

TanE Wireless

Good Safty, Happy Family

TanE 5G MiFi 01
NB-IOT | AI | 5G Mobility

TanE AIOT Cop.

竹寶智能科技股份有限公司



目錄

01	02	03	04	05
公司簡述	BP 商業模式	蜂巢式車聯網 車電產品	財務預測	Q&A

TanE C-V2X 01/02





TanE wireless was established by 6 engineers, who devoted to researching wireless devices for more than twenty years. Based on two decades of experience, we developed networking and new mobile wireless communication techniques at the beginning of Entrepreneurship in 2019. In the present, we apply our technique of new wireless communication to NB-IOT Tracker, 5G AI Dash Cam, 5G MiFi and more wireless products.

The purpose of our company is "Good Safety, Happy Family".

By holding this belief, we hope our technique and products will bring people more convenient, healthier and safer life.



Timeline



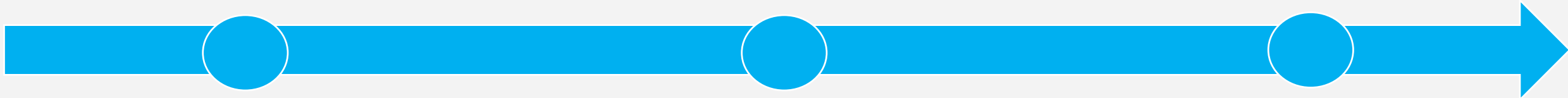
Established



Station at Hsinchu
Science Industrial Park



Integrate electronic
system of electric vehicle



January 22 , 2019

November 11 , 2021

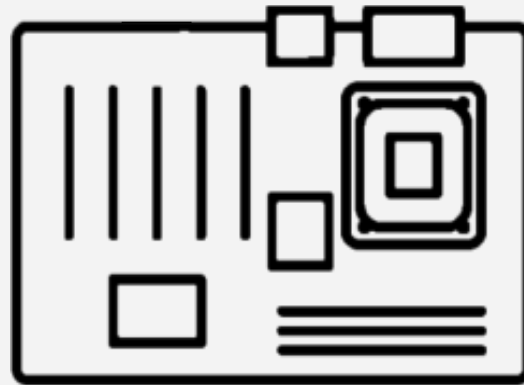
In next three years



Our Core Technology



Ant 、 RF
Development



BB
Development



SW 、 AI
Networking
Development



July, 30 . 2019

TanE AIOT **Wins The SBIR Innovative Idea Award** of Taiwan,2019 !

November, 11 . 2021

Marched into **Hsinchu Science Industrial Park (HSIP)**

March,24 . 2022

Participated in **La French Tech Taiwan -"How Can Innovation Improve Our Lives in the City? "**

Live link :

<https://www.youtube.com/watch?v=GSISgtifi98>

(2:01:22--2:16:59 TanE AIOT presentation)

TanE AIOT practices innovation through technology, and drives the wireless progress of global technology through the new generation wireless communication system. "Integrity" and "responsible operations" are the two cornerstones of TanE AIOT 's business, and its unwavering commitment.

TanE AIOT continues to create an inclusive workplace, care for the disadvantaged, and build a responsible supply chain to serve as a positive force in society, and to fulfill the Company's responsibilities as a corporate citizen. Bearing a dedication to "diligently doing everything right", we never stray from the path of pursuing sustainability and the mutual good, and always seek a way to improve and move forward.



“ Our mission is to be the trusted technology and capacity provider of the global wireless communication system industry for years to come. ”



Operating Strategy



1. Integrity
2. Integrity means
3. Focus on our Core Business: [Wireless Communication System](#)
4. Globalization
5. Long-term Vision and Strategies
6. Treating Customers as Partners
7. Building Quality into all Aspects of our Business
8. Unceasing Innovation
9. Fostering a Dynamic and Fun Work Environment
10. Keeping Communication Channels Open
11. Caring for Employees and Shareholders, and Being a Good Corporate Citizen

January 22, 2019



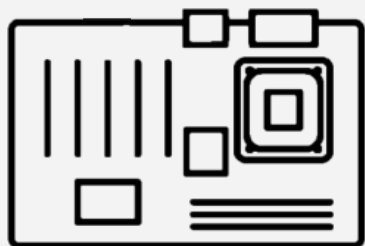
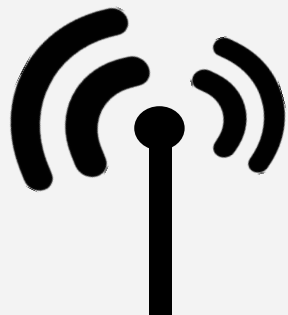
November 11, 2021



In three years

Integrate
electronic
system of
electric vehicle

Our Core Technology



Software

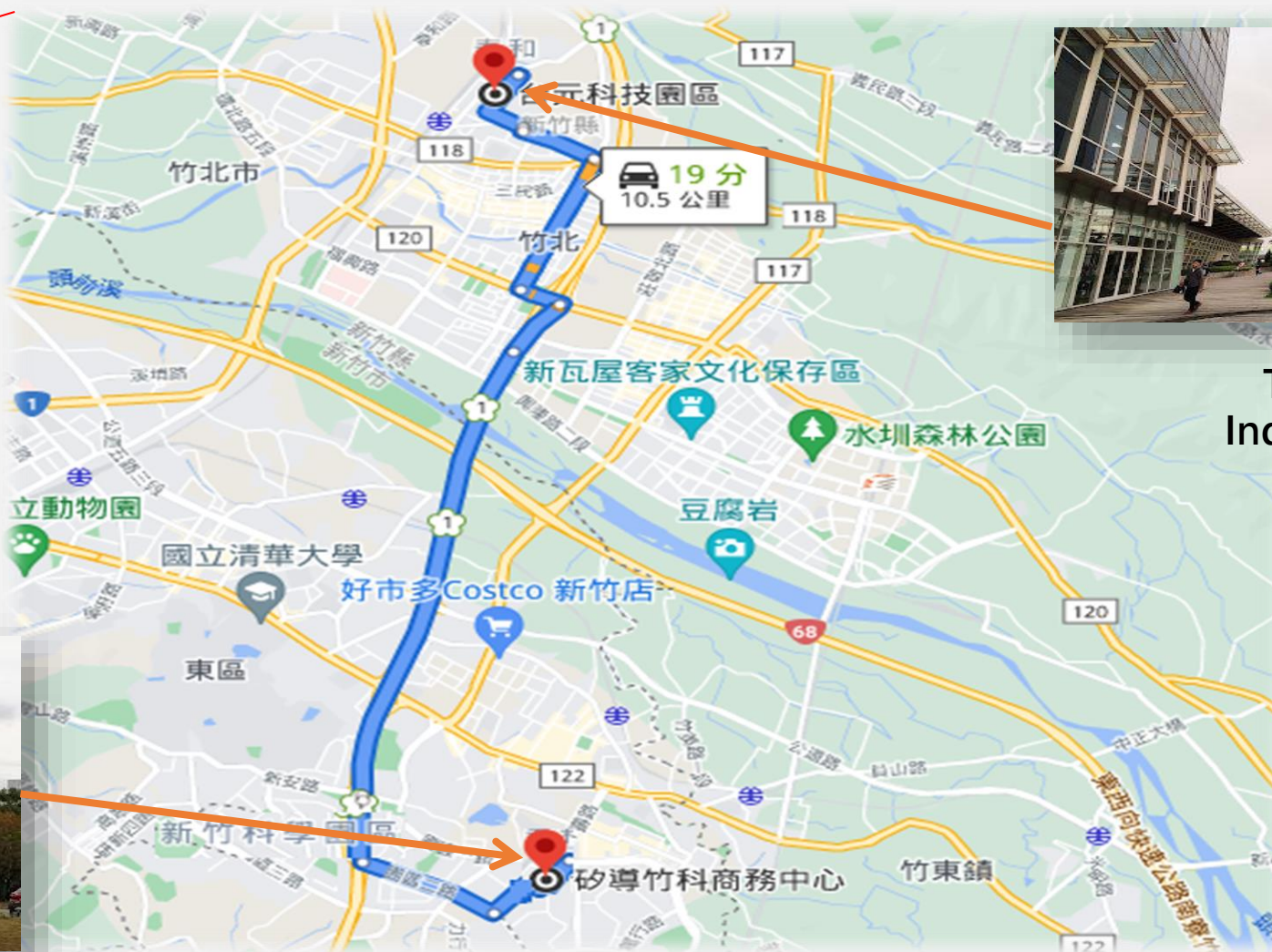
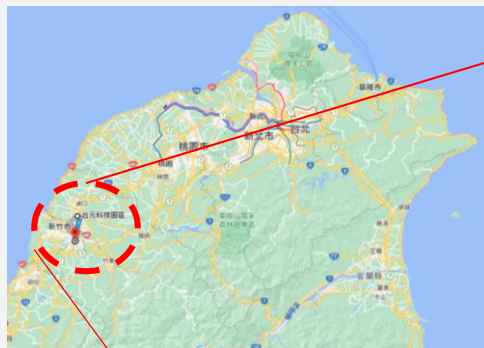


