

The background of the slide is a white field filled with a pattern of 3D cubes. The cubes are rendered in a light gray outline style, giving them a three-dimensional appearance. They are scattered across the page, with some appearing in rows and others more isolated. The overall effect is a clean, modern, and geometric aesthetic.

# emory

## **3Q2014 Investor Conference**

**Nov. 13<sup>th</sup>, 2014**

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# Cautionary Statement

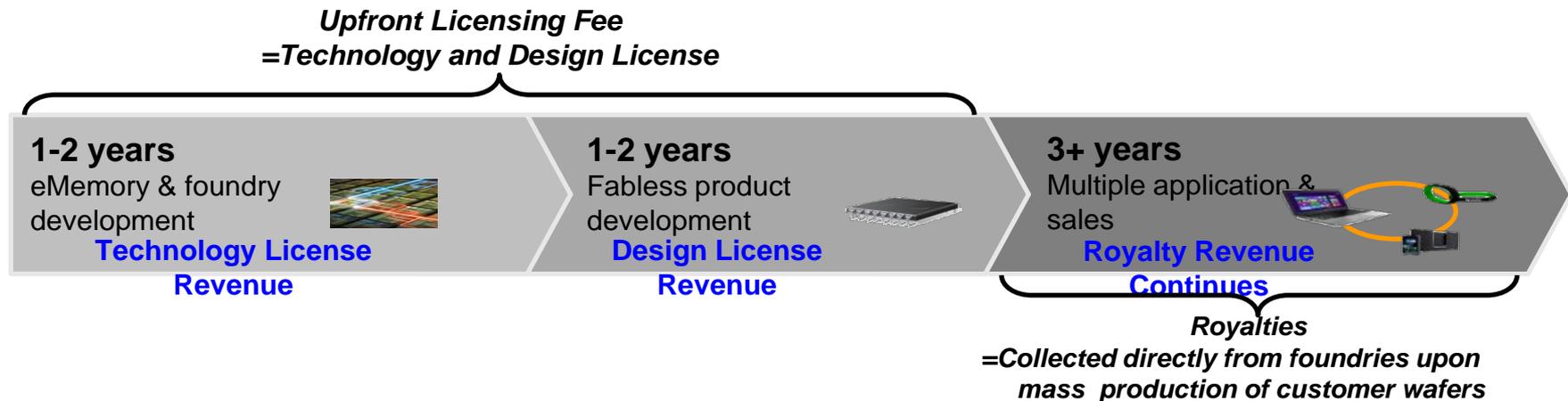
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# Outline

- **Business Model**
- **Review of Operations for 3Q**
- **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, 216 employees (150 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 on-going technology platforms  
2) No. of design licenses  
3) Royalty



