# ememory

### **1Q2015 Investor Conference**

May 11<sup>th</sup>, 2015

### **IPR Notice**

All rights, titles and interests contained in this information, texts, images, figures, tables or other files herein, including, but not limited to, its ownership and the intellectual property rights, are reserved to eMemory. This information may contain privileged and confidential information. Some contents in this information can be found in Logic Non-Volatile Memory (The NVM solutions) from eMemory), published in 2014. Any and all information provided herein shall not be disclosed, copied, distributed, reproduced or used in whole or in part without prior written permission of eMemory Technology Inc.

eMemory, NeoBit, NeoFlash, NeoEE, NeoMTP and NeoFuse are all trademarks and/or service marks of eMemory in Taiwan and/or in other countries.

## **Cautionary Statement**

This presentation contains forward-looking statements, which are subject to risk factors associated with semiconductor and intellectual property business. It is believed that the expectations reflected in these statements are reasonable. But they may be affected by a variety of variables, many of which are beyond our control. These variables could cause actual results or trends to differ materially which include, but are not limited to: wafer price fluctuation, actual demand, rapid technology change, delays or failures of customers' tape-outs into wafer production, our ability to negotiate, monitor and enforce agreements for the determination and payment of royalties, any bug or fault in our technology which leads to significant damage to our technology and reputation, actual or potential litigation, semiconductor industry cycle and general economic conditions. Except as required by law, eMemory undertakes no obligation to update or revise any forward-looking statements, whether as a result of new information, future events, or otherwise.

3



## Outline

### Business Model

- Review of Operations for 1Q15
- Growth Opportunity and Future Outlook
- Q & A

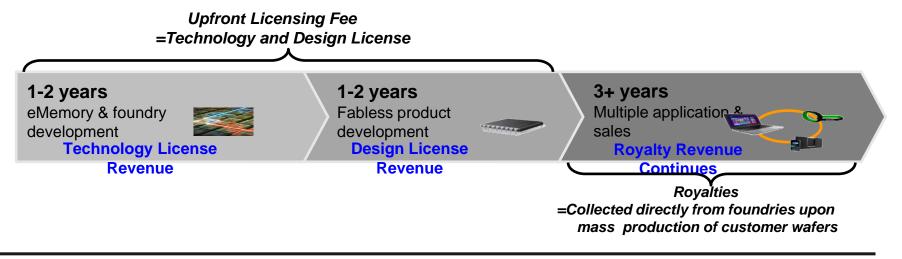


### **Business Model**

- Founded in 2000. First customer engaged in 2002. Achieved profitability in 2005 and IPO in 2011. The largest logic non-volatile memory IP company, 213 employees (144 R&D).
- Since its IPO, the company initiated no new fund raising or bank debt, and has distributed in excess of 100% of earnings in cash dividends.
- Growth Indices: 1) No. of ongoing technology platforms

