

iEPF-9022S-EY4

Expandable Edge AIoT Platform

ASRock
— Industrial —

Preliminary



KEY FEATURES

- Intel® 13th 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® 13th Gen Core™ 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 (The PCIe x16 slot locates at the third one from the right hand side)
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)

Front 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
DIO	2 x RS232 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 specification is subject to change without notice. The brand and product names are trademarks of their respective companies. Any configuration other than original product specification is not guaranteed.

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