

# AFL4-W121-ADLP

## IEI Light Industrial Panel PC

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



**IEI**

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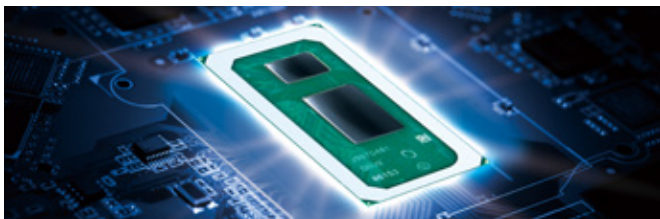
## AFL4-W121-ADLP

Fanless panel PC with narrow bezel design, Intel® Alder 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



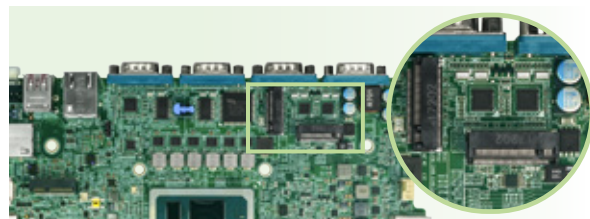
### 12th Gen Intel® Alder Lake-P Platform

Powered by 12th generation Intel® Alder 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.

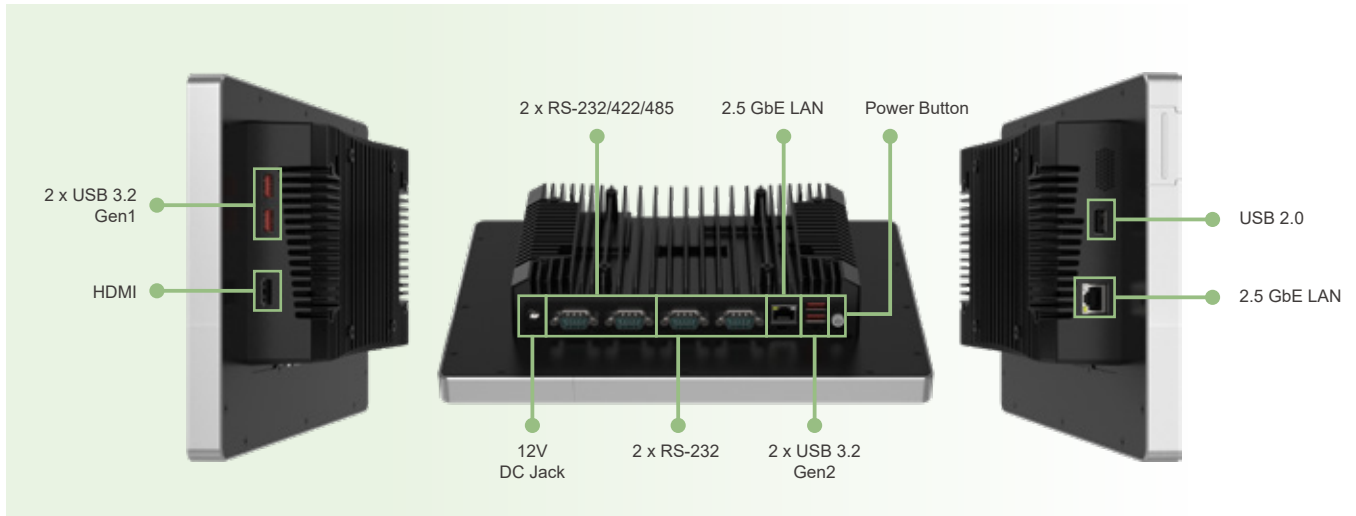


### Support WiFi 6E and Bluetooth 5.2

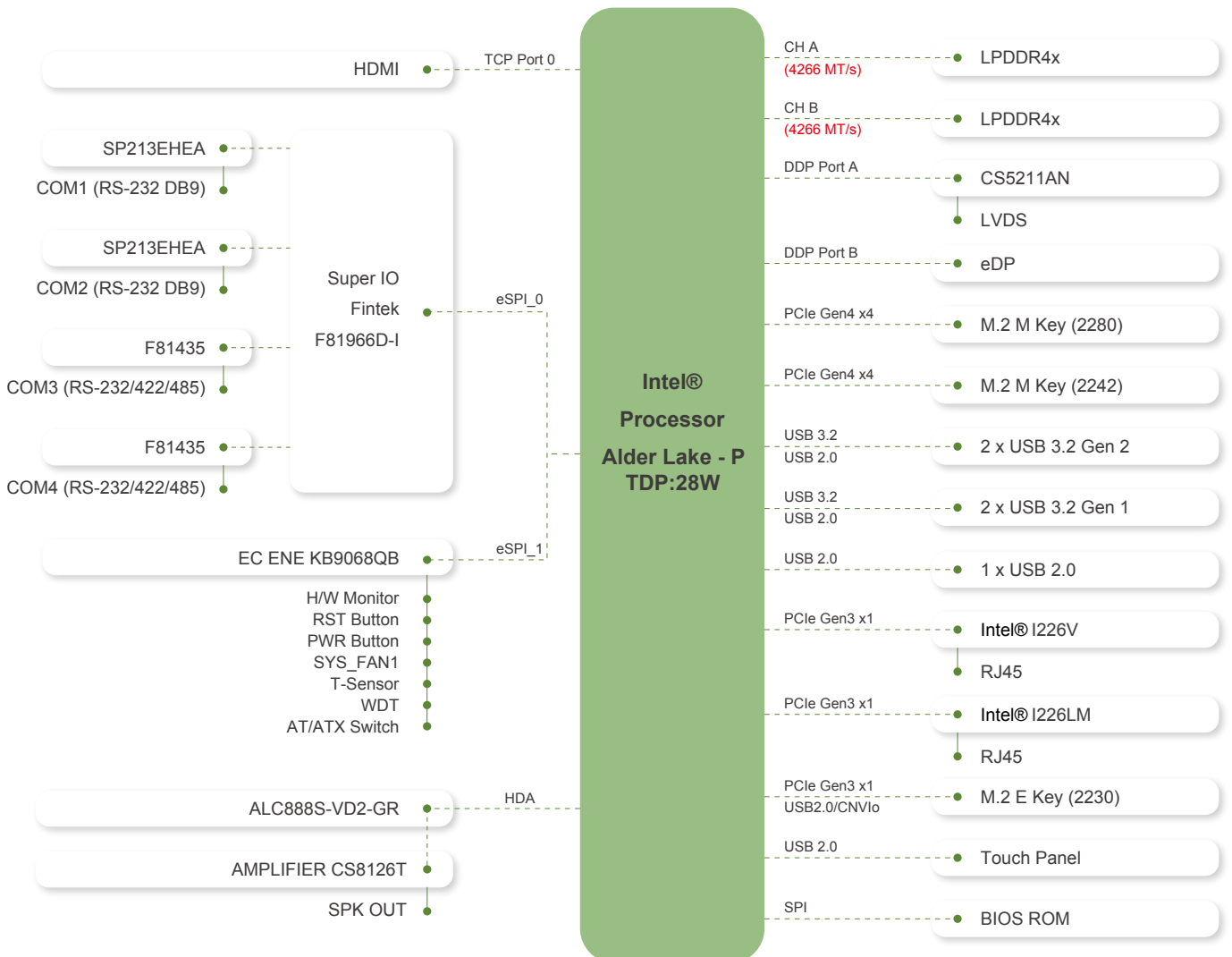
Strong Wi-Fi 6E wireless network capability provides more bandwidth, and the low latency Bluetooth 5.2 connection is more stable and consumes less power.



## 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 <sup>2</sup>  |   |
| Contrast Ratio                        | 1200:1  |   |
| LCD Color                             | 16.2M   |   |
| Viewing Angle (H-V)                   | 170°/170°   |   |
| Backlight MTBF                        | 50,000 hours  |   |
| CPU (SoC)                             | 12th Generation Intel® Core™ i7/i5/i3 Processor (Alder Lake-P)<br>13th Generation Intel® Core™ i7/i5/i3 Processor (Raptor Lake-P) |   |
| 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<br>Projected capacitive type: EETI 80   |   |
| Ethernet                              | LAN1: Intel® I226V 2.5GbE controller<br>LAN2: Intel® I226-LM 2.5GbE controller (support Intel® AMT)                               |   |
