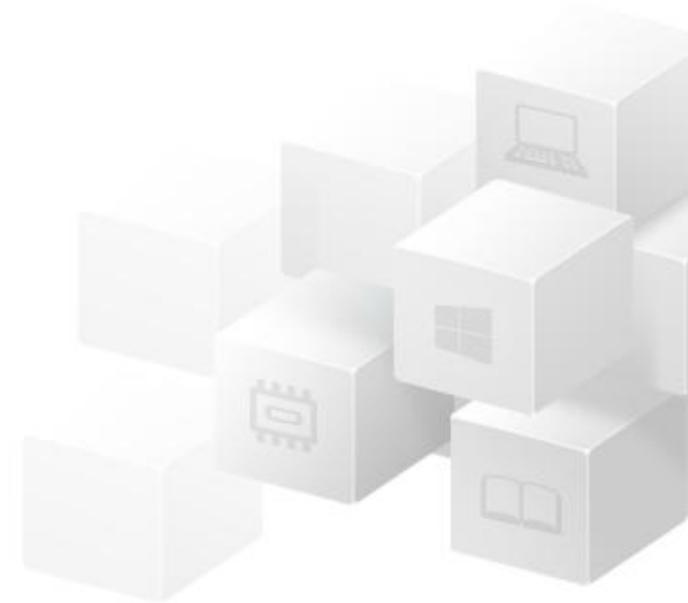


Total Embedded Solution Company

# MDS Technology



*Embedded Innovation*

**m<sup>d</sup>s** technology



# CONTENTS

I

Trend of Embedded Industry

II

Company Information

III

Business Overview

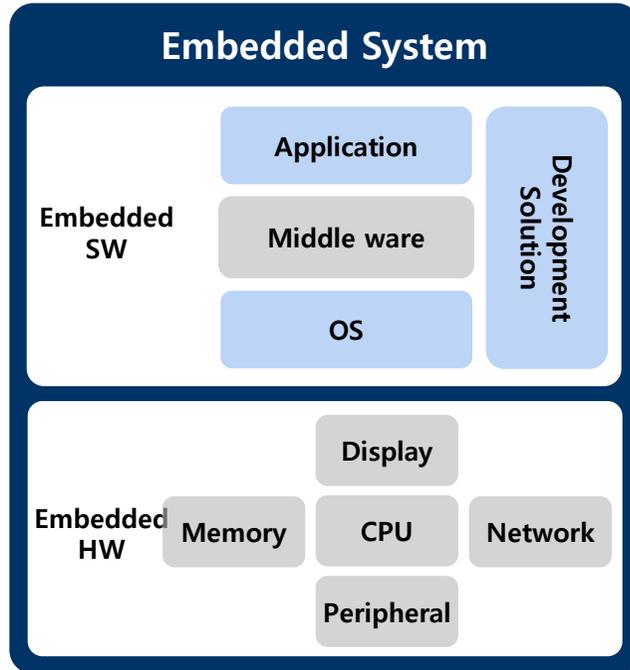
IV

Investment Highlight

V

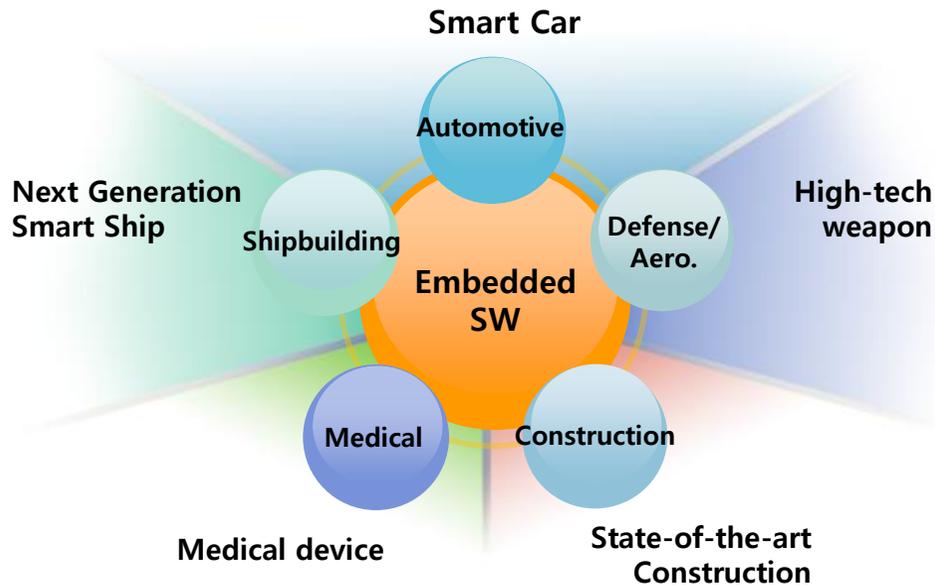
Financial Statement

An Embedded system is a computer system designed to perform a specific task such as automotive, mobile, consumer electronics, defense/aerospace etc.

