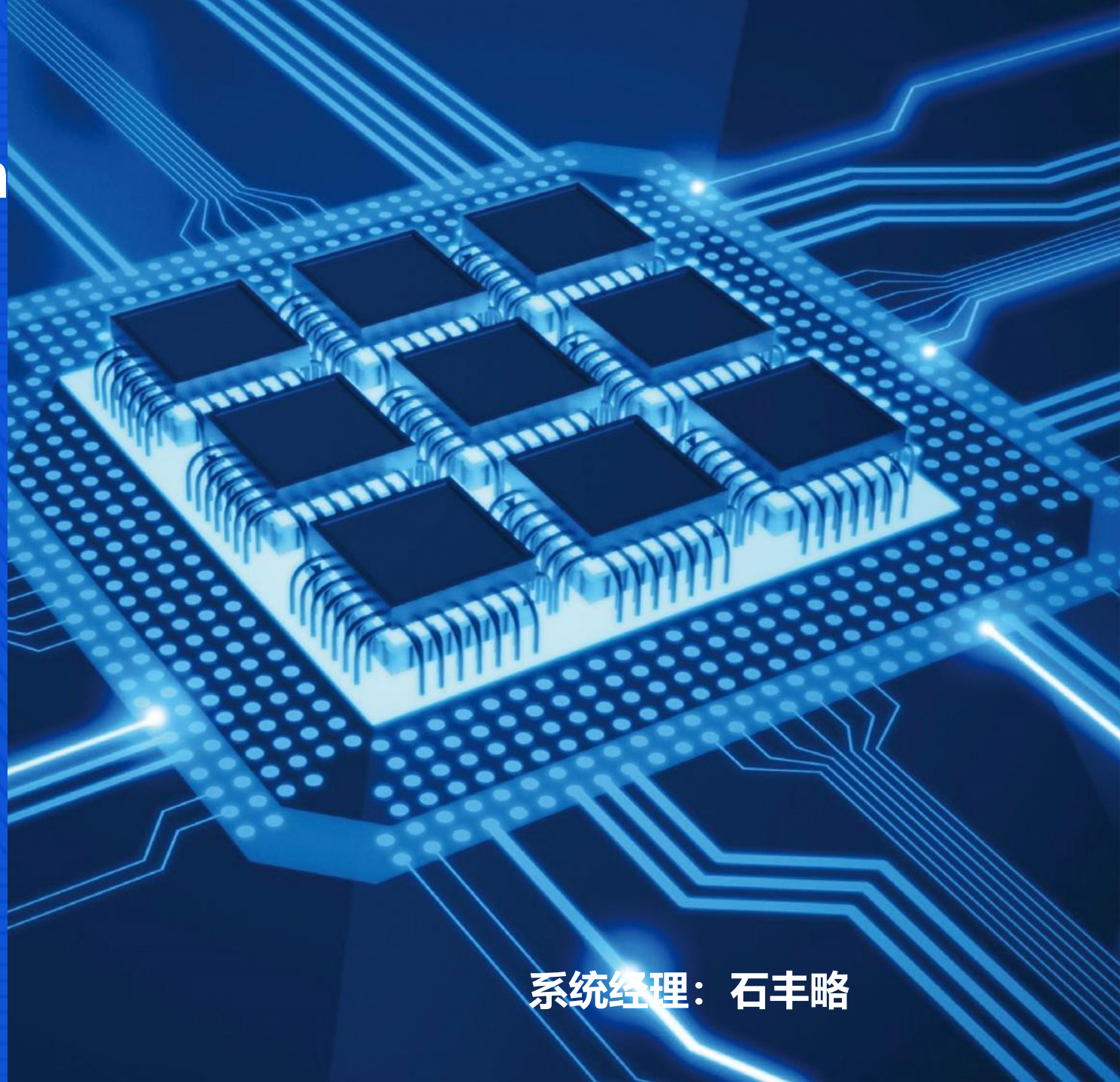


G-Pulse ADCU Solution



G-PULSE



系统经理：石丰略

About G-Pulse

Intron Tech (HKSEx#: 1760.HK)



