Cub Genuine Parts

The Electrical & Electronic Parts Specialist

為升電裝（2231）

- 為升電裝營運績效
- 為升電裝2017 展望
- Q&A

營運績效

(1979.switch) (2000.sensor)

全世界第一款通用型胎壓偵測器

(2007. GEN.1 PUR TPMS)

The 1st universal TPMS in worldwide

全世界最佳通用型胎壓偵測器方案

(2012 GEN.3 Uni-Sensor)

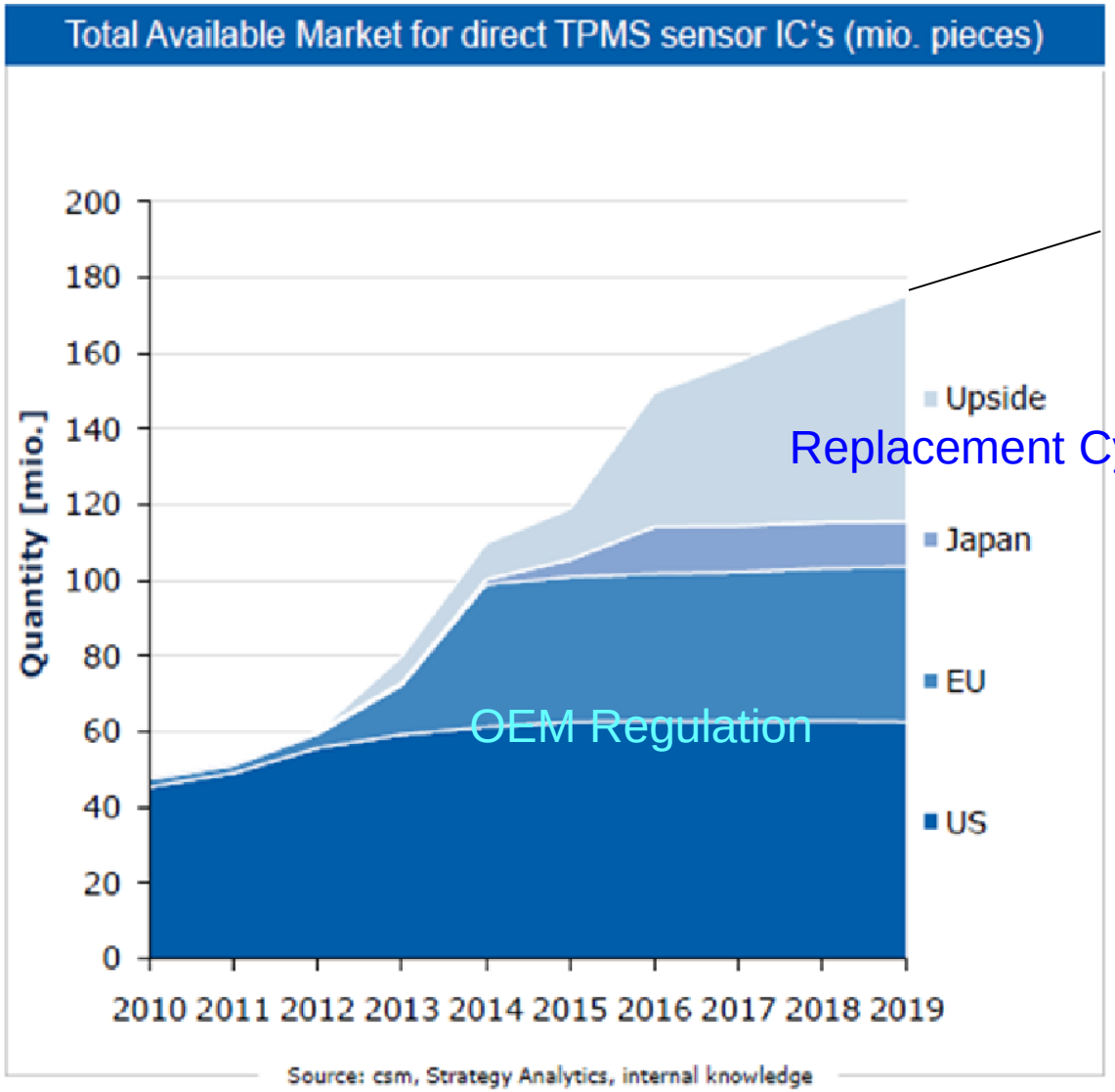
The best universal TPMS in worldwide

單位:仟元

	2012		2013		2014		2015		2016 Q1~Q3	
	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%
銷貨收入	1,338,240	100	1,498,942	100	2,155,184	100	2,822,080	100	2,599,274	100
營業成本	821,155	61	852,092	57	1,068,308	50	1,259,917	45	1,150,108	44
營業毛利	517,085	39	646,850	43	1,086,876	50	1,562,163	55	1,449,166	56