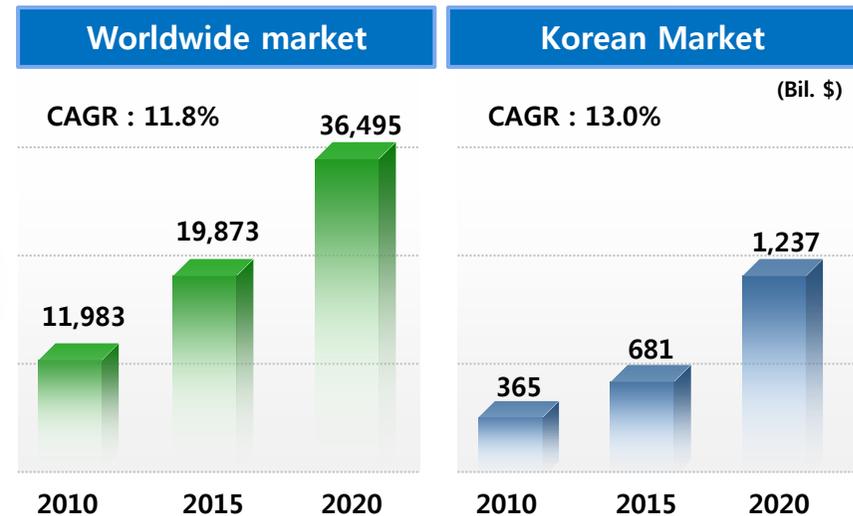


Embedded SW & IT convergence are core items in IT Korea future strategy by government

## IT Convergence Business



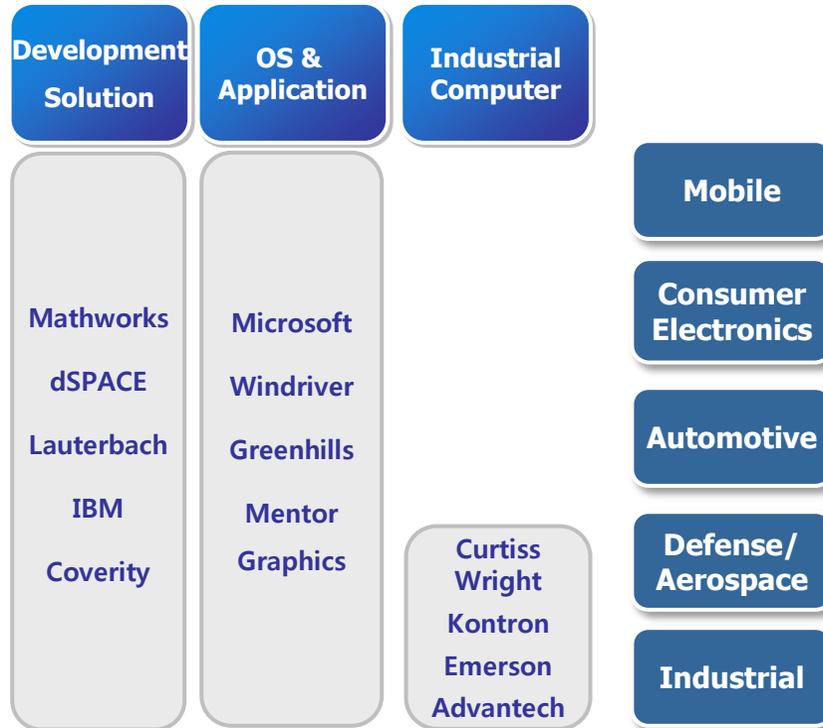
## IT Convergence Market forecast



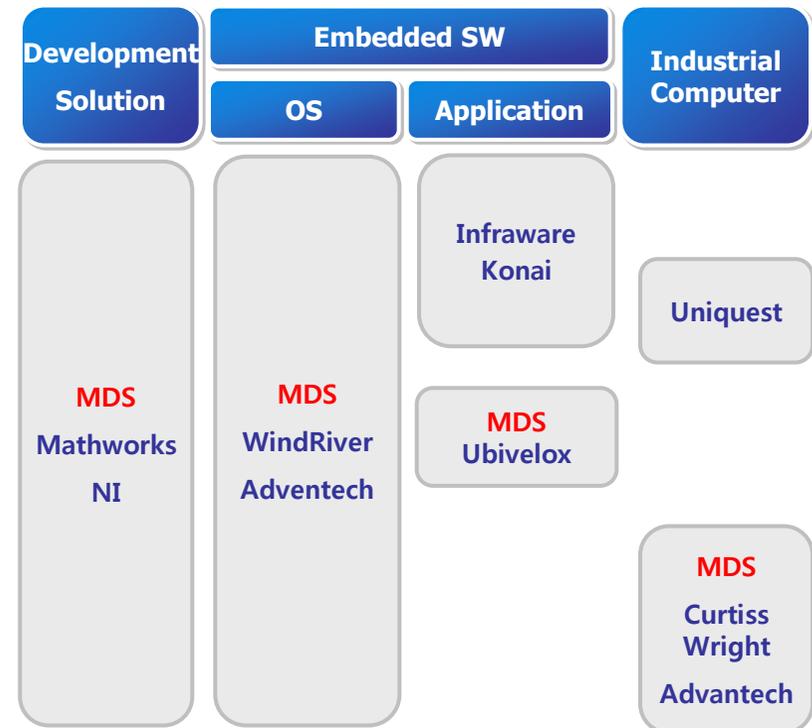
Source : ETRI

As a Market-dominant Enterprise of Korean Embedded Market, Driving entire Industry Growth.