900+
Employee



600+
Engineer



200+
Master



1000+
Customer



15+
Branch

20-years experience in Automotive electronics

> 10 Million

Automotive controller & sensor

> 6000m²

Engineering Lab

> 65%

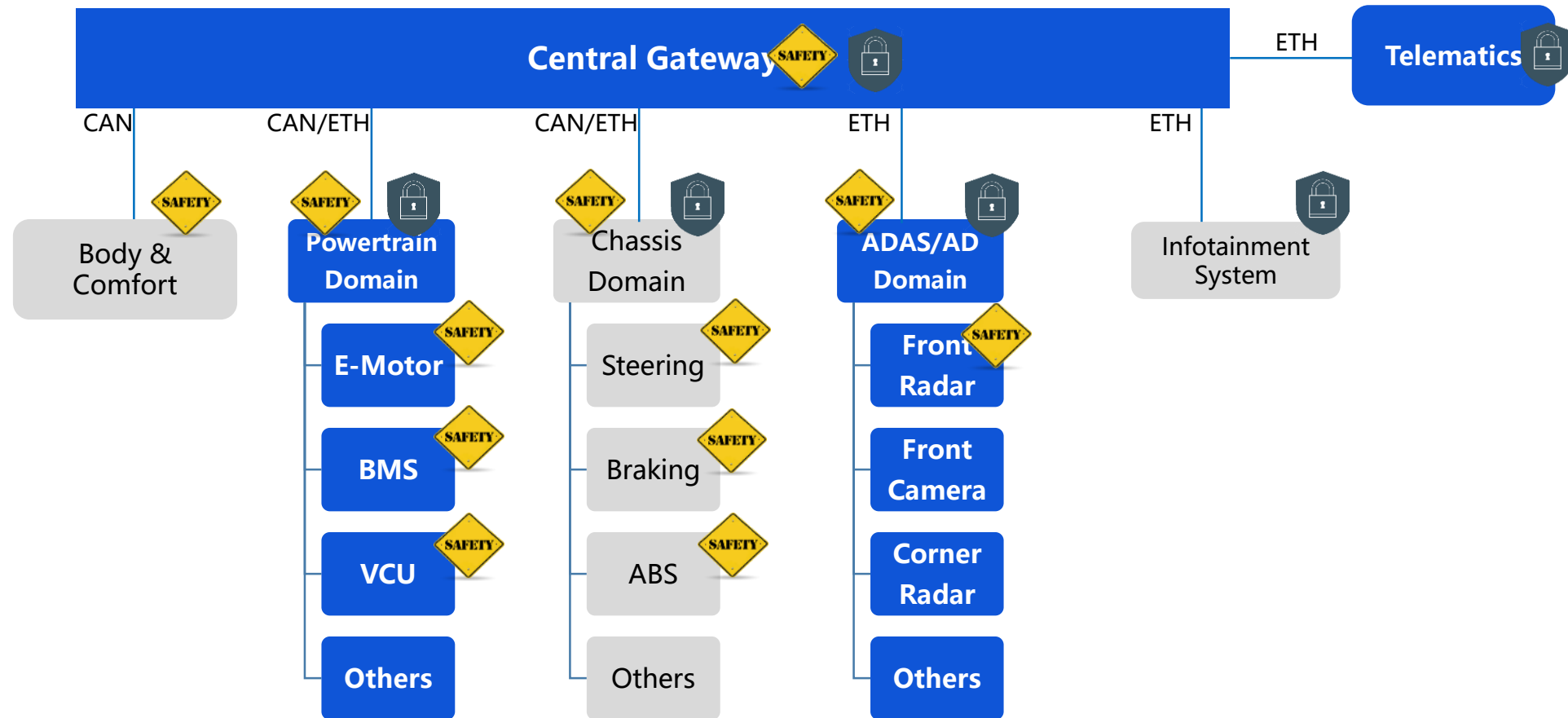
R&D Engineer

> 160

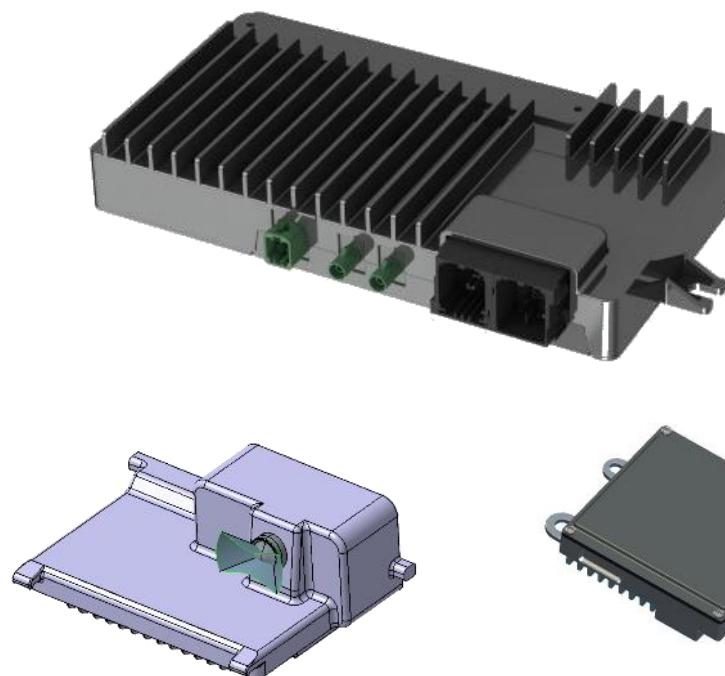
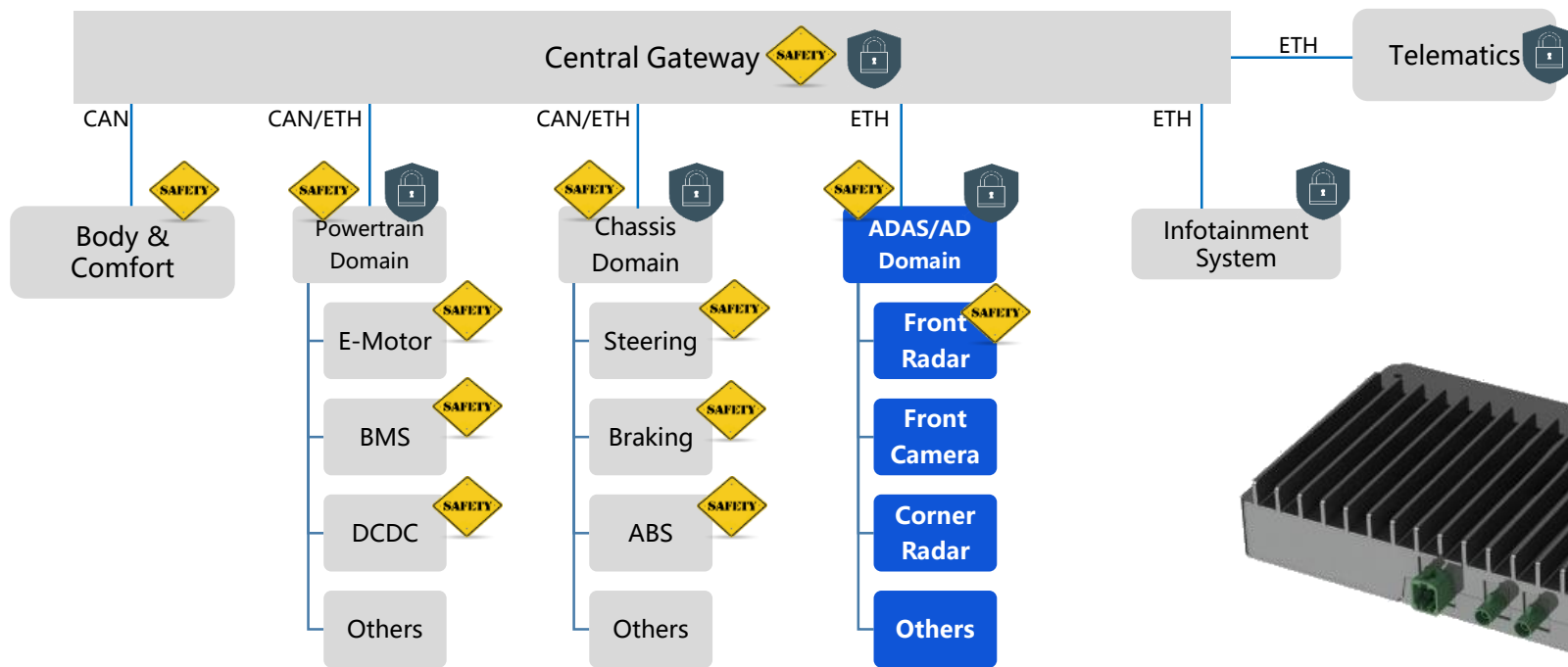
Patent & Copy right

Comprehensive solutions for Automotive Electronics

Comprehensive solutions for Electric Vehicle, Automated Vehicle, and Connected Vehicle.

