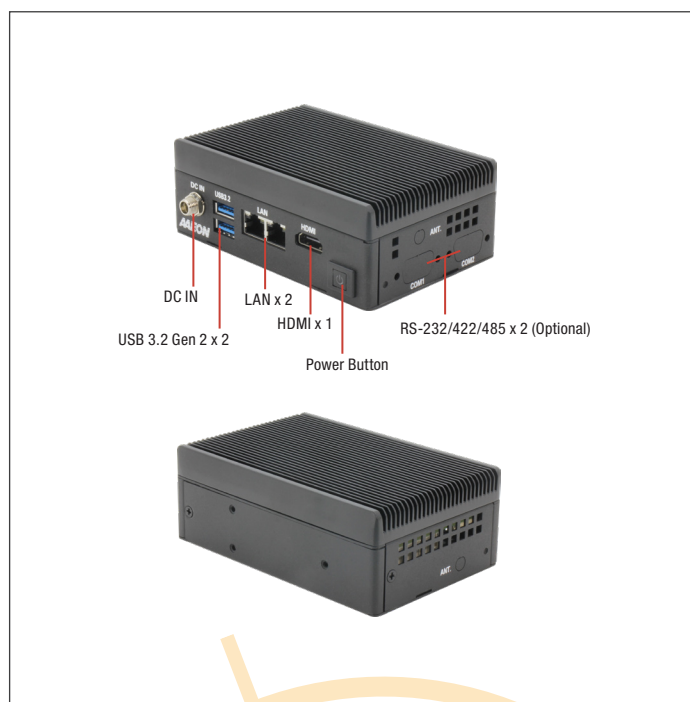


# PICO-EHL4-SEMI

PICO-SEMI TurnKit with Intel® Pentium® and Celeron® N and J Series Processors



## Features

- Intel® Pentium®, and Celeron® N and J series processors (formerly Elkhart Lake)
- Onboard LPDDR4x System Memory
- 32GB eMMC5.1 (Optional: 64GB/128GB)
- HDMI 2.0 x 1
- GbE x 2, USB 3.2 Gen 2 x 2
- Mini Card x 1, M.2 2230 E-Key x 1
- COM x 2 (Optional)



|                  |                                                                    |
|------------------|--------------------------------------------------------------------|
| SERIAL PORT      | —                                                                  |
| VIDEO            | —                                                                  |
| SATA             | 32GB eMMC 5.1 (Optional: 64GB/128GB)                               |
| AUDIO            | —                                                                  |
| DIO/GPIO         | —                                                                  |
| SMBus/I2C        | —                                                                  |
| FAN              | —                                                                  |
| Front Panel      | HDD LED, PWR LED, Power Button, Buzzer, Reset                      |
| Others           | —                                                                  |
| <b>EXPANSION</b> |                                                                    |
| Mini PCI-E/mSATA | Full size mPCIe/mSATA x 1 (SATA as default, PCIe selected by BIOS) |
| M.2              | M.2 2230 E-Key x 1 (PCIe [x1]/USB 2.0)                             |
| Others           | —                                                                  |

## ENVIRONMENT & CERTIFICATION

|                    |                                                |
|--------------------|------------------------------------------------|
| OPERATING TEMP     | 32°F ~ 122°F (0°C ~ 50°C) with 0.5m/s air flow |
| STORAGE TEMP       | -40°F ~ 185°F (-40°C ~ 85°C)                   |
| OPERATING HUMIDITY | 0% ~ 90% relative humidity, non-condensing     |
| MTBF (HOURS)       | 489,989                                        |
| EMC                | CE/FCC Class A                                 |