營業費用	215,642	16	234,544	16	265,874	13	313,049	11	362,498	14
營業利益	301,443	23	412,306	27	821,002	37	1,249,114	44	1,086,668	42
稅前盈餘	294,335	22	430,804	28	880,519	39	1,303,897	46	988,964	38
稅後盈餘	251,636	19	365,643	24	745,499	33	1,122,100	39	820,302	31
EPS	4.13		6		10.43		13.56		9.67	
Capital資本額	603(M)		605(M)		723(M)		833(M)		836(M)	

2016 Q4資本額919(M) * 待會計師審查

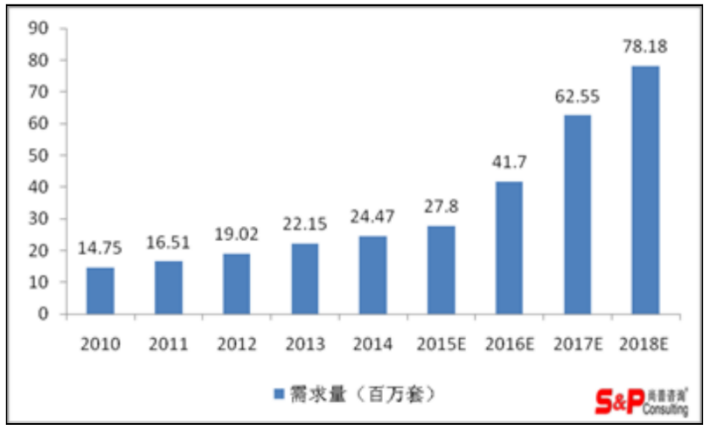
TPMS Market



TPMS AFTERMARKET TO TRIPLE IN SIZE OVER NEXT FIVE TO SEVEN YEARS, FROST & SULLIVAN SAYS

By: Oindrila Bhar | Wednesday, April 1, 2015 - 07:00

2010-2018年全球TPMS产品OEM市场规模分析及预测



The Best Universal TPMS Solution

=

The Best Coverage (>98%)

The best tool solution (easy & free)