TanE Wireless

Good Safety, Happy Family



TanE AIOT Offices Location



Tai Yuen Hi-Tech Industrial Park Office

Hsinchu Science Industrial Park 3rd Office





OEM Factory Partner



➤ TanE AIOT Corp.

Founded on 22 Jan. 2019

Capital: USD 1 million

HQ in HsinChu Science Park ,Taiwan

Company products majored on

NB-IOT/ 5G AI Smart Cam ,5G Mobility Product Development

SP (Brazil)

108K ft² =10K meter²



➤ **Partner**(Arima Comm)Factory Employee:

4,000 persons

➤ **Partner**(Arima Comm)RD:

450 persons in Taiwan 400 persons in China

Partner Arima Comm Wujiang (China)

828K ft² =77K meter²





Our company's products include :

- TanE Wireless 5G MiFi Product
- TanE Wireless NB-IOT Tracker Product
- TanE Wireless TanCa Full Wireless Cam
- TanE C-V2X (Cellular Vehicle-to-Everything)



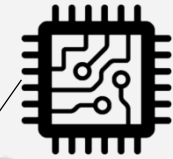


TanE Wireless 5G MiFi Product



5G NR: 1.8 Gbps/300 Mbps

LTE CAT18 FDD-LTE 1.2 Gbps/150Mbps



Qualcomm SDx55

Li-ion Battery

5000mAh



About 8H



5G/4G/3G

802.11 a/b/g/n/ac/ax

TanE wireless 5G Mifi Product



TanE NB01 Tracker Product

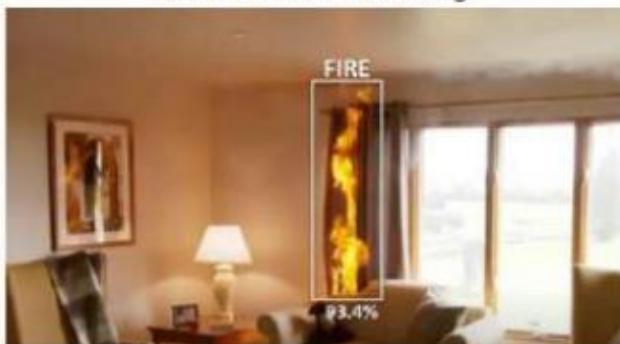


TanE Wireless TanCa WiFi AI Cam



AI feature set

Real-Time Fire Warning



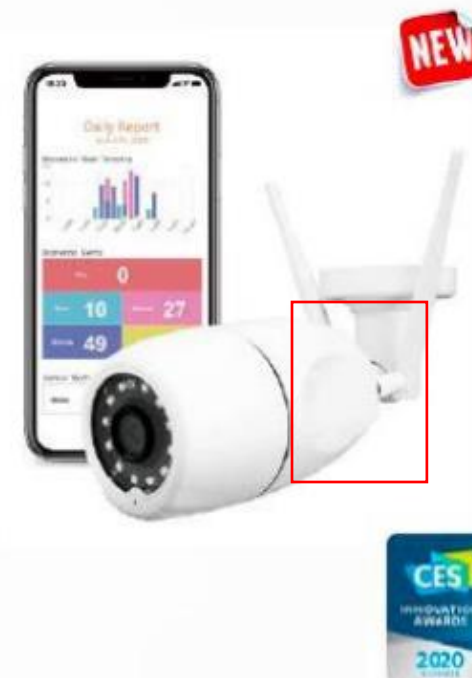
Human and Car Detection



Real-Time Face Recognition



Human and Pet Detection





TanCa Wireless

**For Home Security
Total Solution**



TanCa 01 (WiFi)



叮咚 wireless Cam

TanCa 02 (WiFi)

TanE wireless



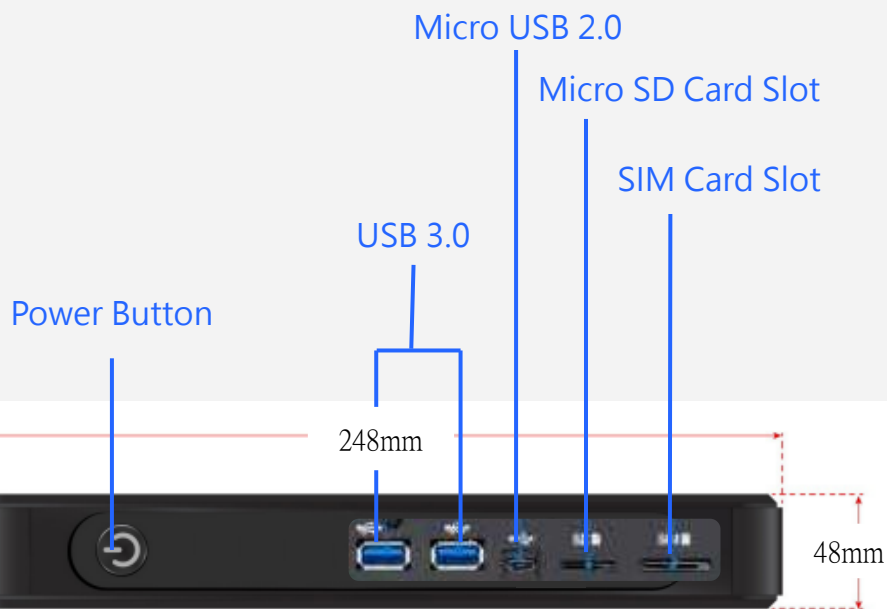
小叮噐 wireless Cam

TanCa 4G (LTE) or TanCa 05 (WiFi)

