

Rugged Mini E3 v3

(Standard Chassis)

Technical Specifications



Features

- Intel 13th Gen. Raptor Lake Core i5/i7/i9 Processors
- Intel® R680E Chipset
- 2x 260-pin DDR5 SO-DIMM, up to 64GB
- Triple independent display
- 2x Intel® 2.5GbE supporting Wake-on-LAN and PXE
- 2x 2.5" SATA SSD/HDD bay and mSATA MiniPCle storage options
- 2x Full-size mini PCIe for communication or expansion modules, 2x SIM socket
- 2x RS-232/422/485, 8x USB 3.2
- 16-bit Isolated digital I/O
- 9 ~ 48VDC wide range power input
- -25°C to 70°C extended operating temperature
- Vehicle ignition sensing

Specifications

System	
Processor	Intel 13th Gen. Raptor Lake Core i5/i7/i9 Processors
System Chipset	Intel® R680E Chipset
Graphics Controller	Intel UHD Graphics 770 (Core CPU)
LAN Chipset	2x 2.5GbE: Intel I226-LM
Audio	Realtek ALC888/1200
System Memory	Up to 64GB DDR5 4800 (2x SO-DIMM)
BIOS	AMI 256Mbit
TPM	TPM 2.0 (dTPM Infineon)
vPro	Yes (Processor Dependent)
Watchdog	Software Programmable Supports 1~255 sec. System Reset
Operating System	
Windows	Windows 11 Pro 64bit Windows 11 IoT Enterprise Windows 11 IoT Enterprise LTSC
Storage	
SSD/HDD	1x 2.5" SATA SSD/HDD Bay (Internal) supports 9mm drives 1x 2.5" SATA SSD Bay (Removable) supports 7mm drives
mSATA	1x mSATA (shared with 1x Mini PCIe)
RAID Support	RAID 0,1
Expansion	
M.2	1 x M.2 (E key) supports M.2 2230 for Wi-Fi
Other Features	
Cooling Method	Fanless

Physical

Enclosure Materials	Extruded Aluminum with Heavy Duty Metal
Dimensions (W x H x D)	9.45" x 10.27" x 3.15" (240 x 261 x 79.2 mm)
Weight	9.92lbs (4.5Kg)
Mounting	Wall Mount Only

I/O

Video	1x DVI-I 2x DP (Display Port)
COM	2x DB9 Serial RS232/422/485, COM1 ~ 2 2x Internal headers RS232/422/485, COM3 & COM3 (Requires optional bracket adapter)
USB	Standard Model: 4x USB 3.2 Gen1 (Front) 4x USB 3.2 Gen2 (Rear)
LAN	2x 2.5GbE RJ45
WLAN	Intel AX2xx, 802.11ax, 2T2R, Wi-Fi/BT card (Optional)
Others	1 x Power Switch 1x AT/ATX Switch 1x Remote Power Switch (2 pin Phoenix Connector)

Power

Power Mode	AT/ATX
Power Input Voltage	9 ~ 48 VDC
Power Ignition Sensing	Yes
Power Connector	5-pin Phoenix Connector
Power Protection	OVP (Over Voltage Protection) OCP (Over Current Protection) RPP (Reverse Polarity Protection)
Power Adapter	External Power Adapter, 24V @9.16A

Environment

Operating Temp.	-13°F - 158°F (-25°C - 70°C)
Storage Temp.	-22°F - 185°F (-30°C - 85°C)
Humidity	10% - 95% non-condensing
Shock	With SSD: 50 G, half sine, 11 ms
Vibration	With SSD: 5 Grms, 5 - 500 Hz, 0.5 hr/axis With HDD: 1 Grms, 5 - 500 Hz, 0.5 hr/axis
Certification	CE, FCC Class A

Warranty

Warranty	1-year standard
----------	-----------------

Rugged Mini E3 v3 Extended Chassis

Extended Chassis Expansion: 1x PCIe x16 (Gen4), 1x PCIe x1 (Gen3)

Weight: 6.5 ~ 7.5 kg (14.3-15.4 lbs)

Dimension: 240 (W) x 261 (D) x 126.8 (H) mm (9.4x10.3x5.1 in)

Compatible GPU Options:

Model Name	RAM	CUDA Cores	TDP	TOPS/TFLOPS	Displays	System Interface	Form Factor
NVIDIA T1000	8G	896	50W	5.3 TFLOPS	4x mDP	PCIe 3.0 x16	2.7" H x 6.1" L, Low-Profile Single Slot
NVIDIA RTX A1000	8G	2304	50W	6.74 TFLOPS	4x mDP	PCIe 4.0 x8	2.7" H x 6.4" L, Single slot
NVIDIA RTX A2000	12G	3328	70W	7.99 TFLOPS	4x mDP	PCIe 4.0 x16	2.7" H x 6.6" L, Low Profile, Dual Slot
NVIDIA RTX 2000 ADA	16G	2816	70W	12 TFLOPS	4x mDP	PCIe 4.0 x8	2.7" H x 6.6" L, Dual slot
NVIDIA RTX 4000 SFF ADA	20G	6144	70W	19.2 TFLOPS	4x mDP	PCIe 4.0 x16	2.7" H x 6.6" L, Low Profile, Dual Slot