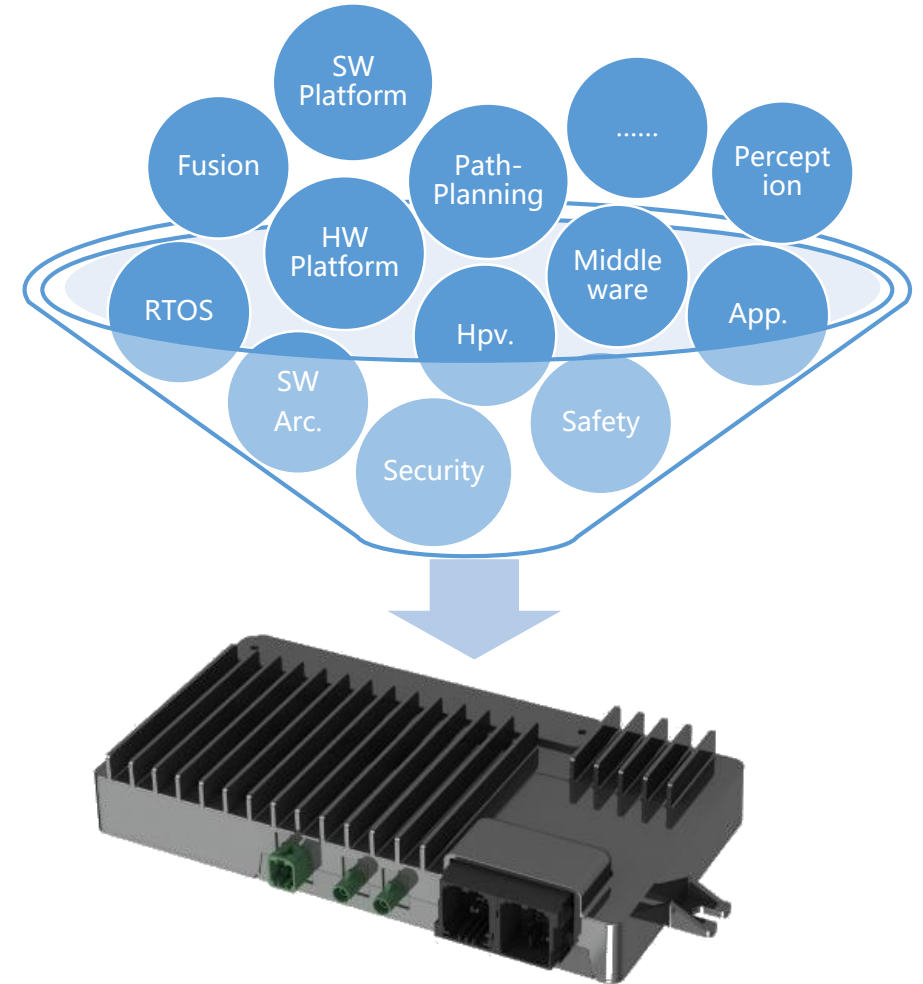


Solutions for Automated Vehicle

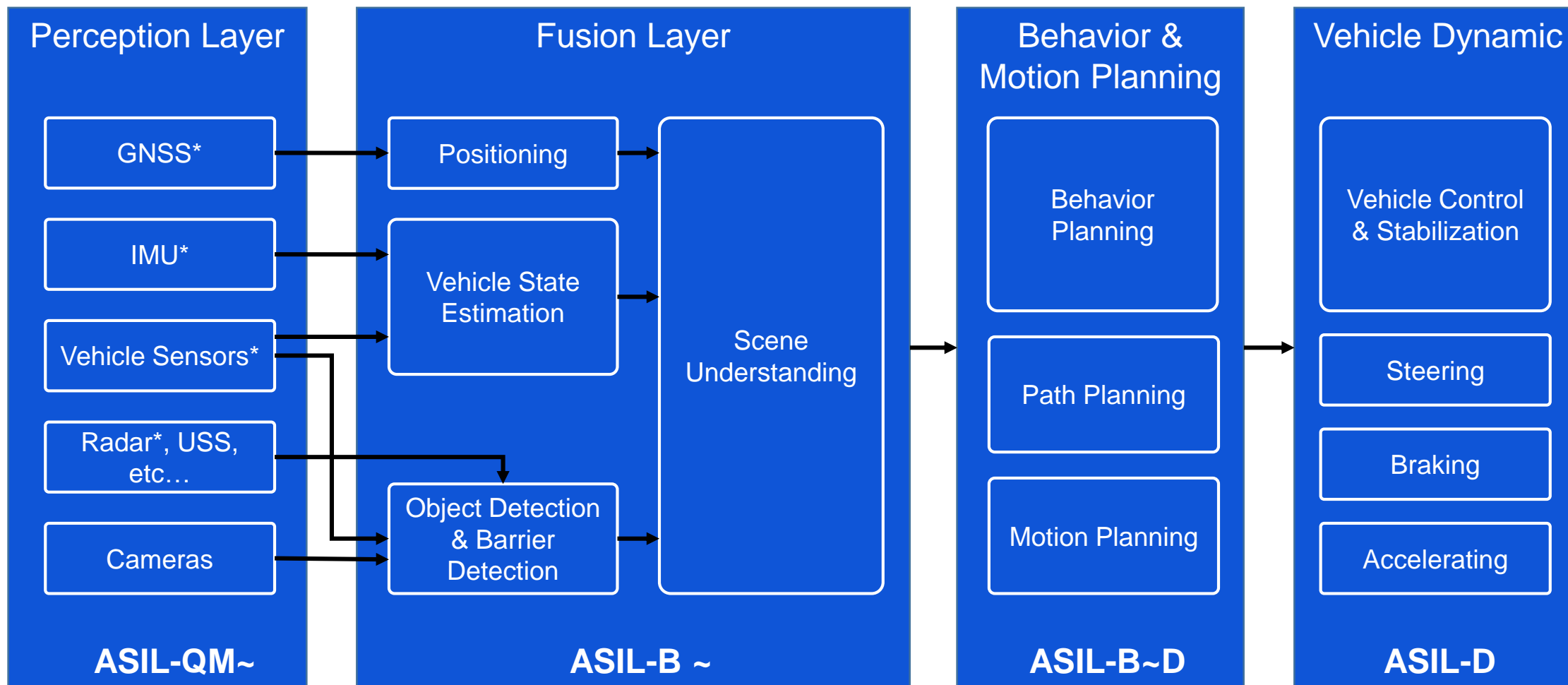


Our focus in ADCU development

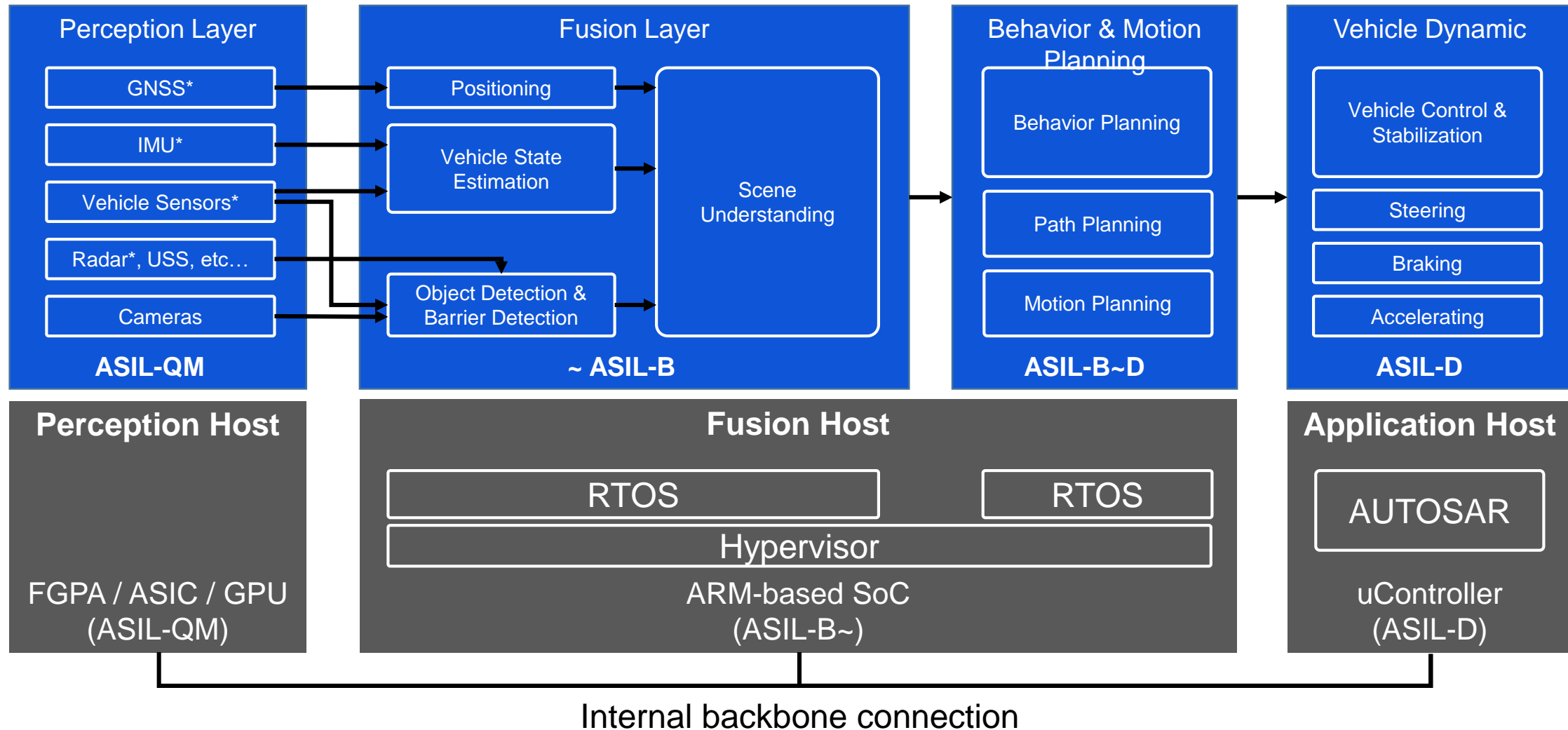
- ✓ Functional Safety & Cyber Security
- ✓ Mass Producible computing platform
 - ✓ HW platform
 - ✓ SW platform (AUTOSAR, RTOS, Hypervisor, MW.....)
- ✓ Test & Validation
- ✓ Continuous Integration & Continuous Delivery