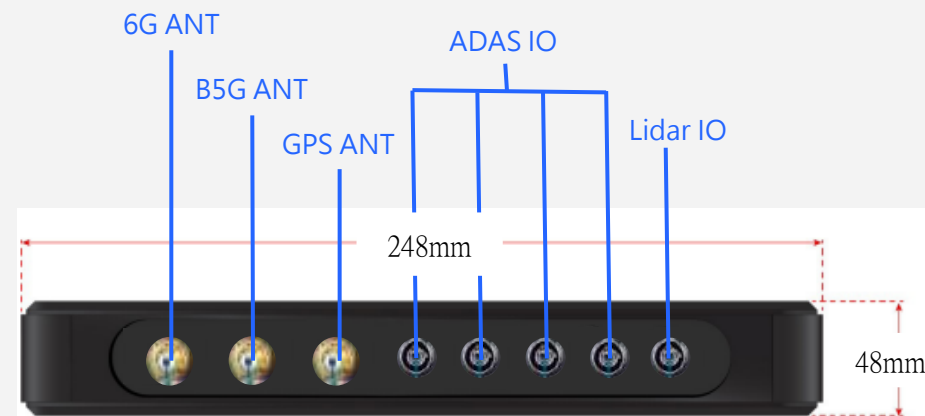
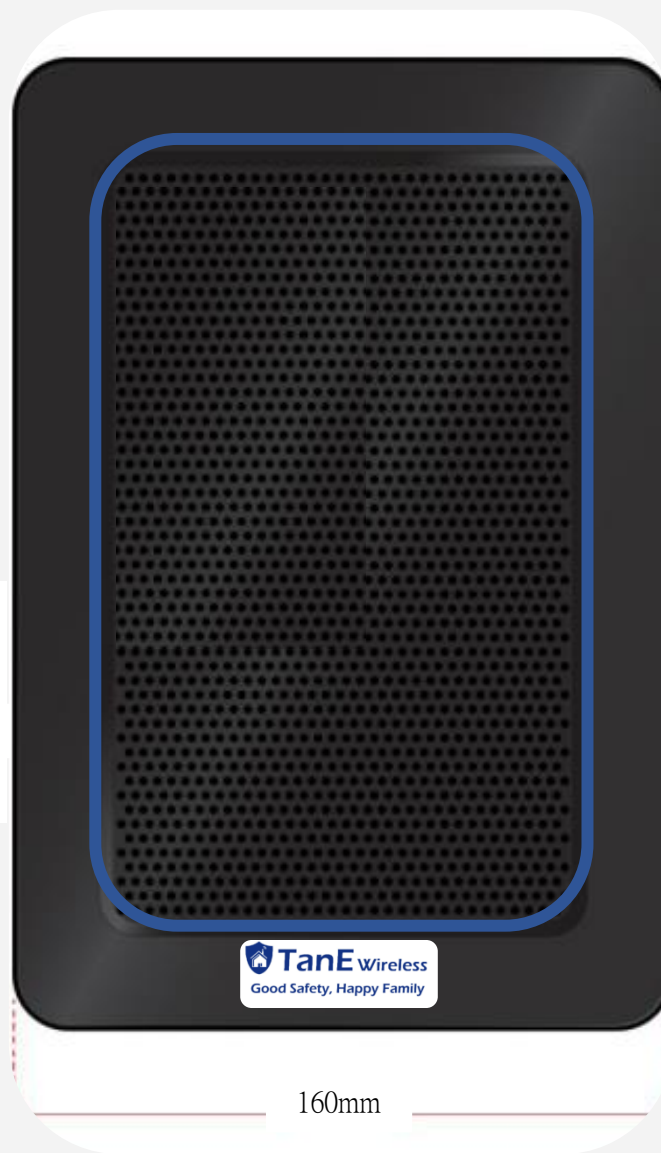


Solar wireless Cam

03 TanE C-V2X (Cellular Vehicle-to-Everything) OBU



Left Side



Right Side



TanE Wireless

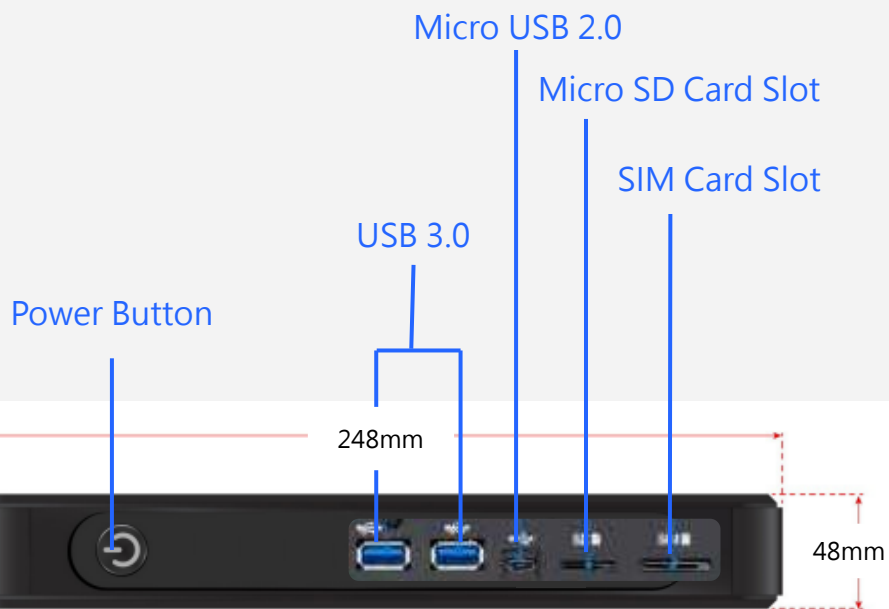
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TanE Cellular Vehicle-to-Everything (TanE C-V2X 01)

