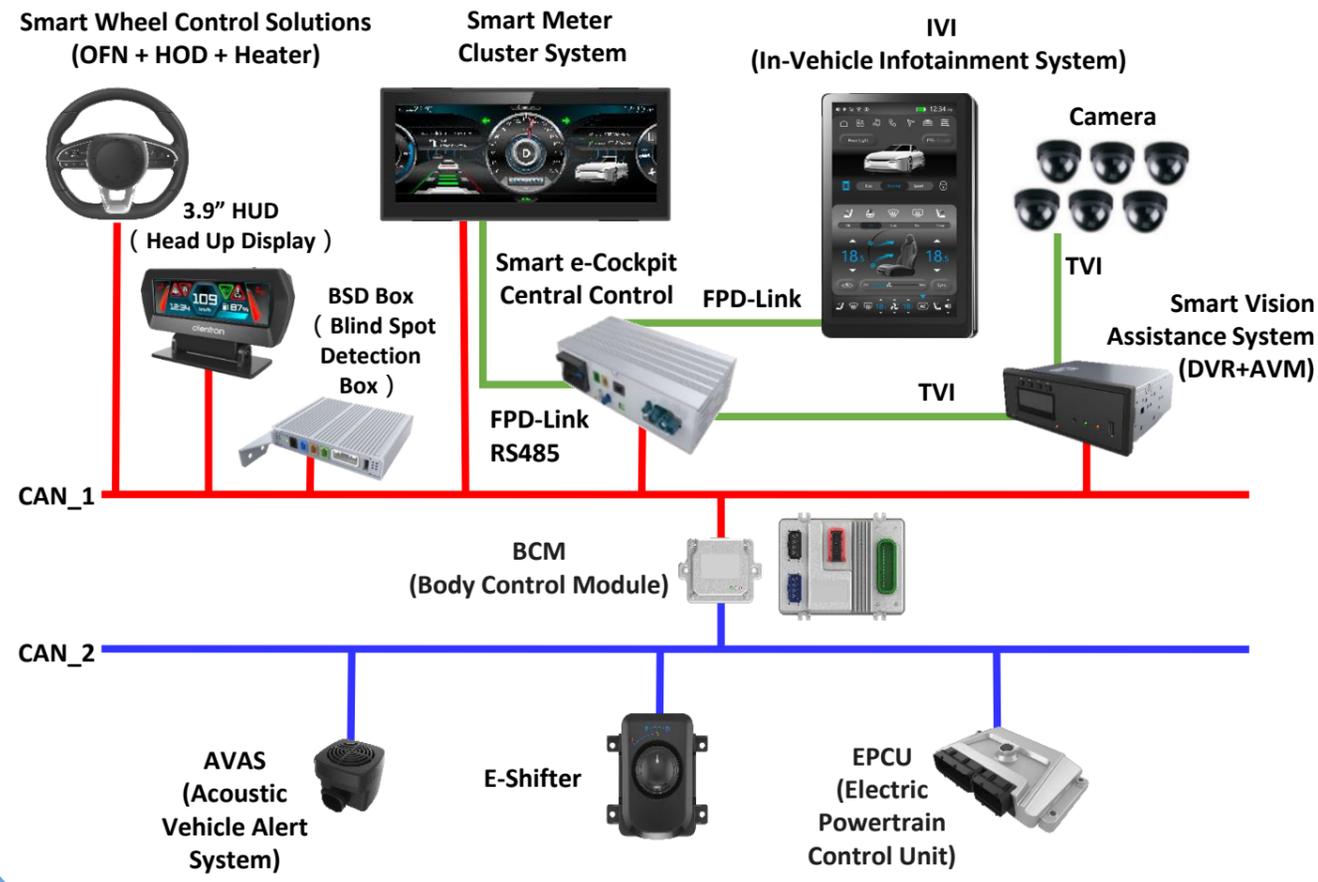