## Worldwide Embedded Market



## Korean Embedded Market



## Overview

CEO	Sangheon Lee
Date of Foundation	Mar, 1994.
Head Office Address	3FL. Hancorn Tower, Pangyo, Gyeonggi-do, Korea
Main Customers	
Sales/Operating Income(CY2012)	Separate : 63.5 Mil. / 8.1 Mil. Consolidated : 72.7Mil. / 8.8 Mil
Website	www.mdstec.com

## Subsidiary

✓ Domestic :



✓ Overseas :



## Human Resources



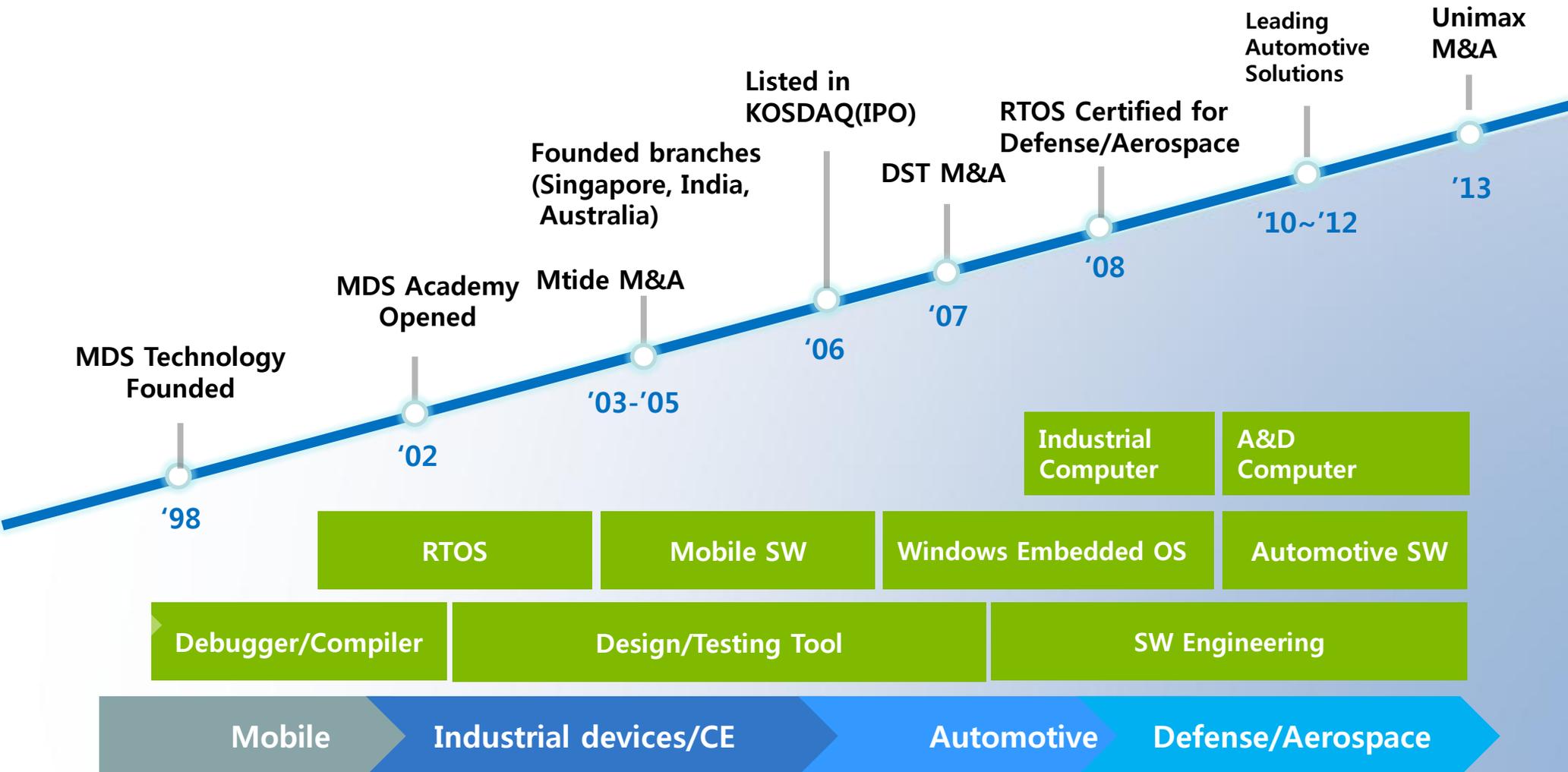
▲ 79% of total Employees has Engineering Background

## Stock Info.

IPO	Sept. 26, 2006
Number of Share	8,713,471
Main Shareholder	Stick Korea Investment(38.7%)