# Worldwide Customers



## Foundry



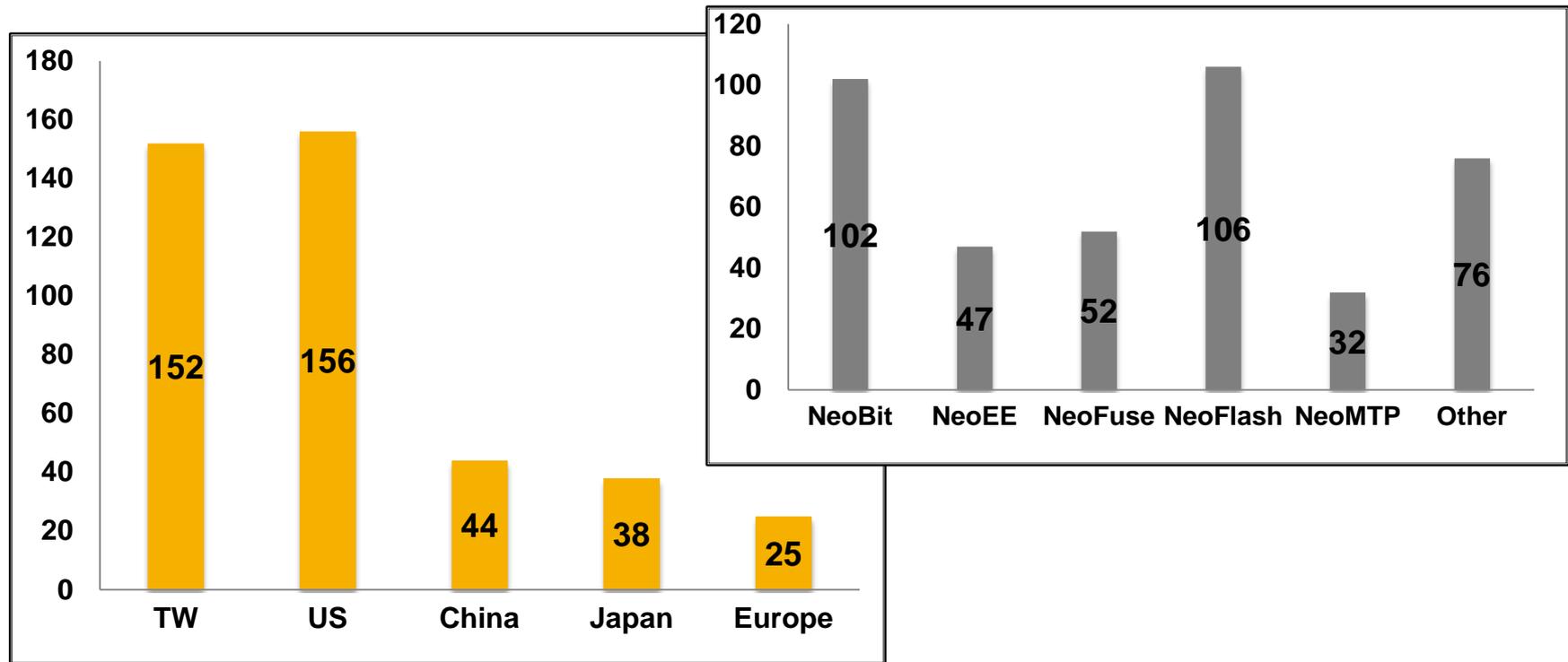
## IDM



|         | Taiwan | China | Korea | Japan | North America | Europe | Others |
|---------|--------|-------|-------|-------|---------------|--------|--------|
| Foundry | 5      | 6     | 3     | 2     | 1             | 0      | 1      |
| IDM     | 0      | 0     | 0     | 8     | 2             | 1      | 0      |
| Fabless | 202    | 280   | 49    | 30    | 118           | 60     | 28     |

# Patent Portfolio

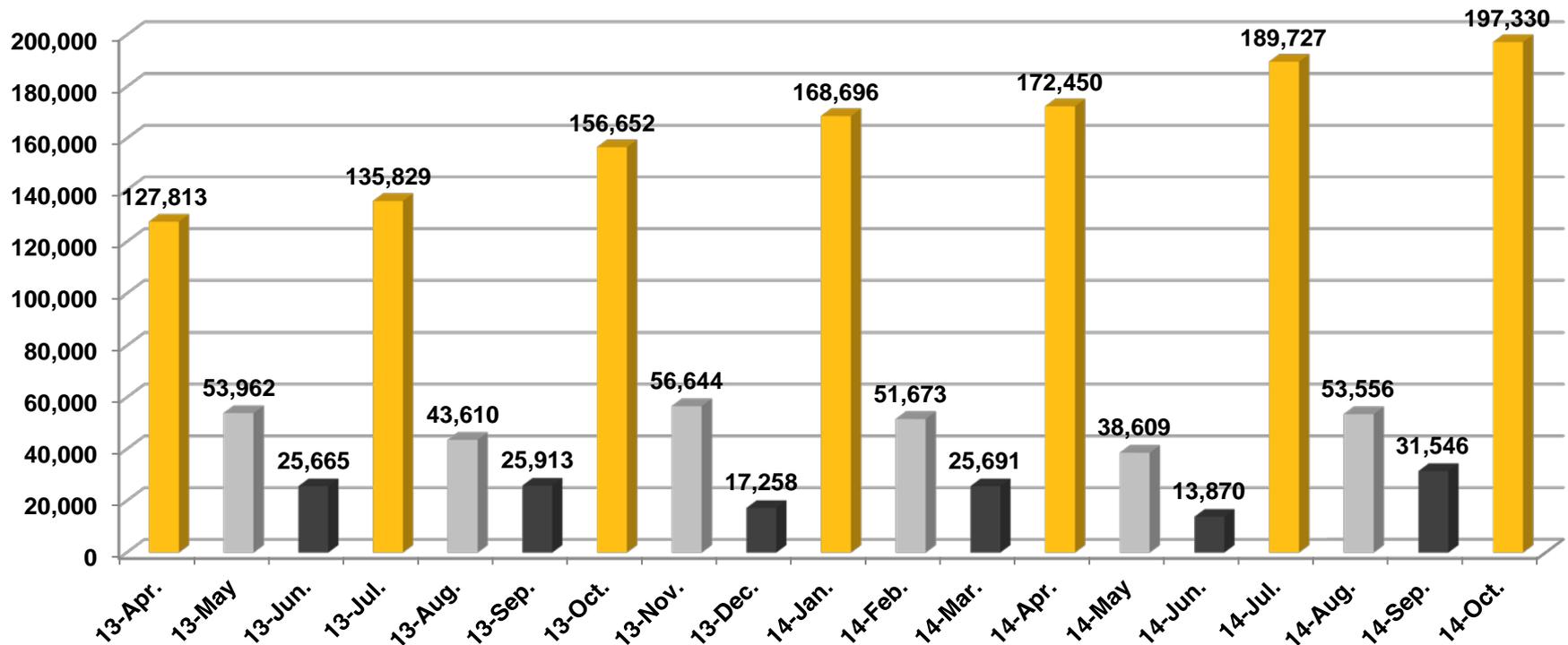
|              | 2Q14       | 3Q14       | Diff.      |
|--------------|------------|------------|------------|
| Pending      | 136        | 160        | +24        |
| Issued       | 236        | 255        | +19        |
| <b>Total</b> | <b>372</b> | <b>415</b> | <b>+43</b> |



# 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



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# 3Q Revenue Breakdown

Unit: NTD thousands

|              | 3Q14           | 2Q14           | QoQ Growth Rate | 3Q13           | YoY Growth Rate | 1Q-3Q14        | 1Q-3Q13        | YoY Growth Rate |
|--------------|----------------|----------------|-----------------|----------------|-----------------|----------------|----------------|-----------------|
| Royalty      | 212,848        | 167,731        | 26.90%          | 148,297        | 43.53%          | 551,594        | 388,949        | 41.82%          |
| Licensing    | 61,981         | 57,198         | 8.36%           | 57,055         | 8.63%           | 194,224        | 188,755        | 2.90%           |
| <b>Total</b> | <b>274,829</b> | <b>224,929</b> | <b>22.18%</b>   | <b>205,352</b> | <b>33.83%</b>   | <b>745,818</b> | <b>577,704</b> | <b>29.10%</b>   |

