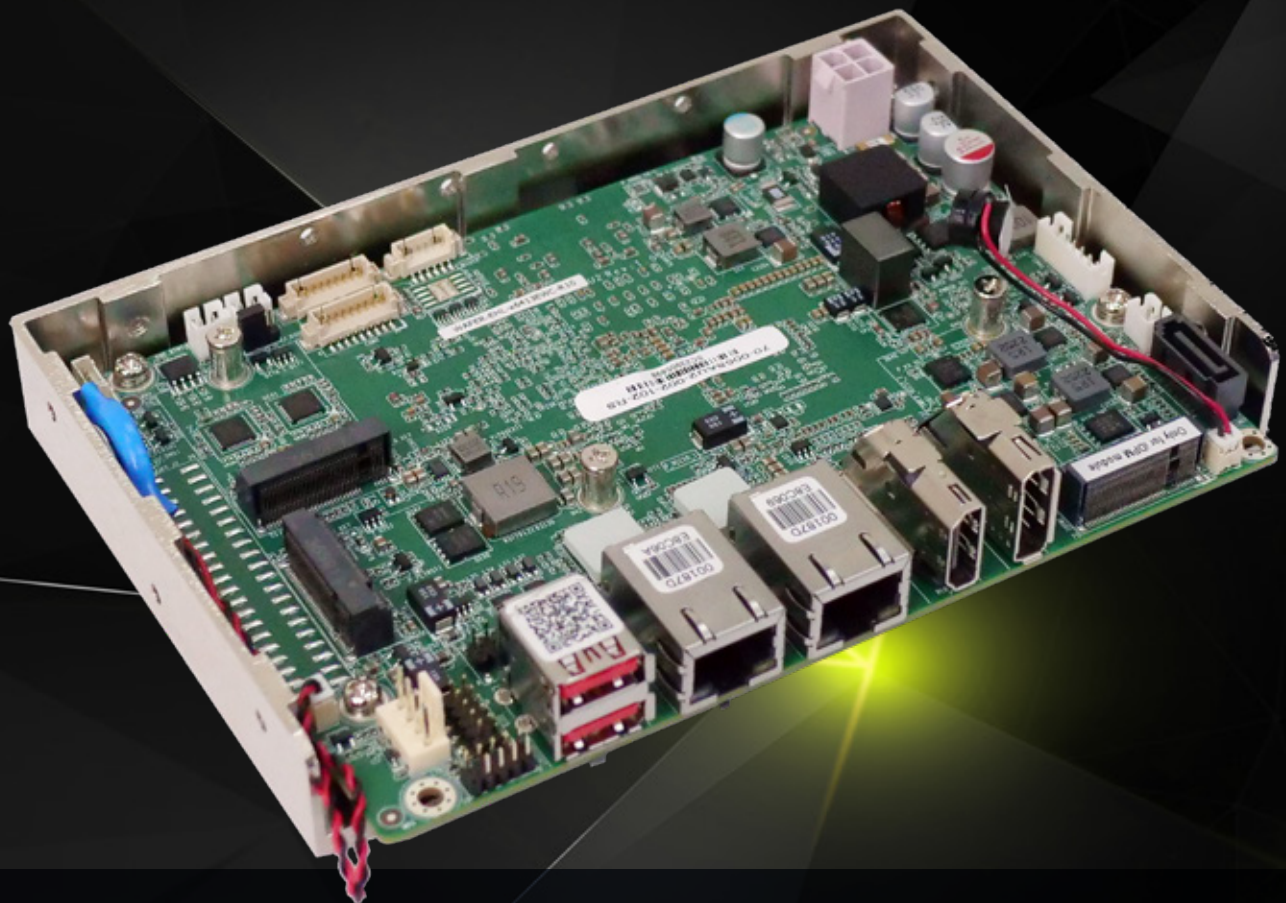


WAFER-EHL-x6000

3.5 SBC supports Intel® Elkhart Lake Atom™ x6000 series on-board SoC

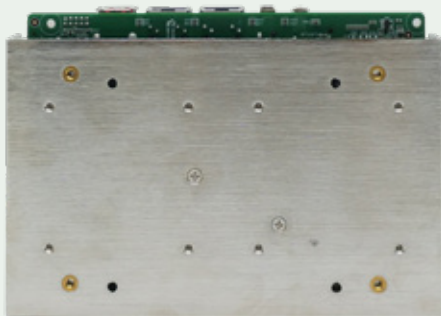
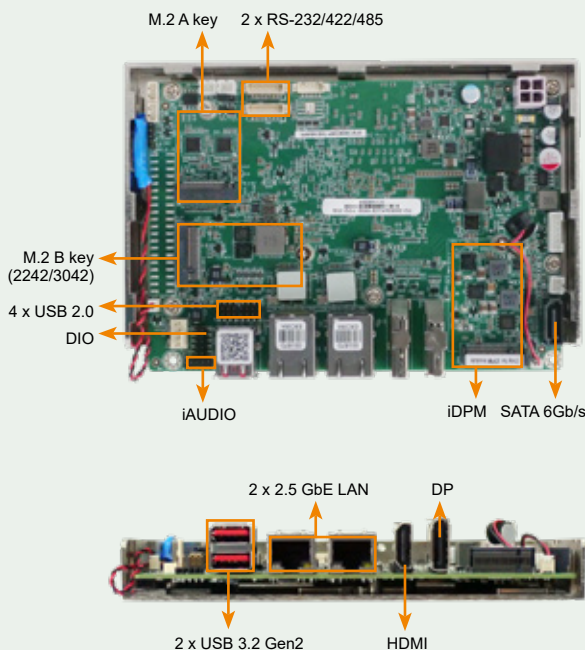
- On-board LPDDR4x 8GB (4 GB option)
- Three displays with 1 x HDMI 2.0, 1 x DP 1.2 and 1 x iDPM slot
- High speed I/O interface for USB 3.2 gen 2, SATA 6Gb/s
- Dual 2.5 GbE LAN with Intel® I226-IT
- Support one M.2 A key and one M.2 B key slot



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WAFER-EHL-x6000

3.5 SBC supports Intel® Elkhart Lake Atom™ x6000 series on-board SoC, triple display with DP, HDMI and iDPM slot, dual 2.5 GbE , USB 3.2 Gen 2, M.2, SATA 6Gb/s, COM, iAUDIO, +12V~28V DC input , -20°C ~85°C, RoHS



Low-power Intel® Elkhart Lake Atom™ x6000 series processor

Equip with Intel® Elkhart Lake Atom™ X6211e, Atom™ X6413e and Atom™ x6425E on board processor.



Supporting Intel® I226-IT 2.5GbE Controllers

Two RJ45 network interfaces are supported via Intel® I226-IT 2.5GbE controllers, achieving up to 2.5GbE network transmission rate.



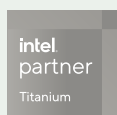
IEI-specific iDPM Interface

IEI uniquely designs a iDPM interface that can connect to display modules, enabling users to add LVDS/eDP/VGA display interface upon requirements

