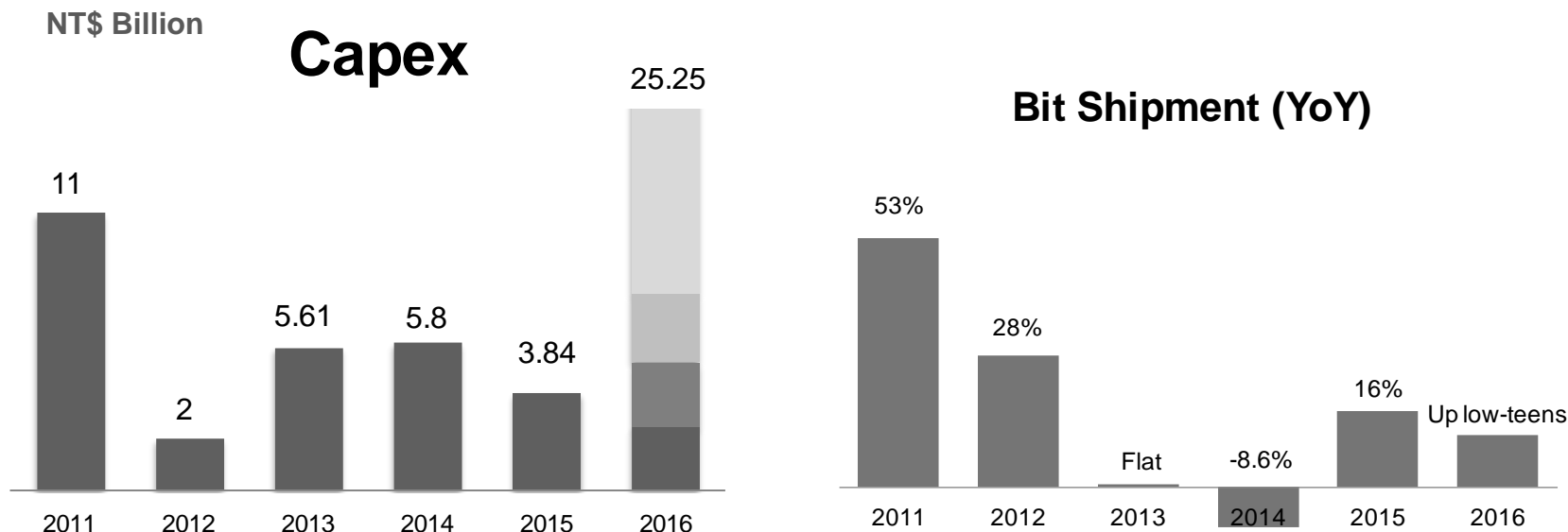
- Completed 320 million new common shares issuance at NT\$ 36.5 per share
- Received NT\$11.68 billion
- Investors including: Kingston, ADATA, Cathay Life Insurance, Mercuries Life Insurance, Taiwan Post, etc.

## NTD 12 Billion Syndicated Loan

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



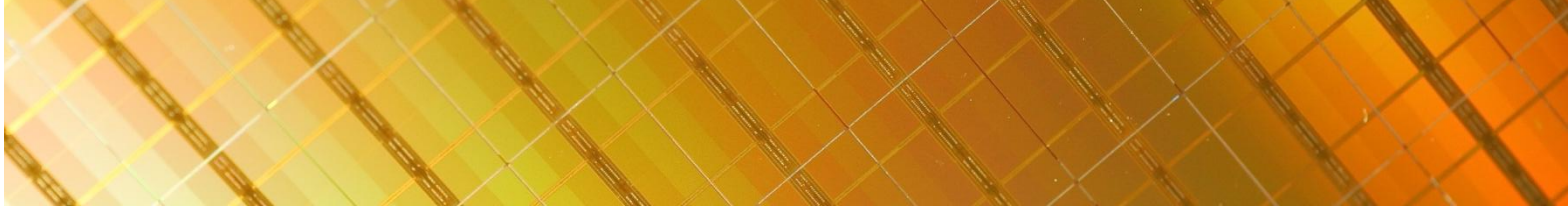
# Capex & Bit Shipment



- **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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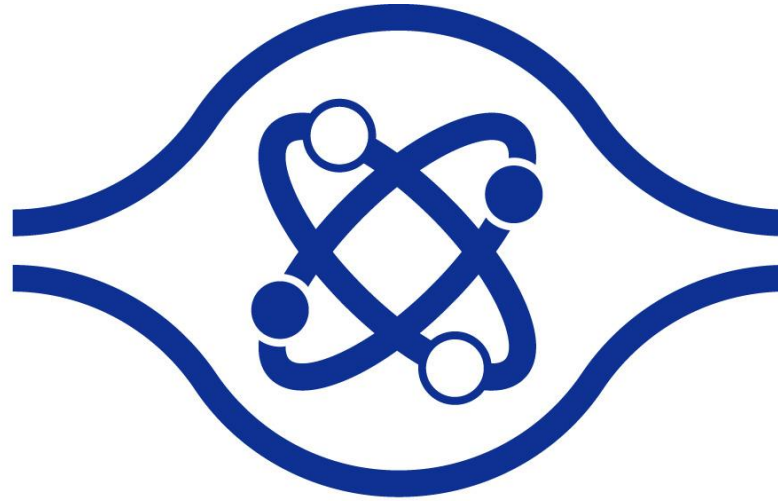


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## SUMMARY

# 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.**
- **Cash dividend of NT\$2.8 per common share will be proposed to the AGM scheduled on 6/22.**



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# Thanks & Questions

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# 2015 Income Statement

Amount: Million NT\$	Y2015		Y2014		YoY
	Audited & Consolidated		Audited & Consolidated		
Net Sales	43,876	100.0%	49,108	100.0%	-10.7%
Cost of Goods Sold	26,568	60.6%	26,939	54.9%	
Gross Margin	17,308	39.4%	22,169	45.1%	-21.9%
SG&A Expenses	1,867	4.3%	1,987	4.0%	
R&D Expenses	1,954	4.5%	1,378	2.8%	
Operating Income	13,487	30.7%	18,805	38.3%	-28.3%
Non-operating Income (Exp.)	4,190	9.5%	12,928	26.3%	
Income before Tax	17,677	40.3%	31,733	64.6%	-44.3%
Income Tax Benefit (Expense)	-506	-1.2%	-2,481	-5.1%	
Profit from Continuing Operation	17,171	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	17,141	39.1%	28,242	57.5%	-39.3%
EPS(NT\$)	7.07		11.77		