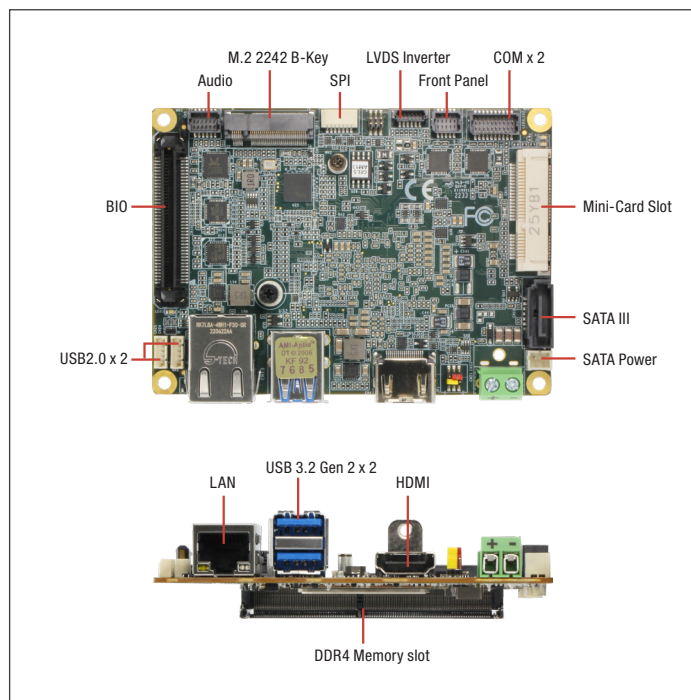


PICO-EHL1

Pico-ITX Board with Intel Atom® x6000E Series, and Intel® Pentium® and Celeron® N and J Series Processors



Features

- DDR4 3200MHz, SODIMM x 1, up to 32GB
- eDP 1.3/LVDS x 1 (2ch 18/24bit)
- HDMI 1.4b x 1
- Realtek RTL8111H-CG x 1
- Full size mPCIe/mSATA x 1
- M.2 2242 B-Key x 1
- USB 3.2 Gen2 x 2, USB2.0 x 2
- RS-232/422/485 x 2
- BIO (PCIe [x2], USB2.0, SMBUS/GPIO, line out, DDI2)



USB	USB 3.2 Gen 2 x 2
SERIAL PORT	—
VIDEO	HDMI 1.4b x 1 (up to 3840 x 2160)
INTERNAL I/O	
USB	USB 2.0 x 2
SERIAL PORT	COM 1, COM 2 (RS-232/422/485, supports 5V/12V/RI)
VIDEO	LVDS (2ch 18/24bit) 1920 x 1200 (Optional: eDP 1.3, 3840 x 2160 @60Hz)
SATA	SATA III x 1 +5V SATA Power Connector x 1
AUDIO	Line-in/Line-out/MIC
DIO/GPIO	4-bit
SMBus/I2C	SMBUS/I2C x 1 (SMBUS as default)
Touch	—
FAN	4pins Smart Fan x 1
SIM	—
Front Panel	HDD LED, PWR LED, Power Button, Buzzer, Reset
Others	—
EXPANSION	
Mini PCI-E/mSATA	Full size mPCIe/mSATA x 1 (SATA as default, PCIe selected by BIOS)
M.2	M.2 2242 B-key x 1 (PCIe [x2] as default, USB2.0 is optional)
Others	BIO (Optional, supports PCIe [x2], USB2.0, SMBUS/GPIO, line out, DDI2)
ENVIRONMENT & CERTIFICATION	
OPERATING TEMP	32°F ~ 140°F (0°C ~ 60°C)
STORAGE TEMP	-40°F ~ 185°F (-40°C ~ 85°C)
OPERATING HUMIDITY	0% ~ 90% relative humidity, non-condensing
MTBF (HOURS)	494,537
EMC	CE/FCC Class A