Unit: Number of contract

|                    |       | 3Q14 | 2Q14 | 1Q-3Q14 | 1Q-3Q13 |
|--------------------|-------|------|------|---------|---------|
| Technology License |       | 5    | 6    | 17      | 14      |
| Design License     | NRE   | 22   | 12   | 67      | 39      |
|                    | Usage | 88   | 86   | 264     | 230     |

# Financial Income Statement

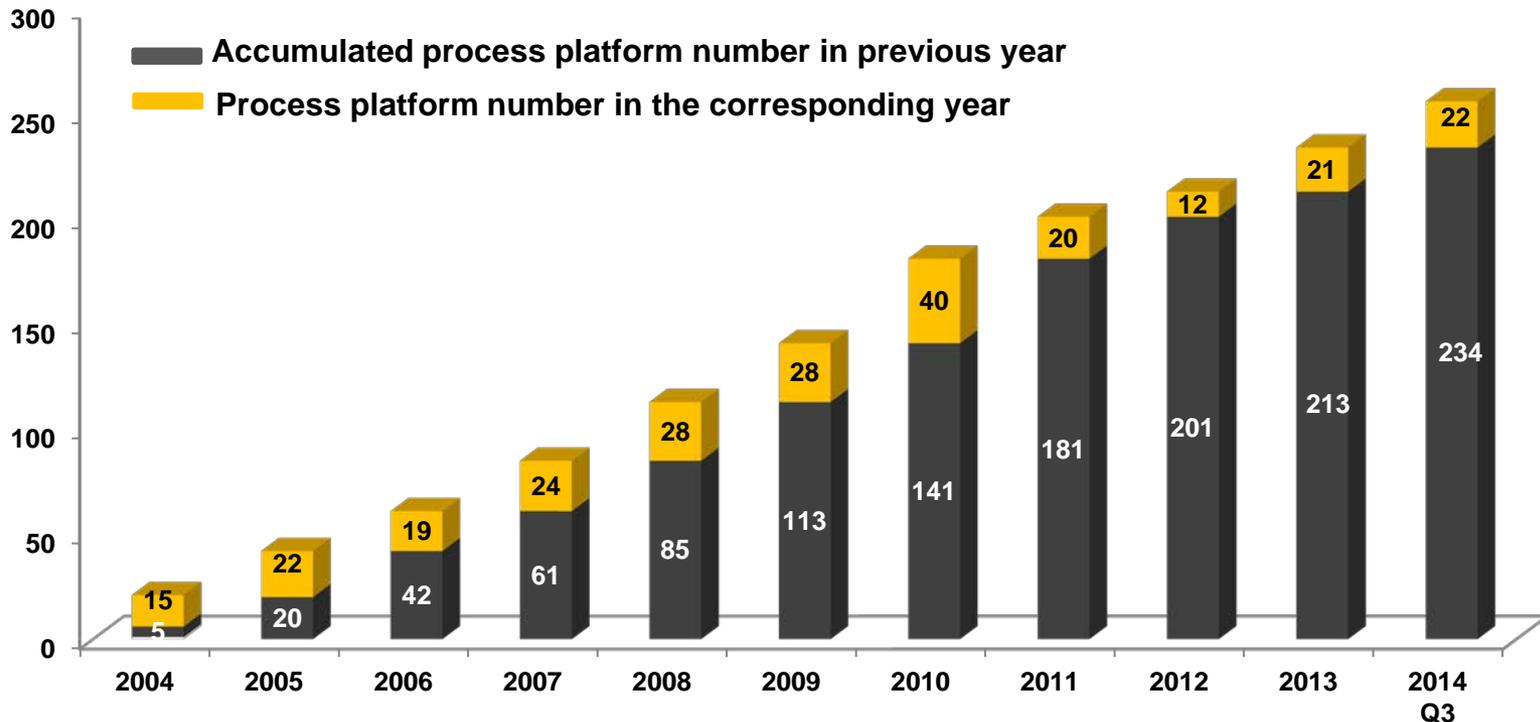
| Unit: NTD thousands  | 3Q14    | 1Q-3Q14 | 1Q-3Q13 | YoY      |
|----------------------|---------|---------|---------|----------|
| Revenue              | 274,829 | 745,818 | 577,704 | 29.1%    |
| Gross Margin         | 100%    | 100%    | 100%    | -        |
| Operating Expenses   | 135,695 | 391,820 | 343,813 | 14.0%    |
| Operating Margin     | 50.6%   | 47.5%   | 40.5%   | +7.0ppts |
| Non Operating Income | 1,852   | 6,943   | 654     | 961.6%   |
| Net Income           | 124,352 | 317,673 | 199,372 | 59.3%    |
| Net Margin           | 45.2%   | 42.6%   | 34.5%   | +8.1ppts |
| EPS (Unit: NTD)      | 1.64    | 4.19    | 2.66    | 57.5%    |
| ROE                  | 29.7%   | 25.3%   | 17.2%   | +8.1ppts |

# Technology License Statistics

Unit: Number of contract

| Year           | 2012 | 2013 | 1Q-3Q2014 |
|----------------|------|------|-----------|
| License number | 12   | 19   | 17        |

