PPC2-CW123-EHL

IEI Heavy Industrial Panel PC

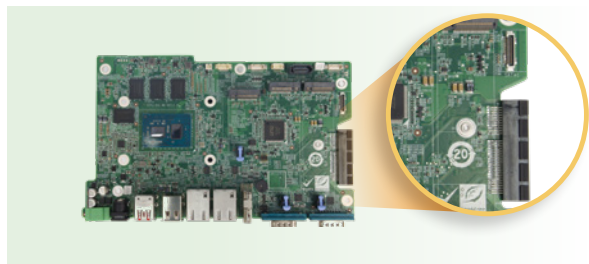### Powered by Intel® Elkhart Lake Platform

iEi®

PPC2-CW123-EHL

Panel PC equips Intel® Celeron® J6412 processor, on-board 8GB memory, HDMI display output, dual 2.5G Ethernet port, one M.2 M key & one M.2 B key expansion slots, 12~24V DC input, anti-glare and anti-UV 10-point touchscreen
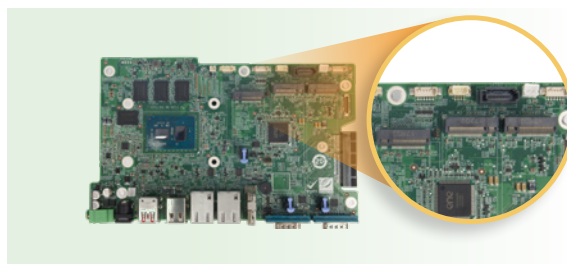
Fanless | M.2 | Touchscreen | Dual 2.5GbE LAN | IP65

IP2EHL_XC Expansion Interface

The IP2EHL_XC connector allows users to flexibly expand functionality such as network, serial ports and CAN to meet various application requirements. (IEI-designed pin definition, supported functions are customized, for models of 10-inch or above)

M.2 B Key & M.2 M Key

Dual M.2 ultra-high-speed expansion supporting SSD & AI accelerator to enhance efficiency.

Anti-glare and Anti-UV PCAP

With anti-glare and anti-UV coating, the 10-point touchscreen can display clearly without reflection.

AG coating | Anti-UV

Support Gloved and Wet Hand Operation

The whole new PCAP screen allows you to accurately manage every step of your operations even with gloves or in wet conditions.
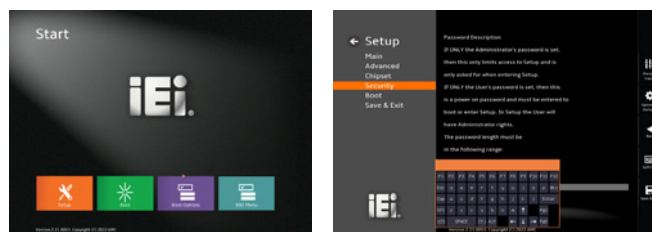
Gloves | Wet Hand

