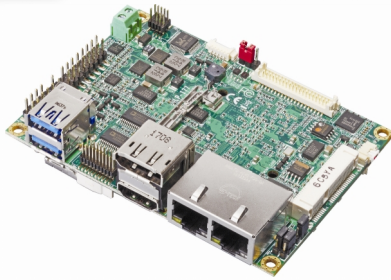


### LP-177



### Features

- Intel® Apollo Lake Series Processor N3350/N4200
- 1 x DDR3L SO-DIMM 1866 MHz up to 8GB
- Integrated HDMI, DisplayPort, LVDS for Triple display supports
- 2 x Intel® Gigabit LAN, 1 x MiniPCie
- 1 x SATA3, 2 x USB2.0, 2 x USB3.0, 2 x COM, 1 x LPC, 1 x PS/2
- Support Watchdog Timer, 4K resolution
- DC input 5V±5%

### 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 RS232, 2 x USB2.0, 1 x LPC, 1 x PS/2, 1 x SMBUS, 1 x LVDS, 1 x LCD inverter, 1 x Audio
<b>Rear I/O</b>	2 x USB3.0, 2 x LAN, 1 x HDMI, 1 x DisplayPort (Optional)

### Mechanical & Environmental

<b>Power Requirement</b>	DC input 5V±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

### System

<b>Processor</b>	Intel® Apollo Lake Series Processor N3350/N4200, FCBGA1296 package
<b>Chipset</b>	Apollo Lake SoC
<b>Memory</b>	1 x DDR3L SODIMM 1866 MHz up to 8GB, Support Non-ECC, unbuffered memory only.
<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 MiniPCle (Minicard support mSATA)
<b>Graphics</b>	
<b>Chipset</b>	Intel® HD Graphics
<b>Display Interface</b>	1 x LVDS (Note1), 1 x HDMI, 1 x DisplayPort (Optional)
<b>LAN</b>	
<b>Chip</b>	2 x Intel® I210-AT Gigabit LAN

### Ordering Code

LP-177PN4S	With N4200 + Heat spreader, support HDMI, LVDS, DP
LP-177TN4S	With N4200 + Heat spreader, support HDMI, LVDS, Header for VGA or 2nd LVDS (Note2)
LP-177PN3S	With N3350 + Heat spreader, support HDMI, LVDS, DP
LP-177TN3S	With N3350 + Heat spreader, support HDMI, LVDS, Header for VGA or 2nd LVDS (Note2)
LP-177PN4F	With N4200 + Cooler Fan, support HDMI, LVDS, DP
LP-177TN4F	With N4200 + Cooler Fan, support HDMI, LVDS, Header for VGA or 2nd LVDS (Note2)
LP-177PN3F	With N3350 + Cooler Fan, support HDMI, LVDS, DP
LP-177TN3F	With N3350 + Cooler Fan, support HDMI, LVDS, Header for VGA or 2nd LVDS (Note2)
ADP-3355NB	DP to VGA Adapter, without bracket
ADP-3460	DP to LVDS Adapter (For 2nd LVDS)
DC-DC3-5V Series	Power Converter Module with Heat spreader, convert wide range DC 6~30V input to DC 5V/ 30W
LP-177P(T)N4S-8G	Same as LP-177P(T)N4S, with DDR3L/8G
LP-177P(T)N3S-8G	Same as LP-177P(T)N3S, with DDR3L/8G
LP-177P(T)N4F-8G	Same as LP-177P(T)N4F, with DDR3L/8G
LP-177P(T)N3F-8G	Same as LP-177P(T)N3F, with DDR3L/8G

**Note1:** Onboard 18/24-bit single/dual channel LVDS connector with +3.3V/+5V supply

**Note2:** There are two modules (ADP3355, ADP3460), and you can choose one to support VGA or 2nd LVDS