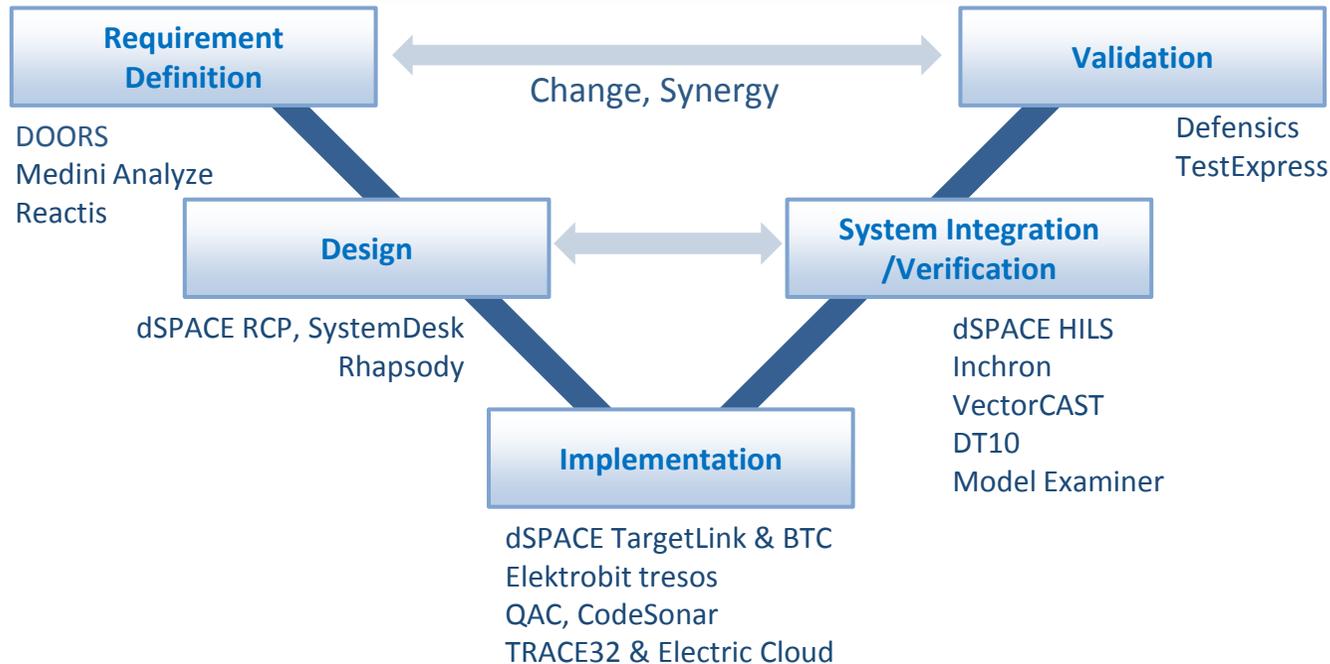
## II. Company Information

Drive embedded industry growth since its establishment in 1994



One-stop solution and services that can provide the best SW engineering business methods and know-how

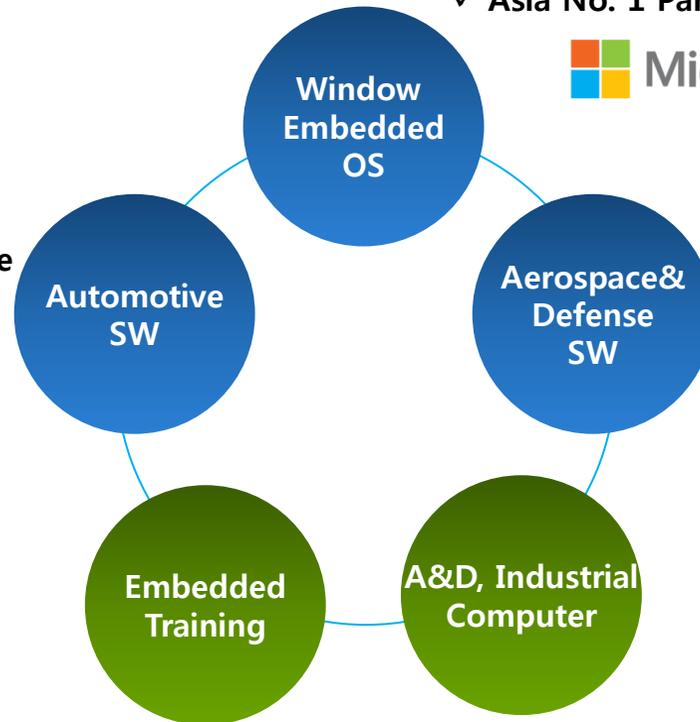
## V-Cycle based Development Solutions (ISO 26262, DO-178B)



From consulting to maintenance, we support the whole development process

Based on OS and System SW development capability,  
We are expanding our business areas. (IVI, M2M, A&D, industrial computing, and HW)