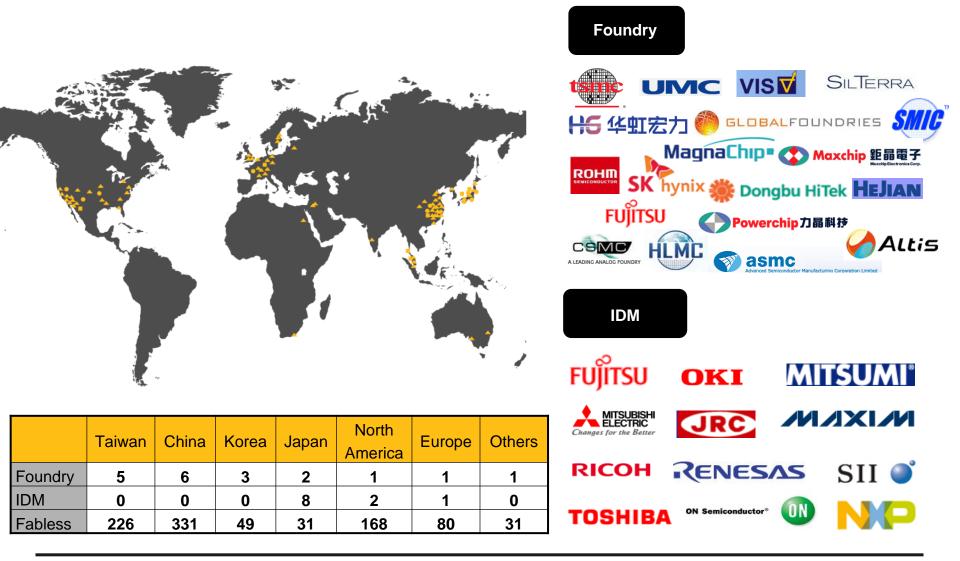
2) No. of design licenses

3) Royalty



Confidential

### **Worldwide Customers**

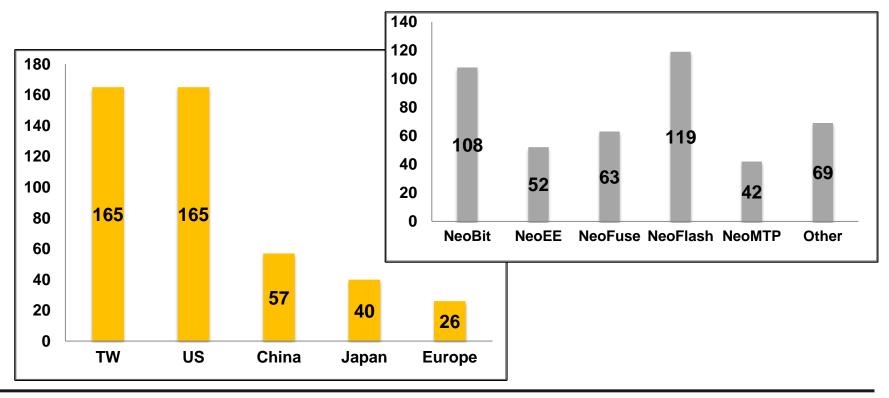




Embedded Wisely, Embedded Widely

### **Patent Portfolio**

	4Q14	1Q15	Diff.
Pending	166	175	+9
Issued	269	278	+9
Total	435	453	+18

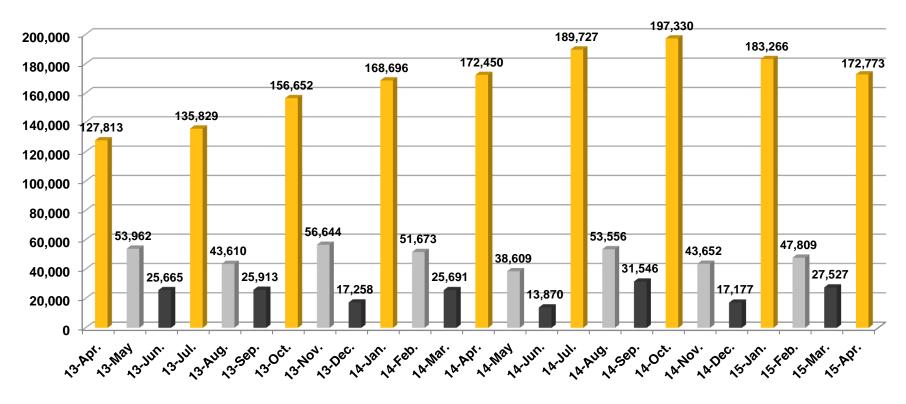


Embedded Wisely, Embedded Widely

Confidential

### **Quarterly Revenue Pattern**

 The quarterly royalty from most of foundries are collected at first month of each quarter and from some other foundries are collected at second month, and none at third month.



