ADCU Dual Orin Platform EAORA07

Intelligent computing and vehicle control platform for SAE L3-L4 levels autonomous systems



400 TOPS
Computation Capabilities

L3-L4 level

Dual SoC Two NVIDIA ORIN chips

Powerful MCU
Infineon ASIL-D rated TC397 chip

Navigation

High-precision maps, localization, and navigation



TECHNICAL CHARACTERISTICS

| Camera | Up to 12 GMSL2 cameras |
|------------------|-----------------------------------|
| Ethernet | Up to 12 100/1000M Automotive |
| CAN | UP to 12 CANFD ports |
| Serial Port | Up to 8 RS232 channels |
| LIN | Up to 2 Lin bus |
| Radar Port | Up to 12 Ultrasonic radar ports |
| Digital Input | Up to 4 channels |
| Analog Input | Up to 4 channels |
| Low-side output | Up to 4 channels |
| High-side output | Up to 4 channels |
| 5V Sensor Power | Up to 2 ports @ MAX current 100mA |
| Navigation | GPS + IMU |

INTERFACE

| Interface type | Number | Function | Chip | Connector | RS232 | 1 | | GNSS | |
|--------------------------------|--------|---|--------|-----------------------|------------------|----|---|------|-------------|
| Camera interface | 12 | GMSL2 | SOC | 3 * FAKRA | CANFD | 8 | 2 channels support specific frame wake up | MCU | |
| 100M Automotive Ethernet | 4 | 100BASE-T1 | Switch | 2*6 | LIN | 2 | | MCU | |
| Gigabit Automotive Ethernet | 8 | 1000BASE-T1 | Switch | 2* 6 cavity connector | USS | 12 | | MCU | |
| HDMI | 2 | | SOC | | KEYON | 4 | 2 channels for SOC 2 channels for MCU | MCU | |
| USB | 2 | 2 channels USB Host support USB2.0, US3.0, USB3.1 | SOC | | Digital Input | 4 | Default settings: 2 channels active-high, 2 channels active-low | MCU | |
| M.2 KEY M | 1 | Extended storage | SOC | Internal | Analog Input | 4 | | MCU | 121 PIN-CMC |
| GPS+IMU | 1 | Extended SSD | SOC | | Low-side output | 4 | 4 channels @ 250mA | MCU | |
| CANFD | 4 | | SOC | | High-side output | 4 | 4 channels @ 1A | MCU | |
| RS232 | 8 | 2 channels for Debug | SOC | | 5V Sensor power | 2 | Maximum current 100mA | MCU | |
| PPS_IN | 2 | Support 5V-16V | SOC | 121 PIN-CMC | Power Positive | 6 | | | |
| PPS_OUT | 4 | PPS is 5V high voltage pulse signal | SOC | | Power Ground | 7 | | | |
| CAN | 1 | | GNSS | | Signal Ground | 2 | | | |