Newly Designed Panel Mount Kit

The new refined and convenient panel mount kit can be easily fastened by hand, no screwdriver required.
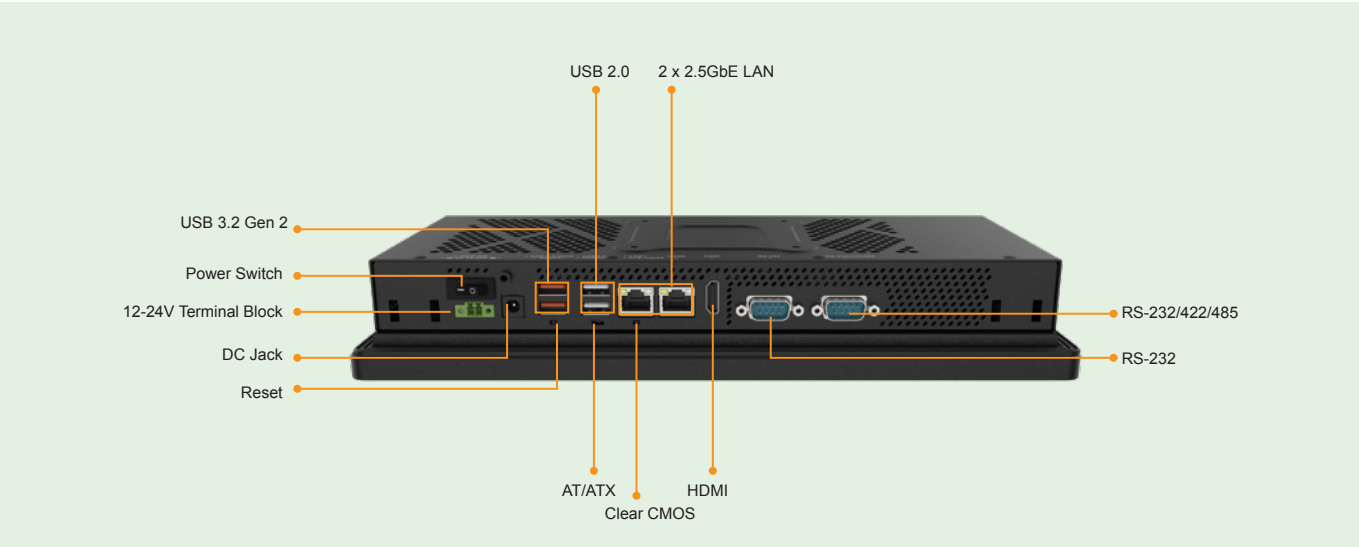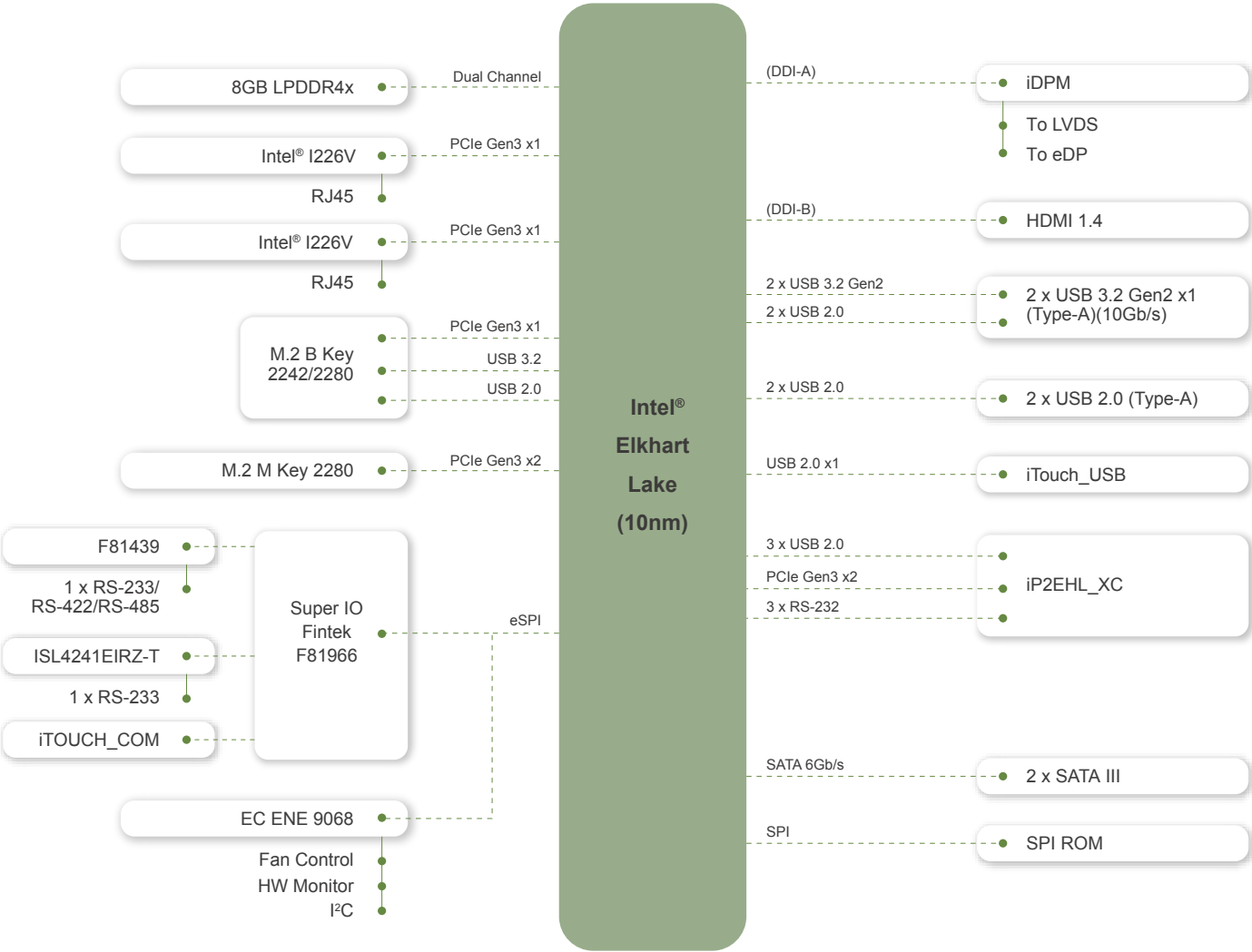
New Graphical BIOS Interface