Unit : NTD Thousands

Embedded Wisely, Embedded Widely

Confidential

## Outline

- Business Model
- Review of Operations for 1Q15
- Growth Opportunity and Future Outlook
- Q & A



## **1Q Revenue Breakdown**

#### **Unit: NTD thousands**

	1Q15	4Q14	% change	1Q14	% change	2014	2013	% change
Licensing	64,056	51,849	23.54%	75,045	-14.64%	246,073	245,688	0.16%
Royalty	194,546	206,310	-5.70%	171,015	13.76%	757,904	562,570	34.72%
Total	258,602	258,159	0.17%	246,060	5.10%	1,003,977	808,258	24.21%

#### **Unit: Number of contracts**

		1Q15	4Q14	2014	2013
Technology Licenses		5	3	21	19
Design NRE		21	15	82	51
Licenses Usage	82	99	363	342	



### **Financial Income Statement**

(Unit: NTD thousands)	1Q15	4Q14	% change	1Q14	% change
Revenue	258,602	258,159	0.2%	246,060	5.1%
Gross Margin	100%	100%	-	100%	-
Operating Expenses	128,976	148,501	-13.1%	126,719	1.8%
Operating Margin	<b>50.1%</b>	42.5%	+7.6ppts	48.5%	+1.6ppts
Net Income	114,423	100,896	13.4%	110,936	3.1%
Net Margin	44.2%	39.1%	+5.1ppts	45.1%	-0.9ppts
EPS (Unit: NTD)	1.51	1.33	13.5%	1.46	3.4%
ROE	24.8%	23.4%	+1.4ppts	25.8%	-1.0ppts

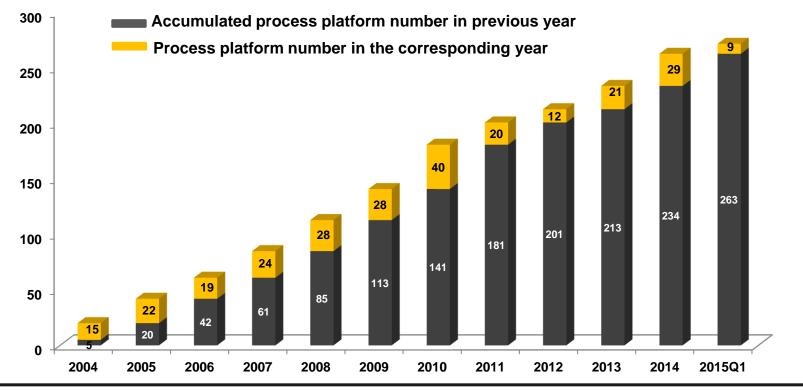


## **Technology License**

#### **Unit: Number of contract**

Year	2012	2013	2014	20151Q
License number	12	19	21	5

Note: The terms (including number of process platforms and licensing fees) for each technology license are set contractually. Payments are made according to set milestones, and there are no particular seasonal factors involved.



Confidential

#### Embedded Wisely, Embedded Widely

### **Current Technology Development Platforms**

- Total (As of Mar.) : 74\*
- 22 for NeoBit, 26 for NeoFuse, 1 for NeoFlash,
  - **17** for NeoEE, and **8** for NeoMTP.

	16nm	28nm	<b>40</b> nm	55/65nm	80/90nm	0.11~ 0.13um	0.15~ 0.18um	>0.25 um	Total
NeoBit	-	-	-	1	-	8	12	2	22
NeoFuse	1	7	4	8	1	3	2	-	26
NeoFlash	-	-	-	1	-	-	-	-	1
NeoEE	-	-	2	-	1	4	9	1	17
NeoMTP	-	-	-	1	2	2	3	-	8

Note\*: 9 platforms qualified in 1Q; 5 platforms kicked off in 1Q.