✓ Asia No. 1 Partner of Microsoft



✓ DO-178B Level A-certified RTOS for Aerospace/Defense



✓ Data Distribution Service Middleware - NeoDDS

✓ Computer & Board specialized in A&D, Industrial



✓ AUTomotive Open System Architecture - AUTOSAR

✓ Link between IVI & Smartphone - NeoLink

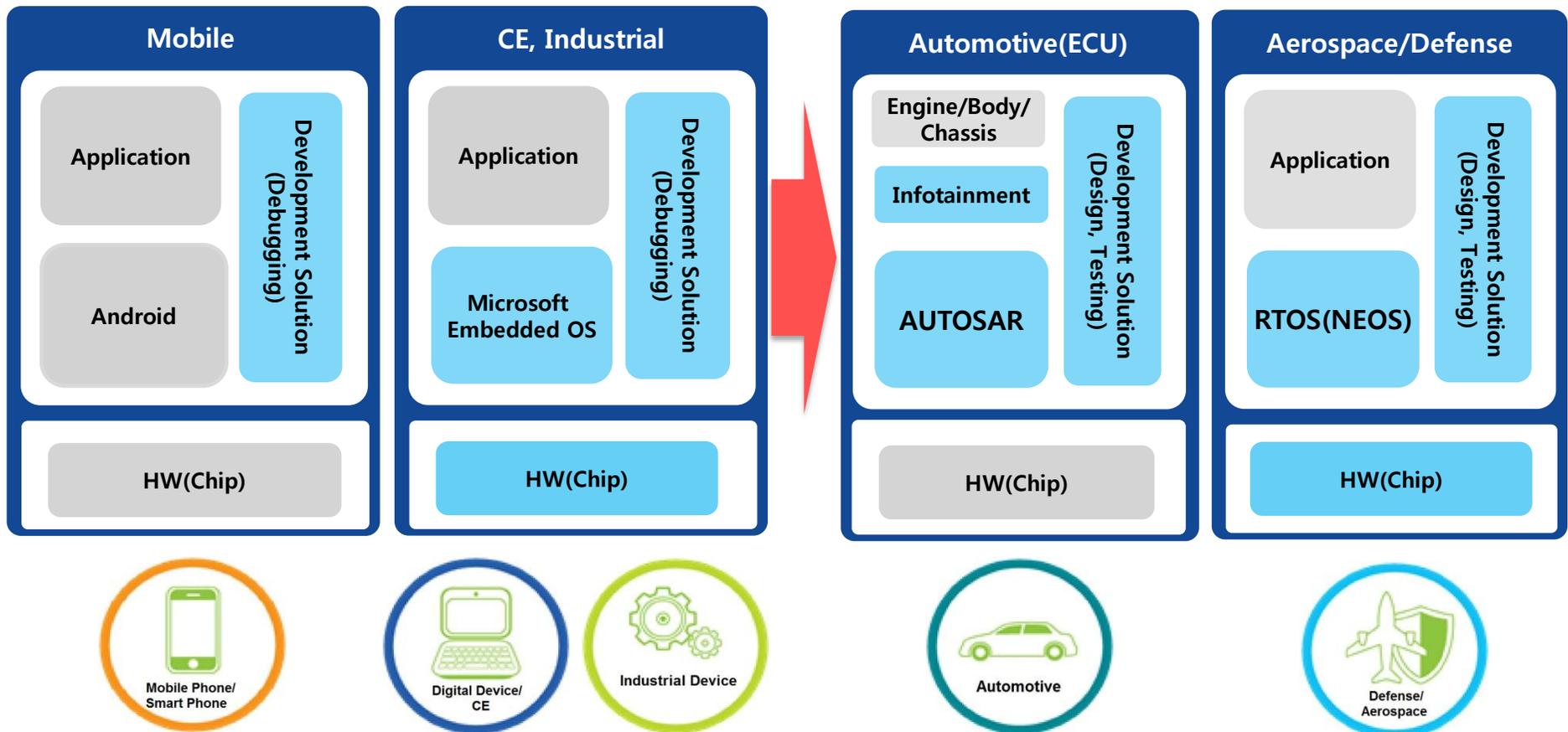


✓ Embedded Training Center

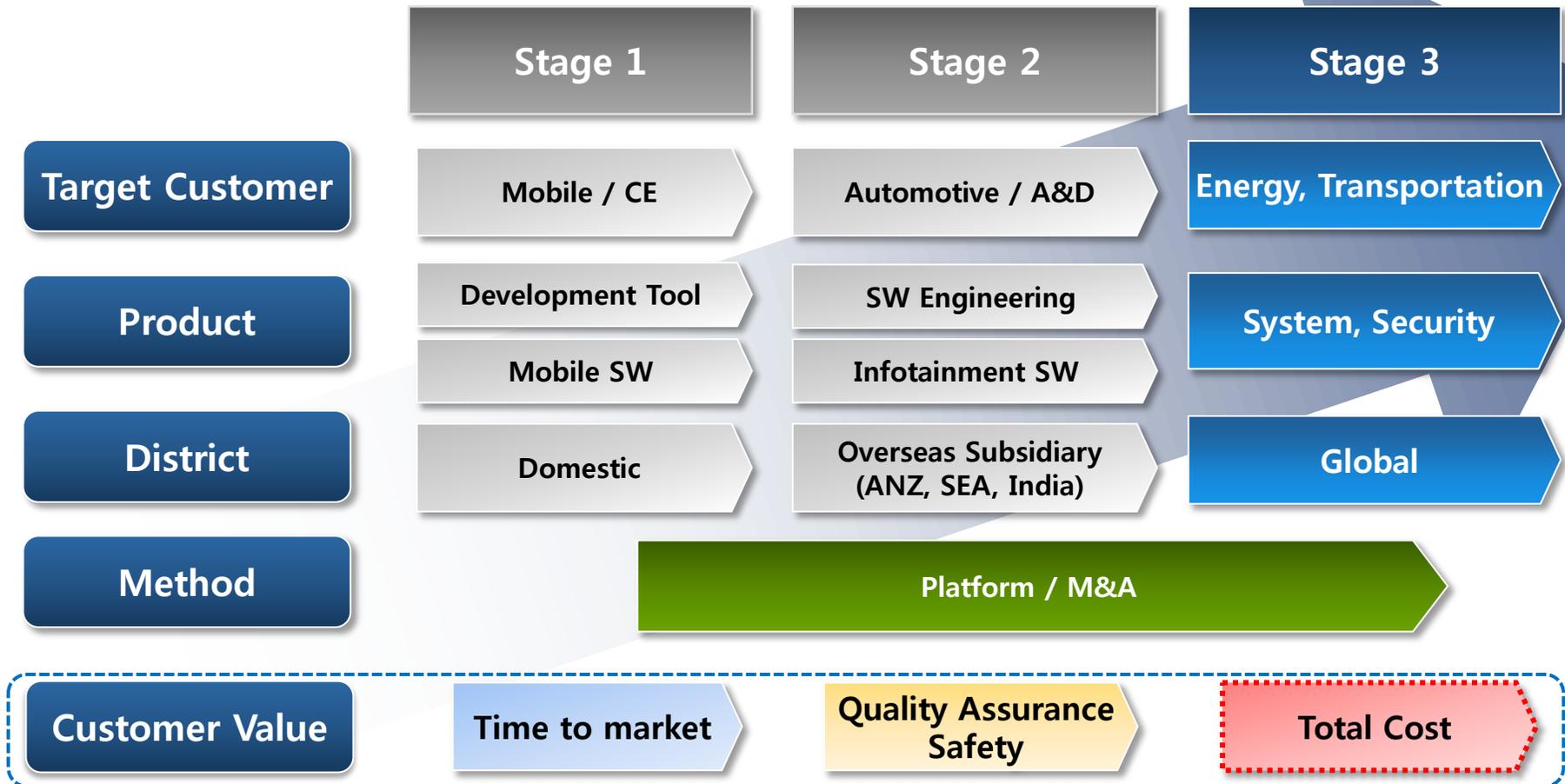


### III. Business Overview - Business area (Domain)

- Enlarged Market : Mobile, Digital/Industrial Device → Automotive, Defense /Aerospace
- Change of Development Solution : Debugging → Design & Testing + SW Engineering Service

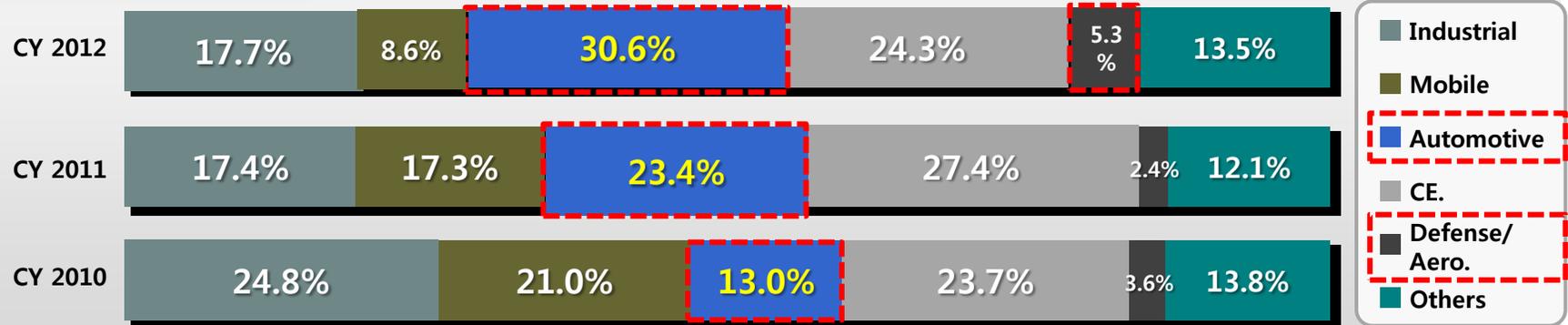


