

AFL4-W121-ADLP

IEI Light Industrial Panel PC

Powered by Intel® Alder Lake-P / Raptor Lake-P Platform



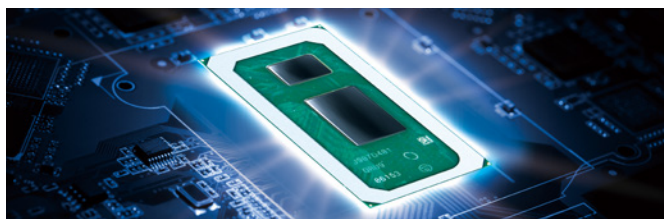
AFL4-W121-ADLP

Fanless panel PC with narrow bezel design, Intel® Alder Lake-P & Raptor Lake-P platform, on-board 8GB memory, HDMI output, dual 2.5GbE LAN, four UART, five USB, two M.2 M key expansion slots, and anti-glare & anti-UV 10-point touchscreen



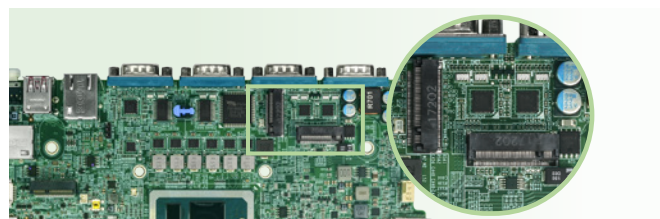
12th/13th Generation Intel® Core™ i Processors (Alder Lake-P & Raptor Lake-P Platform)

Powered by 12th/13th generation Intel® Alder Lake-P & Raptor Lake-P Series processors and asynchronous architecture, unleashing superior performance.



Dual full-speed M.2 expansion slots

Two M.2 M keys support 2242 and 2280 size, PCIe Gen4 x 4 full speed signal, more bandwidth, faster speed.



Anti-glare and Anti-UV PCAP

With anti-glare and anti-UV coating, the 10-point touch screen can be displayed clearly without reflection.



Works with Gloves and Water

The equipped capacitive touch screen supports gloved operation and waterproof function that can effectively eliminate false touch operating caused by water spray.



Extensive I/O Interfaces

The panel PC is small, but comes with abundant I/O for a variety of application scenarios. It includes four UART, five USB, two 2.5G network port and one HDMI interface.

