

# Apollo Lake Series Processor

## LV-67U



## Features

- Intel® Apollo Lake Series Processor N3350/N4200
- 2 x DDR3L SO-DIMM 1866 MHz up to 8GB
- Integrated HDMI, DisplayPort or DVI, LVDS for Triple display supports
- 2 x Intel® Gigabit LAN,
- 1 x MiniPCIe support mSATA
- 2 x SATA3, 4 x USB2.0, 4 x USB3.0, 6 x COM, 1 x LPC
- 1 x GPIO, 1 x PS/2, 1 x SIM Slot, 1 x MINIPCI, 1 x PCI Slot, 1 x CFAST, 1 x SD Card
- Support Watchdog Timer
- Support 4K resolution

## System

Processor	Intel® Apollo Lake Series Processor N3350/N4200, FCBGA1296 package
Chipset	Apollo Lake SoC
Memory	2 x DDR3L DIMM 1866 MHz up to 8GB, Support Non-ECC, unbuffered memory only
Watchdog Timer	Generates a system reset with internal timer for 1 min/s ~ 255 min/s
Real Time Clock	Chipset integrated RTC with onboard lithium battery
Expansion	1 x MiniPCIe (support mSATA) 1 x Sim slot, 1 x MiniPCI, 1 x PCI Slot (Note2), 1 x CFast Card(Optional), 1 x SD Card

## Graphics

Chipset	Intel® HD Graphics
Display Interface	1 x LVDS (Note1) , 1 x DVI (Note3) 1 x HDMI, 1 x DisplayPort (Note3)

## LAN

Chip	2 x Intel® I210-AT Gigabit LAN
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## I/O

Serial ATA	2 x SATA3 interface with 600MB/s transfer rate CFast Card socket (shared with SATA3-2) (Optional)
Audio	Realtek ALC262 HD Audio
Internal I/O	2 x SATA3, 4 x RS232, 4 x USB2.0, 1 x LPC 1 x GPIO ,1 x PS/2, 1 x SMBUS, 1 x I²C, 1 x Audio, 1 x LVDS (Note1), 1 x LCD inverter
Rear I/O	4 x USB3.0, 2 x LAN, 2 x RS232/422/485 (Optional), 1 x Audio 1 x HDMI, 1 x Display Port (Note3), 1 x DVI (Note3)

## Mechanical & Environmental

Power Requirement	Standard 24-pin ATX power supply or 4-pin DC 9~24V
Size	170mm x 170mm (L x W)
Temperature	Operating within 0°C~60°C (32°F~140°F) Storage within -20°C~80°C (-4°F~176°F)
Relative Humidity	10%~90%, non-condensing

## Ordering Code

Art.No. 152901	LV-67UPN4	With N4200 + Heat sink, support LVDS, DVI, HDMI, DP, 2 x SATA3
Art.No. 152907	LV-67UTN4	With N4200 + Heat sink, support LVDS, DVI, 2 x SATA3, Header for VGA or 2nd LVDS (Note4)
Art. No. 152908	LV-67UPN3	With N3350 + Heat sink, support LVDS, DVI, HDMI, DP, 2 x SATA3
Art. No. 152909	LV-67UTN3	With N3350 + Heat sink, support LVDS, DVI, 2 x SATA3, Header for VGA or 2nd LVDS (Note4)
ADP-3355		DP to VGA
ADP-3355NB		DP to VGA, without bracket
ADP-3460		DP to LVDS (For 2nd LVDS)
DSDM8GB-DDR3L-1600-SO-1.35V		DDR3L SO-DIMM 8GB 1600MHz 204PIN 1.35V

**Note1:** Onboard 18/24-bit single/dual channel +3.3V/ +5V/ +12V LVDS

**Note2:** Support two PCI slots by PCI riser card

**Note3:** DVI and DisplayPort can't not use at the same time

**Note4:** There are two modules (ADP3355,ADP3460), and you can choose one to support VGA or 2nd LVDS

**Note5:** Support isolated RS-422/485 transceiver (Optional)