Upgraded with new BIOS interface, which can be navigated with fingers, no keyboard and mouse are required to operate.
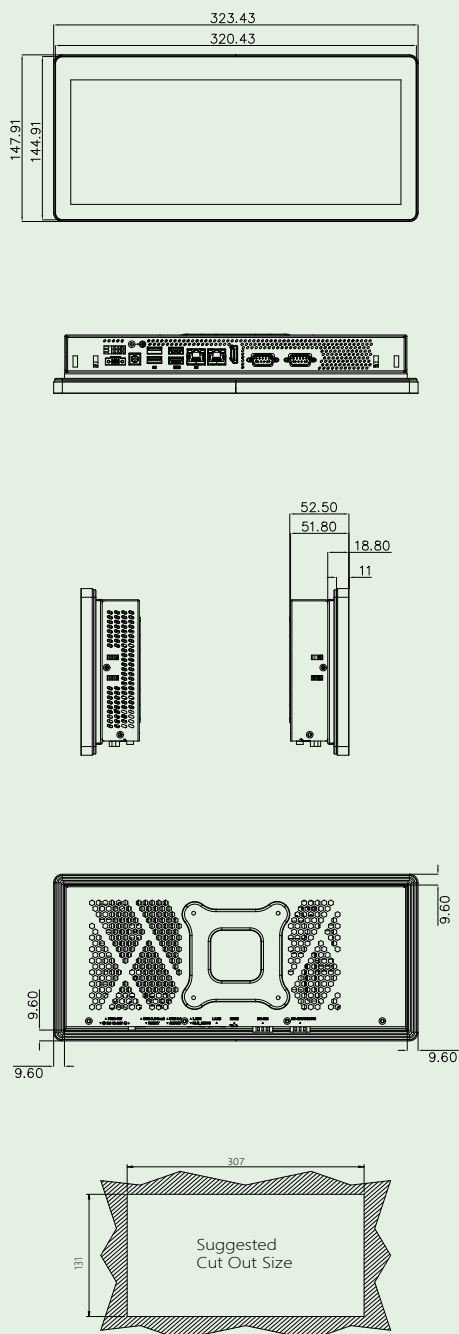
Fully Integrated I/O

USB 2.0   2 x 2.5GbE LAN

USB 3.2 Gen 2

Power Switch

12-24V Terminal Block

DC Jack

Reset

RS-232/422/485

RS-232

AT/ATX   HDMI
Clear CMOS

Block Diagram

8GB LPDDR4x	Dual Channel	
Intel® I226V	PCIe Gen3 x1	
RJ45		
Intel® I226V	PCIe Gen3 x1	
RJ45		
M.2 B Key 2242/2280	PCIe Gen3 x1 / USB 3.2 / USB 2.0	
M.2 M Key 2280	PCIe Gen3 x2	

Intel® Elkhart Lake (10nm)

