



Features

- 12th/13th/14th Gen Intel® Core™ Processors
- DDR5 SODIMM 4800/5200 MT/s x 2, up to 64 GB
- Triple Display: DP x 1, VGA x 1, LVDS x 1
- 2.5GbE x 1, GbE x 1
- USB 3.2 Gen 2 x 2, USB 3.2 Gen 1 x 2
- M.2 2280 M-Key x 1, M.2 E-Key 2230 x 1, Mini Card x 1
- COM Port x 4, GPIO 8-bit, TPM 2.0, DC 12Vin or DC 19Vin ~ 24Vin

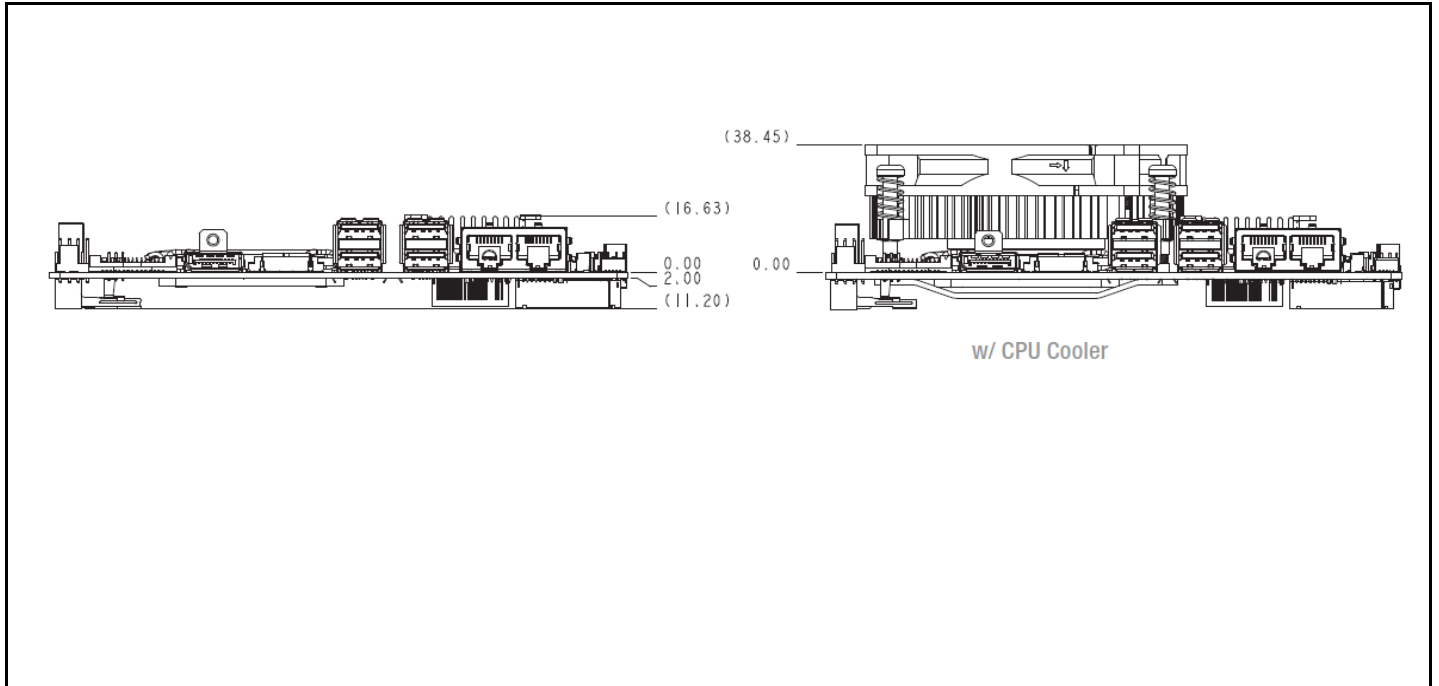
Specifications

System	
Form Factor	4" EPIC Board
CPU	14th Generation Intel® Core™ Processor (up to 35W/65W)
	13th Generation Intel® Core™ Processor (up to 35W/65W)
	12th Generation Intel® Core™ Processor (up to 35W/65W)
Chipset	Intel® H610E Chipset
Memory Type	DDR5 4800/5200, Dual-Channel SODIMM x 2, up to 64GB (DDR Speed dependent on CPU SKU)
BIOS	UEFI
Wake on LAN	Yes
Watchdog Timer	255 Levels
Security	TPM 2.0 (Optional)
RTC Battery	Lithium Battery 3V/240mAh
Dimension	4.53" x 6.50" (115mm x 165mm)
OS Support	Windows 10 (64bit) Ubuntu 22.04.2/kernel 5.19.0
Power	
Power Requirement	DC 19Vin ~ 24Vin DC 12Vin (Note: For stable performance, it is recommended to use a power supply unit rated at 22A @12V DC output to accommodate potential maximum peak power requirements.)
Power Type	AT/ATX
Connector	8-Pin Connector
Power Consumption	Intel® Core™ i9-13900E, DDR5 32GB x2, 7.73A @+12V (Typical)
	Intel® Core™ i9-13900E, DDR5 32GB x2, 21.39A @+12V (Max)
Expansion	
Mini PCI-E/mSATA	Full-size mSATA/Mini Card (Default: Mini PCIe, SATA configuration subject to BOM change)
M.2	M.2 2280 M-Key x 1 (PCIe 3.0 [x4]) M.2 2230 E-Key x 1 (PCIe 3.0 [x1] + USB 2.0)

