

Preliminary



KEY FEATURES

- Latest and Powerful Intel® Atom® x6000E Processor
- Fan-less and Rugged Design, Wide Temperature Operation (-40 °C to 70 °C)
- 6-36VDC Wide Range Power Inputs
- Most Flexible IOs and Expansion for Industrial Applications
- Intel® TCC and TSN Support for Real-Time Computing
- DIN Rail & Wall Mount Options

SPECIFICATIONS

System Core

Processor	Intel® Elkhart Lake SoC Processors iEP-5000G (x6425RE, QC, 1.9GHz, 12W) iEP-5001G (x6414RE, QC, 1.5GHz, 9W) iEP-5002G (x6212RE, DC, 1.2GHz, 6W)
Video	1 x HDMI 2.0b, 1 x VGA
Memory	2 x DDR4 3200MHz SO-DIMM, up to 32GB (In-Band ECC)

I/O Interface

Ethernet	3 x 1GbE*
PoE (Option)	2 x PoE** (Intel I210AT, Option)
Serial Port	3 x COM (RS-232/422/485 BIOS select)
USB	2 x USB 3.2 Gen1 2 x USB 2.0
Digital I/O	4DI/4DOs
Audio	1 x Mic in 1 x Line out
CANBus (Option)	1 x CANBus connector supports up to 2 CANBus devices via additional cable

Expansion

SIM	1 x External SIM card socket for 4G LTE or 5G module
RF& Antenna (Option)	M.2 Wi-Fi 5 module supports IEEE 802.11 a/b/g/n/ac + BT 5.1 (Option) M.2 Wi-Fi 6E module supports IEEE 802.11 a/b/g/n/ac/ax + BT 5.2 (Option) 2 x 4G LTE antenna + 2 x Wi-Fi antenna (Option) 4 x 5G antenna + 2 x Wi-Fi antenna (Option)
M.2 Socket	1 x M.2 Key E Socket (2230) for Wi-Fi module 1 x M.2 Key B Socket (3042/3052) for 4G LTE module / 5G module

Manageability / Security

Manageability	WDT, Intel® In-Band Manageability
Security	TPM2.0

Power Supply

DC Input	6-36 VDC, 80V Surge Protection Supports Latch Adaptor
AC to DC Adaptor (Option)	AC input 100-240Vac, 1.5A 50-60Hz, DC output 19V, 3.42A, 65W Adaptor (Latch type)

Storage Device

SD Slot	1 x Micro SD card slot (SD Card specification version 3.01)
SATA (Option)	1 x 2.5" 9.5mm SATA3 HDD or SSD
M.2 Socket	1 x M.2 Key M Socket (2280) with PCIe2/SATA3 for Storage

Mechanical

Dimensions	58mm (W) x 125mm (D) x 157mm (H)
Indicator	1 x SATA / NVMe Storage LED, 1 x Wi-Fi / BT LED
Function	1 x Power Button, 1 x Clear CMOS Button
Net Weight	1.3kg
Mounting	DIN-Rail or Wall mounting

Environmental

Operating Temperature	-40°C ~ 70°C (-40°F~158°F)
Storage Temperature	-40°C ~ 85°C (-40°F~185°F)
Humidity	~95% @ 40°C (non-condensing)
Vibration	Operating: 5 Grms, 5-500 Hz, 3 axes with SSD
ESD	Contact +/-8 KV, Air +/-15 KV
Shock	Operating 50 Grms, half sine 11 ms duration with SSD
EMC	CE and FCC Class A (EN61000-6-4/-2)
Safety	UL, CB

Add-on Feature / OS Support

Real-Time Enablement	TSN, TCC support under YOCTO
OS Support	Windows 10, Linux

Order Information	iEP-5000G-000/ iEP-5001G-000/ iEP-5002G-000	iEP-5000G-001	iEP-5000G-002
2.5" Storage	Build to Order	N/A	Build to Order
Wifi/BT	Support by additional Wifi/BT Kit		
4G/LTE or 5G	Support by additional 4G/LTE Kit Support by additional 5G Kit	N/A	N/A
PoE	N/A	Default Support	N/A
CANBus	N/A	N/A	Default Support

* Current FW and driver may change in the future.

**iEP-5000G-001 operating temp. and power delivery spec TBD