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

# Current Technology Development Platform

- Total (As of October) : **78**
- **31** for the NeoBit, **25** for NeoFuse, **2** for NeoFlash, **13** for NeoEE, and **7** for NeoMTP.

|          | 16nm | 28nm | 40nm | 55/65nm | 80/90nm | 0.11~<br>0.13um | 0.15~<br>0.18um | >0.25<br>um | Total |
|----------|------|------|------|---------|---------|-----------------|-----------------|-------------|-------|
| NeoBit   | -    | -    | -    | 1       | 1       | 10              | 17              | 2           | 31    |
| NeoFuse  | 1    | 7    | 4    | 8       | 1       | 3               | 1               | -           | 25    |
| NeoFlash | -    | -    | -    | 1       | -       | 1               | -               | -           | 2     |
| NeoEE    | -    | -    | 2    | -       | 1       | 4               | 5               | 1           | 13    |
| NeoMTP   | -    | -    | -    | 1       | 2       | 2               | 2               | -           | 7     |

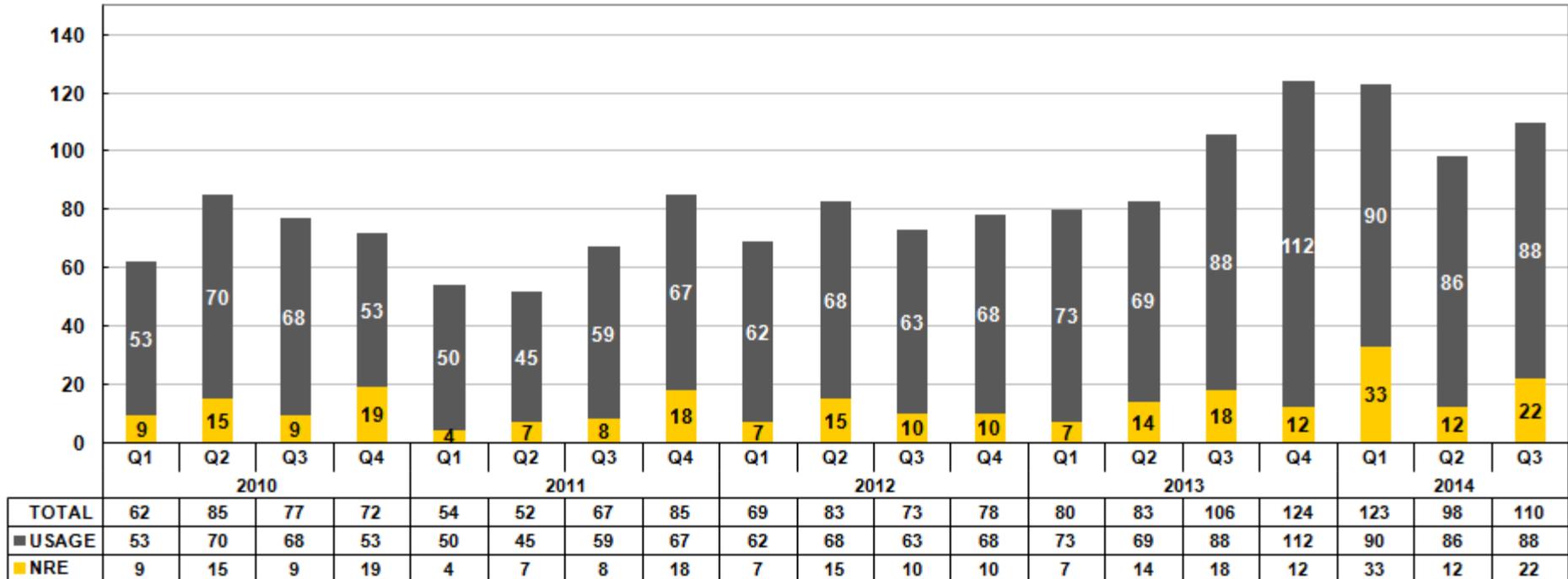
# Current Technology Development Platform

| 12" Fabs    | Production | Development | NVM Type        | Process Type                   |
|-------------|------------|-------------|-----------------|--------------------------------|
| 16nm        | 0          | 1           | OTP             | FF+                            |
| 28nm        | 2          | 7           | OTP             | LP/HPM, HLP/HPM, LPS           |
| 40nm        | 1          | 6           | OTP, MTP        | HV-DDI, LP                     |
| 55/65nm     | 7          | 11          | OTP, MTP, Flash | LP, HV-DDI, HV-OLED, DRAM, CIS |
| 80/90nm     | 7          | 5           | OTP, MTP        | HV-DDI, HV-OLED, LP            |
| 0.13/0.11um | 1          | 5           | OTP, Flash      | HV-DDI, BCD, Generic           |
| 0.18um      | 0          | 1           | OTP             | BCD                            |

| 8" Fabs           | Development | NVM Type        | Process Type                        |
|-------------------|-------------|-----------------|-------------------------------------|
| 0.13/0.11um       | 15          | OTP, MTP, Flash | HV-DDI, BCD, LP, RF, CIS, LL        |
| 0.18/0.16/0.152um | 24          | OTP, MTP        | Generic, LP, LL, MR, HV, Green, BCD |
| 0.25um            | 2           | OTP, MTP        | BCD                                 |
| 0.35um            | 1           | OTP             | UHV                                 |