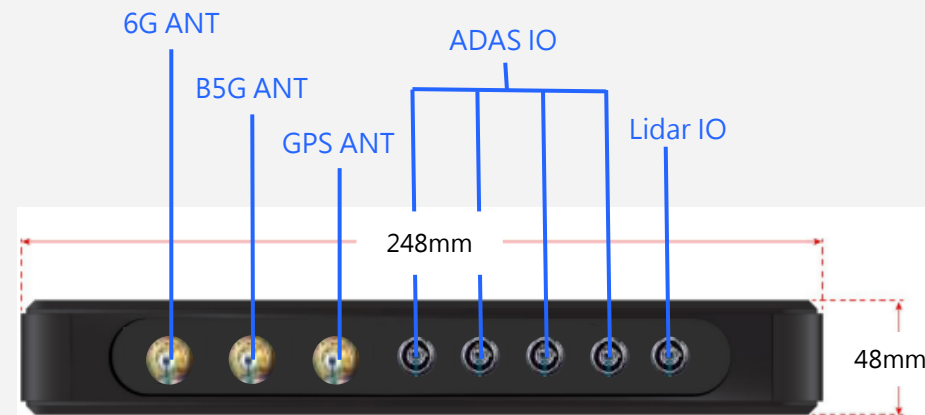
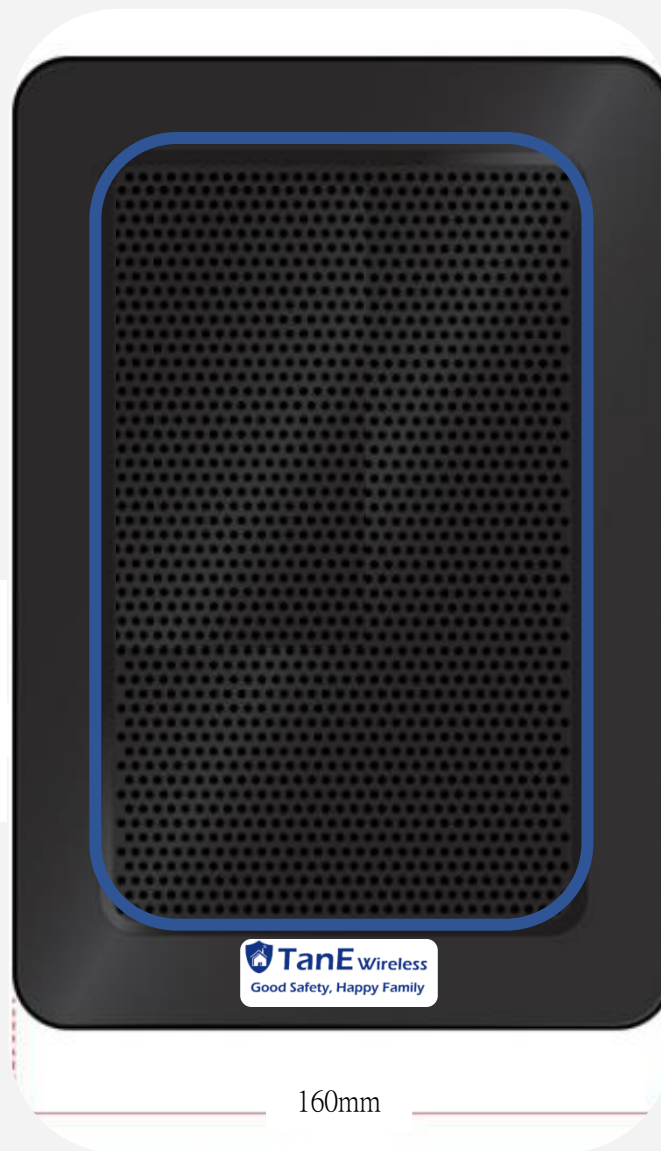




Application Scenarios



Left Side



Right Side



Level	Name	Describe
Level 0	No Driving Automation	The performance by the driver of the entire DDT. Basically, systems under this level are found in conventional automobiles
Level 1	Driver Assistance	A driving automation system characterized by the sustained and ODD-specific execution of either the lateral or the longitudinal vehicle motion control subtask of the DDT. Level 1 does not include the execution of these subtasks simultaneously. It is also expected that the driver performs the remainder of the DDT.
Level 2	Partial Driving Automation	Similar to Level 1, but characterized by both the lateral and longitudinal vehicle motion control subtasks of the DDT with the expectation that the driver completes the object and event detection and response (OEDR) subtask and supervises the driving automation system.
Level 3	Conditional Driving Automation	The sustained and ODD-specific performance by an ADS of the entire DDT, with the expectation that the human driver will be ready to respond to a request to intervene when issued by the ADS.
Level 4	High Driving Automation	Sustained and ODD-specific ADS performance of the entire DDT is carried out without any expectation that a user will respond to a request to intervene.
Level 5	Full Driving Automation	Sustained and unconditional performance by an ADS of the entire DDT without any expectation that a user will respond to a request to intervene. Please note that this performance, since it has no conditions to function, is not ODD-specific.

Equipped with Qualcomm Snapdragon 820A digital cockpit chip:

- Digital cockpit
- Cellular car networking C-V2X
- ADAS and autonomous driving
- Vehicle-to-cloud management

Internet of Vehicles

→ Low latency 4G, 5G

→ Wi-Fi, Bluetooth

→ High precision positioning

→ C-V2X

→ Cloud Connectivity Solutions

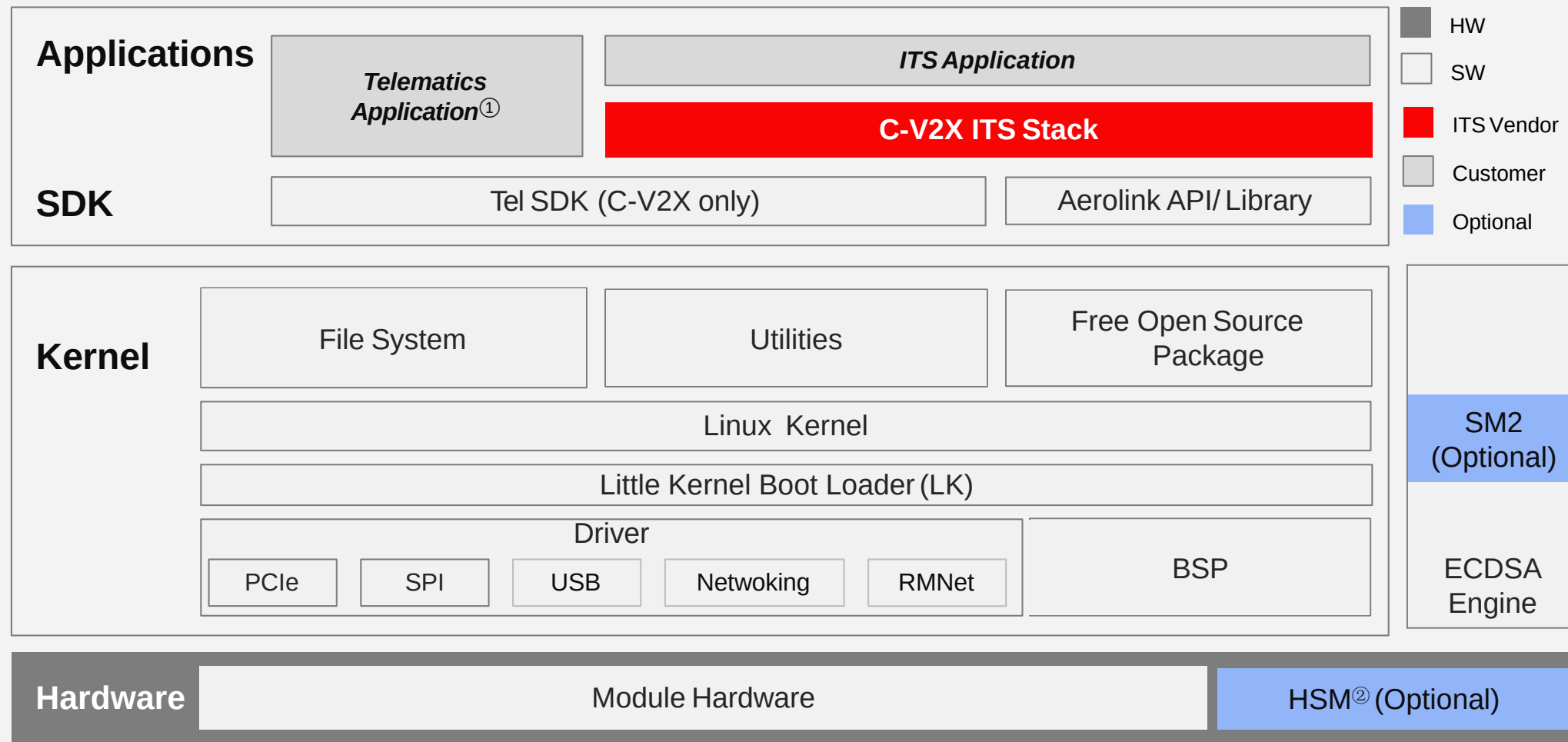
01 TanE C-V2X 01 Automotive products - Specification