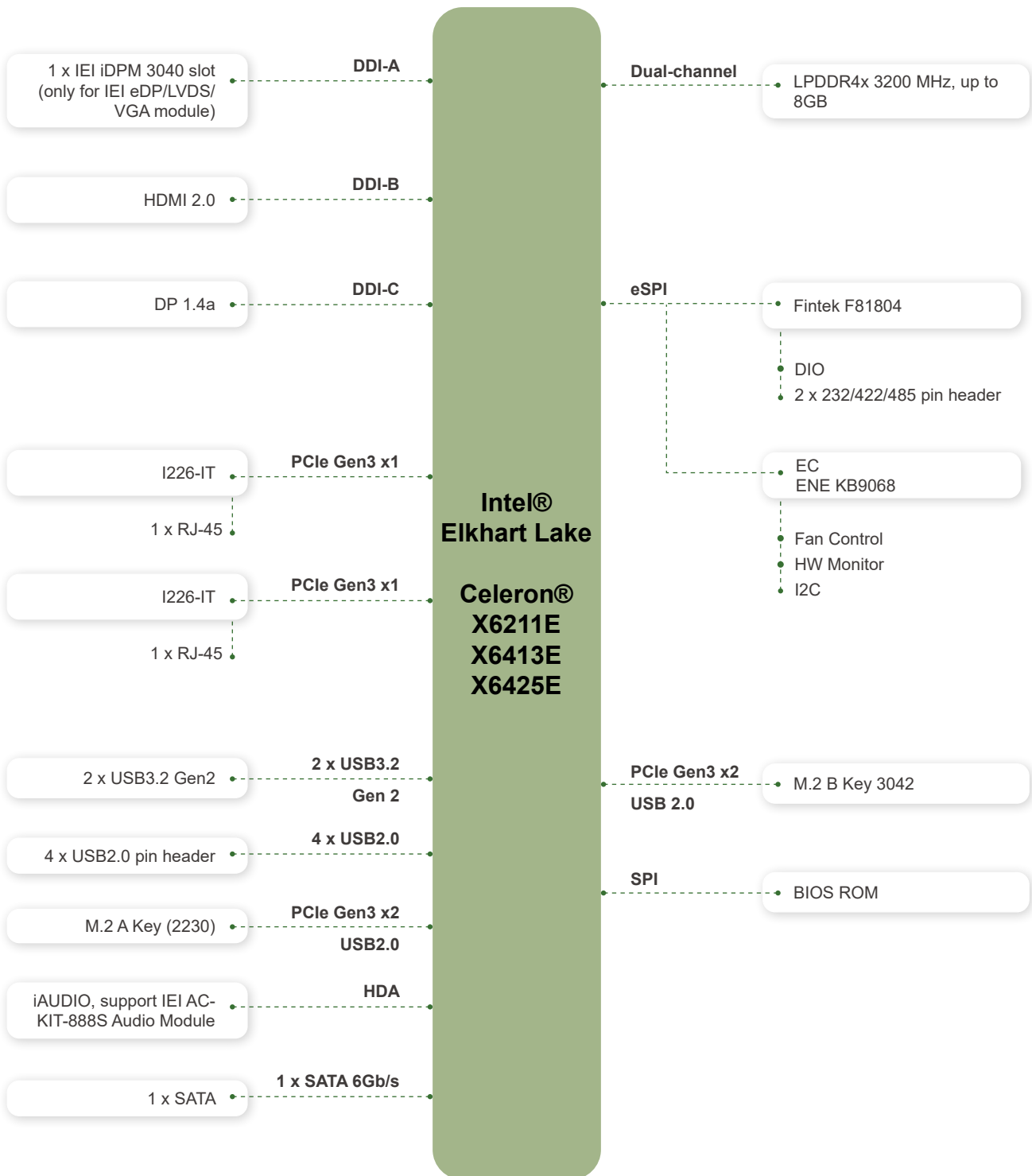


Wide voltage input and wide temperature operation

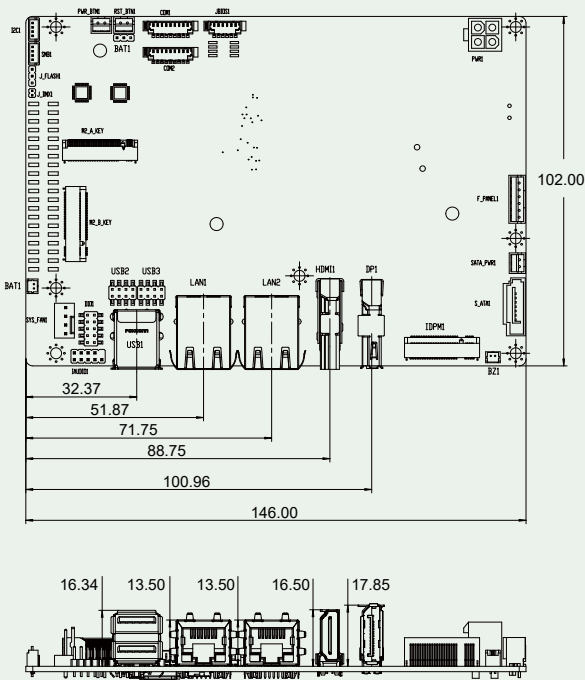
Supports +12V~28V DC voltage input and -20°C~85°C wide temperature operating environment. Meet the performance requirements of different application scenarios.