Expand business domain and pursue the advancement of business, by embedded technology-based platform

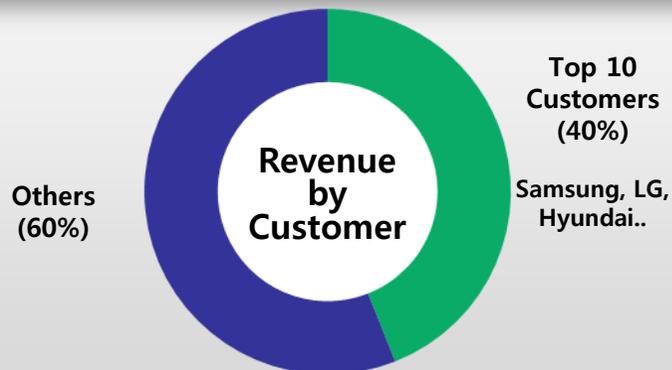


Stable revenue proportion from various customers in each industry  
(14 years continuous Surplus)

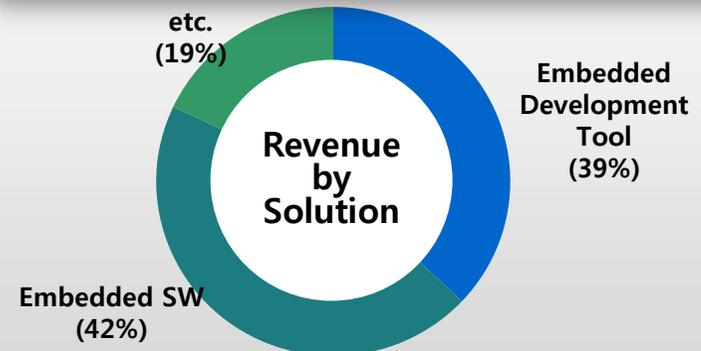
### Revenue by Industry



### Revenue by customers (2012)

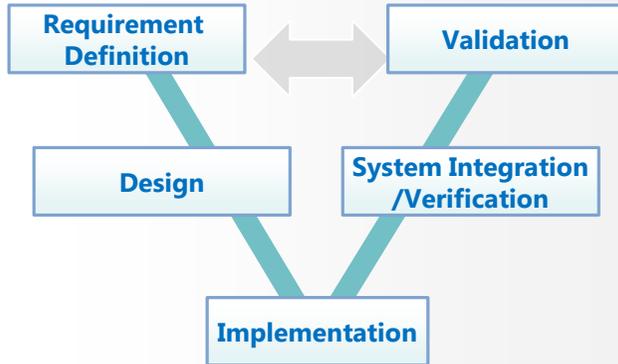


### Revenue by Solution(2012)



**"Technology Window" between Customers and Partners**

**V-Cycle based SW Development Solution**



- Total solutions that cover the entire development process
- Consulting Service based on accumulated experience

