

## 3.5 inch Desktop Miniboard

## 8th & 9th Gen Intel® Core™ Desktop Processors

LS-37L



## **Features**

- Support 8<sup>th</sup> & 9<sup>th</sup> Gen Intel® Core™ Desktop Processors
- 1 x DDR4 SO-DIMM 2666 MHz up to 32GB
- Integrated VGA, DVI, DisplayPort, HDMI, LVDS for Triple display support
- 1 x Intel® Gigabit PHY LAN, 1 x Intel® Gigabit LAN,
- 1 x MiniPCle (support mSATA)
- 2 x SATA3, 4 x USB2.0, 4 x USB3.1 Gen2, 6 x COM,
- 1 x GPIO, 1 x PS/2
- Support Watchdog Timer
- Support 4K resolution
- DC input 9~25V

System		LAN	
	Support 8 <sup>th</sup> & 9 <sup>th</sup> Gen Intel® Core™ Desktop		1 x Intel® I219-LM Gigabit PHY LAN
Processor	Processors, FCLGA1151 package	Chip	(Support iAMT12.0)
	(Support up to 65W TDP) (Note1)		1 x Intel® I210-AT Gigabit LAN
Chipset	Intel® Q370	1/0	
	1 x DDR4 SO-DIMM 2666 MHz up to 32GB, Support Non-ECC, unbuffered memory	Serial ATA	2 x SATA3
Memory		Audio	Realtek ALC262 HD Audio
	(i3, Pentium, Celeron CPU support 2400 MHz only)	Internal I/O	2 x SATA3, 4 x USB2.0
Watchdog Timer	Generates a system reset with internal timer for		3 x RS232, 2x RS232/485/422
	1 min/s ~ 255 min/s		1 x DVI, 1 x VGA , 1 x LVDS, 1 x LCD inverter,
Real Time Clock	Chipset integrated RTC with lithium battery		1 x GPIO, 1 x Audio, 1 x PS/2, 1 x SMBus
Expansion	1 x MiniPCle (support mSATA)	—Rear I/O	1 x DisplayPort, 1 x HDMI
Graphics		— Real I/O	4 x USB3.1 Gen2, 2 x LAN, 1 x RS232
Processor	Intel® UHD Graphics	Mechanical &	Environmental
Display Interface	1 x DisplayPort(Optional), 1 x HDMI, 1 x DVI	Power Requirement	DC input 9~25V
	1 x VGA, 1 x LVDS (Note2)	Size	146mm x 101mm (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**

LS-37L: 8<sup>th</sup> & 9<sup>th</sup> Gen Intel® Core™ Desktop Processors, support HDMI, LVDS, VGA, DVI, DP

LS-37LT: 8th & 9th Gen Intel® Core™ Desktop Processors, support HDMI, LVDS, VGA, DVI, Header for 2nd VGA or 2nd LVDS (Note2)

ADP-3355: DisplayPort to VGA module ADP-3460: DisplayPort to LVDS module

Note1: 8 cores TDP 65W CPU is not supported.(E.g. i7-9700E)
Note2: Onboard 18/24-bit single/dual channel +3.3V/ +5V/ +12V LVDS

Note3: There are two modules ADP-3355,ADP-3460; you can choose the one to support 2nd VGA or 2nd LVDS