## Specifications

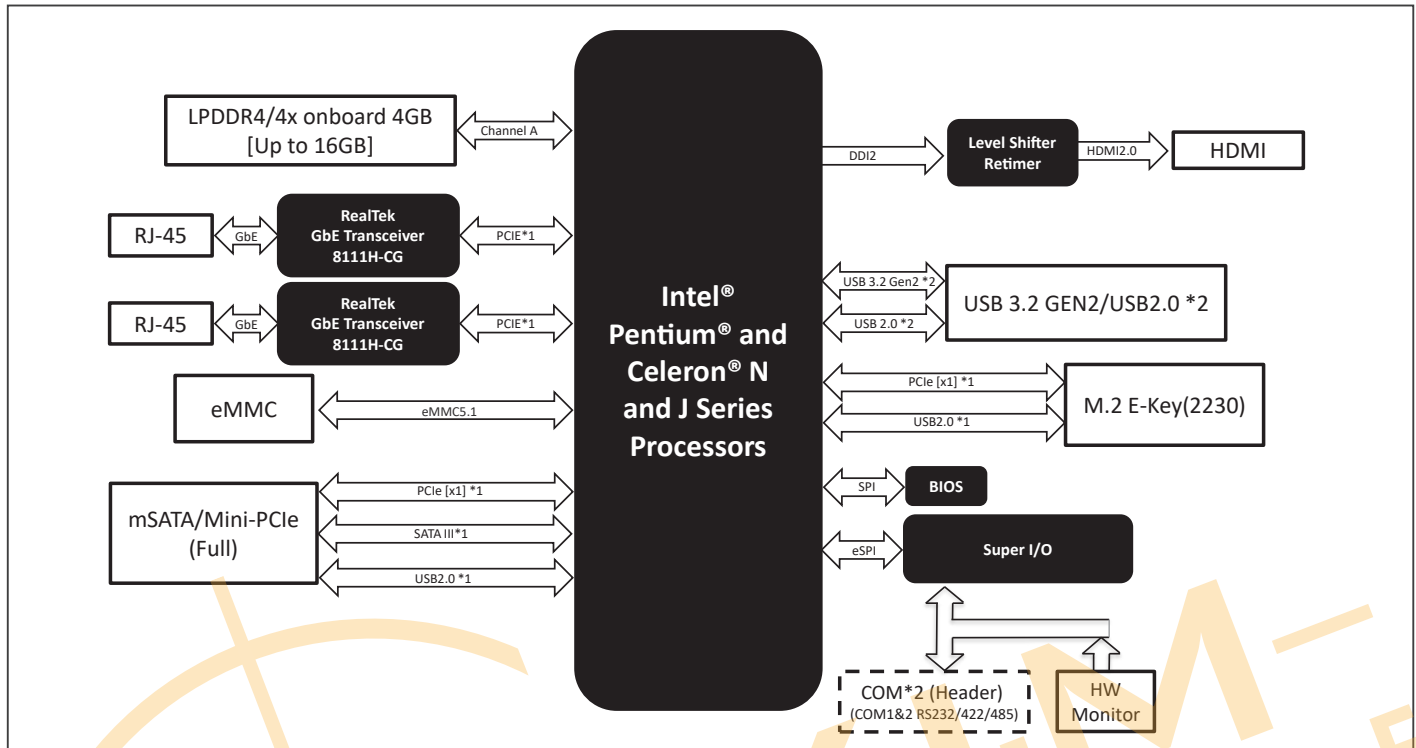
|                     |                                                                                                                                    |
|---------------------|------------------------------------------------------------------------------------------------------------------------------------|
| <b>SYSTEM</b>       |                                                                                                                                    |
| FORM FACTOR         | PICO-SEMI                                                                                                                          |
| CPU                 | Intel® Celeron® Processor J6412 (4C/4T, 2.00 GHz, 10W)<br>Intel® Celeron® Processor N6210 (2C/2T, 1.20 GHz, 6.5W)                  |
| CHIPSET             | Integrated with Intel® SoC                                                                                                         |
| MEMORY TYPE         | Onboard Single-Channel LPDDR4x 3200MHz (Max. 16GB, Non ECC)                                                                        |
| BIOS                | UEFI                                                                                                                               |
| WAKE ON LAN         | Yes                                                                                                                                |
| WATCHDOG TIMER      | 255 Levels                                                                                                                         |
| SECURITY            | Intel® PTT (Integrated TPM)                                                                                                        |
| RTC Battery         | Lithium Battery 3V/240mAh                                                                                                          |
| DIMENSION           | 4.80" x 3.18" x 1.75" (122mm x 80.8mm x 44.4mm)                                                                                    |
| Gross Weight        | 0.88 lb. (0.40kg)                                                                                                                  |
| OS Support          | Windows 10 (64 bit)<br>Ubuntu 20.04.3(IOT)/Kernel 5.13                                                                             |
| <b>POWER</b>        |                                                                                                                                    |
| POWER REQUIREMENT   | 12V only                                                                                                                           |
| POWER SUPPLY TYPE   | ATX                                                                                                                                |
| CONNECTOR           | DC Jack Connector                                                                                                                  |
| POWER CONSUMPTION   | Intel® Pentium® J6426, LPDDR4x onboard 16GB, 1.43A@ +12V(TYPICAL)<br>Intel® Pentium® J6426, LPDDR4x onboard 16GB, 1.78A@ +12V(MAX) |
| <b>DISPLAY</b>      |                                                                                                                                    |
| CONTROLLER          | Intel® UHD Graphics for 10th Gen Intel® Processors                                                                                 |
| LVDS/eDP            | —                                                                                                                                  |
| Display Interface   | HDMI 2.0 x 1, 3840 x 2160 @60Hz                                                                                                    |
| Multiple Display    | Up to 1 Display                                                                                                                    |
| <b>AUDIO</b>        |                                                                                                                                    |
| CODEC               | —                                                                                                                                  |
| AUDIO INTERFACE     | —                                                                                                                                  |
| Speaker             | —                                                                                                                                  |
| <b>EXTERNAL I/O</b> |                                                                                                                                    |
| ETHERNET            | RTL8111H-CG 1GbE, RJ45 x 2                                                                                                         |
| USB                 | USB 3.2 Gen 2 x 2                                                                                                                  |
| SERIAL PORT         | COM 1, COM 2 (RS-232/422/485, supports 5V/12V/RI, Optional)                                                                        |
| VIDEO               | HDMI 2.0 x 1                                                                                                                       |
| <b>INTERNAL I/O</b> |                                                                                                                                    |
| USB                 | —                                                                                                                                  |