**Broad Business Network**

**Customers**



**Partners**



- More than 1,300 customers in all industry sectors
- Partnership with world-leading Embedded companies

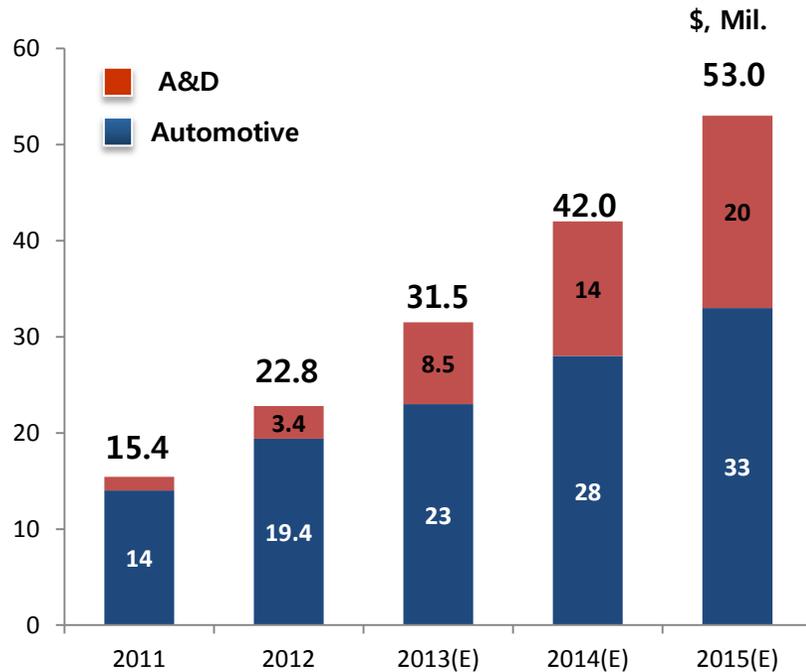
**Embedded specialized Technology & Knowhow**



- Technical expertise for the Defense / Aerospace RTOS
- ISO 26262, AUTOSAR Consulting
- Korea's largest embedded training center : MDS Academy

## Earnings growth by Automotive and Aerospace & Defense Market expansion

### ■ Revenue of Automotive, A&D Market



### ■ Market Growth Momentum

- Increasing Projects & SW Engineers (Automotive / A&D Market)
- Sales units are bigger than mobile market
- Increase Solution Business (SW + Engineering Service)
- Start A&D Mass Production('14)

## ■ Financial Info. (K-IFRS, Separated)

(\$ / mil , 1\$=1,000won)

Subjects	2009	2010	2011	2012	Growth Rate
Sales	55.5	62.1	61.1	<b>63.4</b>	<b>4.0%</b>
Operating Income	7.0	8.9	7.8	<b>8.1</b>	<b>4.2%</b>
Ordinary Income	7.3	10.4	11.2	<b>11.2</b>	<b>0.1%</b>
Net Income	5.7	8.3	8.8	<b>9.4</b>	<b>6.5%</b>
EPS	739(won)	907(won)	1,053 (won)	<b>1,110(won)</b>	<b>5.4%</b>

Subjects	1Q			2Q			1H		
	2010	2011	2012	2010	2011	2012	2010	2011	2012
Sales	13.3	11.4	12.6	17.3	15.7	15.8	30.5	27.2	28.4
Operating Income	1.7	0.2	1.7	2.9	2.1	2.3	4.7	2.3	4.0

Subjects	3Q			4Q			2H		
	2010	2011	2012	2010	2011	2012	2010	2011	2012
Sales	15.7	14.3	14.2	15.9	19.6	20.9	31.6	33.9	35.1
Operating Income	2.9	2.1	1.1	1.3	3.4	3.0	4.2	5.5	4.1

## Balance Sheets

(\$ / mil.)

Subjects	2009	2010	2011	2012
Current Assets	31.1	35.2	51.1	64.2
Fixed Assets	22.3	29.3	20.7	20.3
<b>Total Assets</b>	<b>53.4</b>	<b>64.1</b>	<b>71.8</b>	<b>84.5</b>
Current Liabilities	13.8	9.7	12.7	12.3
Long-term Liabilities	1.4	0.9	2.0	3.2
<b>Liabilities</b>	<b>15.2</b>	<b>10.6</b>	<b>14.7</b>	<b>15.5</b>
Capital Stock	4.8	4.8	4.8	4.8
Capital Surplus	18.2	18.7	18.7	21.1
Capital Adjustment	-18.6	-0.7	-2.9	0.5
Other Comprehensive Income	-0.1	0.3	0.1	-
Earned Surplus	34.1	30.4	36.5	42.6
<b>Capital</b>	<b>38.2</b>	<b>53.5</b>	<b>57.1</b>	<b>68.9</b>

## Income Statement

(\$ / mil.)

