## **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







01.	Overview
02.	Inotera Transaction Update
03.	Accelerating 20nm Technology
04.	DRAM Industry Environment
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#### NNNYN

**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</p> 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





PoP = Package on Package MCP = Multiple-Chip Package

#### **Worldwide Coverage & Location**

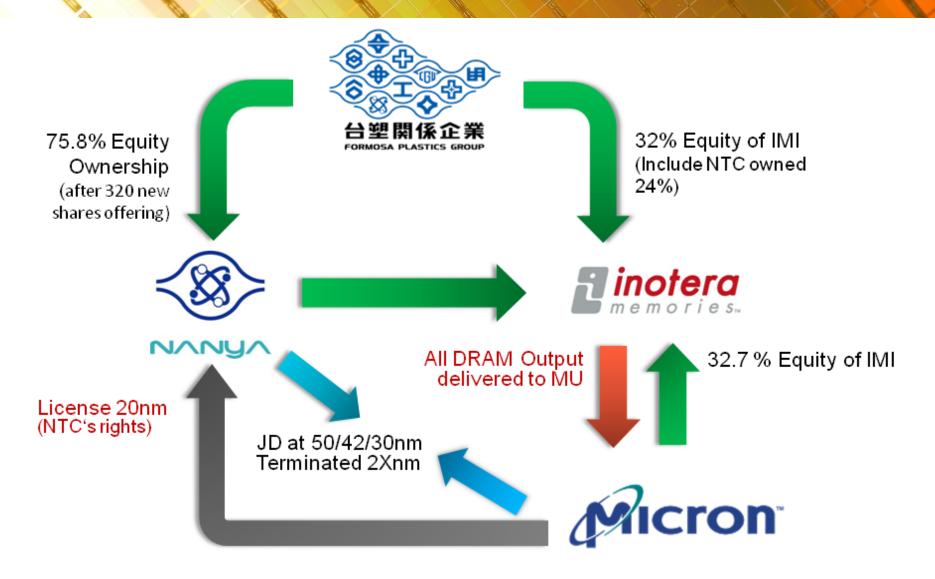




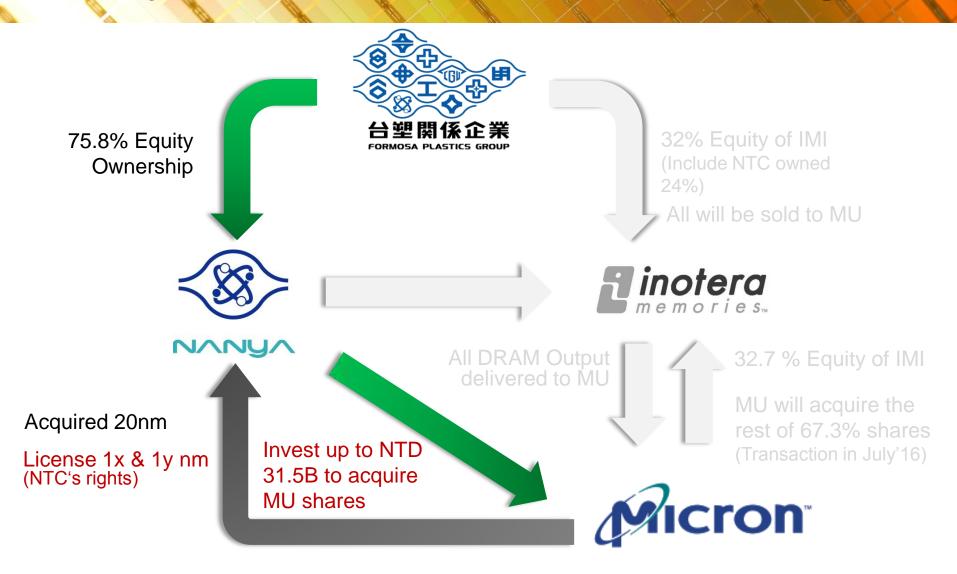
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# **O2 INOTERA TRANSACTION UPDATE**

#### 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	<ul> <li>Approvals by the Investment Commission and Fair Trade Commission in Taiwan, or necessary regulatory authorities in other countries</li> </ul>
Financing	<ul> <li>NTD 52.5B (approximately \$ 1.6B) cash on Micron's balance sheet (40%)</li> <li>Micron Taiwan will take NTD 80B (approximately \$2.4B) Taiwan debt financing (60%) (1 USD: 33.2 NTD)</li> </ul>
Partnerships	Nanya will invest Micron up to NTD 31.5B through private placement
Transaction Close	Target to close in July 2016

