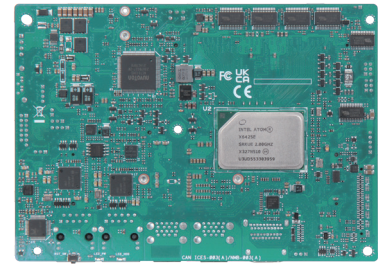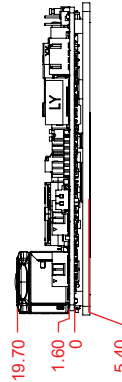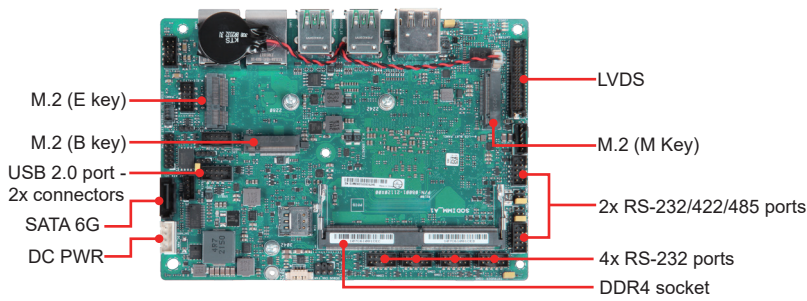# PEB-2274

Intel® Atom® x6000E processor series based 3.5" embedded board with DDR4 SDRAM, Gigabit Ethernet, M.2 (E+B+M key) sockets, 6x COM ports and 9~36V DC input

- M.2 (E key)
- M.2 (B key)
- USB 2.0 port - 2x connectors
- SATA 6G
- DC PWR
- LVDS
- M.2 (M Key)
- 2x RS-232/422/485 ports
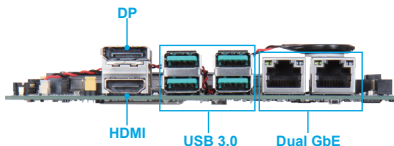- 4x RS-232 ports
- DDR4 socket

19.70 1.60 0 5.40

PEB-2274 is built upon Intel Atom® x6000E series processors (formerly Elkhart Lake). It features DDR4 memory up to 32GB, two Gigabit Ethernet ports, three M.2 sockets, and wide voltage of power input from 9V to 36V. It supports industrial temperature range from -40°C to 85°C, and can operate with TDP under 12W for fanless applications.

FEATURES

- Supports DDR4 3200 MHz non-ECC SDRAM on one SODIMM slot, up to 32GB
- Supports three displays configuration: HDMI+DP+LVDS
- Supports three M.2 (E+B+M key) slots, one SATA III port
- Supports wide voltage of DC power input from 9V~36V
- Support a wide temperature range from -40ºC to 85ºC

REAR/IO

- DP
- HDMI
- USB 3.0
- Dual GbE

ORDERING GUIDE

AB1-3S90	(GP).PEB-2274 Intel Elkhart Lake SoC on Board(x6425E,3.0G,12C,1.5M).EBC. w/ DDR4/DP/HDMI/GbE/COM/Audio/USB

PACKING LIST

One PEB-2274 Main board

GENERAL

Processor	Intel® Atom® x6425E, 4 cores, 2.0GHz/3.0GHz, 12W TDP
Chipset	Integrated
Memory	- DDR4 3200 MHz, In-Band ECC (IBECC) - SO-DIMM socket, up to 32GB
Storage Devices	1x SATA III
Watchdog Timer	YES
Expansion Interface	- 1x M.2 E key, type 2230 for WIFI/BT device - 1x M.2 M key, type 2280 (SATA mode & PCIe x2 mode) - 1x M.2 B key (USB 2.0)

I/O INTERFACE

Audio	- Realtek ALC897 - Line-out or Mic-in
Ethernet	2x Intel® i210IT with 2x RJ-45
Serial port	- 6 (2 x RS-232/422/485, 4x RS 232)
USB	- 4x USB 3.2 Gen2 ports on rear I/O - 1x USB 2.0 Header support additional 2x USB 2.0 connectors
Keyboard & Mouse	N/A
GPIO	1 (8-bit)
Other	1x SPI TPM header

DISPLAY

Graphic Controller	Intel® 10th Gen UHD Graphics
Display Interface	- HDMI 2.0 up to 4K x 2K @ 60 Hz - DP++ 1.2 up to 4096 x 2160 @ 60 Hz - LVDS up to 1920 x 1080 @ 60 Hz

Mechanical & Environment

Dimension	146mm(L) x 105(W) mm
Power Supply	DC 9V~36V input
Environment	- Operating temperature: -40ºC to 85ºC - Non-operating temperature: -40ºC to 85ºC - Relative humidity:10% to 95% (non-condensing)
MTBF	TBD

EC SATA 3.2 AMI BIOS LVDS DDR 4 HDMI DP USB 2.0 Watch DOG Fanless FC CE Windows 10 IoT RoHS

*All information provided is subject to change without notice. Last updated: July 19, 2024