Specifications

SYSTEM	
FORM FACTOR	PICO-ITX
CPU	Intel Atom® x6000E, Celeron® N and J Processor Series: Intel Atom® x6425E (4C, 2.0GHz, up to 3.0GHz, TDP up to 12W) Intel Atom® x6211E (2C, 1.3GHz, up to 3.0GHz, TDP up to 6W) Intel® Celeron® Processor J6412 (4C, 2.0GHz, up to 2.6GHz, TDP up to 10W) Intel® Celeron® Processor N6210 (2C, 1.2GHz, up to 2.6GHz, TDP up to 6.5W)
CHIPSET	Integrated with Intel® SoC
MEMORY TYPE	DDR4 up to 3200MHz, SODIMM x 1, up to 32GB
BIOS	UEFI
WAKE ON LAN	Yes
WATCHDOG TIMER	255 Levels
SECURITY	TPM 2.0 (Optional)
RTC Battery	Lithium Battery 3V/240mAh
DIMENSION	3.94" x 2.84" (100mm x 72mm)
Gross Weight	0.18 lbs (0.08 kg)
OS Support	Windows® 10 (64-bit) Ubuntu 20.04.5/Kernel 5.15
POWER	
POWER REQUIREMENT	+12V
POWER SUPPLY TYPE	AT/ATX
CONNECTOR	Phoenix 2-pin Connector (Default) Lockable DC Jack Connector (colay)
POWER CONSUMPTION	Intel Atom® x6425E, DDR4 32GB, 2.67A@ +12V (Typical) Intel Atom® x6425E, DDR4 32GB, 2.84A@ +12V (Max)
DISPLAY	
CONTROLLER	Intel® UHD Graphics for 10th Gen Intel® Processors
LVDS/eDP	LVDS (2ch 18/24bit) 1920 x 1200 (Optional: eDP 1.3, 3840 x 2160 @60Hz)
Display Interface	HDMI 1.4b x 1 (up to 3840 x 2160) DDI (BIO, Optional)
Multiple Display	Up to 3 Simultaneous Displays
AUDIO	
CODEC	Realtek ALC269
AUDIO INTERFACE	Line-in/Line-out/MIC
Speaker	—
EXTERNAL I/O	
ETHERNET	Realtek 8111H Gigabit Ethernet 10/100/1000Base, RJ-45 x 1