# Quarterly Design Licensing (New Tape Out)

- Total **331** NTO as of 3Q 2014 ( **393**@2013, **303**@2012, **258**@2011)

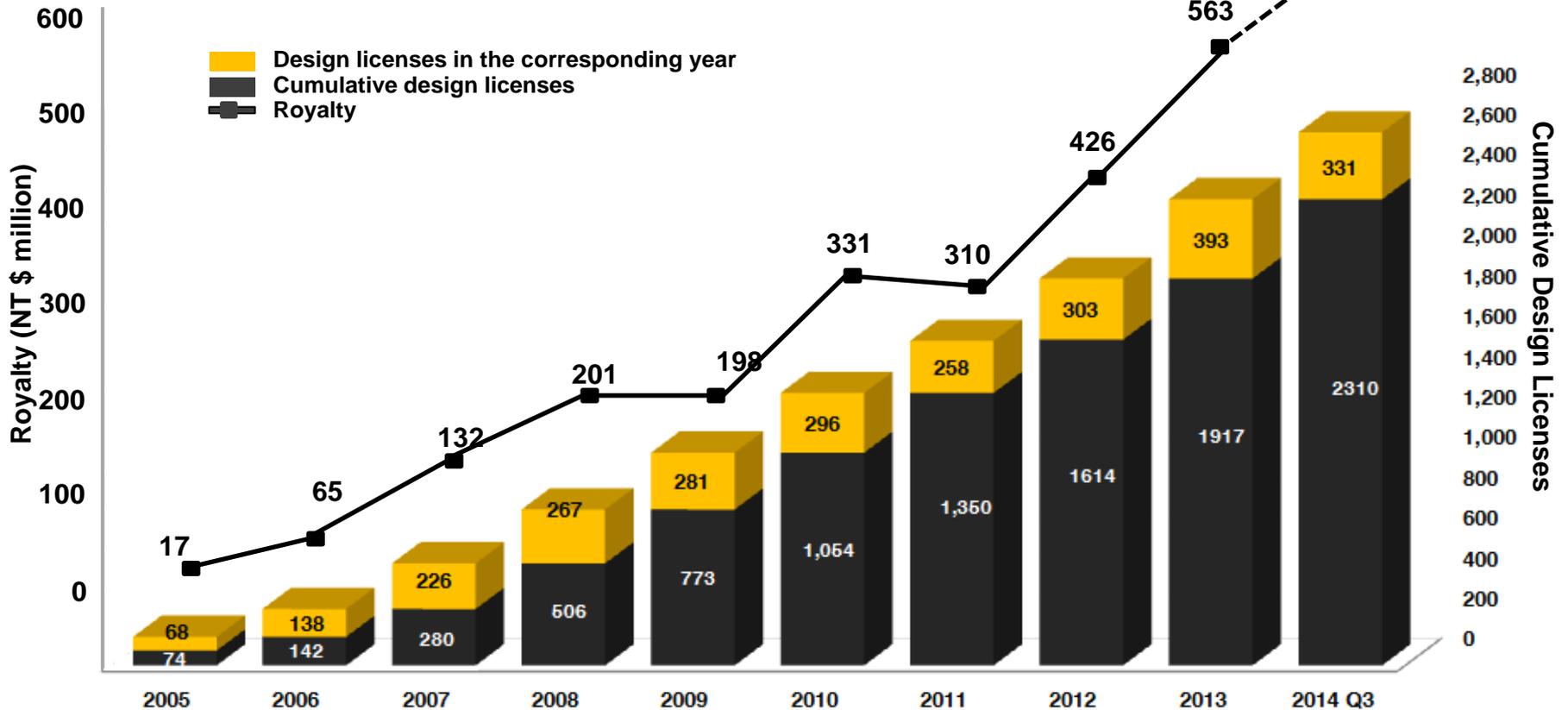


Usage : Usage of pre-qualified and verified IP (charged by per product tape out or annual package), the cycle time from design implementation to royalty payments for mass production is faster, typically less than one year.

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.