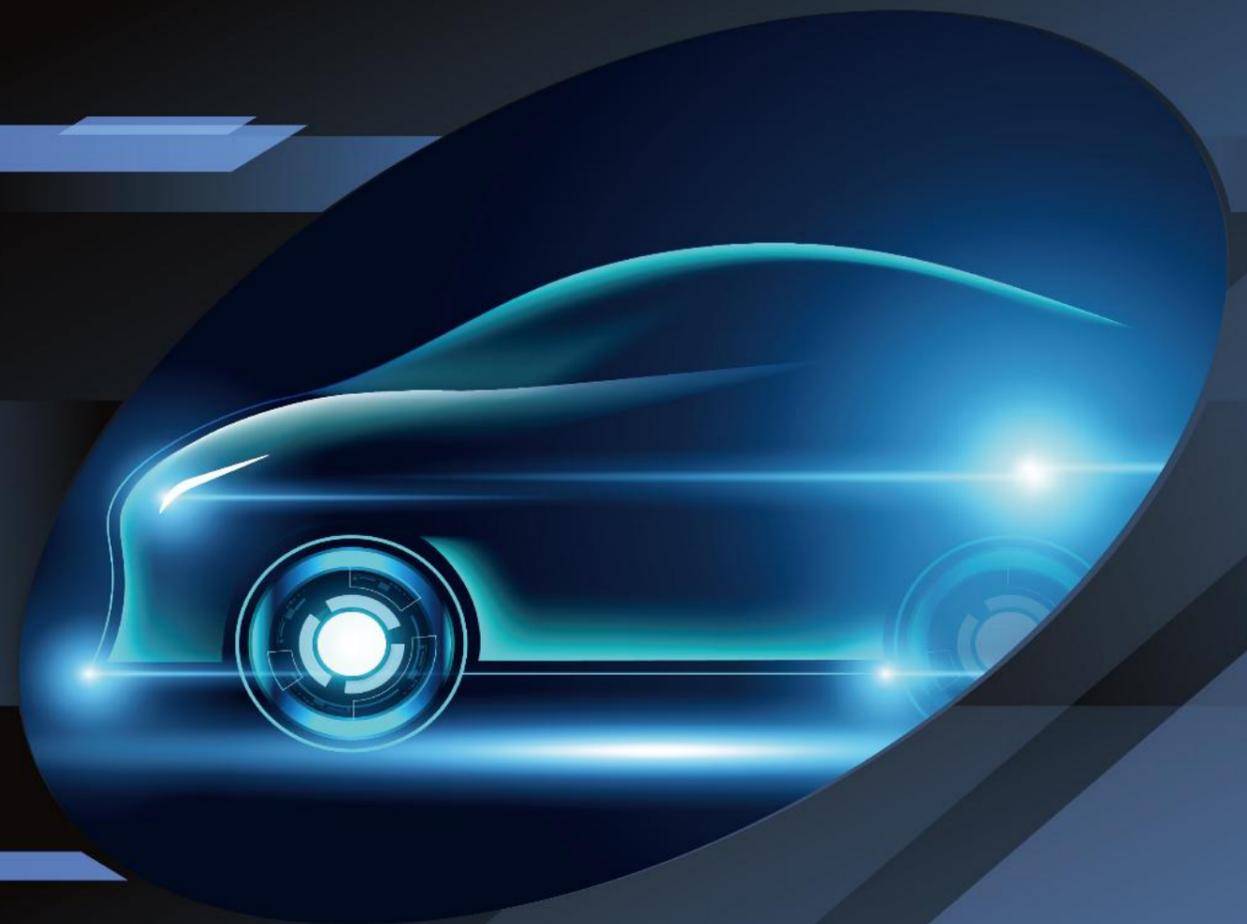