### **Current Technology Development Platforms**

12" Fabs	Production	Development	NVM Type	Process Type
16nm	0	1	ОТР	FF+
28nm	2	7	ОТР	LP/HPM, HLP/HPM, LPS
40nm	1	6	OTP, MTP	HV-DDI, LP
55/65nm	9	10	OTP, MTP, Flash	LP, HV-DDI, HV-OLED, DRAM, CIS
80/90nm	5	4	OTP, MTP	HV-DDI, HV-OLED, LP
0.13/0.11um	4	5	OTP, Flash	HV-DDI, BCD, Generic
0.18um	1	0	ОТР	BCD

8" Fabs	Development	NVM Type	Process Type
0.13/0.11um	12	OTP, MTP, Flash	HV-DDI, BCD, LP, RF, CIS, LL
0.18/0.16/0.152um	26	OTP, MTP	Generic, LP, LL, MR, HV, Green, BCD
0.25um	2	OTP, MTP	BCD
0.35um	1	ОТР	UHV

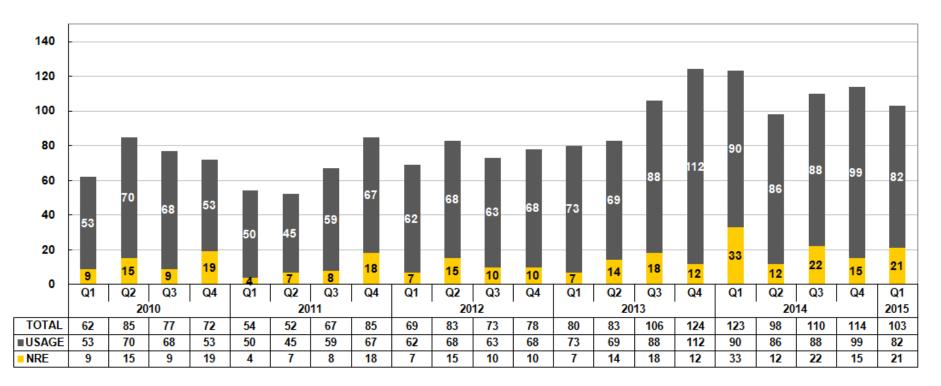
\*As of Mar. 31, 2015



Embedded Wisely, Embedded Widely

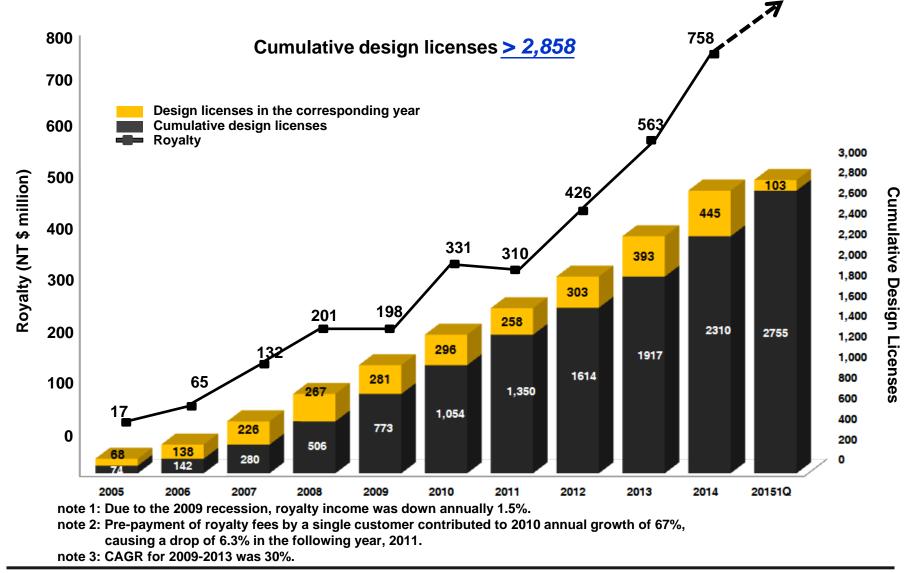
### Quarterly Design Licensing (New Tape Out)

