

# EPS-RPS

Intel® 13th Fanless Rugged Embedded System



## Product Features

- 13th Gen Intel® Core™ i9/i7/i5/i3/Pentium®/Celeron® Processor
- 2-DIMM Up to 64GB Dual Channel DDR5 SO-DIMM 4800MHz
- 3-Expansion (mPCIe & 2-M.2 E/B)
- Support 5G, Wi-Fi 6E, 2.5G LAN
- Support HW TPM 2.0
- Support H610E/Q670E
- 3-Storage (2.5" Drive Bay & 2-M.2 B/M)
- Rich I/O 8-USB, 6-COM, 2-LAN
- DC in +12V~24V, wide voltage

## Specification

### System Information

|                                |                                                                                                                                                                                                                                             |
|--------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Processor</b>               | Default:<br>Intel® Core™ i9-13900TE Processor (35W)<br>Intel® Core™ i7-13700TE Processor (35W)<br>Intel® Core™ i5-13500TE Processor (35W)<br>Intel® Core™ i3-13100TE Processor (35W)<br>Optional:<br>Intel® Core™ i5-13500E Processor (65W) |
| <b>Platform Controller Hub</b> | Intel® Q670E Express Chipset<br>Intel® H610E Express Chipset                                                                                                                                                                                |
| <b>System Memory</b>           | 2 x SO-DIMM Socket, Max. Up to 64GB DDR5 4800MHz                                                                                                                                                                                            |
| <b>BIOS Information</b>        | AMI UEFI BIOS, 256 Mbit SPI Flash ROM                                                                                                                                                                                                       |
| <b>Watchdog Timer</b>          | H/W Reset, 1sec. ~ 65535sec.                                                                                                                                                                                                                |
| <b>H/W Status Monitor</b>      | CPU & system temperature monitoring and Voltage monitoring                                                                                                                                                                                  |
| <b>RAID</b>                    | RAID 0/1 (Q670E sku only)                                                                                                                                                                                                                   |
| <b>TPM</b>                     | TPM 2.0                                                                                                                                                                                                                                     |
| <b>iAMT</b>                    | iAMT support for Q670E sku w/i9,i7,i5 CPU                                                                                                                                                                                                   |

**SBC**
**EBM-ADS**
**Expansion**

|              |                                                                                                                                       |
|--------------|---------------------------------------------------------------------------------------------------------------------------------------|
| <b>M.2</b>   | 1 x M.2 Key-B 2242/3042/3052 support SATA3/PCIe III/ USB 2.0/USB3.2 Gen. 1 and nano SIM slot<br>1 x M.2 Key-E 2230 PCIeIII x 1/USB2.0 |
| <b>mPCIe</b> | 1 x mPCIe support PCIe III x 1/USB2.0 expansion                                                                                       |

**Storage**

|                      |                                                                                                                                                                         |
|----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>M.2</b>           | 1 x M.2 Key-M 2242/2280, support PCIe Gen IV x 4 (NVMe SSD)(Q670E sku only)<br>1 x M.2 Key-B 2242, support SATA (share with expansion slot, Q670E sku support RAID 0/1) |
| <b>2.5 Drive Bay</b> | 1 x 2.5 Drive Bay                                                                                                                                                       |

**Front I/O**

|                                  |                                                                         |
|----------------------------------|-------------------------------------------------------------------------|
| <b>USB</b>                       | 4 x USB 3.2 Gen.1                                                       |
| <b>Power Button</b>              | 1 x Power Button                                                        |
| <b>Reset Button</b>              | 1 x Reset Button                                                        |
| <b>COM Port</b>                  | 6 x COM (4 x RS232/422/485 + 2 x RS232)                                 |
| <b>LED Indicator</b>             | 1 x Storage LED (Yellow)<br>1 x LTE LED (Green)<br>1 x Wifi LED (Green) |
| <b>Audio</b>                     | 1 x Mic-In<br>1 x Line-Out                                              |
| <b>Wire-Control Power On/Off</b> | 1 x 2-Pin Terminal Block                                                |