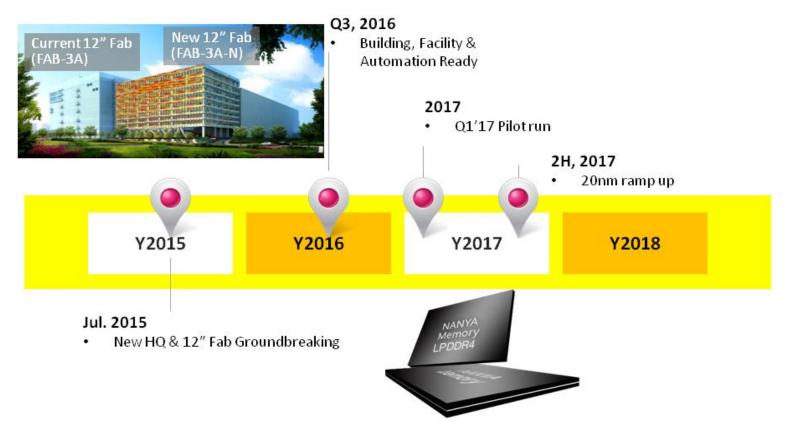


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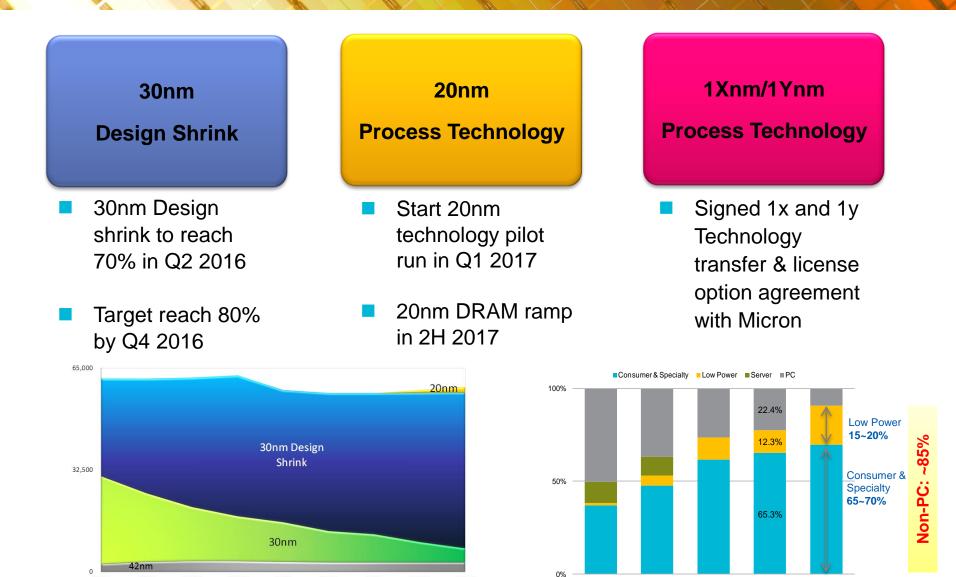
#### **O O O O O O O O**

### 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**



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02'16

01'16

Q3'16

04'16

01'17

Q2'17

Q3'17

Q4'17

2012

2013

2014

2015

2016(E)

