



## EZX-EHLP

Intel® Elkhart Lake 1.8" SBC

- > Bottom Layer Soldered Processor
- > Intel® Atom® x6000E Series and Intel® Pentium® and Celeron® J Series processors
- > Onboard Single channel LPDDR4 4GB memory down (8GB for BOM option)
- > Dual Display, Mini DP, eDP 1.3
- > M.2 Key-B 3042/2242 bridge bracket to 3052 (with PCIe x2 (via OEM BIOS request) or default (PCIe x1+USB2.0/USB3.0), or (SATAIII+ USB2.0/USB3.0), SIM Slot for SSD/LTE/IO Cards) with FPC connector
- > Single Intel® I210AT/IT Gigabit Ethernet
- > 1 x Dual deck USB3.1 gen2 Type A for 2 x USB 3.1 Gen2 at I/O, 4 x USB 2.0 by pin header
- > 1 x RS-232/422/485
- > GPIO 8bit
- > DC-In+12V

**Spec**

-System Information-	
<b>Processor</b>	Onboard Intel® Pentium®/Celeron®/Atom™ SoC BGA Processor (Elkhart Lake Platform 4.5~12W)- (with CPU Bottom Mounted)
<b>Platform Controller Hub</b>	Elkhart lake SoC integrated
<b>System Memory</b>	Onboard Single channel LPDDR4 4GB memory down (8GB for BOM option)
<b>I/O Chipset</b>	EC ITE IT5571
<b>BIOS Information</b>	AMI BIOS, 256Mbit SPI Flash ROM
<b>Watchdog Timer</b>	H/W Reset, 1sec. ~ 65535sec and 1sec. or 1min./step
<b>H/W Status Monitor</b>	CPU & system temperature monitoring Voltages monitoring
<b>TPM</b>	Onboard eMMC 5.1 64GB
Expansion	
<b>Expansion</b>	1 x M.2 Type B 3042/2242 bridge bracket to 3052 (with PCIe x2 (via OEM BIOS request) or default (PCIe x1+USB2.0/USB3.0), or (SATAIII+ USB2.0/USB3.0), SIM Slot for SSD/LTE/IO Cards) *Default is PCIe x1/SATAIII+USB2.0/USB3.0 support WWAN+GNSS or NVMe SSD
Storage	
<b>Storage</b>	1 x M.2 Type B
I/O	
<b>USB Port</b>	1 x Dual deck USB3.1 gen2 Type A for 2 x USB 3.1 Gen2 at I/O 4 x USB2.0 fby pin header
<b>COM Port</b>	1 x RS232/422/485
<b>DIO</b>	1 x 8-bit GPIO
Display	
<b>Graphic Chipset</b>	Intel® UHD Graphics
<b>Spec. &amp; Resolution</b>	Mini DP: Max resolution 4096x2160@60Hz eDP 1.3: Max resolution 4096x2160@60Hz
<b>Multiple Display</b>	Dual Display
Certifications	
<b>Certification Information</b>	CE FCC Class B
Ethernet	
<b>LAN Chipset</b>	1 x Intel I210AT/IT Gigabit Ethernet
<b>Ethernet Interface</b>	1 x 10/100/1000 Base-Tx GbE compatible
<b>LAN Port</b>	1 x RJ-45
Mechanical & Environmental	
<b>Operating Temperature</b>	0~60°C, w/HDD/SSD, ambient with 0.5 m/s Air flow Elkhart Lake N/J Series CPU SKU -20~60°C, w/HDD/SSD, ambient with 0.5 m/s Air flow Elkhart Lake Atom x6000E Series CPU SKU
<b>Storage Temperature</b>	-40°C ~ 75°C (-40°F ~ 167°F)
<b>Operating Humidity</b>	40°C @ 95% Relative Humidity, Non-condensing
<b>Weight</b>	0.30kg
<b>Power Requirement</b>	DC in +12V
<b>ACPI</b>	Single power ATX Support S0,S3, S4, S5 ACPI 5.1 Compliant
<b>Power Mode</b>	AT / ATX mode Switchable Through Jumper
<b>Dimension (L x W)</b>	84mm (3.31") x 65mm (2.55")
Software Support	
<b>OS Information</b>	Win 10 64bit Linux
Ordering Information	



**Ordering Information**

EZX-EHLP-J6412-A1R  
EZX-EHLP-J6413-A1R  
EZX-EHLP-X11E-A1R  
EZX-EHLP-X13E-A1R  
EZX-EHLP-X12RE-A1R  
Intel® Pentium®/Celeron®/Atom™ SoC BGA Processor 1.8" SBC Motherboard

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