TanE C-V2X 01 Model	Physical
3GPP Rel-15 NSA/SA Operation, Sub-6 GHz	Dimensions (W / H / D ; mm) : 248.0 x 160.0 x 48.0
5G & LTE Bands* : NA / EU / CN / JP / Latin America	IP4X
C-V2X Communication	Chassis Material : Aluminum
Precise GNSS : L1 + L5 (Default)/ L1 + L2* (Optional) Dead Reckoning : QDR 3.0	I / O Port : 1000 BASE-T x 1 CAN FD x 1 Speaker Out and Mic in Power in RF (LTE-A/ 5G NAD, EAP, Wi-Fi/ Bluetooth) Antenna interfaces USB interfaces (U)SIM interfaces
WiFi 802.11 a / b / g / n / ac / ax, 2 x 2 MIMO support (2.4G / 5G Dual Band)	
BT5.2	
ToTal Memory8 Gb + 8 Gb MCP (1 GB + 1 GB)	
IMU : Accelerometer, Gyroscope and Magnetometer	Operation Temperature : -40°C ~ +85°C
eCall	ISO / TS-16949, ISO-26262

Solutions :

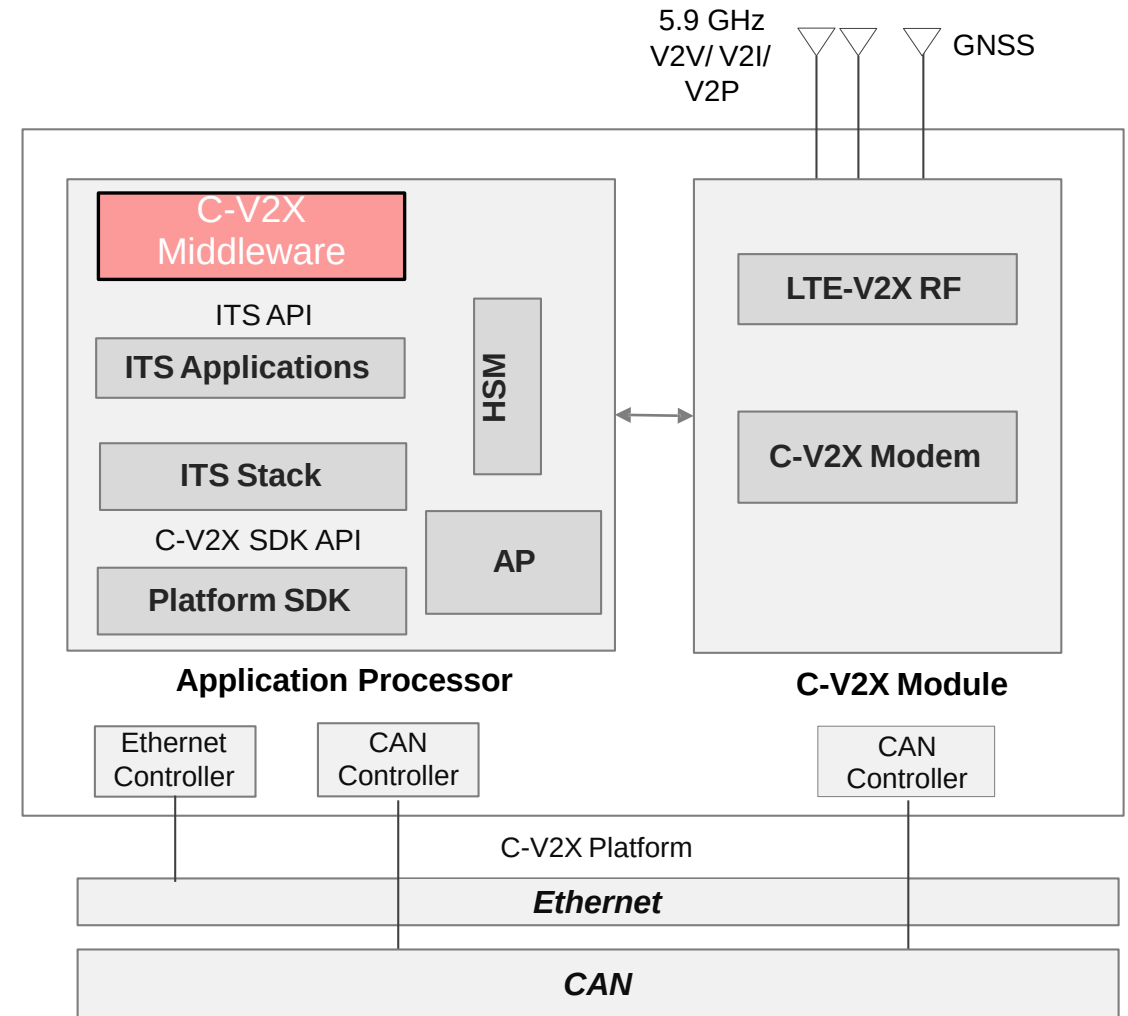
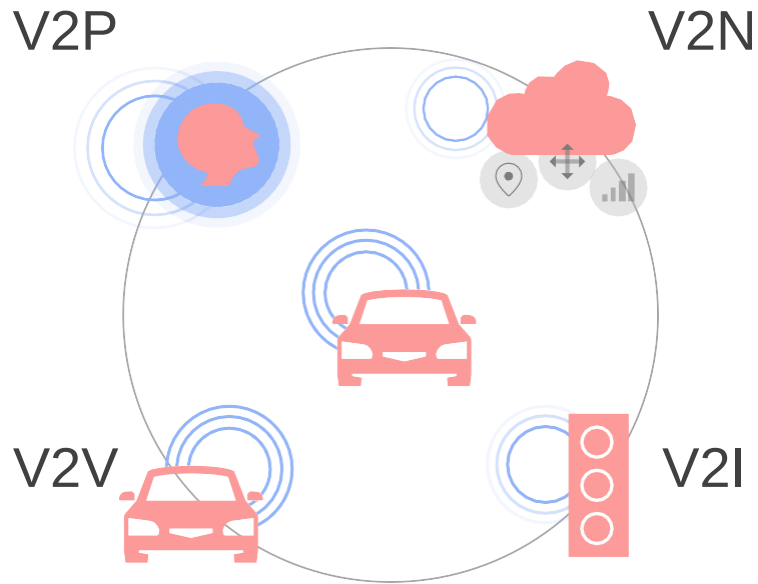
ITS Stack + High Performance HSM