(DDI-A) — iDPM
— To LVDS
— To eDP

(DDI-B) — HDMI 1.4

2 x USB 3.2 Gen2 / 2 x USB 2.0 — 2 x USB 3.2 Gen2 x1 (Type-A)(10Gb/s)

2 x USB 2.0 — 2 x USB 2.0 (Type-A)

USB 2.0 x1 — iTouch_USB

3 x USB 2.0 / PCIe Gen3 x2 / 3 x RS-232 — iP2EHL_XC

F81439
1 x RS-233/ RS-422/RS-485
ISL4241EIRZ-T
1 x RS-233
iTOUCH_COM

Super IO Fintek F81966

eSPI

EC ENE 9068
Fan Control
HW Monitor
I²C

SATA 6Gb/s — 2 x SATA III

SPI — SPI ROM

Dimensions (Unit: mm)

Specifications

	PPC2-CW123-EHL
LCD Display	12.3" (8:3)
Resolution	1920 (W) x 720 (H)
Brightness	850cd/cm²
Contrast Ratio	1000:1
LCD Color	16.7M
Pixel Pitch (mm)	0.152 x 0.152
Viewing Angle (H-V)	170°/170°
Backlight MTBF	30,000 hours
CPU (SoC)	Intel® Celeron® Processor J6412 1.5M Cache, up to 2.60 GHz / TDP 10w
Memory	Dual-channel 8GB LPDDR4x on-board (up to 16GB)
Touchscreen	Multi-point projected capacitive type (anti-UV / anti-glare coating,support gloves) Surface hardness: ≥7H
Touch Controller	Projected capacitive type: EETI 80
Ethernet	2 x 2.5GbE LAN via Intel I226-V
Expansion	1 x M.2 2242/2280 B key (PCIe Gen3 x1 + USB 3.0) 1 x M.2 2280 M key (PCIe Gen3 x2)
Mounting	VESA 75 mm x 75 mm Panel, Wall, Stand and Arm
Construction Material	Aluminum front cover and sheet metal rear cover
Enclosure Color	Black
I/O Ports, Switches and Buttons	1 x HDMI output　1 x 12V-24V power jack 2 x RJ-45 2.5GbE　1 x Power terminal block (2-pin) 2 x USB 3.2 Gen 2x1 (10Gb/s)　1 x AT/ATX switch 2 x USB 2.0　1 x Power button 1 x RS-232/422/485　1 x Reset button 1 x RS-232　1 x Clear CMOS button
Power Input	12 V ~ 24 V DC
Power Consumption	+12V @ 4.033A (Intel® Celeron J6412 with 8GB memory)
Thermal Solution	Fanless
TPM	Intel® Platform Trust Technology
Watchdog Timer	Software Programmable support 1~255 sec. system reset
Operating Temperature (with air flow)	-10ºC ~ 50ºC
Storage Temperature	-20ºC ~ 60ºC
Humidity	10% ~ 95%, non-condensing
IP Level	IP 65 compliant front panel
Safety and EMC	CE, FCC Class A, UKCA
ErP	ErP 2009/125/EC
Dimensions(H x W x D) (mm)	323.43 x 147.91 x 52.50
Cutout Dimensions(mm)	307 x 131
Net Weight	2.03kg

Packing List

1 x Power Cord	1 x Power Adapter	1 x QIG
1 x Panel Mount Kit	1 x Screw Pack	

Ordering Information

PPC2-CW123-EHL-J1/8G-R11	12.3" 850 cd/cm² 1920x720 Panel PC with Intel® Celeron® Processor J6412, 8GB LPDDR4x on-board, HDMI output, black, 12-24V DC input, projected capacitive touchscreen with AG, R11

Options

Item	Part No	Description
Arm	ARM-11-RS/ARM-31-RS	VESA 75/100 Desk ARM
Stand	STAND-C12-R10	VESA 75/100 Easy Stand
Wall	AFLWK-12	Monitor Wall mounting kit
OS	PPC2-EHL-W10IoT21-E-R11	OS Image with Windows®10 Enterprise Entry 64-bit 2021 LTSC for PPC2-EHL Series