- Total 103 NTO as of 1Q 2015 ( 445@2014 393@2013, 303@2012, 258@2011)



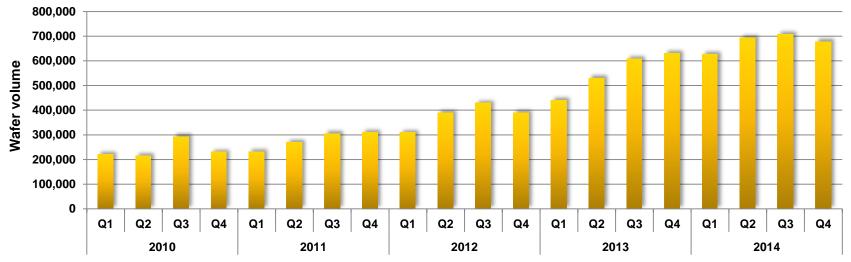
Usage : Usage of pre-qualified and verified IP (charged by per product tape out or annual package), the cycle time from design implementation to royalty payments for mass production is faster, typically less than one year. NRE: NRE covers the customization of IP that must undergo new verification or qualification. It typically requires 1 to 1.5 years before resulting in royalty revenue.

### **Cumulative Licenses Drive Future Royalties**





### **Wafer Production Volume**



embedded eMemory IP in T Company (\$revenue); \* % of Process node in T company total revenue in 1Q15

	Process node	*% of T	1Q15	4Q14	2014	2013
8"	0.5+	1%	0%	0%	0%	0%
	0.25/0.35	4%	32.1%	30%	30.5%	27.3%
	0.15/0.18	13%	8%	8%	11.9%	10.7%
	0.11/0.13	2%	20.5%	28.9%	20.8%	19.1%
12"	90nm	7%	18.2%	18.2%	16.3%	4.8%
	65nm	12%	0.3%	0.1%	0%	0%
	40/45nm	15%	0%	0%	0%	0%
	28nm	30%	0%	0%	0%	0%
	20nm	16%	0%	0%	0%	0%
8"		20%	14.1%	14.2%	15.6%	14.2%
12"		80%	1.5%	1.4%	1.4%	0.69%
Total		100%	4.1%	4.3%	4.5%	4.1%