ITS Stack + SM2 + Aerolink + Cost-efficient HSM^{optional}

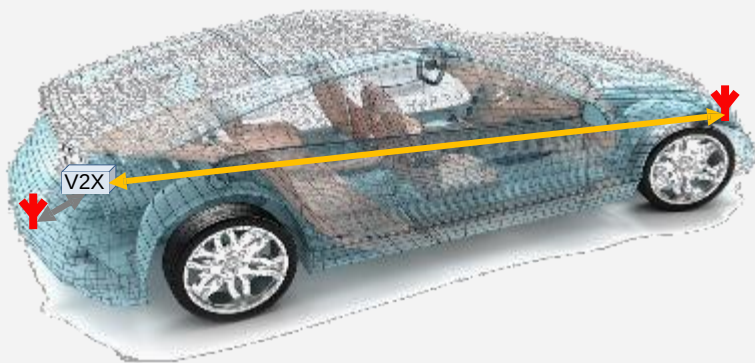
01 TanE C-V2X 01 Automotive products - Specification



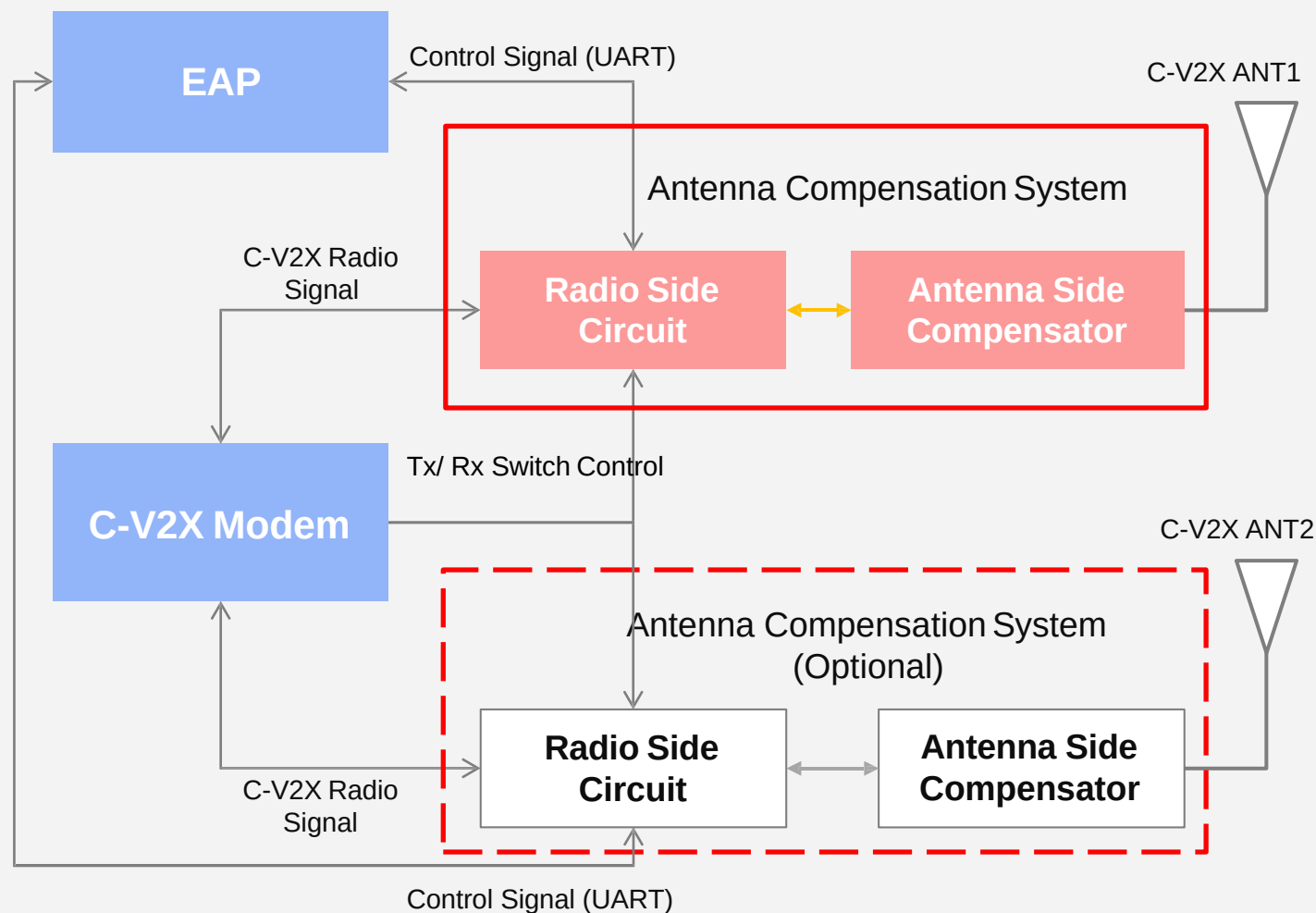
Vehicle-to-Everything (V2X)



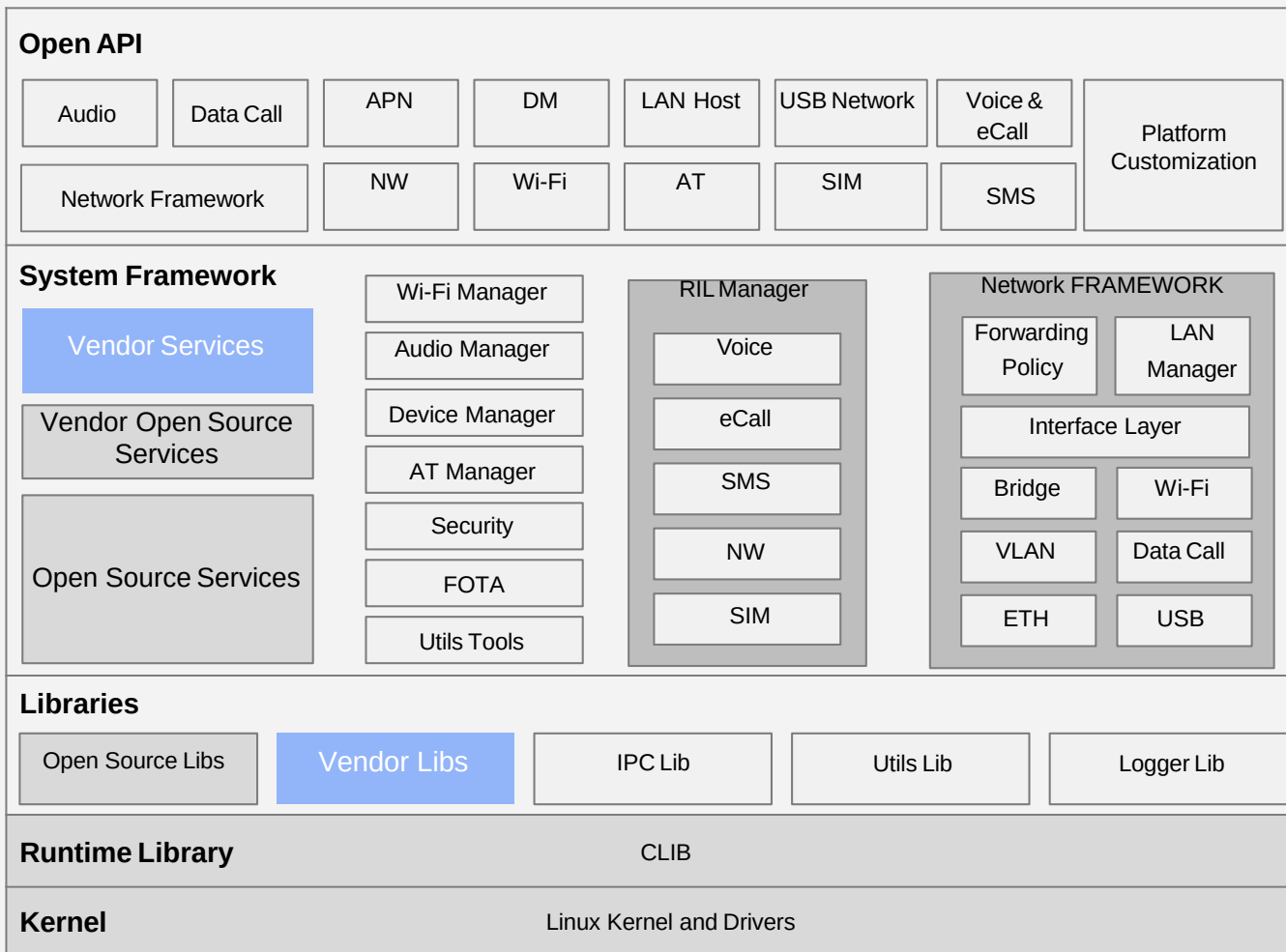
Quectel C-V2X Antenna Compensation System