Block Diagram



Dimensions



Specifications

Model	WAFER-EHL-x6000
SoC	On board Intel® Elkhart Lake Atom™ x6000 series / Pentium® / Celeron® processor Intel® Atom™ x6211E on-board SoC (up to 3.00 GHz, dual-core, 1.5M Cache, TDP=6W) Intel® Atom™ x6413E on-board SoC (up to 3.0GHz, quad-core, 1.5M Cache, TDP=9W) Intel® Atom™ x6425E on-board SoC (up to 3.0GHz, quad-core, 1.5M Cache, TDP=12W)
BIOS	Dual AMI UEFI BIOS
Memory	On-board LPDDR4x 8GB
Graphics Engine	Intel® UHD Graphics
Display Output	Triple Independent Displays 1 x HDMI 1.4 (up to 4096 x 2160@30Hz) 1 x DP 1.2 (up to 4096 x 2160@60Hz) 1 x IEI iDPM 3040 slot (only for IEI eDP/LVDS/VGA Module)
Ethernet	LAN1: Intel® I226-IT 2.5GbE controller LAN2: Intel® I226-IT 2.5GbE controller
External I/O Interface	2 x USB 3.2 Gen 2
Internal I/O Interface	1 x SATA 6Gb/s with 5V SATA power connector 4 x USB 2.0 (2*4 pin, P=2.0) 2 x RS-232/422/485 (1x9 pin, P=1.25)
I2C	1 x I2C (1x4 pin, P=1.25)
SMBus	1 x SMBus (1x4 pin, P=1.25)
TPM	Intel® PTT
Audio	1 x iAUDIO, support IEI AC-KIT-888S Audio Module (2 x 5 pin)
Front Panel	1 x Power LED & HDD LED (1x6 pin) 1 x Power button (1x2 pin) 1 x Reset button (1x2 pin)
Expansion	1 x M.2 A Key 2230 (PCIe Gen3 x2&USB2.0) 1 x M.2 B Key 3042 (PCIe Gen3 x2&USB2.0)
Digital I/O	1 x 8-bit digital I/O (2x5 pin)
FAN connector	1 x System fan connector (1x4 pin)
Power supply	+12V~28V DC input power (AT/ATX mode) 1 x Internal power connector (2x2 pin)
Watchdog Timer	Software Programmable support 1~255 sec. System reset
Power Consumption	12V@3.34A, 19V@2.16A, 24V@1.79A, 28V@1.52A (Intel® Atom x6211E 1.3GHz with 8GB 3200MHz DDR4 memory and EUP enabled)
Operating Temperature	-20°C ~ 85°C
Storage Temperature	-40°C ~ 85°C
Operating Humidity	5% ~95%, non-condensing
Diemension	146mm x 102mm
Weight	GW:850g / NW:350g
Certification	CE/FCC Compliant

Optional Accessories

AC-KIT-888S-R10	CB-USB02A-RS
32102-000100-200-RS	CM-WAFER-WOF-R10
CM-WAFER-WF-R10	iDPM-LVDS-R10
iDPM-eDP-R10	iDPM-VGA-R10

Packing List

1 x WAFER-EHL-x6000EWC single board computer	1 x Power cable (PN: 32100-087100-RS)
1 x SATA with power cable kit (PN: 32801-000201-200-RS)	1 x QIG

Ordering Informaiton

WAFER-EHL-x6211EWC-R11	3.5 SBC supports Intel® Atom™ x6211E on-board SoC with 8GB LPDDR4, triple display with DP, HDMI and iDPM slot, dual 2.5 GbE , USB 3.2 gen 2, M.2, SATA 6Gb/s, COM, iAUDIO and RoHS, -20°C ~ 85°C
WAFER-EHL-x6413EWC-R11	3.5 SBC supports Intel® Atom™ x6413E on-board SoC with 8GB LPDDR4, triple display with DP ,HDMI and iDPM slot, dual 2.5 GbE , USB 3.2 gen 2, M.2, SATA 6Gb/s, COM, iAUDIO and RoHS, -20°C ~ 85°C
WAFER-EHL-x6425EWC-R11	3.5 SBC supports Intel® Atom™ x6425E on-board SoC with 8GB LPDDR4, triple display with DP ,HDMI and eDP slot, dual 2.5 GbE , USB 3.2 gen 2, M.2, SATA 6Gb/s, COM, iAUDIO and RoHS, -20°C ~ 85°C

Optional Accessories

AC-KIT-888S-R10	Realtek ALC888S 7.1 Channel HD Audio peripheral board, RoHS
CB-USB02A-RS	Dual port USB cable with bracket, 300mm, P=2.00
32005-003500-200-RS	Round cable, RS-232/422/485, 300mm, 1*9 pin, P=1.25
CM-WAFER-WF-R10	Cooler Module (W/FAN); Mechanical, for 3.5" WAFER series; RoHS
CM-WAFER-WOF-R10	Cooler Module (W/O FAN); Mechanical, for 3.5" WAFER series; RoHS
iDPM-eDP-R10	eDP to eDP DisplayPort converter board (for IEI iDPM connector)
iDPM-LVDS-R10	eDP to LVDS DisplayPort converter board (for IEI iDPM connector)
iDPM-VGA-R10	eDP to VGA Connetor converter board (For IEI Display Module)