



# PEB-2773

Apollo Lake Atom™ Processor based 3.5' embedded Board with DDR3L SDRAM, Gigabit Ethernet, Dual mini-PCle socket, six COM ports and 12~24V DC input

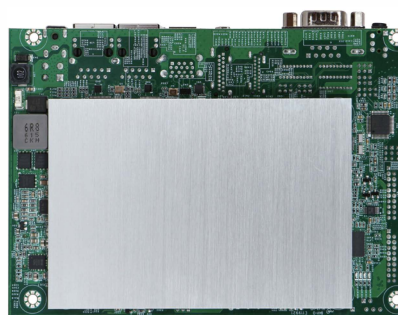
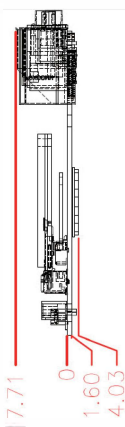
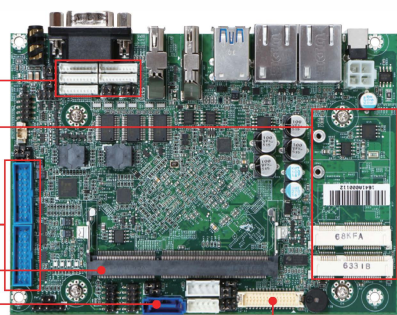
Five RS-232 COM ports

Dual Mini-PCle socket

Four USB3.0 ports

DDR3L socket

SATA III  
LVDS

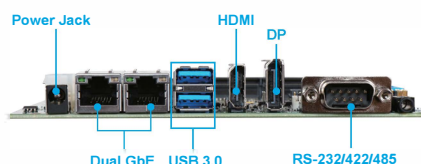


PEB-2773 build with Intel® Atom™ processor E3900 series. Not only does it operates with TDP under 12W for fan-less applications, but it also supports industrial temperature range from -40°C to 85°C and wide voltage of power input from 12V to 24V.

## FEATURES

- Supports Intel® Apollo Lake series processor
- Supports DD3L-1866/1600 non-ECC SDRAM on one SODIMM slot, up to 8GB
- Supports Triple displays including DP, HDMI, and Dual channel 24bit LVDS
- Supports Mini-PCle / mSATA (Dual Mini-PCle slot)
- Supports 6\*COM ports(REAR IO support RS-232/422/485)

## REAR/IO



## ORDERING GUIDE

|          |   |
|----------|---|
| AB1-3E83 | (R).PEB-2773. Intel Apollo Lake SoC on Board.EBC. w/DDR3L/DP/HDMI/GbE/COM/Audio/USB |
|----------|---|

## PACKING LIST

|                         |
|-------------------------|
| One PEB-2773 Main board |
| One Installation CD     |
| One SATA cable          |

## GENERAL

|                     |  |
|---------------------|--|
| Processor           | Intel® Atom™ Dual/Quad Core E3900 series Processor (up to 12W)                 |
| Chipset             | N/A  |
| BIOS                | AMI uEFI BIOS  |
| Memory              | Support up to 8GB DDR3L 1333/1600/1866 MH/z SDRAM on one 204 pin SODIMM socket |
| Storage Devices     | - One SATA III port<br>- One mSATA socket(mini-PCle)                           |
| Watchdog Timer      | Programmable watchdog timer, time out period from 1 sec to 255 secs.           |
| Hardware Monitoring | Temperature (CPU & System)   |
| Expansion Interface | Two mini-PCle socket (Full size support mSATA / Half size support WiFi/BT)     |

## I/O INTERFACE

|             |  |
|-------------|--|
| Super I/O   | N/A  |
| Audio       | - High Definition Audio integrated in Intel SoC<br>- Realtek ALC892 HDA codec<br>- Audio jack on rear I/O with Line-in, Line-out, and Mic-in on board pin header |
| Ethernet    | - Dual Intel® I210IT GbE controller<br>- 2x RJ45 connectors on rear I/O  |
| Serial Port | - 1x RS-232/422/485 with DP9 connector on REAR I/O(selected by bios)   |
| USB         | - 2x USB 3.0 ports on rear I/O<br>- 4x USB 3.0 ports on board with pitch 3.0 header  |
| GPIO        | 8-bit configurable controlled by embedded controller   |

## DISPLAY

|                    |  |
|--------------------|--|
| Graphic Controller | - Intel® Gen 9 Graphics supports DirectX 12, OpenGL 4.2 / OpenCL 2.0<br>- Video decode HW acceleration support for H.264, H.265, MPEG2, VC-1/WMV9, JPEG, VP8, and VP9                  |
| Display Interface  | - LVDS: dual channel 24bit LVDS on board connector, up to 1920x1200<br>- HDMI: on board connector, resolution up to 3840 x2160<br>- DP: on board connector, resolution up to 4096x2160 |

## Mechanical & Environment

|              |  |
|--------------|--|
| Dimension    | 146(L) x 102(W) mm; 5.74"(L) x 4.02"(W)  |
| Power Supply | DC 12-24V input  |
| Environment  | - Operation Temperature: -40°C to 80°C<br>- Storage Temperature: -40°C to 80°C<br>- Relative Humidity: 5% to 95%, non-condensing |
| MTBF         | Over 120,000 hours at 40°C   |