Service Call

The best training & service team

Chain Store

Garage

2017 展望

- **電裝品出貨穩定**

- **TPMS 持續穩健成長**
  - 替換市場需求持續增長
  - 為升在歐美市占率持續提升，且佈局其它新市場

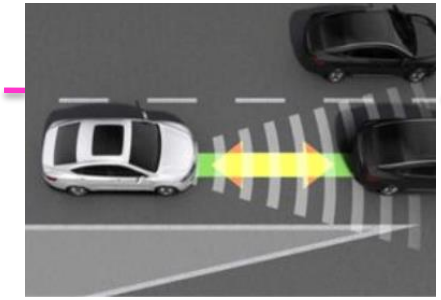
- **ADAS開發及佈局**

Roadmap

道路通訊系統 - - - 車隊安全管理系統 - - - 車聯網系統

胎壓偵測器

24G,77GHz
雷達模組



無人駕駛

Total ADAS Solution

汽車傳感器

★全球最佳
通用型TPMS

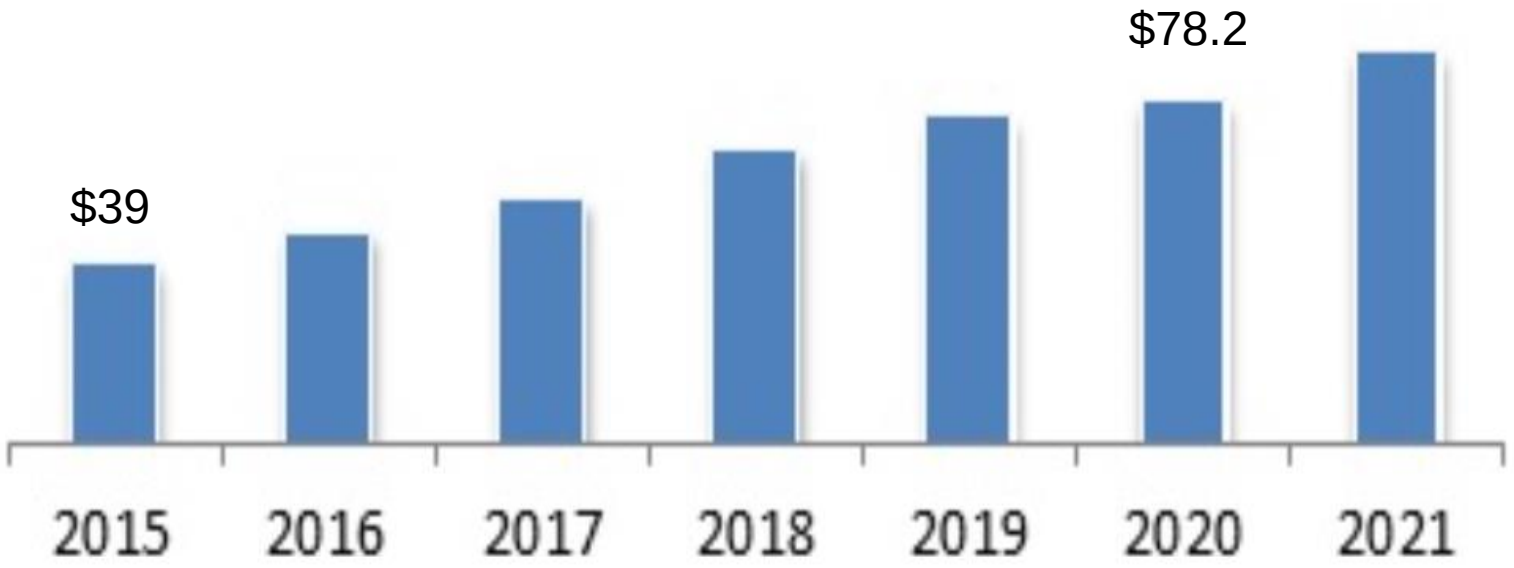
兩岸領先 ⟶ 全球Top 3競爭

汽車開關

★全美最大AM電裝品進口商

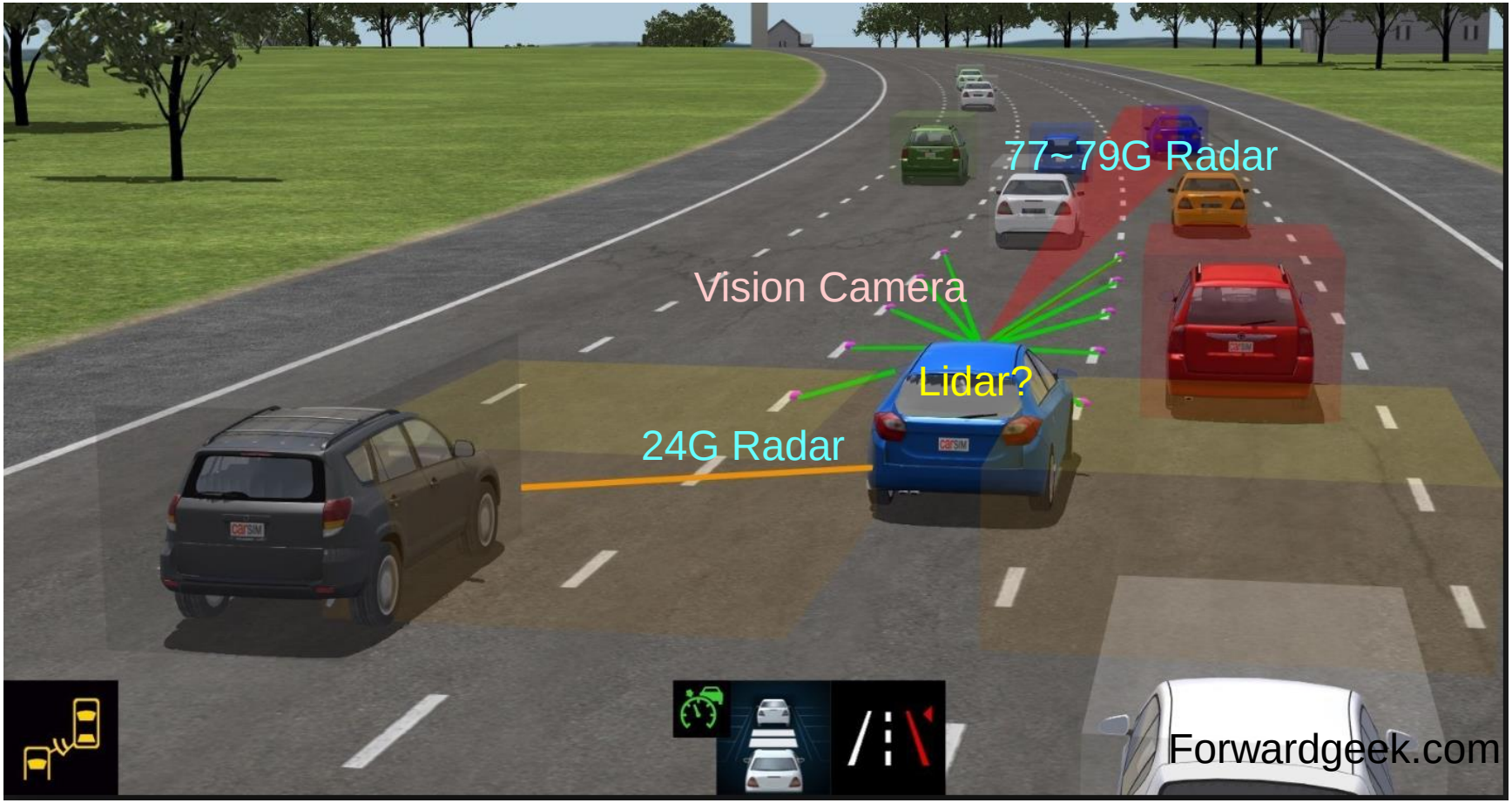
2016 2019

Advanced Driver Assistance Systems Market Revenue, By Years, 2015-2021 ($Billion)



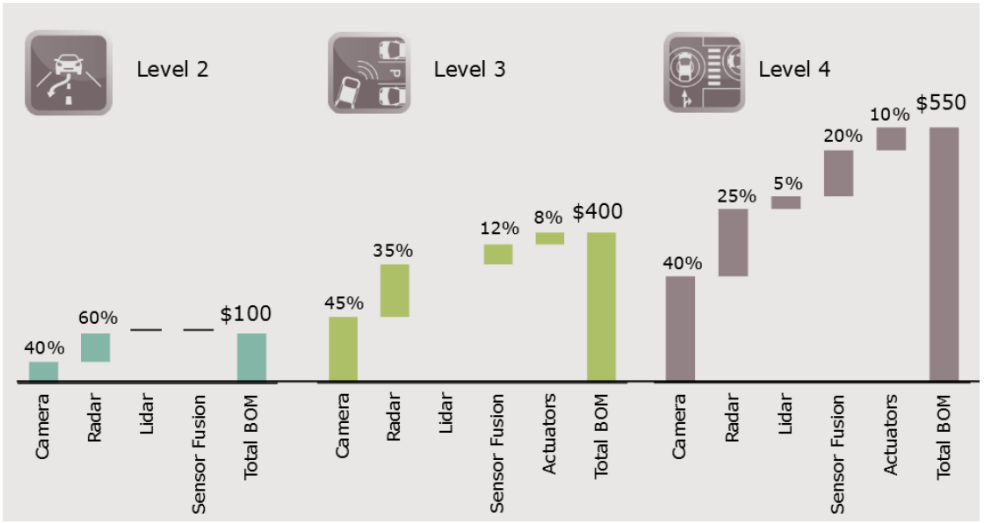
Source-IndustryARC Analysis and Expert Insights