Typical AD Function Topology



CAELUS Architecture for ADCU

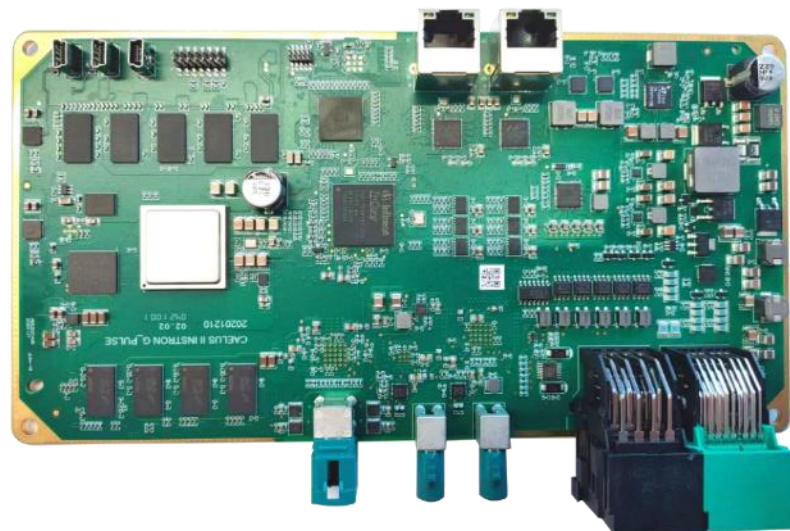


MPSoC (ZUx) series ADCU

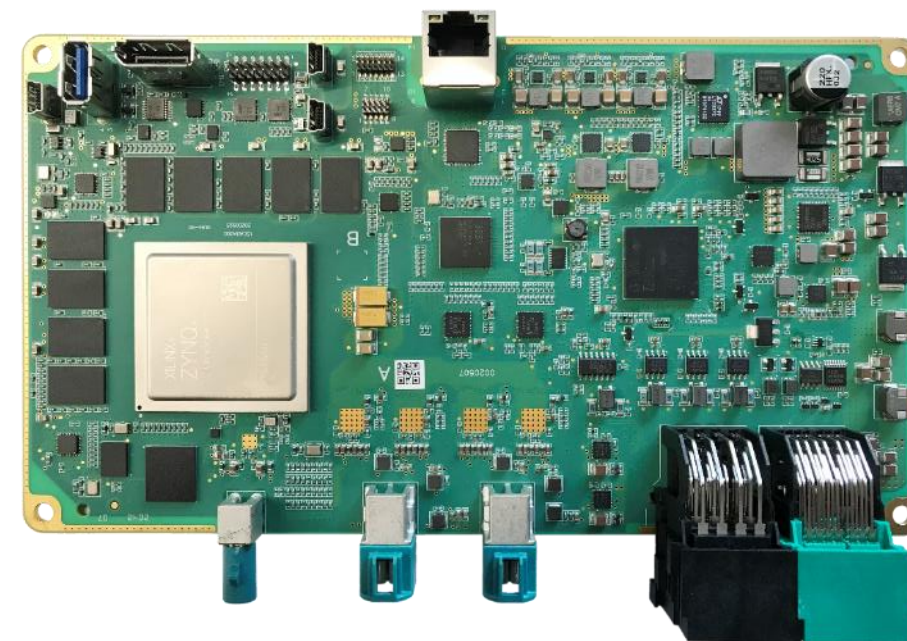
TC297+ZU2



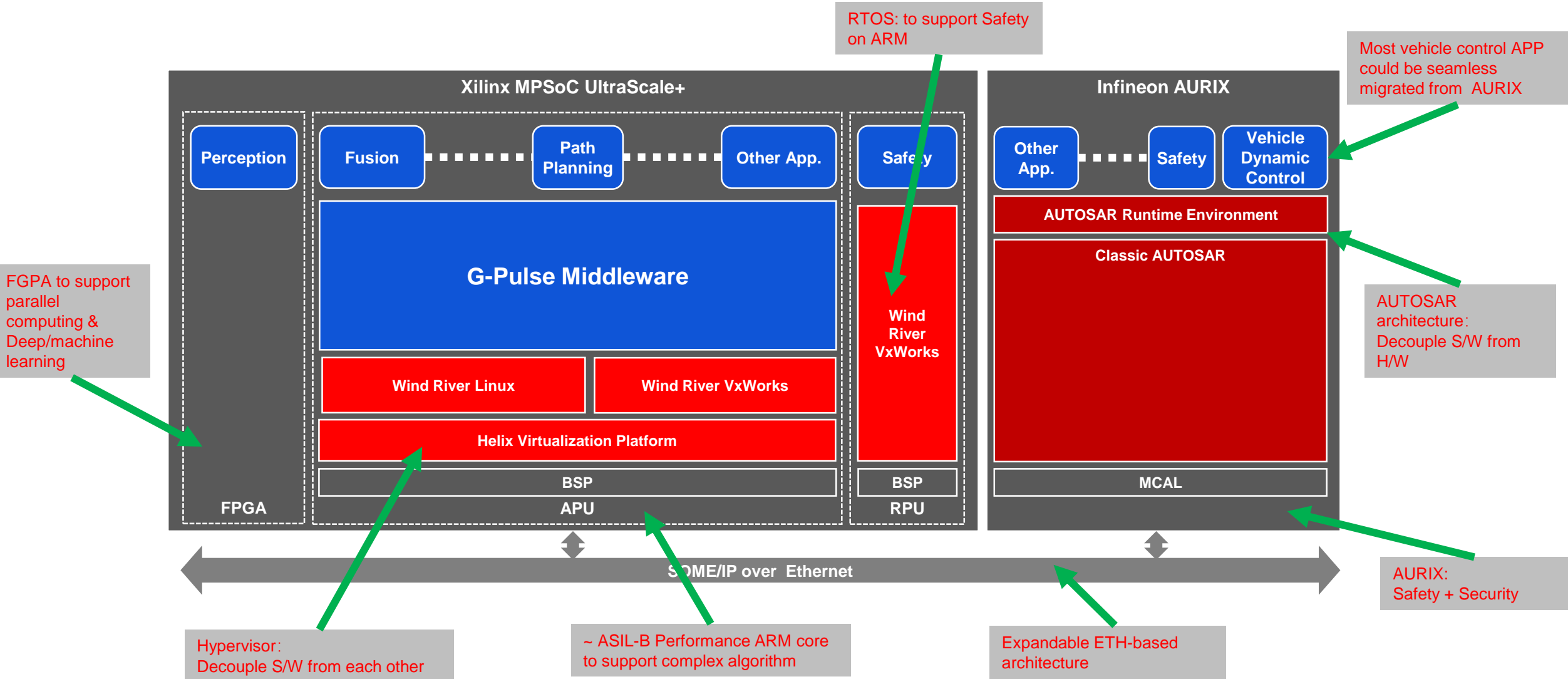
TC397+ZU5(9 DRAM Ver.)



TC397+ZU11 9 (9 DRAM Ver.)