# Accumulated Licenses Drive Future Royalties

Accumulated design licenses > 2,641

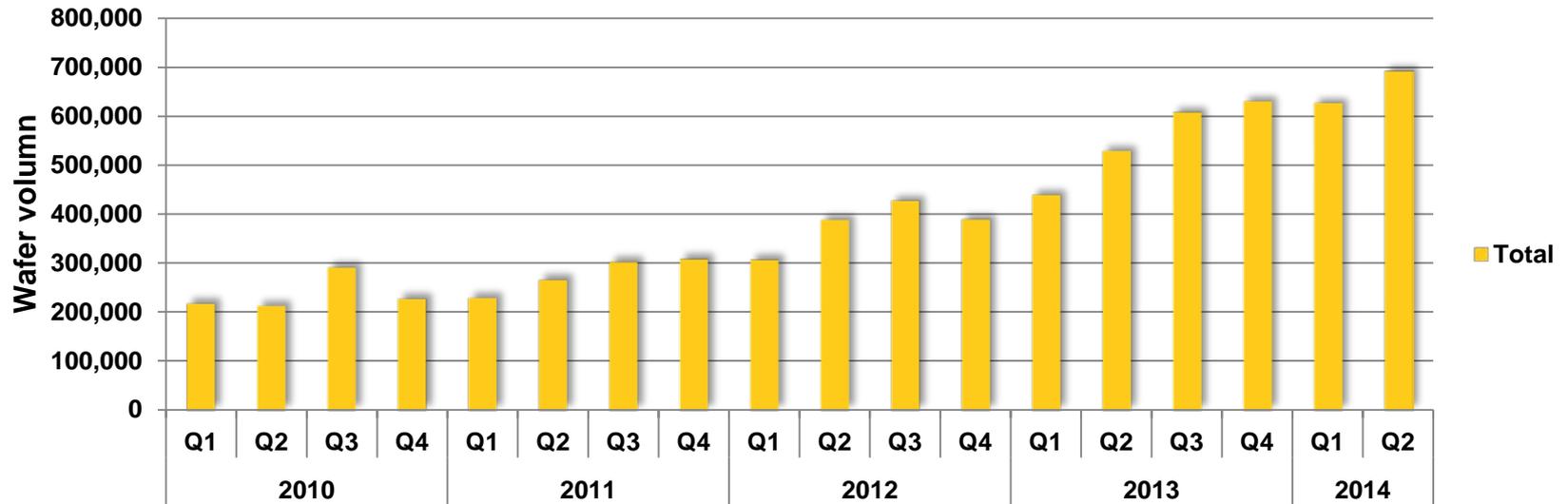


note 1: Due to the 2009 recession, royalty income was down annually 1.5%.

note 2: Pre-payment of royalty fees by a single customer contributed to 2010 annual growth of 67%, causing a drop of 6.3% in the following year, 2011.

note 3: CAGR for 2009-2013 was 30%.

# Wafer Production Volume



embedded eMemory IP in T Company (\$revenue); \* % of Process node in T company total revenue in 3Q14

|              | Process node | *% of T | 3Q14  | 2Q14  | 1Q-3Q14 | 1Q-3Q13 |
|--------------|--------------|---------|-------|-------|---------|---------|
| 8"           | 0.5+         | 1%      | 0%    | 0%    | 0%      | 0%      |
|              | 0.25/0.35    | 4%      | 33.5% | 34.2% | 30.5%   | 25.6%   |
|              | 0.15/0.18    | 13%     | 13%   | 13.3% | 13.3%   | 9.36%   |
|              | 0.11/0.13    | 3%      | 21%   | 20.4% | 20.8%   | 20.2%   |
| 12"          | 90nm         | 6%      | 16.4% | 18.3% | 16.3%   | 3.9%    |
|              | 65nm         | 13%     | 0%    | 0%    | 0%      | 0%      |
|              | 40/45nm      | 17%     | 0%    | 0%    | 0%      | 0%      |
|              | 28nm         | 34%     | 0%    | 0%    | 0%      | 0%      |
|              | 20nm         | 9%      | 0%    | 0%    | 0%      | 0%      |
| 8"           |              | 21%     | 16.5% | 17%   | 16.1%   | 13.2%   |
| 12"          |              | 79%     | 1.4%  | 1.6%  | 1.4%    | 0.65%   |
| <b>Total</b> |              | 100%    | 4.5%  | 5.1%  | 4.5%    | 3.7%    |

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# Applications by Technology

| 12"     |      |      | 8"      |         |           |           |       |       |
|---------|------|------|---------|---------|-----------|-----------|-------|-------|
| 16/20nm | 28nm | 40nm | 55/65nm | 80/90nm | 110/130nm | 160/180nm | 250nm | 350nm |