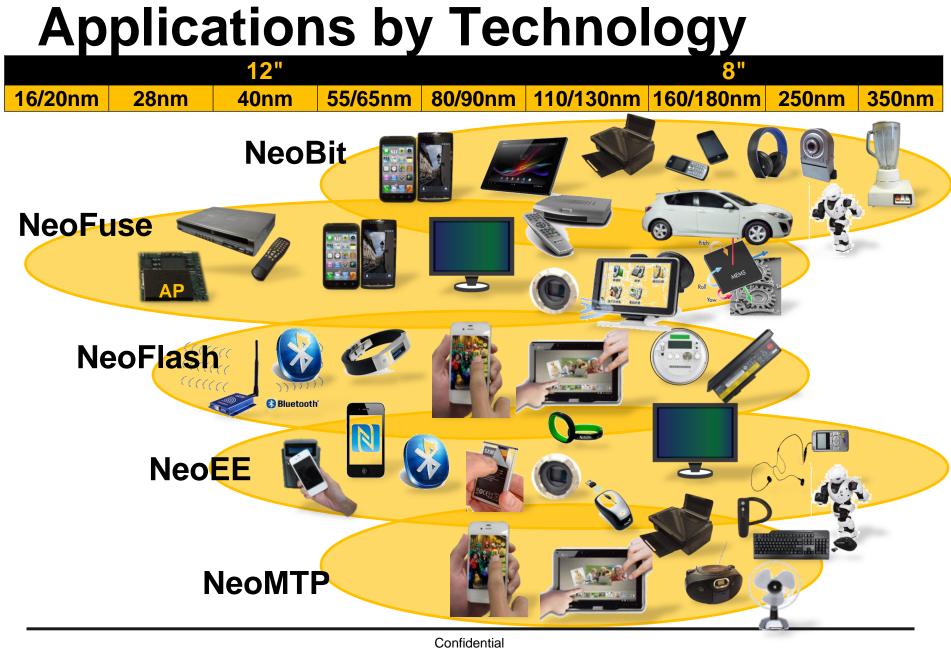
Embedded Wisely, Embedded Widely

Confidential

## Outline

- Business Model
- Review of Operations for 1Q15
- Growth Opportunity and Future Outlook
- Q & A



