



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 PCI-e x2 (via OEM BIOS request) or default (PCI-e 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	
Processor	Onboard Intel® Pentium®/Celeron®/Atom™ SoC BGA Processor (Elkhart Lake Platform 4.5~12W)- (with CPU Bottom Mounted)
Platform Controller Hub	Elkhart lake SoC integrated
System Memory	Onboard Single channel LPDDR4 4GB memory down (8GB for BOM option)
I/O Chipset	EC ITE IT5571
BIOS Information	AMI BIOS, 256Mbit SPI Flash ROM
Watchdog Timer	H/W Reset, 1sec. ~ 65535sec and 1sec. or 1min./step
H/W Status Monitor	CPU & system temperature monitoring Voltages monitoring
TPM	Onboard eMMC 5.1 64GB
Expansion	
Expansion	1 x M.2 Type B 3042/2242 bridge bracket to 3052 (with PCI-e x2 (via OEM BIOS request) or default (PCI-e x1+USB2.0/USB3.0), or (SATAIII+ USB2.0/USB3.0), SIM Slot for SSD/LTE/IO Cards) *Default is PCI-e x1/SATAIII+USB2.0/USB3.0 support WWAN+GNSS or NVMe SSD
Storage	
Storage	1 x M.2 Type B
I/O	
USB Port	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
COM Port	1 x RS232/422/485
DIO	1 x 8-bit GPIO
Display	
Graphic Chipset	Intel® UHD Graphics
Spec. & Resolution	Mini DP: Max resolution 4096x2160@60Hz eDP1.3: Max resolution 4096x2160@60Hz
Multiple Display	Dual Display
Certifications	
Certification Information	CE FCC Class B
Ethernet	
LAN Chipset	1 x Intel I210AT/IT Gigabit Ethernet
Ethernet Interface	1 x 10/100/1000 Base-Tx GbE compatible
LAN Port	1 x RJ-45
Mechanical & Environmental	
Operating Temperature	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
Storage Temperature	-40°C ~ 75°C (-40°F ~ 167°F)
Operating Humidity	40°C @ 95% Relative Humidity, Non-condensing
Weight	0.30kg
Power Requirement	DC in +12V
ACPI	Single power ATX Support S0,S3, S4, S5 ACPI 5.1 Compliant
Power Mode	AT / ATX mode Switchable Through Jumper
Dimension (L x W)	84mm (3.31") x 65mm (2.55")
Software Support	
OS Information	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