**NeoBit**



**NeoFuse**



**NeoFlash**



**NeoEE**

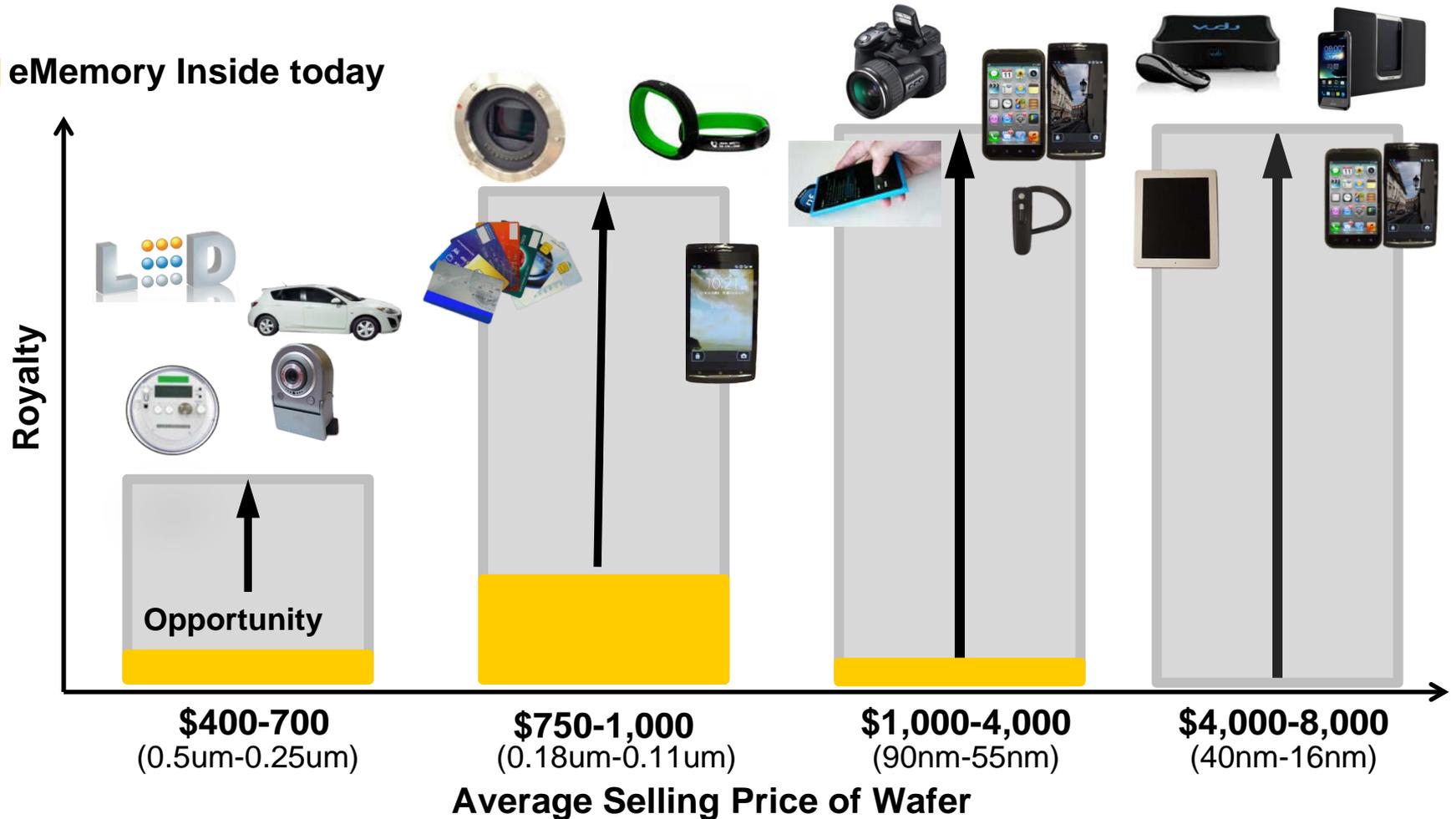


**NeoMTP**



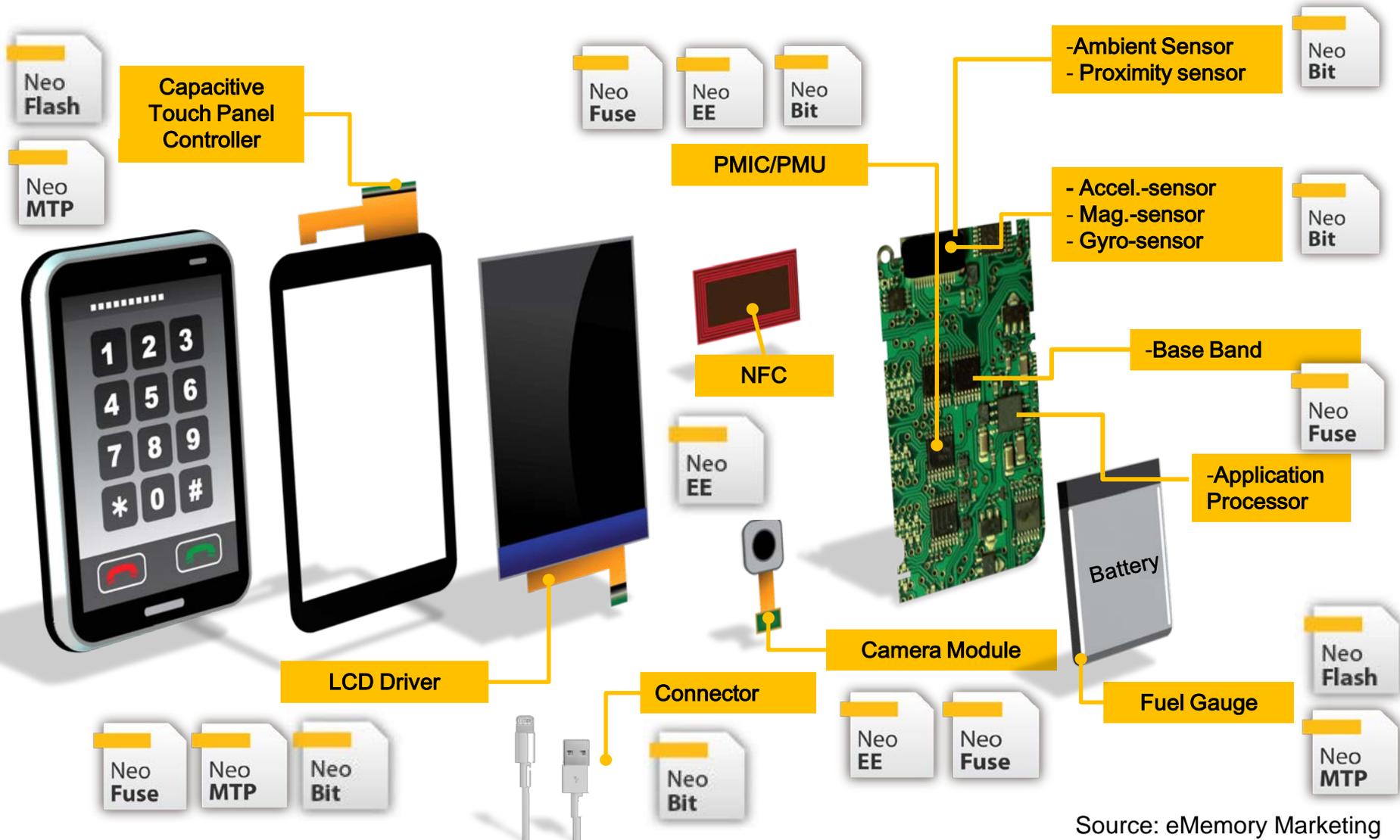
# Opportunity at all Price Points

 eMemory Inside today



Note: 2.2 million 8" equivalent wafers with eMemory IP were shipped in 2013. (~5% of WW foundry shipment)

# eMemory IP in Smart Phone



Source: eMemory Marketing

# Key Growth Drivers

## Growth in value per mobile devices

- More chip applications per smartphone/tablet product.