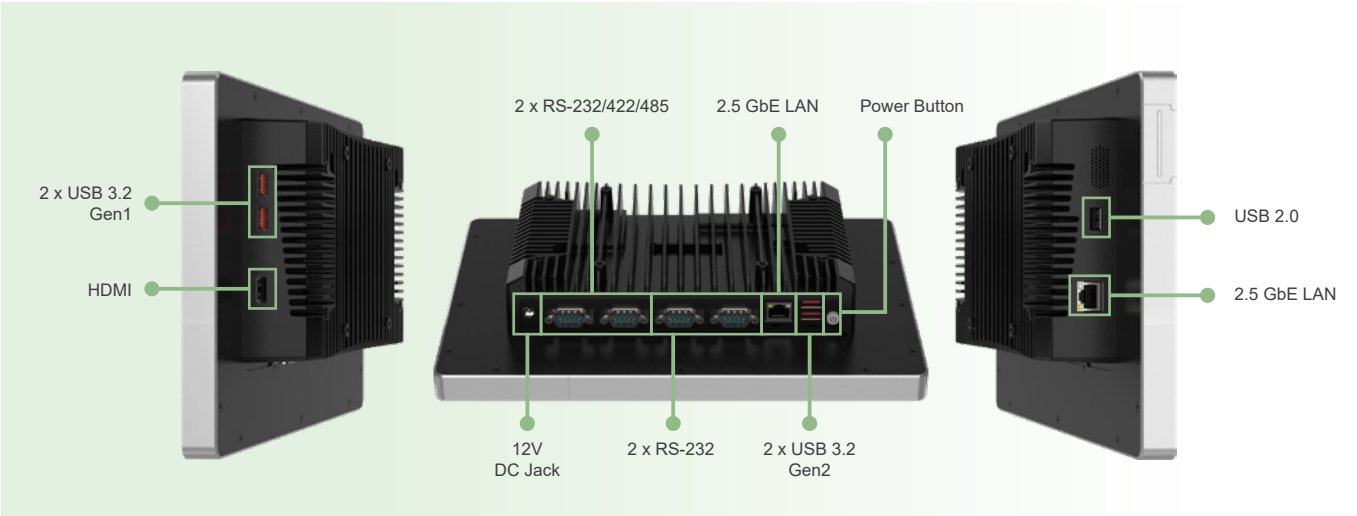


Support WiFi 6E and Bluetooth 5.2

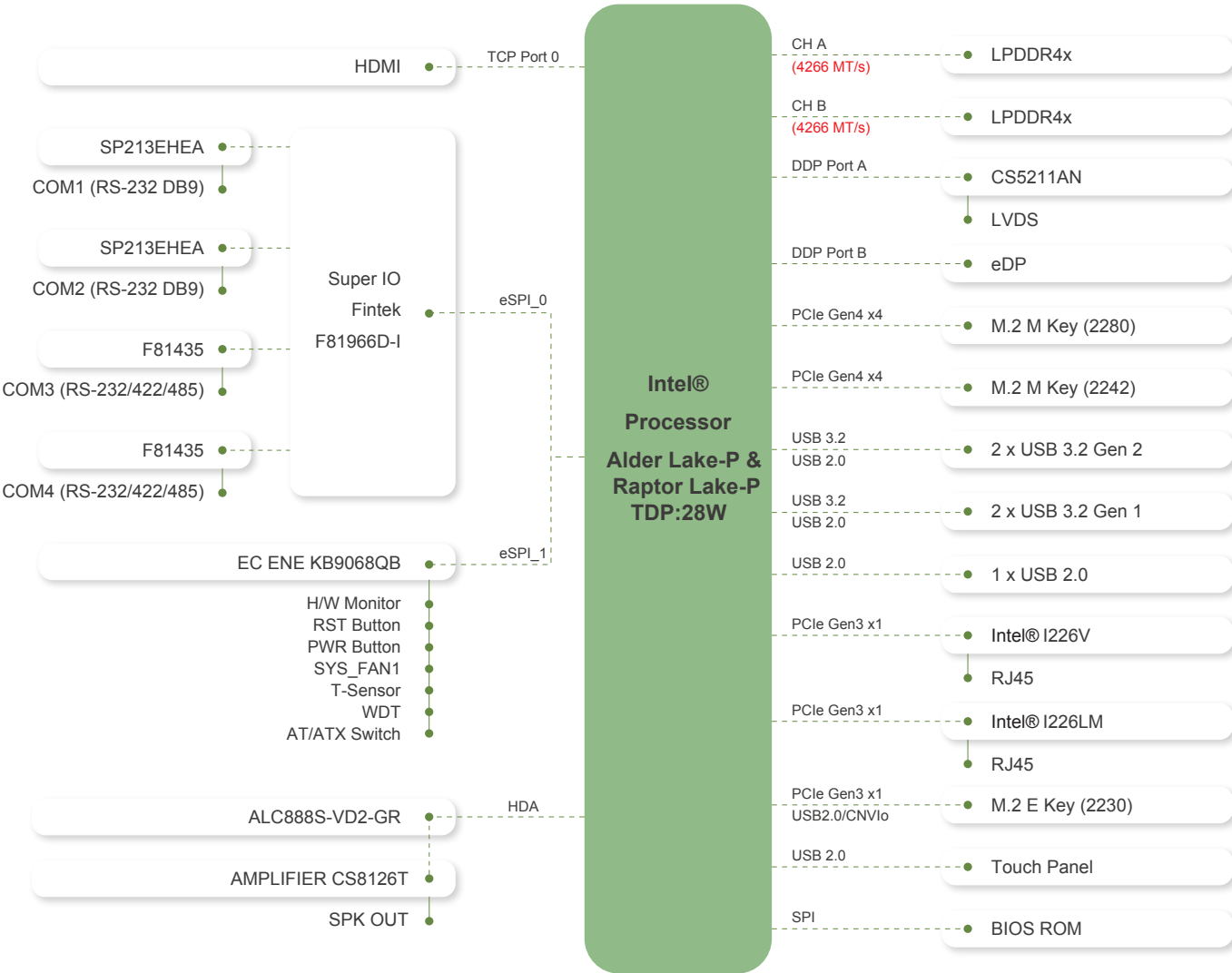
Strong Wi-Fi 6E wireless network capability provides more bandwidth, and the low latency Bluetooth 5.2 connection is more stable and consumes less power.