| Expansion                             | 1 x M.2 M key 2242 (PCIe Gen4 x4)<br>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<br>2 x RS-232/422/485 by DB9<br>2 x 2.5GbE LAN<br>2 x USB 3.2 Gen2<br>2 x USB 3.2 Gen1<br>1 x USB 2.0           | 1 x HDMI output<br>1 x 12V DC Jack<br>1 x Power button<br>1 x Reset button<br>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 @ 4.960A (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   |   |

## Ordering Information

|                             |  |
|-----------------------------|--|
| AFL4-W121-ADLP-i7/16G-R11   | 12.1" 450cd/m <sup>2</sup> 1280x800 fanless panel PC with Intel® Core™ i7-1260P on-board processor, 16GB LPDDR4x on-board, Wi-Fi 6E and Bluetooth 5.2 module, PCAP touch, 12V DC, R11  |
| AFL4-W121-ADLP-i5/8G-R11    | 12.1" 450cd/m <sup>2</sup> 1280x800 fanless panel PC with Intel® Core™ i5-1240P on-board processor, 8GB LPDDR4x on-board, Wi-Fi 6E and Bluetooth 5.2 module, PCAP touch, 12V DC, R11   |
| AFL4-W121-ADLP-i3/8G-R11    | 12.1" 450cd/m <sup>2</sup> 1280x800 fanless panel PC with Intel® Core™ i3-1220P on-board processor, 8GB LPDDR4x on-board, Wi-Fi 6E and Bluetooth 5.2 module, PCAP touch, 12V DC, R11   |
| AFL4-W121-ADLP-Ri3E/8G-R11  | 12.1" 450cd/m <sup>2</sup> 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 <sup>2</sup> 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 <sup>2</sup> 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  |
|-------|--------------------------|--|
| Arm   | ARM-11-RS                | VESA 75/100 Desk Arm   |
| 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)

