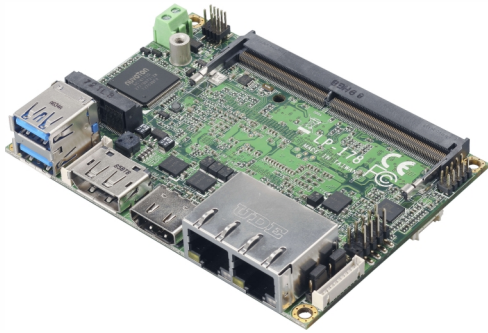


### LP-178



### Features

- Onboard Intel® Whiskey Lake U Processor
- 1 x DDR4 SO-DIMM 2400 MHz up to 16GB
- Integrated DisplayPort, HDMI,
- 1 x Intel® Gigabit PHY LAN, 1 x Intel® Gigabit LAN,
- 1 x M.2 (Key E)
- 1 x SATA3, 2 x USB2.0, 2 x USB3.1 Gen2, 2 x RS232,
- Support Watchdog Timer
- Support 4K resolution
- DC input 12V ±5%

### System

<b>Processor</b>	Intel® Whiskey Lake U Processor FCBGA1528 package
<b>Memory</b>	1 x DDR4 SO-DIMM 2400 MHz up to 16GB, Support Non-ECC, unbuffered memory
<b>Watchdog Timer</b>	Generates a system reset with internal timer for 1 min/s ~ 255 min/s
<b>Real Time Clock</b>	Chipset integrated RTC with lithium battery
<b>Expansion</b>	1 x M.2 (Key E) for Wi-Fi and Bluetooth 2230mm

### Graphics

<b>Processor</b>	Intel® Gen 9.5 integrated HD Graphics
<b>Display Interface</b>	1 x DisplayPort, 1 x HDMI,

### LAN

<b>Chip</b>	1 x Intel® I219-LM Gigabit PHY LAN (Support iAMT12.0) 1 x Intel® I210-AT Gigabit LAN
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### I/O

<b>Serial ATA</b>	1 x SATA3
<b>Audio</b>	Realtek ALC262 HD Audio
<b>Internal I/O</b>	1 x SATA3, 2 x USB2.0, 1 x LPC 2 x RS232, 1 x Audio, 1 x SMBus, 1 x Header for LVDS or VGA (Note1)
<b>Rear I/O</b>	1 x DisplayPort, 1 x HDMI, 2 x LAN 2 x USB3.1 Gen2,

### Mechanical & Environmental

<b>Power Requirement</b>	DC input 12V±5%
<b>Size</b>	100 mm x 72mm (L x W)
<b>Temperature</b>	Operating within 0°C~60°C (32°F~140°F) Storage within -20°C~80°C (-4°F~176°F)
<b>Relative Humidity</b>	10%~90%, non-condensing

### Ordering Code

<b>LP-1787:</b>	With i7-8665UE + Cooler fan, support HDMI, DP , Header for LVDS or VGA (Note1)
<b>LP-178C:</b>	With Celeron 4305UE + Cooler fan, support HDMI, DP, Header for LVDS or VGA (Note1)
<b>ADP-3355:</b>	DisplayPort to VGA module
<b>ADP-3460E:</b>	DisplayPort to LVDS module for LP-178.

**Note1:** Add ADP-3355 supports 2nd VGA or Add ADP-3460E supports 2nd LVDS.

**Note2:** If you want to use other WHL U CPU(i5-8365UE,i3-8145UE), please contact with our sales.

**Note3:** If you want to use 2nd LVDS or 2nd VGA, please contact with our sales.