## Growth into more markets

- From consumer electronics and mobile devices to wearable devices.
- Adding new NVM product lines further enable more product applications.

## Growth in more advanced technology

- Higher royalty per wafer is contributed from more advanced technology nodes.

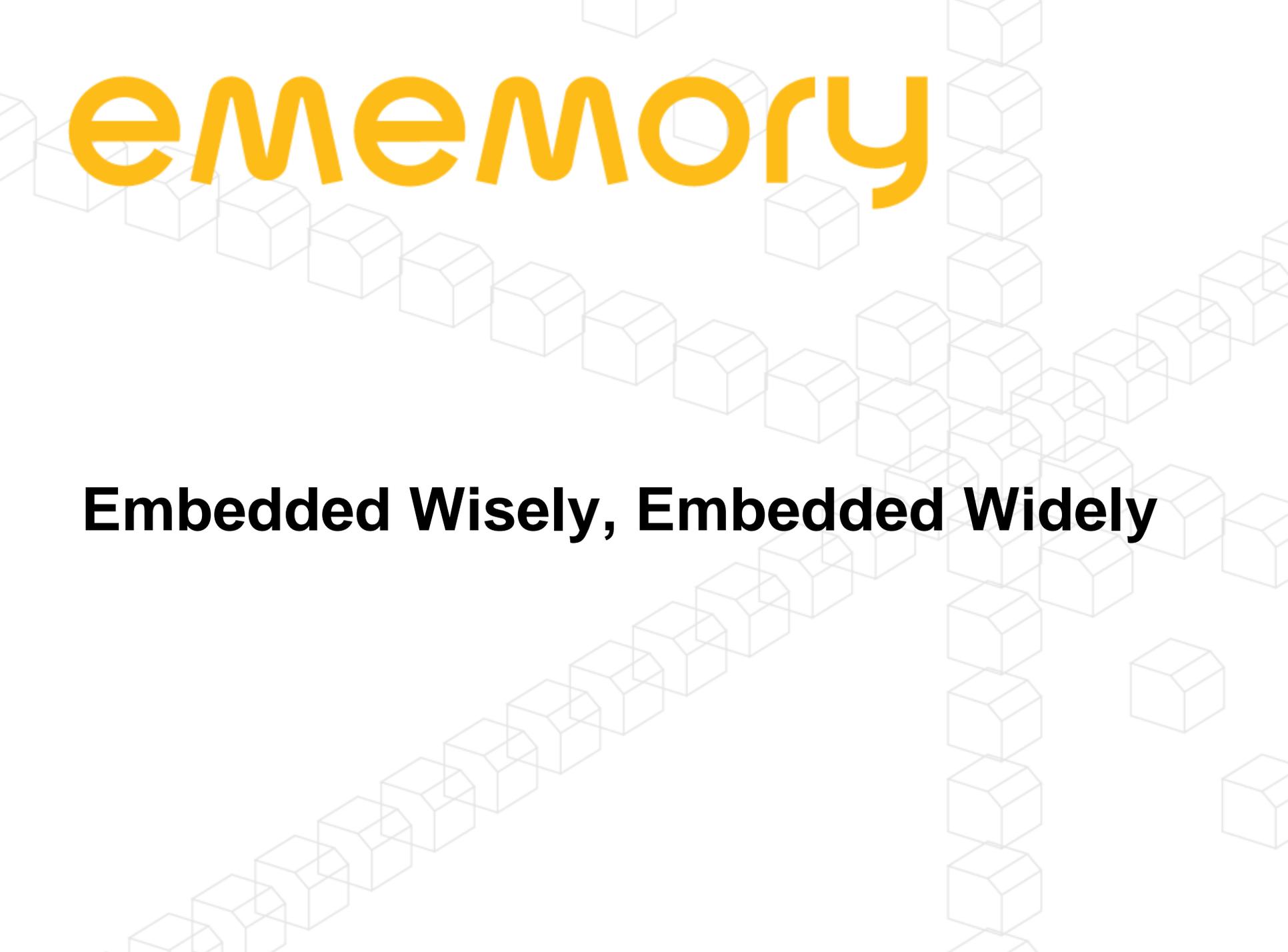
## IoT great era

- Embedded Logic NVM will be a must.

# Outlook for 4Q and Beyond

- **We foresee sustainable growth momentum in the coming quarters.**
- **Our penetration into advanced technology nodes is accelerating.**
- **The needs for low cost, low power and increased security are accelerating the adoption of eNVM in a diverse range of IoT-related applications.**

# Q & A

The background of the slide is a light gray color with a pattern of 3D cubes. The cubes are arranged in a way that creates a sense of depth and perspective, with some cubes appearing to be in the foreground and others receding into the background. The cubes are drawn with thin gray lines, and their faces are slightly shaded to give them a three-dimensional appearance. The pattern is dense and covers the entire slide area.

# eMemory

**Embedded Wisely, Embedded Widely**