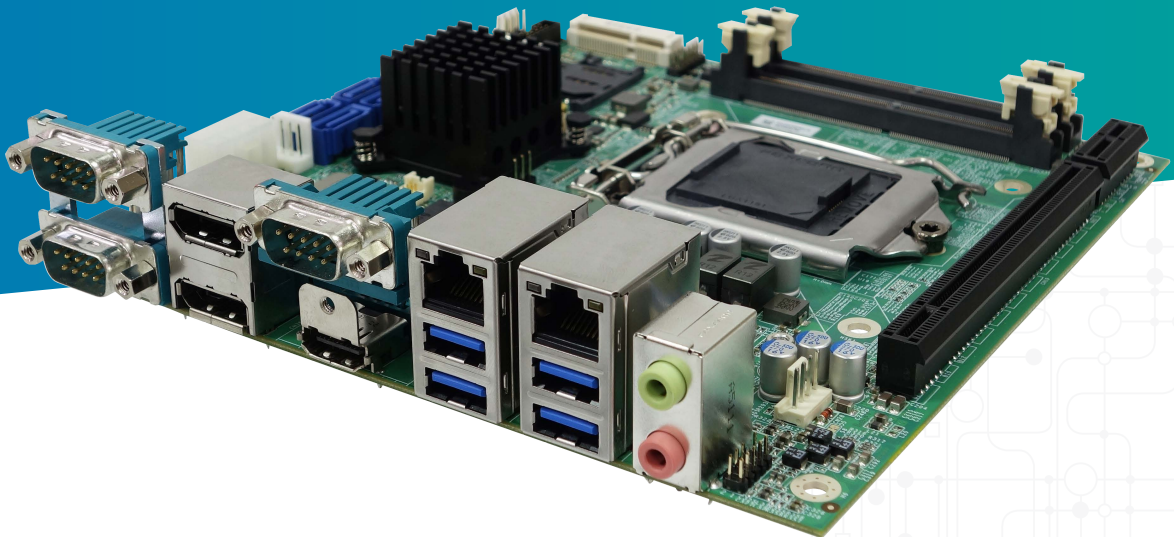


INS8349A

**Intel® 6th Gen. Skylake-S Processor Mini ITX Motherboard
with Q170/H110 Express Chipset**

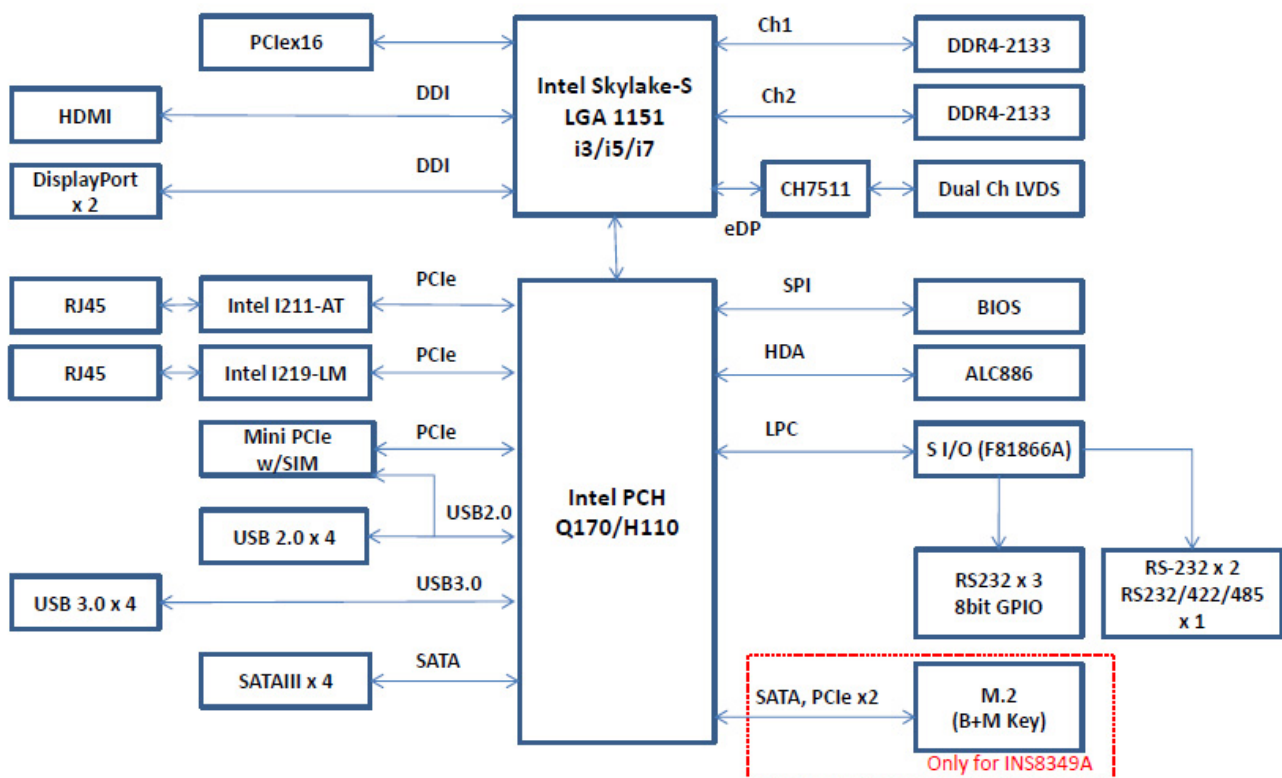
32GB DDR4 , HDMI/DP/LVDS, 6 COM, 8 USB , 2 Gigabit Ethernet,
DC-12V, PCIe x 16 Slot