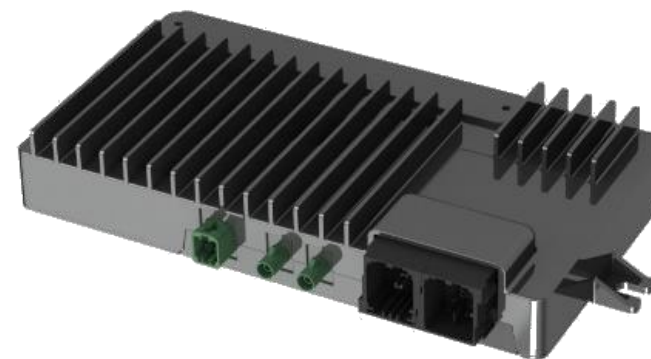


Recommended SW architecture



Open ADCU for Developer User

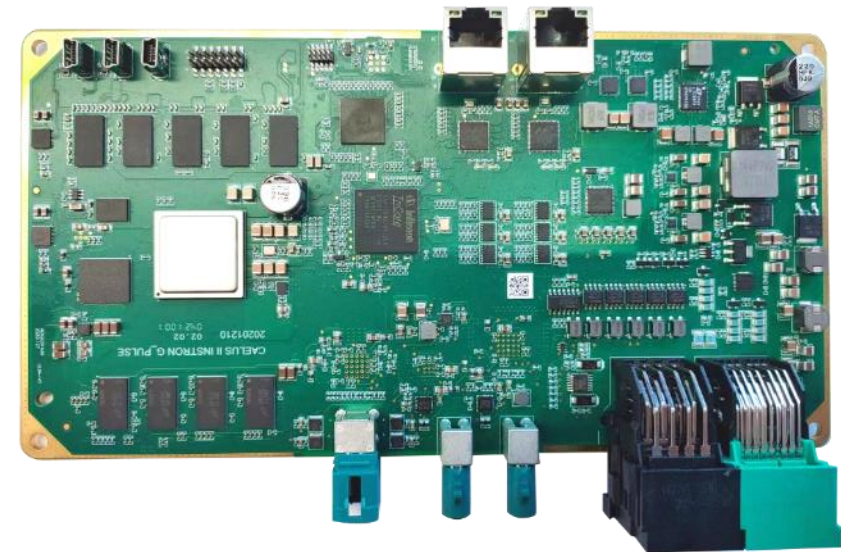
A ready-to-use package for ADAS/AD developer.



Open ADCU for Developer User

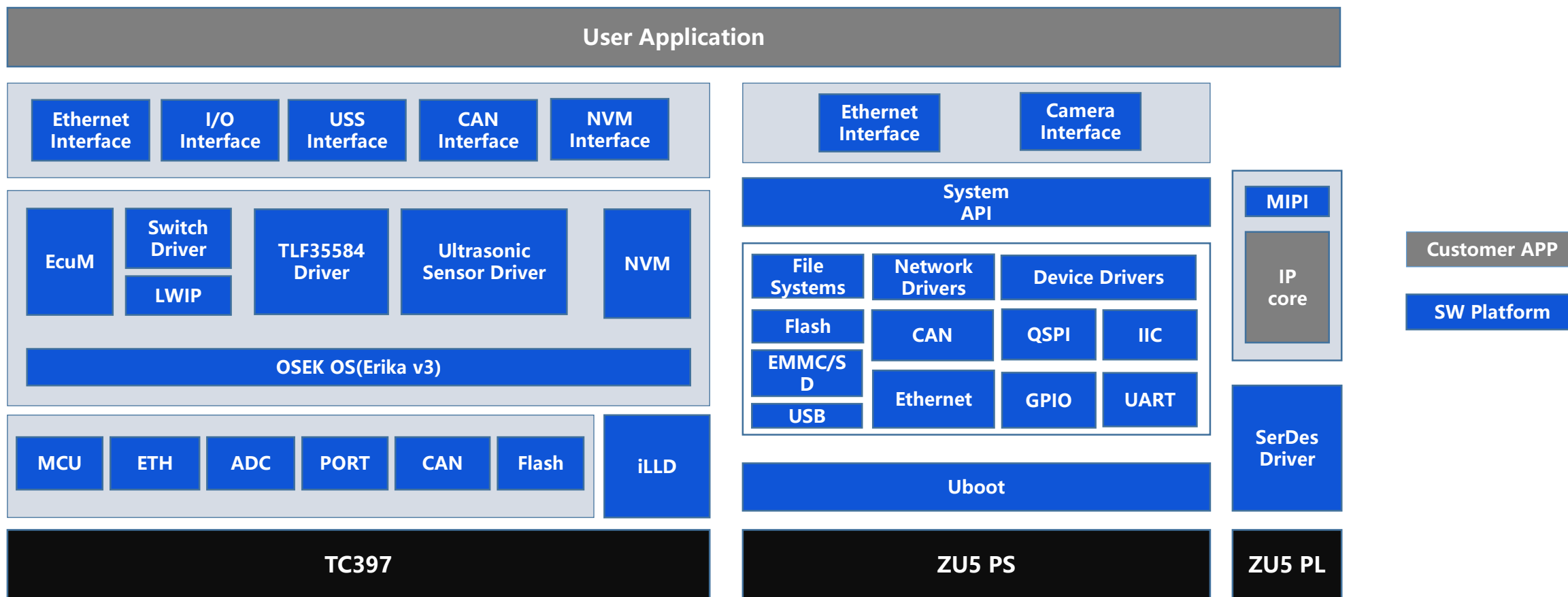
A validated ECU hardware, which could be used as prototype or A-sample.

Item	Parameter	Note
Operating temperature	-40°C ~ 85°C	
Size (mm)	259*132.5*40	mm
Weight (kg)	≤0.9kg	
Input voltage	13.5V (Typ)	Voltage range: 9V ~ 16V
Communication Interface	CAN*1 LIN*4 100 Base T1*1	
Sensor interface	CAN*5 LIN*12	
Debug interface	JTAG*2, UART*2, 1000 Base T*2	
MCU	TC397	
SOC	XAZU5EV	
Video input	MAX9286、MAX9276	HFM、FAKRA
Video output	MAX9295	HSD