## Packing List

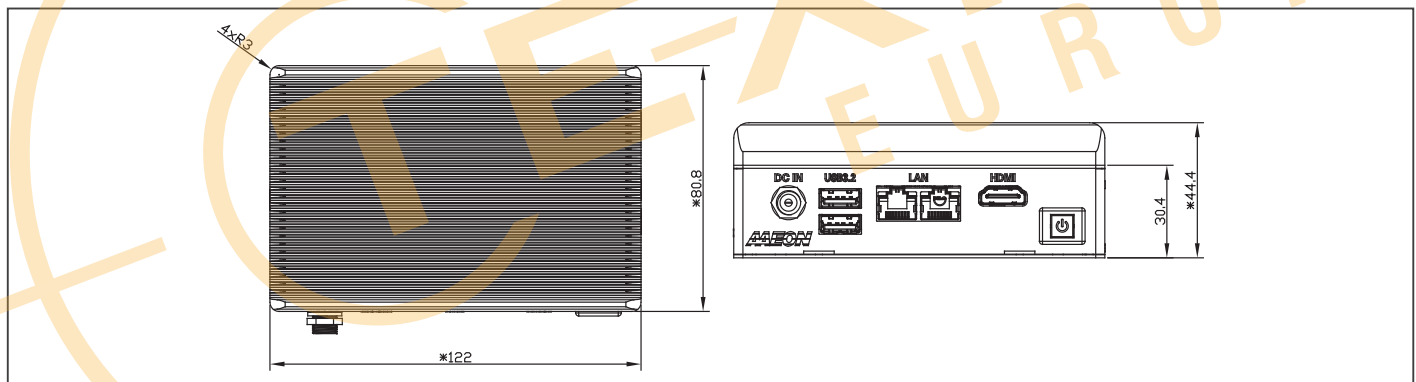
- PICO-EHL4-SEMI

## Optional Accessories

| Part Number          | Description                                  | Qty. |
|----------------------|----------------------------------------------|------|
| 1702031802           | Power Cord (US Type)                         | 1    |
| 1702031803           | Power Cord (Europe Type)                     | 1    |
| 170203180E           | Power Cord (Japan)                           | 1    |
| 125530060Z           | Power Adapter 12V/5A 60W FSP060-DHAN3 w/Lock | 1    |
| 170X000654           | Dual COM port cable (100mm)                  | 1    |
| PICO-EHL4-SEMI-VESA1 | PICO-EHL4-SEMI VESA bracket kit              | 1    |
| PICO-EHL4-SEMI-WMT1  | PICO-EHL4-SEMI Wallmount bracket kit         | 1    |
| PICO-EHL4-SEMI-DIN1  | Din rail kit                                 | 1    |

**Block Diagram****Dimension**

Unit: mm

**Ordering Information**

| Part number             | CPU                             | Memory | Display  | Storage   | LAN     | USB              | Expansion slot                             | Power      | Operating Temp | Others |
|-------------------------|---------------------------------|--------|----------|-----------|---------|------------------|--------------------------------------------|------------|----------------|--------|
| PICO-EHL4-SEMI-A11-S001 | Intel® Celeron® Processor N6210 | 4GB    | HDMI x 1 | eMMC 32GB | GbE x 2 | USB3.2 Gen 2 x 2 | M.2 2230 E-key x 1<br>mSATA(Full-size) x 1 | +12V (ATX) | 0~50°C         | —      |
| PICO-EHL4-SEMI-A11-S002 | Intel® Celeron® Processor J6412 | 8GB    | HDMI x 1 | eMMC 32GB | GbE x 2 | USB3.2 Gen 2 x 2 | M.2 2230 E-key x 1<br>mSATA(Full-size) x 1 | +12V (ATX) | 0~50°C         | —      |

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