

Features

- Supports 13th gen Intel® RPL S Processor (LGA 1700, 35W TDP)
- Intel® Q670 Express Chipset
- 4x Independent Displays
- 2x Intel® 2.5GbE supporting Wake-on-LAN and PXE, 3x External SIM socket
- 2x 2.5" SATA SSD Bay (1x Internal) with RAID 0, 1, 5 support
- 1x M.2 E Key, 2230 (PCIe x1, USB 2.0)
- 1x M.2 B Key, 2242/3042/3052 (PCIe x2, or PCIe x1 & USB 3.2 Gen1; Support AI Module/Storage/4G/5G)
- 1x M.2 B Key, 2242/3042/3052 (PCIe x2 or SATA; Support AI Module/SATA Storage/4G/5G)
- 3x RS-232/422/485, 6x USB 3.2 Gen 2 (10 Gbps)
- 8x DI + 8x DO with isolation
- 9 to 48VDC Wide Range Power Input Supporting AT/ATX Mode
- Wide Operating Temperature (-25°C to 70°C)
- Vehicle ignition sensing

Rugged Mini E2 v3

Technical Specifications



Specifications

System	
Processor	Supports 13 th gen Intel® RPL S Processor (LGA 1700, 35W TDP)
System Chipset	Intel® Q670 Express Chipset
Graphics Controller	Integrated Intel® UHD Graphics 770/730
LAN Chipset	2.5 GbE1: Intel I226 (Support Wake-on-LAN and PXE, Support TSN) 2.5 GbE2: Intel I226 (Support Wake-on-LAN and PXE, Support TSN)
Audio	Realtek ALC888S
System Memory	1x DDR5 4800/5600MHz SODIMM. Max. up to 32GB
BIOS	AMI 256Mbit SPI BIOS
TPM	TPM 2.0
vPro	Yes (Processor Dependent)
Watchdog	Software Programmable Supports 1~255 sec. System Reset
Operating System	
Windows	Windows 10 LTSC Windows 11 Pro 64bit or LTSC
Storage	
SSD/HDD	1x 9mm 2.5" SATA SSD Bay (Internal) 1x 7mm 2.5" SATA SSD Bay (Hot-swappable)
RAID Support	Support RAID 0, 1, 5
Expansion	
Sim Socket	1x External Mini SIM socket 1x External Dual Nano SIM socket
M.2	1x M.2 B key Type: 2242/3042/3052 (Support PCIe x2/PCIe x1 & USB 3.2 Gen1 /Hailo AI Module/4G/5G) 1x M.2 B key Type: 2242/3042/3052 (Support PCIe x2/SATA signal/Hailo AI Module) 1x M.2 E key slot 2230 (Support PCIe x1 & USB 2.0; Support CNVi/ Wifi Module)
Other Features	
Cooling Method	Fanless

Physical

Enclosure Materials	Extruded Aluminum with Heavy Duty Metal
Dimensions (W x H x D)	192 (W) x 227 (D) x 60.3 (H) mm 7.6 (W) x 8.9 (D) x 2.4 (H) in
Weight	7.93 lb (3.6 kg)
Mounting	Wall Mounting kit with Vibration Isolation, DIN Rail Mounting (optional)
I/O	
Video	4x DisplayPort 1x HDMI Shared by 1x DP port
COM	3x RS-232/422/485 (Optional Isolation)
USB	6x USB 3.2 Gen 2 (10Gbps)
LAN	2x 2.5GbE RJ45
WLAN	Intel WiFi 6E 802.11ax +BT5.3 M.2/2x2/MUM/vPro (optional)
Others	5x WiFi Antenna Holes 1x Power Switch 1x AT/ATX Switch 1x Remote Power On/Off 1x PC/Car Mode Switch 1x Clear CMOS Switch 2x CAN 2.0 A/B 2-pin Internal header
Power	
Power Mode	AT/ATX
Power Input Voltage	9 ~ 48 VDC
Power Ignition Sensing	Yes
Power Connector	3-pin Phoenix Connector
Power Protection	OVP (Over Voltage Protection) OCP (Over Current Protection) RPP (Reverse Polarity Protection)
Power Adapter	AC/DC 24V/9.2A, 220W
Environment	
Operating Temp.	-13°F - 122°F (-25°C to 50°C) (35W CPU)
Storage Temp.	-30°C to 85°C
Humidity	10% - 95% non-condensing
Shock	With SSD: 50G half-sin 11ms
Vibration	With HDD: 1 Grms (5 - 500 Hz, 0.5 hr/axis) With SSD: 5 Grms (5 - 500 Hz, 0.5 hr/axis)
Certification	UL 62368 Ed. 3, CE, FCC Class A, EMC Conformity with EN50155 & EN50121-3-2
Warranty	
Warranty	1-year standard