Open ADCU for Developer User

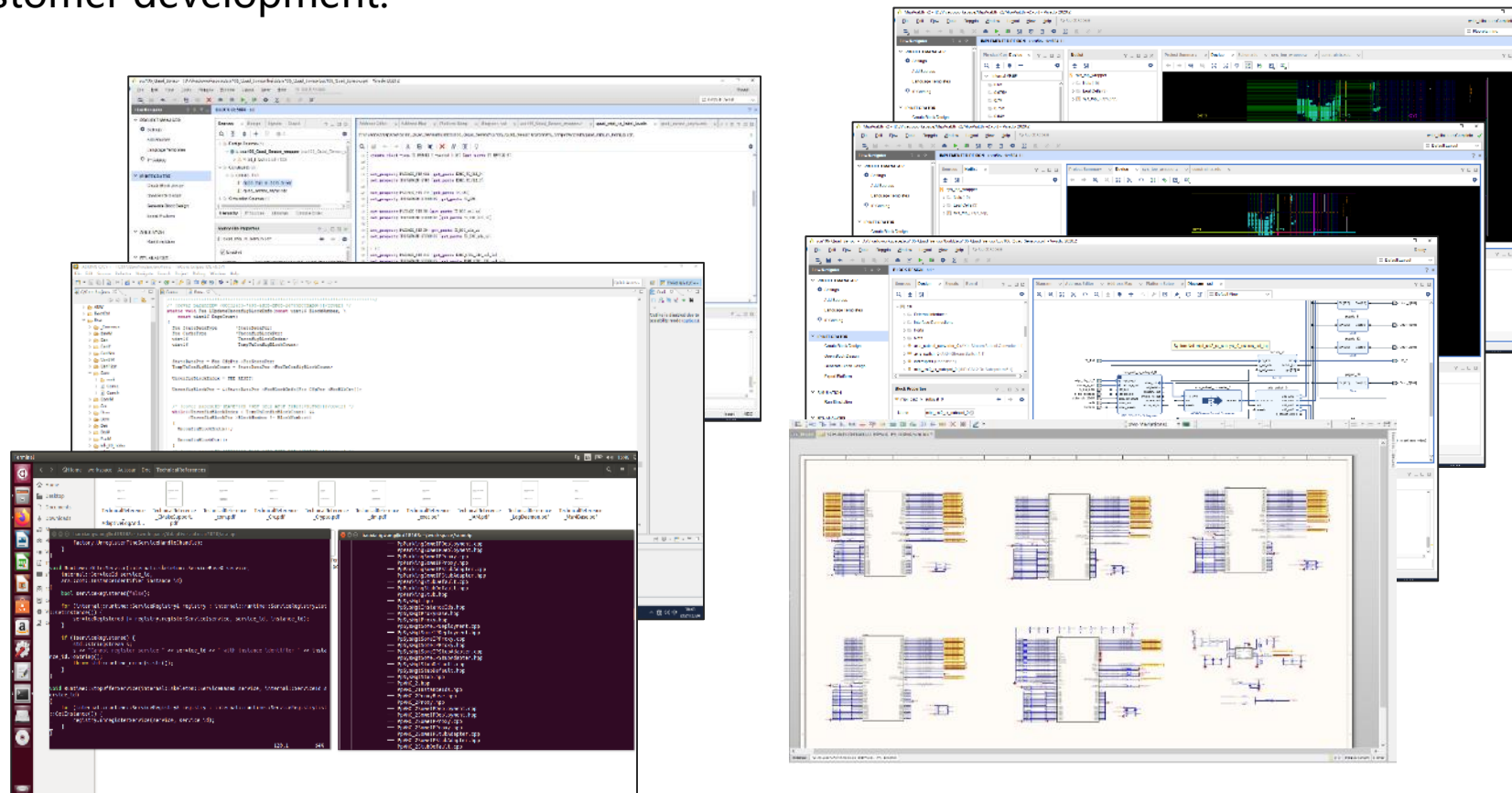
A structured SW platform, to enable rapid application/algorithm development.



Open ADCU for Developer User

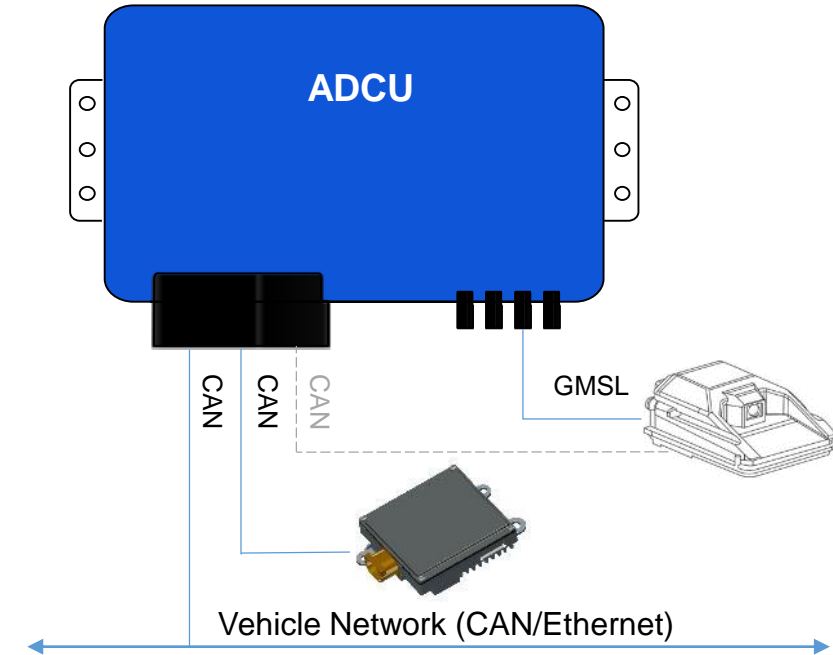
An OPEN platform, to foster customer development.

Artefact list	
1	Hardware Datasheet
2	Hardware User Manuel
3	Hardware Diagram
4	Hardware Schematic drawing
5	Hardware Test Report
6	Software architect
7	Software tool-chain application note
8	Software User Manual
9	Software Source Code (AURIX + MPSoC)
10	Application note for MIPI
11	PC Client
	Etc...



