

iEPF-9012S-EY4

Expandable Edge AIoT Platform



KEY FEATURES

- Intel® 12th Gen Core™ Processors with H610 Chipset
- 2 x 260-pin DDR4 SO-DIMM up to 64GB (32GB per DIMM)
- 1 x PCIe x16 (PCIe Gen4)
- 1 x M.2 Key B, 1 x M.2 Key E, 2 x Mini PCIe
- 2 x USB 3.2 Gen2x1, 2 x USB 3.2 Gen1x1, 2 x USB 2.0, 6 x COM, 4 x SATA3, 8 x DI, 8 x DO
- 4 x Intel 2.5G LAN (2 support PoE)
- 1 x Displayport, 1 x HDMI 2.0b, 1 x VGA
- Powerful Edge AI acceleration enabled by the most flexible mechanical, thermal, and power design, with support for 275mm x 124 mm x 60 mm (L x H x D) max. and up to 255W graphic card

SPECIFICATIONS

Processor System

| | |
|---------|--|
| CPU | Intel® 12th Gen Core™, Pentium or Celeron Processors |
| Chipset | Intel® H610 |
| Socket | LGA 1700 |

Memory

| | |
|------------|---------------------------|
| Technology | Dual Channel DDR4 2933MHz |
| Capacity | 64 GB (32 GB per DIMM) |
| Socket | 2 x 260-pin SO-DIMM |

Graphics

| | |
|-------------|---|
| Controller | Intel® UHD Graphics |
| DisplayPort | DisplayPort 1.4a, DP++ Max resolution up to 4096x2160@60Hz |
| HDMI | HDMI 2.0b Max resolution up to 4096x2160@60Hz |
| VGA | Max resolution up to 1920x1200@60Hz |

Expansion Slot

| | |
|-------------|---|
| PCIe | 1 x PCIe Gen4 x16 [*] , PCIe x16 slot with default power cable can support up to 180W graphic card (275mm x 111.15 mm x 60 mm (L x H x D), if remove the card holder, it can be limited on 275mm x 124mm x 60 mm) Graphic card can be up to 255W with optional VGA module |
| Mini-PCIe | 1 x Full/Half size with PCIe Gen3 x1 and USB 2.0 1 x Full/Half size with PCIe Gen3 x1 |
| RF& Antenna | 8 x SMA connector hole reserved |
| M.2 | 1 x M.2 (Key E, 2230) with CNVI/PCIe Gen3 x1 and USB2.0 for Wi-Fi/BT module 1 x M.2 (Key B, 2280/3042/3052) with PCIe Gen3 x1 / USB2.0 for 4G / 5G |
| SIM Socket | 2 x Nano SIM Card slot (1 connected to Mini PCIe, 1 connected to M.2 Key B) |

Audio

| | |
|-----------|--|
| Interface | Realtek ALC897, High Definition Audio. |
|-----------|--|

Ethernet

| | |
|-------------------|--|
| Controller/ Speed | 4 x Intel 2.5G LAN (2 support PoE, PoE output max:15.4W/port, each port supports IEEE 802.3AF PoE) |
| Connector | 4 x RJ45 |

Storage

| | |
|----------------|--|
| SATA | 4 x SATA3 (6Gb/s) 4 x 2.5" HDD/SSD Tray |
| CFast (Option) | 1 x Type II socket (Shared with SATA3) |

Rear I/O

| | |
|-------------|--|
| DisplayPort | 1 |
| HDMI | 1 |
| VGA | 1 |
| Ethernet | 4 x 2.5G LAN |
| USB | 2 x USB 3.2 Gen2x1, 2 x USB 3.2 Gen1x1, 2 x USB 2.0, 1 x USB2.0 internal connector w/ lock function |
| Audio | 1 x Mic-in, 1 x Line-out |
| COM | 4 x RS232/422/485 2 x RS232 |
| DIO | 8DIs/8DOs |

Watchdog Timer

| | |
|-----------------|--|
| Output Interval | From Super I/O to drag RESETCON# 256 Segments, 0, 1, 2, ...255sec |
|-----------------|--|

Power Requirements

| | |
|-----------|---|
| Input PWR | 9V~36V VDC with Ignition control and remote power on/off switch. 80V Surge Protection, OVP, UVP, OCP and reverse protection Ignition Power Input w/ 13-mode condition |
|-----------|---|

Environment

| | |
|-----------------------|--|
| Operating Temperature | 35W CPU: -40°C~75°C (-40°F~167°F) 46W~65W CPU: -40°C~55°C (-40°F~131°F) (with FAN inside, without Add-on Card) (w/ air flow 0.5~0.8 m/s) |
| Storage Temperature | -40°C~85°C (-40°F~185°F) |
| Humidity | ~95% @ 40°C (non-condensing) |
| Shock | Operating: 50 G, half sine 11ms duration with SSD |
| Vibration | Operating: 5 Grms, 5-500 Hz, 3 axes with SSD |
| ESD | Contact +/-4kV, Air +/-8kV |
| EMC | EN61000-6-4/-2, CE & FCC Class A |
| Safety | LVD |

Mechanical

| | |
|--------------|--|
| Construction | Aluminum heatsink + Metal chassis |
| Mounting | Desk Mount |
| Dimensions | 202mm (W) x 290mm (D) x 209.3mm (H) (7.95" x 11.42" x 8.24") |
| Net Weight | 10kg |

Others

| | |
|----------------------|------------------------------|
| OS Support | Windows 10 & Linux |
| TPM | TPM 2.0 |
| Real-Time Enablement | TSN, TCC support under YOCTO |

*The PCIe x16 slot locates at the third slot from the right hand side.

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

Sales: +1 347 719 4508
Support: +1 347 719 4508

1309 Coffeen Ave
Ste 1200
Sheridan
WY 82801
USA

EMEA

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