Subjects	2009	2010	2011	2012
<b>Sales Revenue</b>	<b>55.5</b>	<b>62.1</b>	<b>61.1</b>	<b>63.5</b>
Cost of Sales	34.6	39.2	38.8	39.7
<b>Gross Profit</b>	<b>20.9</b>	<b>22.9</b>	<b>22.2</b>	<b>23.8</b>
Selling and administrative expense	13.9	14.1	14.4	15.7
<b>Operating Income</b>	<b>7.0</b>	<b>8.9</b>	<b>7.8</b>	<b>8.1</b>
Non-Operating Income	2.3	2.7	4.0	3.6
Non-Operating Expense	2.0	1.1	0.6	0.5
<b>Ordinary Income</b>	<b>7.3</b>	<b>10.4</b>	<b>11.2</b>	<b>11.2</b>
Income Tax Expense	1.6	2.1	2.3	1.8
<b>Net Income</b>	<b>5.7</b>	<b>8.3</b>	<b>8.8</b>	<b>9.4</b>
<b>EPS(won)</b>	<b>739</b>	<b>907</b>	<b>1,053</b>	<b>1,110</b>

## Provides total solution for ECU development & Infotainment system

### Embedded SW Development Solution

#### SW Engineering Service

- ✓ Consulting
- ✓ Development Tool (Design, Debugging, Testing)
- ✓ Embedded Training



(MirrorLink Solution)

### Infotainment

- ✓ MirrorLink
- ✓ M2M Platform
- ✓ ECU Virtualization
- ✓ Smart Car Solution



(M2M)

### ECU (Engine/Body/Chassis)

- EPS(Power Steering)
- EPB(Parking Brake)
- ESC(Stability Control)
- Air-bag / Air-Suspension
- MCU(Motor Control Unit)
- BMS ...

OS

H/W(Chip)

### ECU\_Infotainment

Infotainment  
Application

OS  
(Android, WinCE)

H/W(Chip)

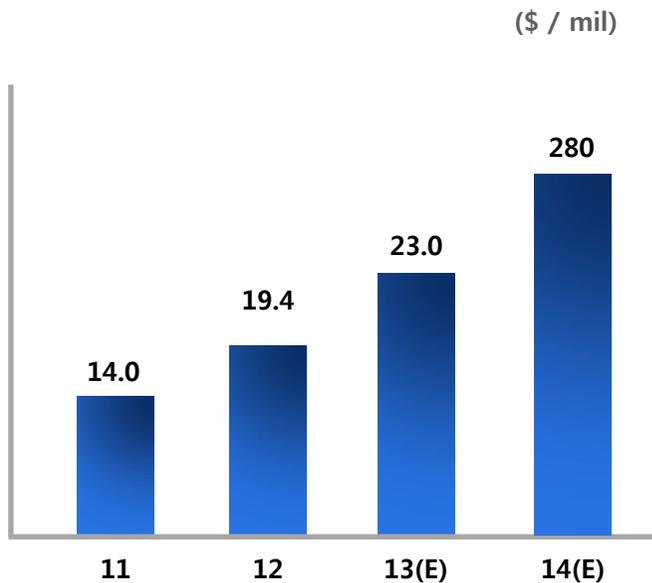
### Embedded OS

- ✓ AUTOSAR Platform



As Automotive SW market growth, we'll penetrate automotive market with lined up solution

### Sales & Proportion of Automotive Market



### Compare Automotive Industry with Mobile Industry

	Mobile SW	Automotive SW	
		AS-IS	TO-BE
Cost of Development Environment (by Person)	\$10,000	\$25,000	\$50,000 ~ \$100,000
SW Developers	25,000	1,500	5,000
Ratio of SW Developers	50%	11%	30%
Tool usage	Debugger	Debugger, Design Tool	Debugger, Design/Testing Tool

#### Development Solution

- ECU Solution
- Debugger, Compiler
- ISO 26262 Solution

#### Infotainment Solution

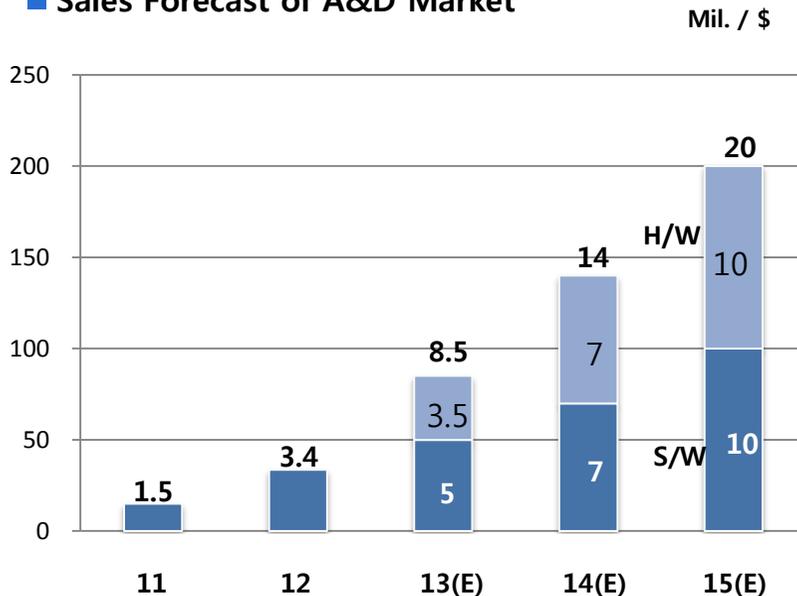
- In-Vehicle Infotainment
- ECU Virtualization
- MirrorLink

#### Embedded OS

- AUTOSAR Solution
- OSEK OS

Based on Technical expertise for the Aerospace & Defense RTOS,  
We provide RTOS & embedded system development solution

■ Sales Forecast of A&D Market



- Increase High-tech weapon development
- Weapon localization plan by government
- Enlarge portion of embedded SW in weapon



- Active investment in HW Business (UNIMAX M&A)
- Synergy effect between SW and HW Business

### Embedded Development Solution

- EC/ECU development Tool
- Debugging/Design/Testing

### Embedded OS

- NEOS RTOS

### Aerospace/Defense HW

- Industrial Computer
- COTS System