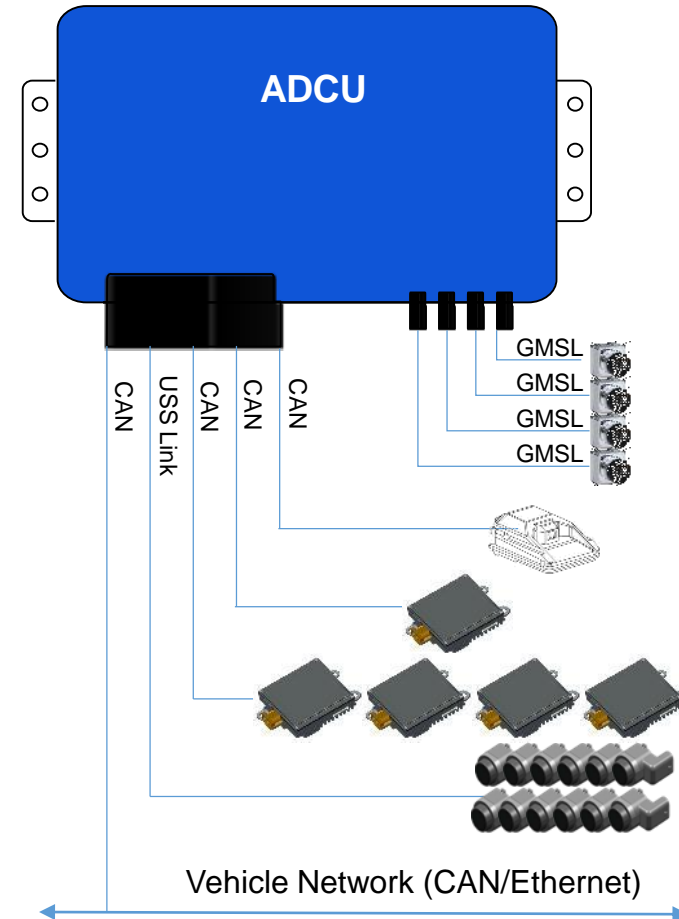
Application Scenarios - I

Host	Development & Evaluation
Safety Host (AURIX)	<ul style="list-style-type: none">✓ AUTOSAR Platform✓ Vehicle dynamic control
Fusion Host (Cortex-A53)	<ul style="list-style-type: none">✓ RTOS, eg. Wind River VxWorks✓ Hypervisor, eg. Wind River HVP✓ Sensor Fusion (front radar + front camera)✓ ADAS application, eg. AEB, ACC, FCW, etc...
Perception Host (FPGA)	<ul style="list-style-type: none">✓ Front camera perception algorithm



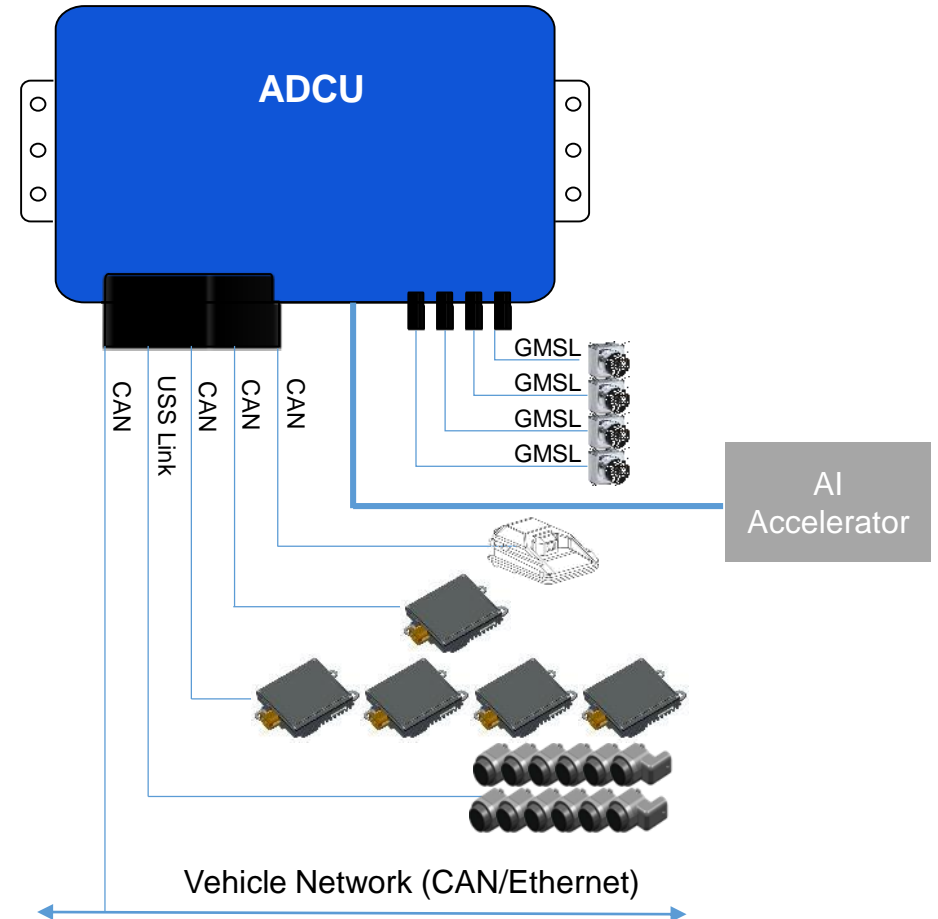
Application Scenarios - II

Host	Development & Evaluation
Safety Host (AURIX)	<ul style="list-style-type: none"> ✓ AUTOSAR Platform evaluation ✓ Vehicle dynamic control evaluation ✓ etc...
Fusion Host (Cortex-A53)	<ul style="list-style-type: none"> ✓ RTOS, eg. Wind River VxWorks ✓ Hypervisor, eg. Wind River HVP ✓ (Multiple) Sensor Fusion algorithm ✓ Path planning algorithm ✓ Other algorithm & complex application ✓ etc...
Perception Host (FPGA)	<ul style="list-style-type: none"> ✓ Surround view camera perception



Application Scenarios - III

Host	Development & Evaluation
Safety Host (AURIX)	<ul style="list-style-type: none"> ✓ AUTOSAR Platform ✓ Vehicle dynamic control ✓ etc...
Fusion Host (Cortex-A53)	<ul style="list-style-type: none"> ✓ RTOS, eg. Wind River VxWorks ✓ Hypervisor, eg. Wind River HVP ✓ AI accelerator host (via Ethernet) ✓ Sensor Fusion algorithm (object fusion, map fusion, etc...) ✓ Path planning algorithm ✓ Other algorithm & complex application ✓ etc...
Perception Host (FPGA)	<ul style="list-style-type: none"> ✓ Camera perception algorithm





Mission

To foster the development of Automotive Industry in China with cutting-edge technology capability and exceptional service offering.

Vision

To become the greatest service platform for Automotive Electronics Industry.