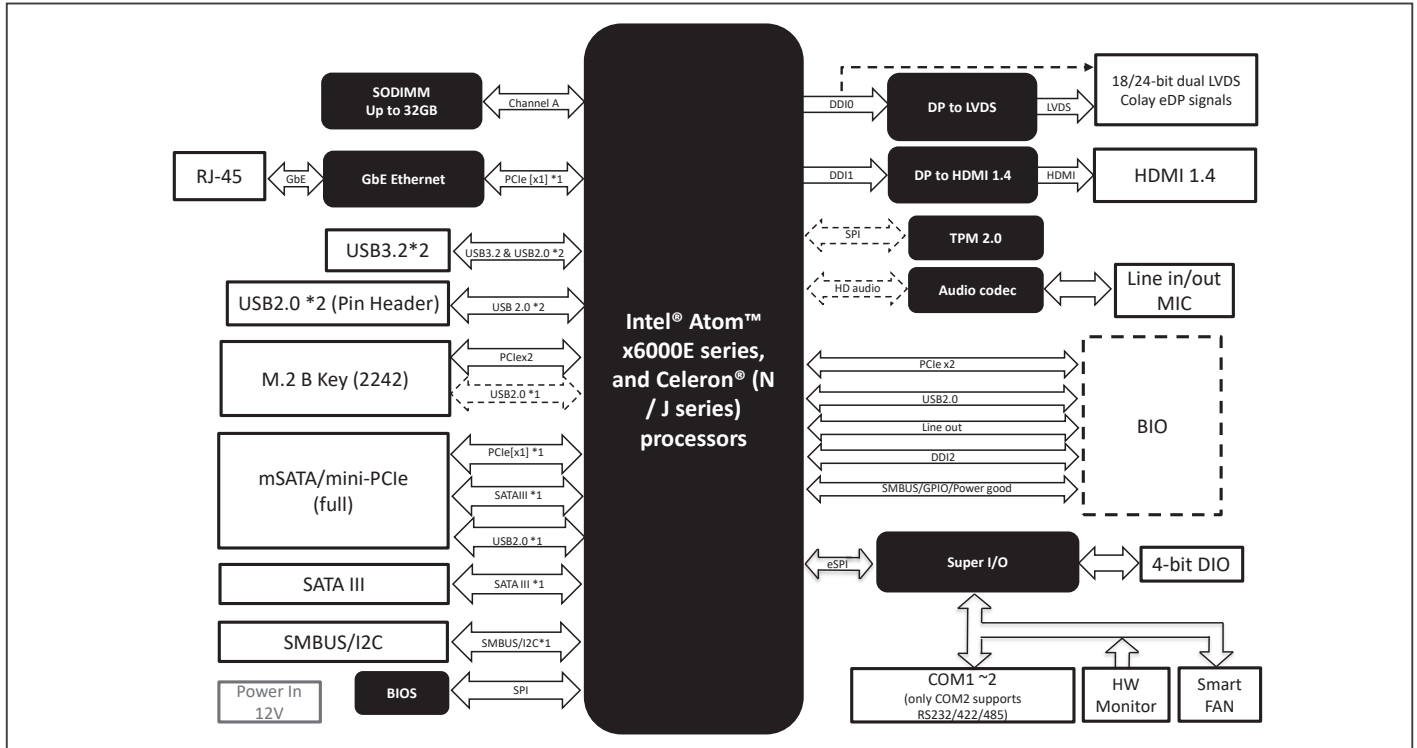
Packing List

- PICO-EHL1

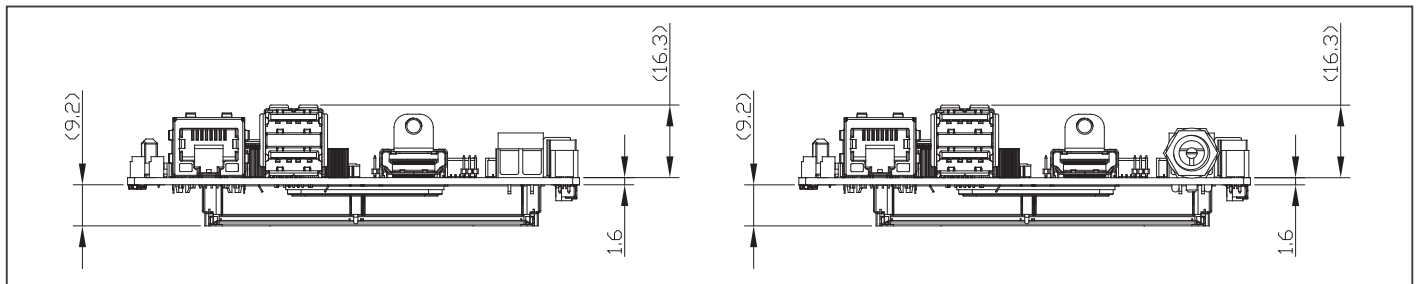
Optional Accessories

Part Number	Description	QTY
1709100108	Front Panel cable.10cm	1
170X000231	Dual COM cable.30cm	1
1700050207	USB2.0 cable.20cm	1
170X000593	SATA CABLE.15cm	1
1702150155	SATA power cable.15cm	1
1702030200	Power cable (Phoenix type to DC Jack).20cm	1
170X000156	Audio cable.25cm	1
PICO-EHL1-FAN01	Cooler.100*72*24mm.for J6412/N6210	1
PICO-EHL1-FAN02	Cooler.100*72*22.8mm.for x6425E/x6211E	1

Block Diagram



Dimension Unit: mm



Ordering Information

Part number	CPU	Display	Storage	LAN	USB	RS-232/422/485	Expansion slot	Power	Operating Temp	Others
PICO-EHL1-A10-0001	N6210	HDMI x 1 LVDS x 1	SATAIII x 1	GbE x 1	USB 2.0 x 2 USB3.2 Gen 2 x 2	2	M.2 2242 B-key x 1 miniCard (Full) x 1	+12V (Terminal block)	0~60°C	DIO, Line-out
PICO-EHL1-A10-0002	J6412	HDMI x 1 LVDS x 1	SATAIII x 1	GbE x 1	USB 2.0 x 2 USB3.2 Gen 2 x 2	2	M.2 2242 B-key x 1 miniCard (Full) x 1	+12V (Terminal block)	0~60°C	DIO, Line-out
PICO-EHL1-A10-0003	x6211E	HDMI x 1 LVDS x 1	SATAIII x 1	GbE x 1	USB 2.0 x 2 USB3.2 Gen 2 x 2	2	M.2 2242 B-key x 1 miniCard (Full) x 1	+12V (Terminal block)	0~60°C	DIO, Line-out
PICO-EHL1-A10-0004	x6425E	HDMI x 1 LVDS x 1	SATAIII x 1	GbE x 1	USB 2.0 x 2 USB3.2 Gen 2 x 2	2	M.2 2242 B-key x 1 miniCard (Full) x 1	+12V (Terminal block)	0~60°C	DIO, Line-out