04'15

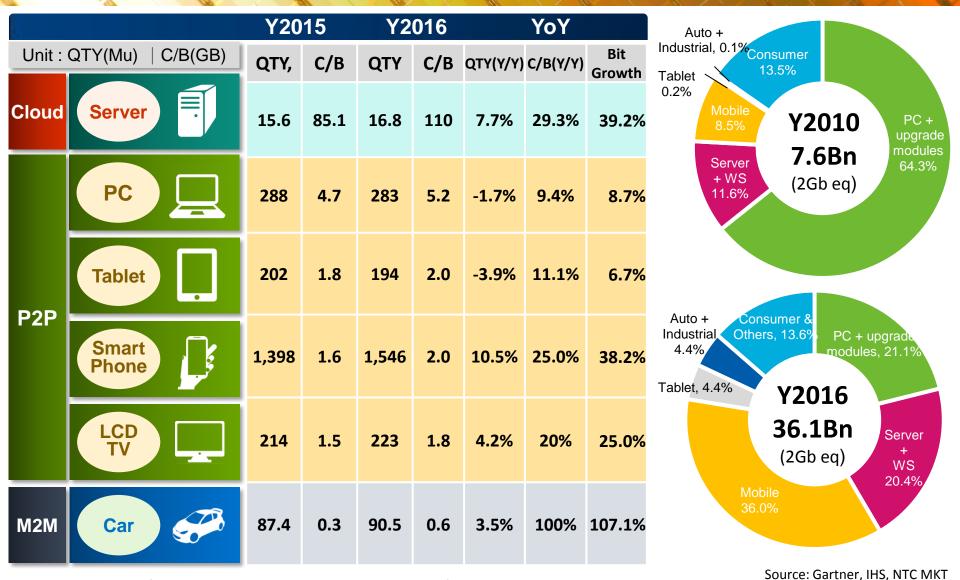


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## DRAM INDUSTRY ENVIRONMENT

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### **Demand Diversifying**



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

#### **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				
HIZEHEEP 7 TH	Q1'15	Q2'15	Q3'15	Q4'15	2015
Revenue	12B	11.2B	10.3B	10.3B	43.9B
Gross Profit Gross Margin (%)	5.7B 47%	4.7B 42%	3.9B <mark>37%</mark>	3.1B <mark>30%</mark>	17.3B 39.5%
Operating Income Operating Margin (%)	4.8B <del>40%</del>	3.9B <mark>35%</mark>	3.0B 29%	1.9B <i>18%</i>	13.5B 30.7%
Non-operating Income	1.5B	0.8B	1.8B	0.03B	4.2B
Net Income Net Margin (%)	6.3B <mark>52%</mark>	4.3B <mark>38.1%</mark>	4.7B <del>46%</del>	1.9B <i>18%</i>	17.1B 39.1%
Capital	24B*				
EPS	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.

## **2015 Financial Highlights**



#### 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 Audited & Consolidated	Q2'15 Audited & Consolidated	Q3'15 Audited & Consolidated	Q4'15 Unaudited & Consolidated		
Beginning Balance	7,268	7,429	7,189	3,747		
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		
Ending Balance	7,429	7,189	3,747	3,100		
Free Cash Flow <sup>(1)</sup>	4,346	3,636 3,302		2,764		
<ul> <li>(1) Free Cash Flow = Cash from operating activities – Capital expenditures</li> <li>* Mainly due to cash dividend payout to shareholders</li> </ul>						

#### **Business Highlights**

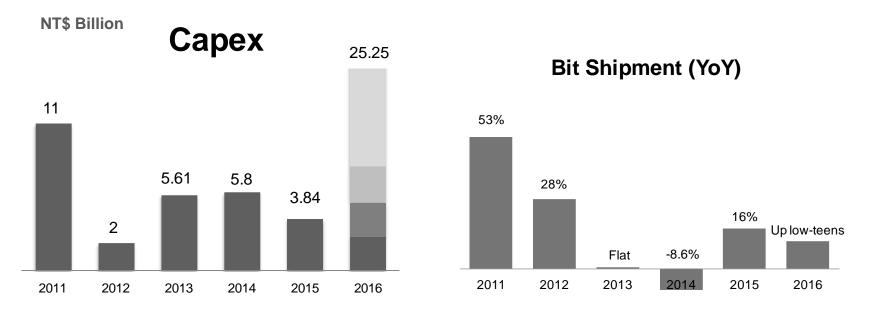
#### **Rights Offering**

- 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.



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

### **Capex & Bit Shipment**



Capital Expenditure (Capex)

Bit Shipment

- NT\$3,842M Capex of Y2015.
- Estimated NT\$25,253M for 2016 Capex.
   (20nm Conversion Capex in 2016 guided for NT\$ 23,632M)
- 16.3% bit shipment growth in 2015.
- 2016 bit shipment guidance to increase low-teens yoy.
- Estimated bit shipment flat in Q1'16.

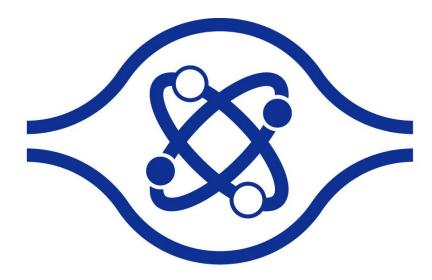


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# 06 SUMMARY

## 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.



## N/NU/ Thanks & Questions

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## **2015 Income Statement**

	Y2015		Y2014		
Amount: Million NT\$	Unaudited & Consolidated		Audited & Consolidated		YoY
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		25

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