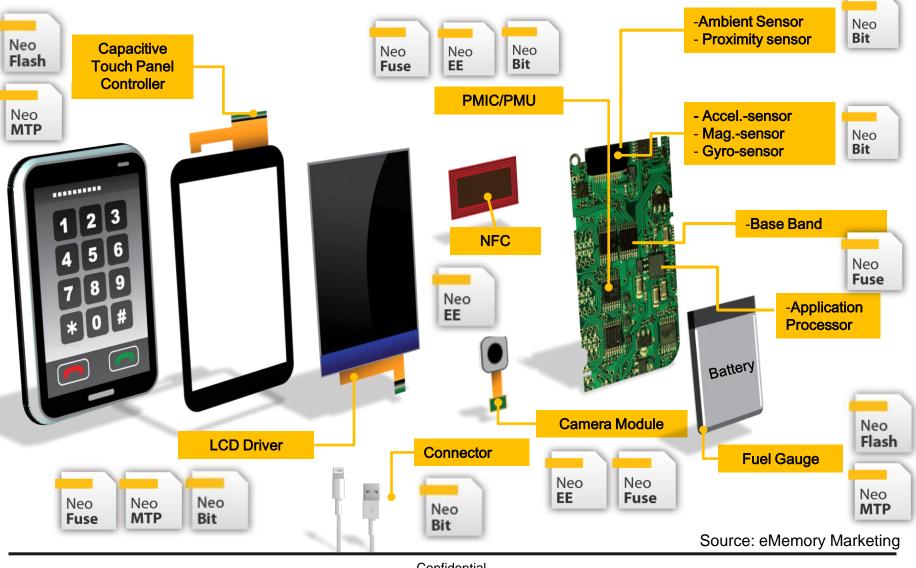


ememory

Embedded Wisely, Embedded Widely

19

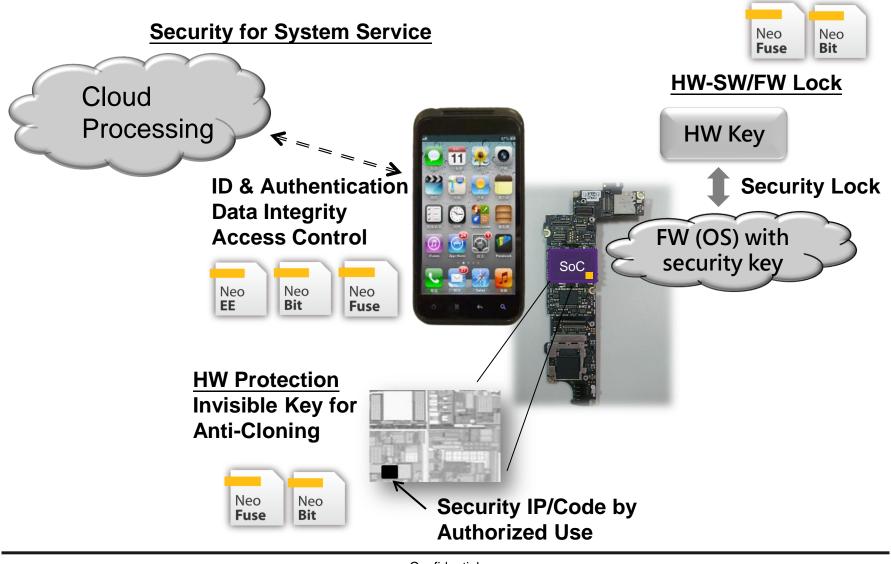
### eMemory IP in Smartphone



Embedded Wisely, Embedded Widely

Confidential

## Security with eMemory IPs

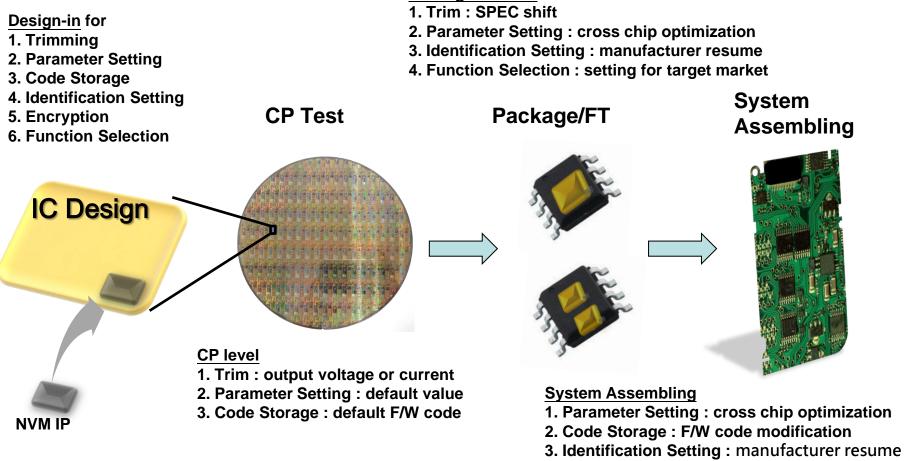


Embedded Wisely, Embedded Widely



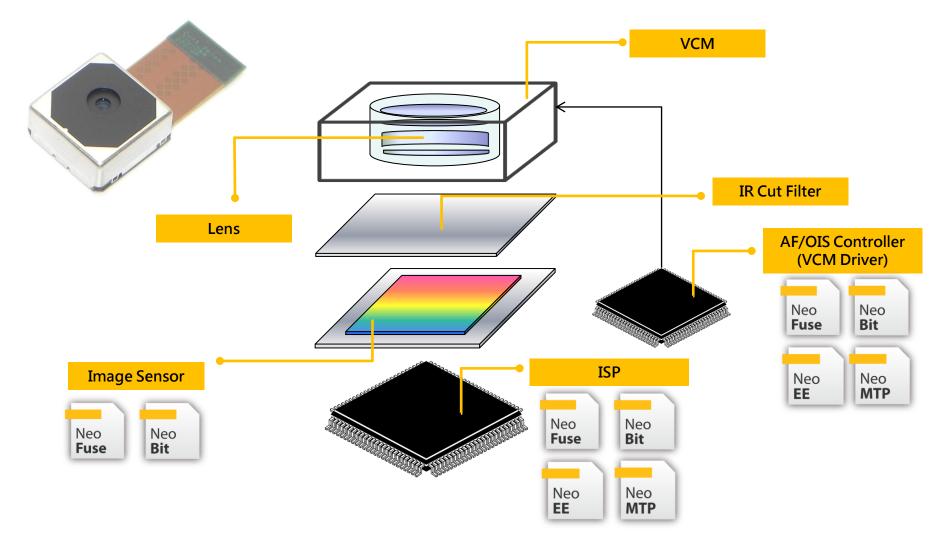
## **Benefits from Using eMemory IPs**

Package/FT level



4. Encryption : Security algorithm or key storage

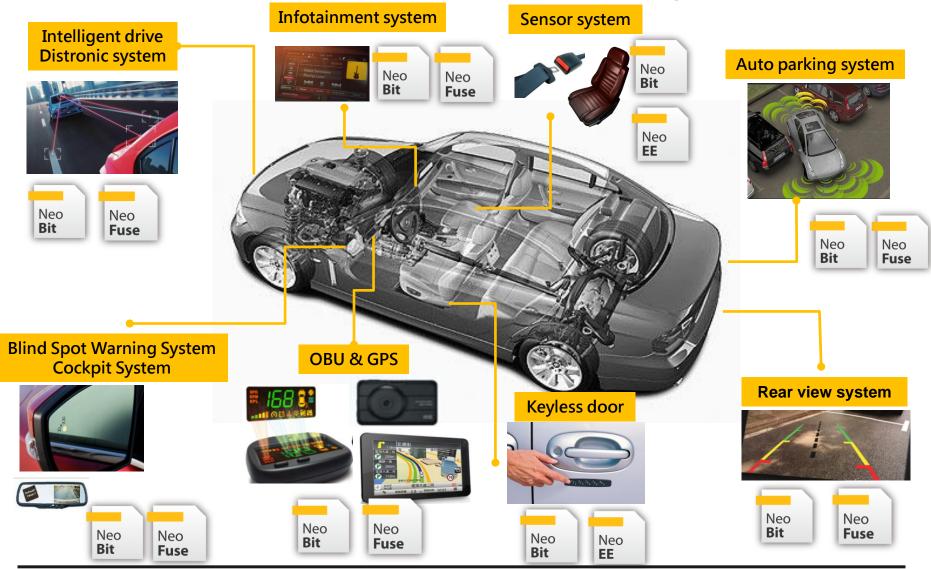
## Imager Module with eMemory IPs



Embedded Wisely, Embedded Widely