Clientron, based in Taiwan, is a dedicated leader in the automotive industry, specializing in system integration services. With extensive expertise in integrating subsystems to enable seamless communication between all components and applications within electric vehicles, Clientron stands at the forefront of innovation.

At the heart of our offerings are advanced in-vehicle infotainment systems, complemented by cutting-edge developments in Advanced Driver Assistance Systems (ADAS) and Cellular Vehicle-to-Everything (C-V2X) applications. These innovations have enabled us to support manufacturers in creating smart e-Cockpits, earning the trust and recognition of leading automakers across various regions.

At Clientron, our unwavering commitment is to be a trusted partner in delivering user-friendly, secure, reliable, and durable solutions for the automotive industry.

# Smart Cockpit of Electric Vehicle





### IVI (In-vehicle Infotainment System)

- Support multi-display integration
- Including Meter Cluster, Navigation, Diagnostic, Entertainment, Hands Free, Radio, A/C, etc.)
- Android Auto O.S.
- Support 12.3"/12.1"/15.6" Touch Screen
- Support Apple CarPlay & Android Auto
- Support 5G/4G, BT/WiFi, GPS, CAN BUS, UART, USB, etc.

### Smart Meter Cluster System



- With 12.3"、1920x720 Display
- Support 5"/7"/10"/12.3" Sizes
- Customization GUI
- Using RTOS on 24V system
- Support CAN BUS, USB, PWM
- With Buzzer inside

### BSD Box, (Blind Spot Detection Box)



- Video Switch with AI Algorithm
- Support TVI in\*2, TVI out\*1
- Support Object recognition Algorithm ex. Vehicle, People
- Buzzer inside or out line
- Support CAN BUS

### IBDS ( Intelligent Blind Detection System )



### 3.9" HUD, (Head Up Display)

- 3.9" Head Up Display
- Support CAN BUS and interact with Meter and ADAS
- Flexible GUI



### IDPS ( Integrative Driver Precaution Sys. )

- High-resolution cameras
- Support TVI Video out to Display
- Support AI algorithm such as:
  - DVR ( Digital Video Recorder )
  - AVM、BSIS、FCW、LDW、DMS
  - IDR ( Identify Driving Recorder )
- Support CAN BUS, 4G Module, Printer, SD Card
- Support Taiwanese VDR/16-1



### Steering Wheel Control Solutions

- Control Unit solution for steering wheel :
  - OFN ( Optical Finger Navigation )
  - HOD ( Hands Off Detection )
  - Heating/ Vibration
  - Including sensor mate
- Apply to L2 or higher Autopilot level

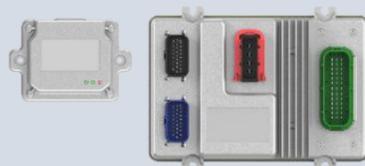
## Smart Cockpit of Electric Vehicle



### E-Shifter



- E-Shifter is shifted by wire
- Apply to development of APS (Automated Parking System) and ADAS (Advanced Driver Assistance Systems)
- Support CAN BUS interface



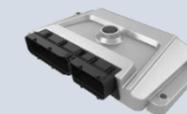
### BCM (Body Control Module)

- Support 18V - 32V DC
- Support diagnostic and BT ( Optional )
- Support 1 master with 6 Slave local CAN BUS network and redevelopment ( Master unit )
- Support A/D interface including :
  - CAN BUS
  - wake-up I/O ( 20A, 9A, 3.2A, 2A, etc. )



### AVAS (Acoustic Vehicle Alert System)

- Support CAN BUS interface
- Comply with automotive-grade test
- Ingress Protection Rating: IP67



### EPCU (Electric Powertrain Control Unit)

- EPCU is the Vehicle Control Unit integrating BMS (Battery Management Sys.), MCU (Motor Control Unit)
- Support A/D I/O Control
- Apply to buses, passenger vehicles, and all-terrain vehicles (ATV)
- Adopt the Model-Based Design(MBD) to implement the AI algorithm and logic structure
- Support to redevelop