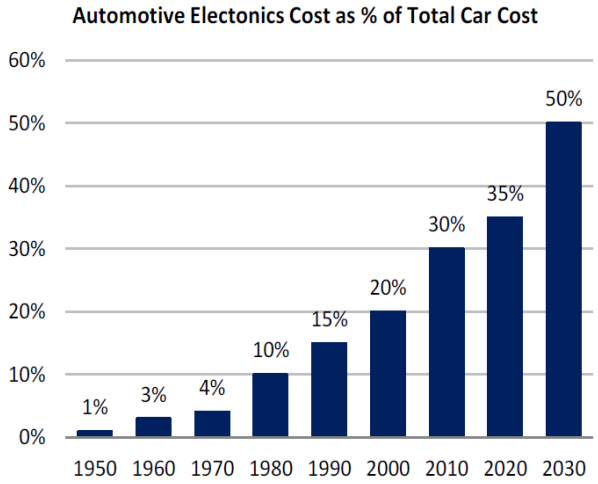
ADAS 核心零件



ADAS 應用發展

Pure Semiconductor Content for ADAS per Level of Automation – A 5x Increase in Content with Just ADAS





Source: Infineon Company Presentation February 2016, PWC analysis

ADAS 發展與法規

Levels to Driverless Cars

NHTSA Levels of Automation						
NHTSA Levels of Automation	Level 0 No assist	Level 1 Foot free	Level 2 Hands free	Level 3 Eyes free	Level 4 Mind free	Level 5 Driver free
	Driver Only	**Assisted**	**Partial Automation**	**Conditional Automation**	**High Automation**	**Driver Less**
	No Vehicle Autonomy/Warnings	**Vehicle Provides Driver Info/Warnings/ Longitudinal Guiding**	**Vehicle Integrates Detection/Response/ Lateral Guiding**	**Vehicle Monitor/ Driver Takes Control in Emergency**	**Vehicle Handles All Tasks in Specific Situations**	**Fullly Autonomous/ Connected Vehicles**