- Long cable length between TCU and antenna housing results in losses.
- System TRX performance degrades according to the length and quality of cable.
- Tx Power and Rx Sensitivity degrades dB-for-dB with cable loss.
- Compensator improves Tx and Rx performance within the cable loss range.



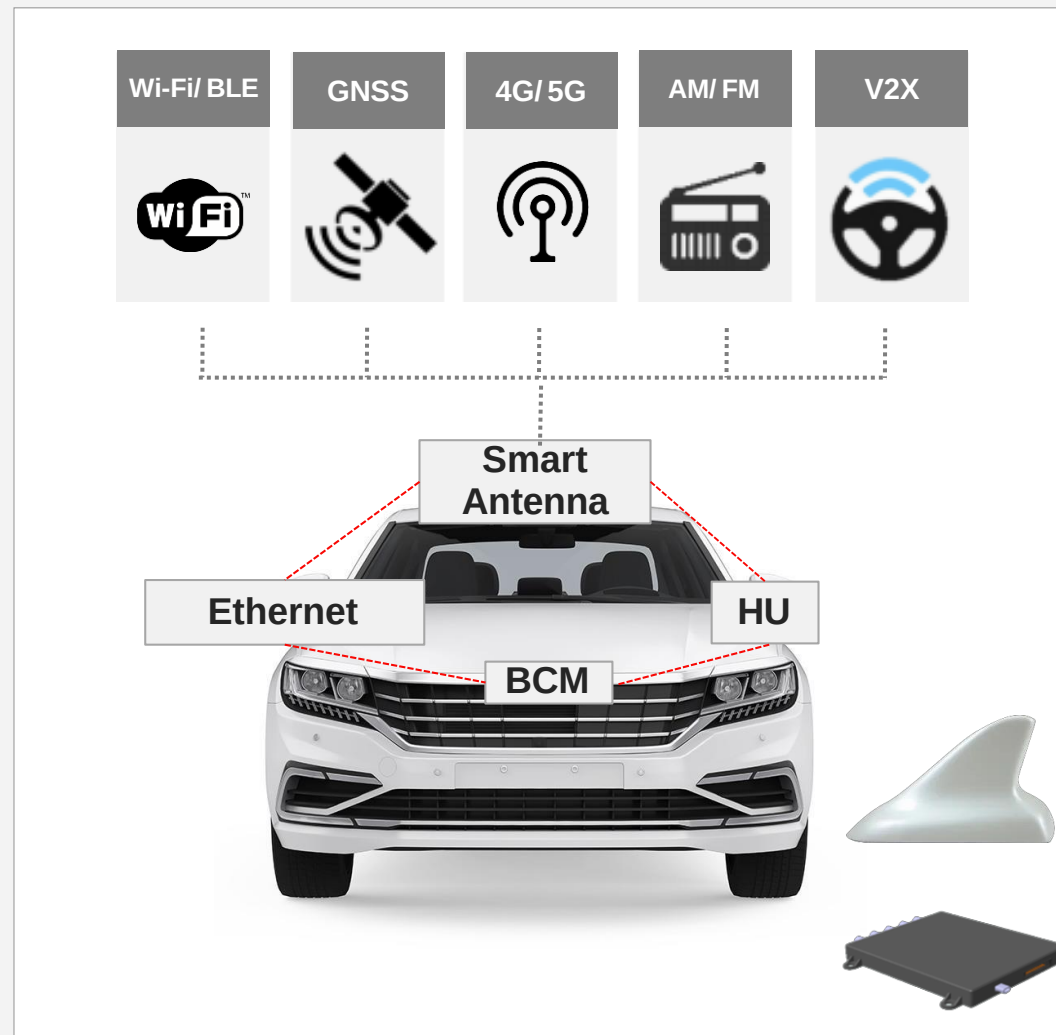
01 TanE C-V2X 01 Automotive products - Software Architecture



- **Stability:** Implemented for more than 5 years on automotive modules
- **Rich Features:** Telematics-oriented features for more than 30 car OEMs
- **Reliability:** A/B system updates ensure lifetime-extended MCP and enhanced reliability
- **Annual Maintenance:** Annual maintenance release available for customers
- **Flexibility:** Feature requests responded and supported with high efficiency

An adaptive antenna array consisting of 5G MIMO, C-V2X, Wi-Fi/ Bluetooth, GNSS, AM/ FM and other units, as well as high-precision IMU and GNSS modules.

