

Zone ECU

Under
development

All functions are integrated, power distribution with full semiconductor, high-speed communication, proxy I/O, and communication gateway

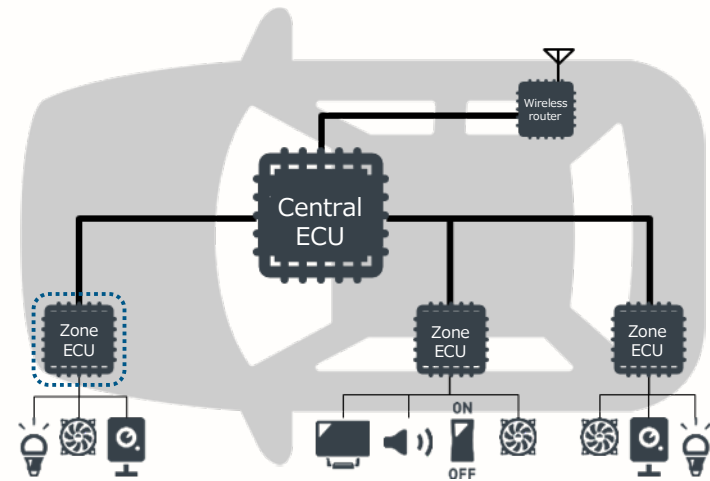
Background or assignment

Current E/E architectures are the distributed type in which ECUs (Electric Control Unit) are distributed individually for each system. However, in order to respond to vehicle changes*, it has shifted to the integrated control type consisting of centralized ECU with control functions for multiple systems and Zone ECU dedicated to I/O functions for each area.
* Easy-to-add functions by updating software with OTA (Over The Air)

Solutions to Challenges

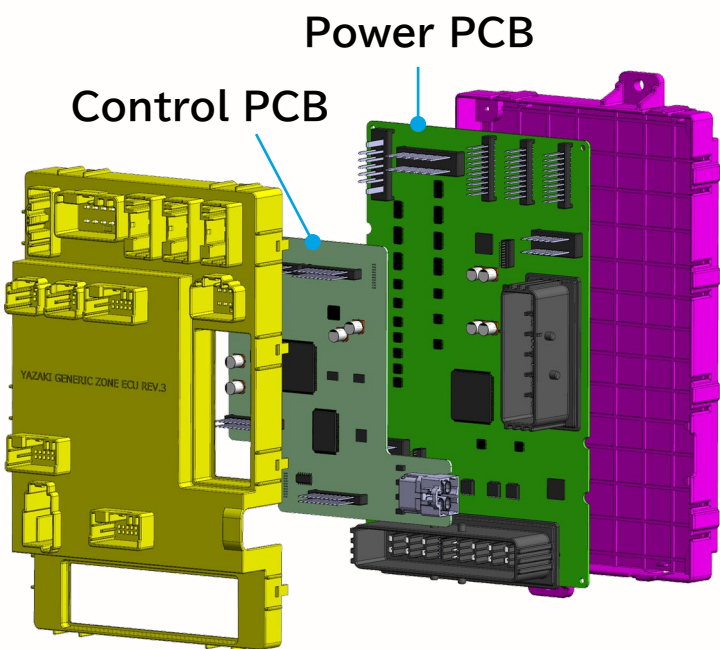
- 1 Power distribution with full semiconductors with integrated FUSE functions
- 2 High-speed communication (1Gbps Ethernet)
- 3 Supports a wide range of inputs and outputs (Analog/Digital/High Side/Low Side/Half Bridge Total 144ch)

Main performance, specifications and structure



Features

① Area power supply	⑥ Ethernet communication
② Semiconductor FUSE	⑦ CAN/CANFD communication
③ Proxy I/O	⑧ LIN communication
④ Software update	⑨ Communication gateway
⑤ Cyber security	⑩ Switching hub



Specifications

Operating temperature		-40degC to 85degC
Operating voltage		6V to 16V
Input		72ch
Output high side/half bridge		64ch
Output low side		8ch
Ethernet	1Gbps	1ch
	100Mbps	4ch
CAN, CANFD		8ch
LIN		10ch

Number of pins used: 235