- Support Intel® Skylake-S LGA 1151 for i7/i5/i3, 65W/35W processor
- Intel Q170/H110 Express Chipset
- 2 x SO-DIMM up to DDR4 -2133 32GB
- 1 x HDMI 1.4b, 2 x DP++ and 1 x Dual Channel 24-bit LVDS
- Expansion : 1 x PCIe x16, 1 x MiniPCIe with SIM Card Holder, 1 x M.2
- 6 x COM, 8 x USB, LPC, SMBus
- Dual LAN Ports (1 x Intel I211-AT & 1 x I219-LM GbE)
- 4 x SATAIII
- DC-IN 12V

INS8349A a powerful industrial Mini-ITX motherboard supporting 6th Generation Intel® Core i7/i5/i3 LGA1151 Processors with built in Intel® HD Graphics. Onboard video connections include HDMI, DP++ and 24-bit dual channel LVDS, enabling customers to select between them for triple independent display. The board features 2 x SO-DIMM DDR4 2133MHz sockets, expandable to 32GB. Additionally the INS8349A supports a variety of I/O including 2 x GbE Intel Gigabit Ethernet, 4 x SATAIII, 4 x USB3.0, 4 x USB2.0, 1 x Mini-PCle socket, 1 x M.2 for expansion slot with WIFI/3G module option. For furthering graphical performance an 1 x PCIe x16 slot will allow the installation of discrete VGA card. INS8349A delivers flexible expansion slots allowing customers to install one PCI-Express X16 card and Mini-PCle cards. It is built with a SIM card holder capable of installing a SIM card with a Mini-PCle 3G/4G module for wireless connection

Blockdiagram



Specifications

System	
CPU	LGA1151 for Intel® 6th Gen. Core™ i7 / i5 / i3 processors, TDP 65W max.
Platform Controller Hub	Q170 : INS8349A H110 : INS8349A1
System Memory	Two 260-pin SO-DIMM up to 32GB DDR4 2133/2400 MHz SDRAM
BIOS	AMI SPI BIOS
Watchdog	255 levels, 1 ~ 255 sec
Expansion Slot	1 x PCI-Express 3.0 X16 slot 1 x Full-size Mini-PCIe w/SIM slot
Display	
Chipset	Intel® HD Graphics 500 series
DisplayPort++	2, 4096x2304 @ 60 Hz
HDMI 1.4b	1, 4096x2304 @24Hz
LVDS	1, Dual Channel 24bit LVDS. 1920x1200@60Hz
Ethernet	
Chipset	1 x Intel® I211-AT , 1 x I219-LM Gigabit Ethernet
Rear I/O	
HDMI	1 x HDMI 1.4b
DisplayPort	2 x DP++
Ethernet	2 x RJ45
USB Port	4 x USB3.0
Serial Port	3 x DB9 (1 x RS232/422/485, 2 x RS232)
Audio	2 x Audio Jack (Line-Out/ MIC-In)

Internal I/O	
Storage	4 x SATAIII Ports 1 x M.2 (B+M Key Type, 80*22 mm), M.2 only for INS8349A
Serial Port	3 x RS232 (2*5P header)
LVDS	1 x (DF13A-40DP-1.25V)
GPIO	1 x 8bit (2*6P header)
USB Port	4 x USB 2.0 (2*5P header)
Mini PCIe	1
SIM Card	1
AT/ATX Mode Select	1 x (1*3P header)
DC-IN	1 x (2*4P connector)
Audio	
Audio Codec	1 x Realtek ALC886 HD Audio codec, Line-Out/MIC
Power Requirements	
Power Type	12V DC-IN (8-pin connector)
Mechanical and Environment	
Form Factor	Mini ITX
Power Type	DC-In/12V
Dimension	170mm x 170mm
Operating Temp.	0°C~60°C (32°F~140°F)
Storage Temp.	-20°C~80°C (-4°F~176°F)
Relative Humidity	10%~90% (non-condensing)

Ordering Information

INS8349A

Intel® Skylake-S LGA1151 with Q170 chipset, HDMI 1.4b / DP++ / LVDS, PCIe X16, 1 Mini-PCIe, 1 M.2, 2 Gigabit LAN, 4 SATA, 6 COM, USB3.0, DC 12V Input

INS8349A1

Intel® Skylake-S LGA1151 with H110 chipset, HDMI 1.4b / DP++ / LVDS, PCIe X16, 1 Mini-PCIe, 2 Gigabit LAN, 4 SATA, 6 COM, USB3.0, DC 12V Input