Display	
Controller	Intel® UHD Graphics 770 (i5 SKU and above) Intel® UHD Graphics 730 (i3 SKU) Intel® UHD Graphics 710 (Intel® Celeron® G6900TE SKU)
LVDS/eDP	Dual Channel 18/24bit LVDS x 1
Display Interface	DP 1.2 x 1, up to 3840 x 2160 @60Hz VGA x 1, up to 1920 x 1080
Multiple Display	Up to 3 Simultaneous Displays
External I/O	
Ethernet	Intel® Ethernet Controller I226, 2.5GbE RJ-45 x 1 Intel® Ethernet Connection I219, GbE RJ-45 x 1
USB	USB 3.2 Gen 2 (Type-A) x 2 USB3.2 Gen 1 (Type-A) x 2
Video	DP 1.2 x 1
Internal I/O	
USB	USB 2.0 x 4 (Pin Header)
Serial Port	RS-232/422/285 x 2 RS-232 x 2 (Pin Header)
Video	VGA x 1, LVDS x 1
SATA	SATA 6.0 Gb/s x 2 +5V SATA Power Connector x 2
DIO/GPIO	8 bit
SMBus/I2C	SMBus/I2C (change by BOM, I2C only for Windows 10)
Fan	4 Pin Smart Fan
Front Panel	Power Button, Reset Button, Power LED, SATA LED, Buzzer
Environment & Certification	
Operating Temperature	32°F ~ 140°F (0°C ~ 60°C) (Note: To achieve the best performance, keeping the EPIC-RPS7 operating with 0.5m/sec airflow when DDR5 SODIMM1 installed on bottom side is recommended)
Storage Temperature	-40°F ~ 185°F (-40°C ~ 85°C)
Operating Humidity	0% ~ 90% relative humidity, non-condensing
MTBF (Hours)	353,666
EMC	CE/FCC Class A

Dimension

Unit: mm / inch



Ordering Information

Part Number / Item	
AMB-4RP0-001	14th Generation Intel® Core™ Processor (up to 35W/65W)
AMB-4RP0-002	13th Generation Intel® Core™ Processor (up to 35W/65W)
AMB-4RP0-003	12th Generation Intel® Core™ Processor (up to 35W/65W)