**Rear I/O**

|                    |                                  |
|--------------------|----------------------------------|
| <b>USB</b>         | 2 x USB 3.2 Gen.2<br>2 x USB 2.0 |
| <b>LAN Port</b>    | 2 x RJ-45                        |
| <b>DP</b>          | 2 x DP++ 1.4                     |
| <b>HDMI</b>        | 2 x HDMI 2.0b                    |
| <b>Antenna</b>     | 2 x Antenna with dust cover      |
| <b>AC/DC Input</b> | 5-Pin Terminal Block             |

**Right I/O**

|                |                             |
|----------------|-----------------------------|
| <b>Antenna</b> | 2 x Antenna with dust cover |
|----------------|-----------------------------|

#### Left I/O

**Antenna** 2 x Antenna with dust cover

#### Display

**Graphic Chipset** Intel® 13th Generation CPU integrated  
(H610E support 3-display, Q670E support 4-display)

#### Audio

**Audio Codec** Realtek ALC888s

#### Ethernet

**LAN Chipset** 1 x Intel I226-LM  
1 x Intel I219-LM

#### Power Requirement

**ACPI** Single power ATX Support S0, S3, S4, S5 ACPI 5.0 Compliant

**Power Mode** ATX/AT (ATX is default setting)

#### Software Support

**OS** Win 10/Win 11 64bit / Linux

#### Certification

**Certification Information** CE, FCC Class B

#### Mechanical & Environmental

**Operating Temp.** Fanless Mode (35W)  
-10°C ~ 55°C (14°F ~ 131°F)  
Fan Kit Mode (65W)  
-10°C ~ 50°C (14°F ~ 122°F)

**Storage Temp.** -30°C ~ 70°C (-22°F ~ 158°F)

**Operating Humidity** 40°C @ 95% Relative Humidity, Non-condensing

**Dimension (W x L x H)** 215.8 × 202.5 × 75mm

**Vibration Test** With SSD: 5Grms, IEC 60068-2-64, Random, 5 ~ 500Hz, 30min/axis

**Shock Test** With SSD: 50Grms, IEC 60068-2-27, Half Sine, 11ms

**Drop Test** ISTA 2A, IEC-60068-2-32 Test : Ed

**IP Rating** IP50

**Mounting Kit** Wall Mount kit & DIN Rail

Ordering Information

Ordering Information

Intel® 13th Gen Core™ i9/i7/i5/i3/Pentium®/Celeron® Processor

With Intel® Q670E Chipset

EPS-RPS-I9Q-A1-1R (I9-13900TE)

EPS-RPS-I7Q-A1-1R (I7-13700TE)

EPS-RPS-I5Q-A1-1R (I5-13500TE)

EPS-RPS-I3Q-A1-1R (I3-13100TE)

With Intel® H610E Chipset

EPS-RPS-I9H-A1-1R (I9-13900TE)

EPS-RPS-I7H-A1-1R (I7-13700TE)

EPS-RPS-I5H-A1-1R (I5-13500TE)

EPS-RPS-I3H-A1-1R (I3-13100TE)

## Assured Systems

Assured Systems is a leading technology company with over 1,500 regular clients in 80 countries, deploying over 85,000 systems to a diverse customer base in 12 years of business. We offer high-quality and innovative rugged computing, display, networking and data collection solutions to the embedded, industrial, and digital-out-of-home market sectors.

### US

[sales@assured-systems.com](mailto:sales@assured-systems.com)

Sales: +1 347 719 4508

Support: +1 347 719 4508

1309 Coffeen Ave

Ste 1200

Sheridan

WY 82801

USA

### EMEA

[sales@assured-systems.com](mailto:sales@assured-systems.com)

Sales: +44 (0)1785 879 050

Support: +44 (0)1785 879 050

Unit A5 Douglas Park

Stone Business Park

Stone

ST15 0YJ

United Kingdom

VAT Number: 120 9546 28

Business Registration Number: 07699660