Source: Autoliv, Mizuho Securities research

The Roadmap to Driverless Cars

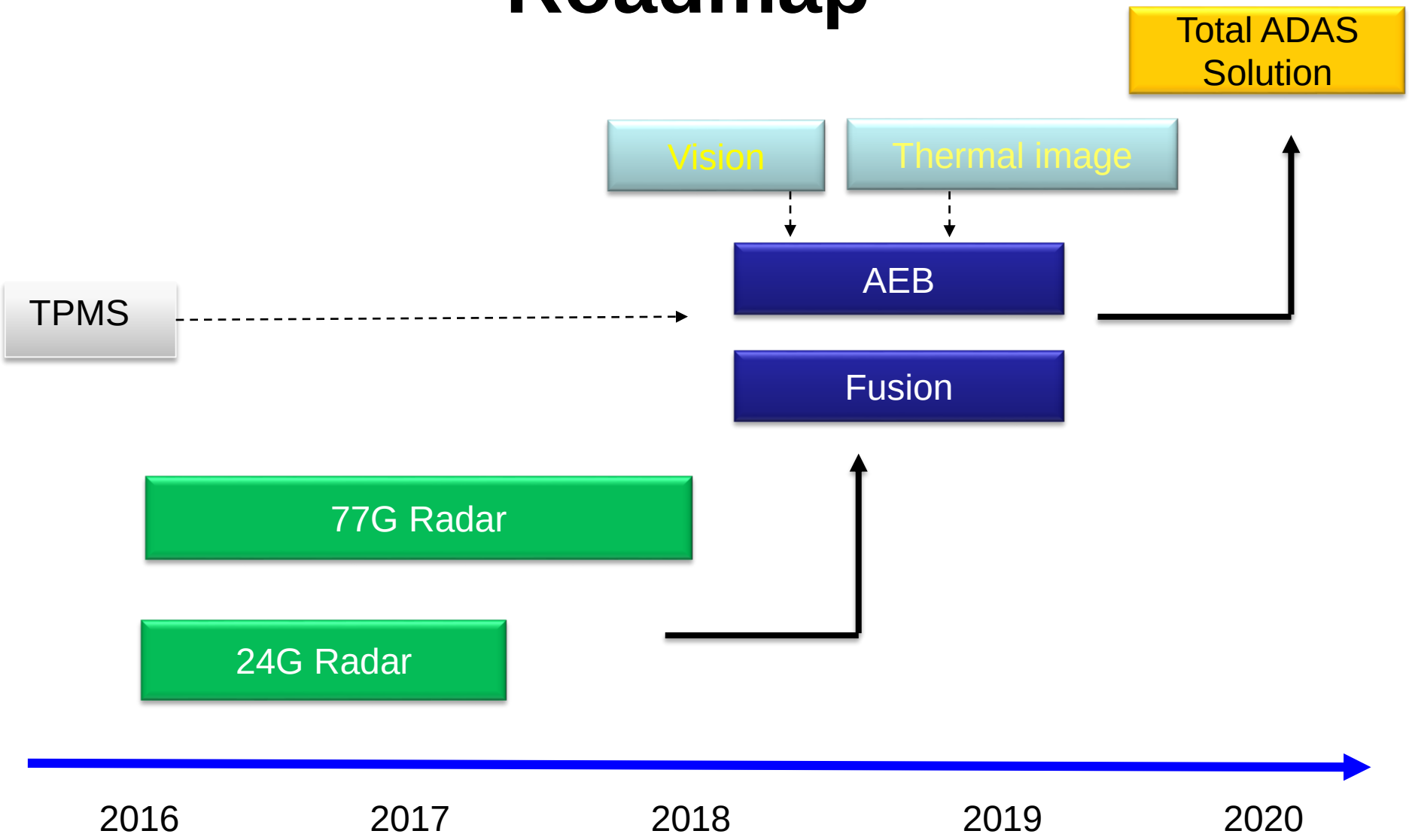
NCAP (New Car Assessment Programs) - Driving Towards Zero Accidents							
		2014-15	2016-17	2018-19	2020	2025	2040
Major Global Safety Mandates (NCAP)		AEB (Vehicle Collision) LDW	AEB (Vehicle Collision)	AEB (Pedestrians/Night) **AEB** (Bike/Crossing Collision AEB (Vehicle/Crossing Collision)	**ADAS Level 2, 3**: pratical automated driving, automated driving in specific conditions	**Human Interface** Accident Free No traffic jams Movement support	**Fully Automated**
		AEB (Vehicle Collision) **LDW** (Lane Departure Warnings)	AEB (Pedestrians/Day) LKA (Lane Keep Assist)				
		**FCW** (**Front Collision Warning)** **LDW**	AEB (Vehicle Collision) AEB (Pedestrian/Day)	**AEB (Pedestrians/Night)**			

Source: Company Reports, Denso, National Highway Transportation & Safety Administration (NHTSA), Mizuho Securities research

毫米波雷達之技術優越性

要有效解決前方追撞及盲區碰撞的重大交通問題，歐美日各國皆極力發展『汽車防撞警示雷達系統』，但現行測速雷達採用的訊號，包括超音波、雷射、紅外線與影像等技術，都無法克服天候影響導致訊號衰減，因而降低偵測距離的效能，只有**毫米波汽車雷達**，受到的天候影響最少，也被稱為『**全天候雷達**』。

Roadmap


Total ADAS Solution
Vision
Thermal image
AEB
TPMS
Fusion
77G Radar
24G Radar
2016
2017
2018
2019
2020

競爭優勢

- 擁有24GHz及77GHz毫米波雷達核心技術.
- 技術完全自主，包含硬體、演算法、軟體.
- 完整之開發設備與自動化產線.
- 已獲相關車廠合作肯定.
- 以雷達技術為核心, 提供未來完整ADAS方案.

Q&A