- Low latency and broadband communication capability
- Centimeter-level positioning accuracy
- Vehicle routing coordination
- V2X and other services

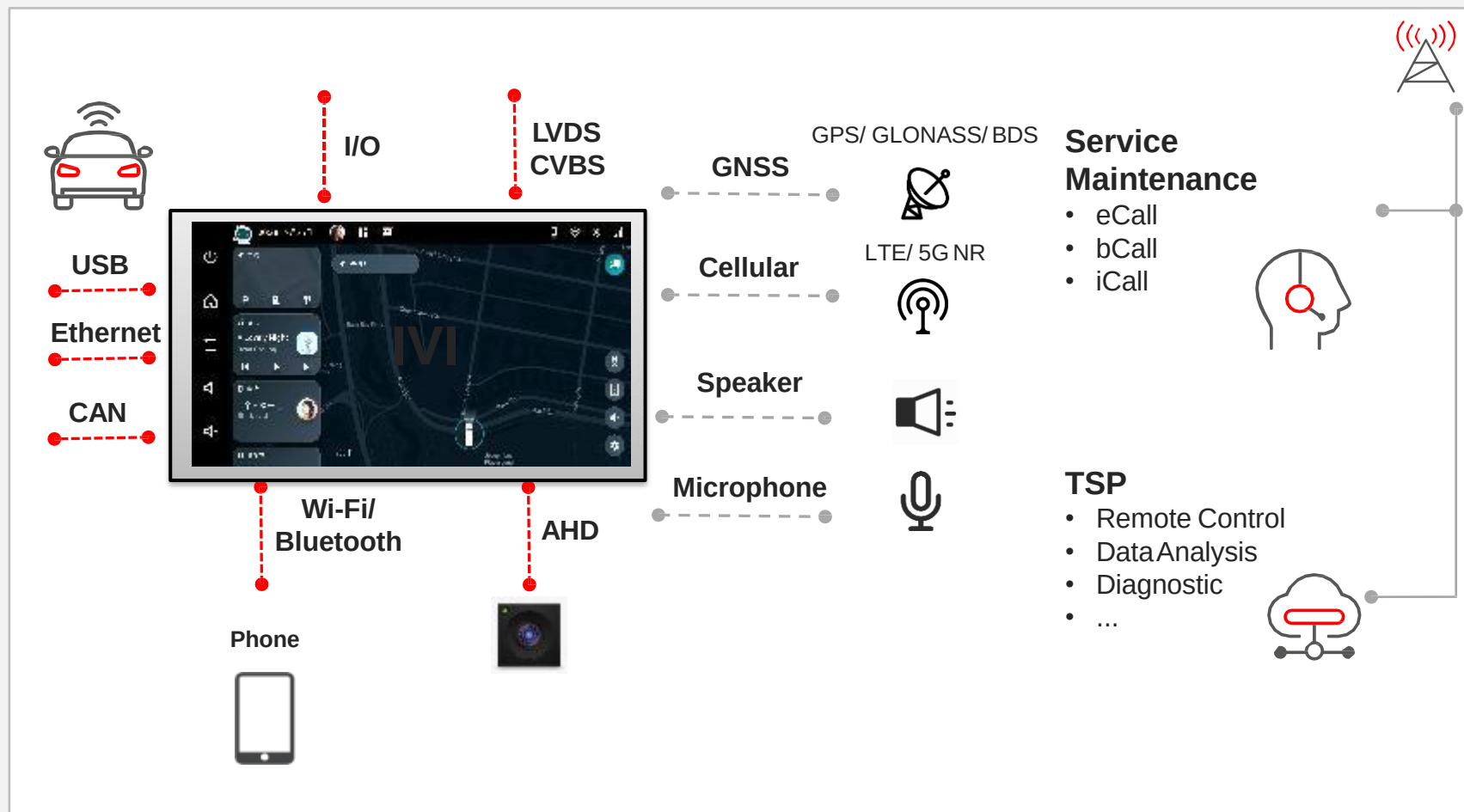


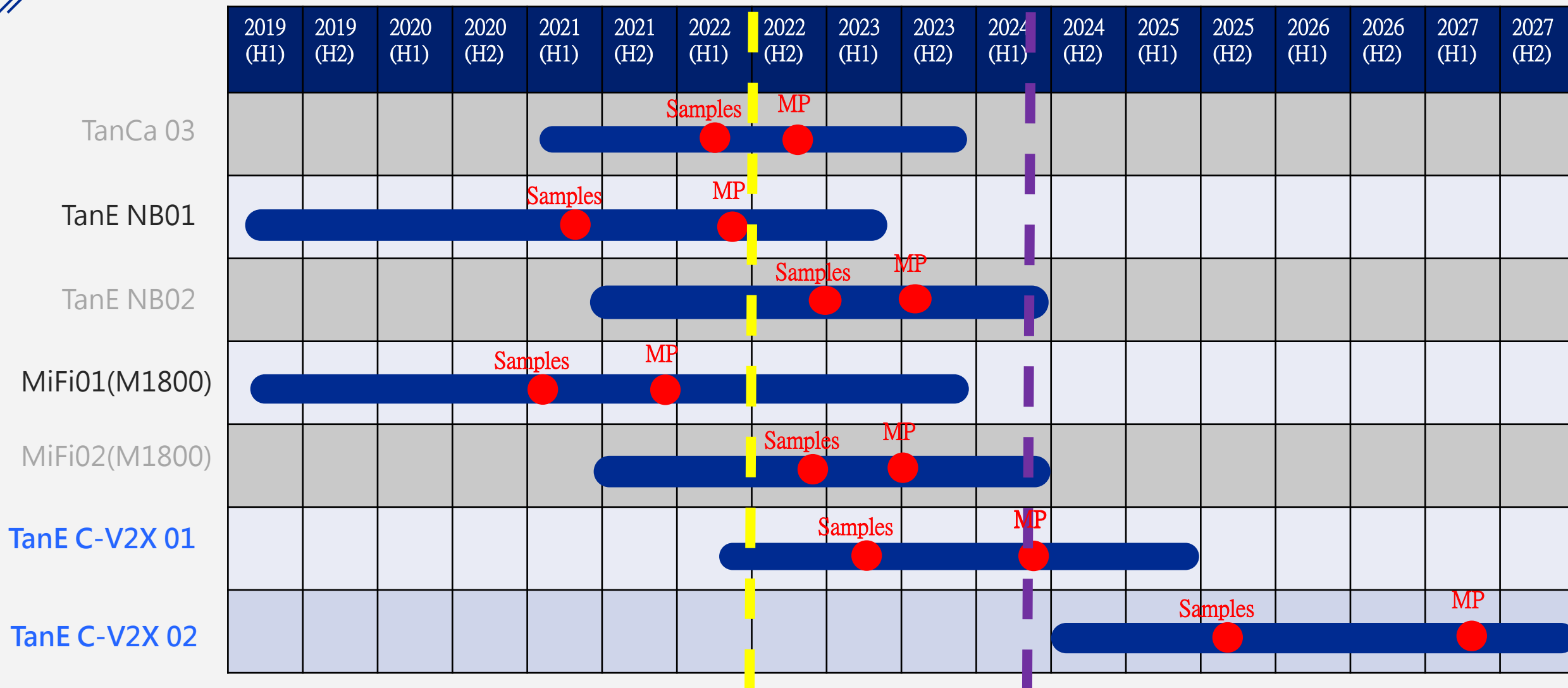
01 TanE C-V2X 01 Automotive products - Connected IVI System



Integrating cellular module, GNSS, Wi-Fi/ Bluetooth functions, the IVI system provides enhanced in-vehicle experience.

- Multimedia audio and video functions
- Real-time navigation
- AM/ FM radio
- Wi-FiAP
- Reverse parking assistance





01

TanE C-V2X 01 Automotive products - Quotation



TanE C-V2X 01 Automotive products	1k	5k	10k	50k	100k	200k
BOM Cost + MVA Cost <u>Transfer Unit Price</u>						

Q&A

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Thank You!