### **Autotronics with eMemory IPs**



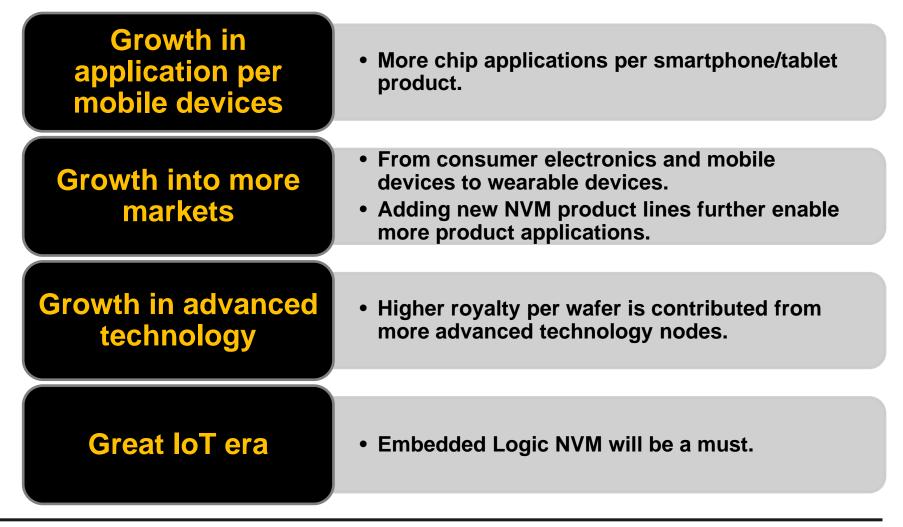
Embedded Wisely, Embedded Widely

Confidential

## **Outlook for 2Q and Beyond**

- Applications in major smart phone customer continue their momentum and expand to wearable devices.
- PMICs in Chinese smart phone continue to increase production and expand to new power management applications, such as fast charger and wireless charger.
- TDDI and 55nm LCD Drivers start to ramp up.
- Applications in STB, Fingerprints, and CIS will ramp up in 2H of 2015.

## **Key Growth Drivers**





## **Q & A**



# ememory

### **Embedded Wisely, Embedded Widely**