Fully Integrated I/O



Block Diagram



Specifications

Model	AFL4-W121-ADLP	
LCD Display	12.1" (16:10)	
Resolution	1280 (W) x 800 (H)	
Brightness	450 cd/cm ²	
Contrast Ratio	1200:1	
LCD Color	16.2M	
Viewing Angle (H-V)	170°/170°	
Backlight MTBF	50,000 hours	
CPU (SoC)	support 12th/13th Generation Intel® Core™ i Processors (Alder Lake-P & Raptor Lake-P) Intel® Core™ i7-1370PE (up to 4.8GHz, 14-core, 28W TDP) Intel® Core™ i5-1340PE (up to 4.5GHz, 12-core, 28W TDP) Intel® Core™ i3-1320PE (up to 4.5GHz, 8-core, 28W TDP)	
Memory	Dual-channel 8GB LPDDR4x on-board	
Touchscreen	Multi-point projected capacitive type (anti-UV / anti-glare coating, support gloves)	
Touch Controller	Surface hardness: ≥7H Projected capacitive type: EETI 80	
Ethernet	LAN1: Intel® I226V 2.5GbE controller LAN2: Intel® I226-LM 2.5GbE controller (support Intel® AMT)	
Expansion	1 x M.2 M key 2242 (PCIe Gen4 x4) 1 x M.2 M key 2280 (PCIe Gen4 x4)	
Mounting	VESA 100, Wall, Stand and Arm	
Construction Material	Aluminum front cover and sheet metal rear cover	
Enclosure Color	Silver+Black	
I/O Ports, Switch	2 x RS-232 by DB9 2 x RS-232/422/485 by DB9 2 x 2.5GbE LAN 2 x USB 3.2 Gen2 2 x USB 3.2 Gen1 1 x USB 2.0 1 x HDMI output 1 x 12V DC Jack 1 x Power button 1 x Reset button 1 x AT/ATX switch	
Wireless & Bluetooth	IEEE 802.11ax 2T2R module (Wi-Fi 6E) with BT v5.2 (M.2 2230 E-key)	
Thermal Solution	Fanless	
Power Input	DC 12V	
Power consumption	+12V @ 3.71A (Intel® Core i7-1270PE with 8GB memory)	
TPM	Intel® Platform Trust Technology	
Watchdog Timer	Software Programmable support 1~255 sec. system reset	
Operating Temperature (with air flow)	-10°C ~ 50°C	
Storage Temperature	-20°C ~ 60°C	
Humidity	10% ~ 95%@40°C, non-condensing	
IP Level	IP 64 compliant front panel	
Safety and EMC	CE, FCC Class A, UKCA	
Operation Vibration	MIL-STD-810G 514.6C-1(with SSD)	
Operation Shock	Half-sine wave shock 5G; 11ms; 100 shocks per axis	
Dimensions (H x W x D)	295.72 x 197.80 x 57.80 (mm)	
Net Weight	2.44kg	
ErP	ErP 2009/125/EC	
OS	Windows 10/11 IoT, Linux	

Ordering Information

AFL4-W121-ADLP-Ri3E/8G-R11	12.1" 450cd/m ² 1280x800 fanless panel PC with Intel® Core™ i3-1320PE on-board processor, 8GB LPDDR4x on-board, Wi-Fi 6E and Bluetooth 5.2 module, PCAP touch, 12V DC, R11
AFL4-W121-ADLP-Ri5E/8G-R11	12.1" 450cd/m ² 1280x800 fanless panel PC with Intel® Core™ i5-1340PE on-board processor, 8GB LPDDR4x on-board, Wi-Fi 6E and Bluetooth 5.2 module, PCAP touch, 12V DC, R11
AFL4-W121-ADLP-Ri7E/16G-R11	12.1" 450cd/m ² 1280x800 fanless panel PC with Intel® Core™ i7-1370PE on-board processor, 16GB LPDDR4x on-board, Wi-Fi 6E and Bluetooth 5.2 module, PCAP touch, 12V DC, R11

Packing List

Item	Q'ty
Power Cord	1
Power Adapter	1
QIG	1
Thermal Pad	1

Options

Item	Part No.	Description
Stand	STAND-C12-R10	VESA 75/100 Easy Stand
Wall	AFLWK-19B	Monitor Wall Mount Kit
OS	AFL4-ADLP-W10IoT21-H-R10	Windows® 10 Enterprise High End 64-bit 2021 LTSC for AFL4-ADLP i7 Series
	AFL4-ADLP-W10IoT21-V-R10	Windows® 10 Enterprise Value 64-bit 2021 LTSC for AFL4-ADLP i3 & i5 Series
	AFL4-ADLP-W11IoT22-H-R10	Windows® 11 Enterprise High End 64-bit 2022 LTSC for AFL4-ADLP i7 Series
	AFL4-ADLP-W11IoT22-V-R10	Windows® 11 Enterprise Value 64-bit 2022 LTSC for AFL4-ADLP i3 & i5 Series

Dimensions (Unit: mm)

