ASRock Industrial

intel IoT Solutions Alliance

IMB-157

Mini-ITX Motherboard

Spotlight Features

- Intel® Apollo Lake SoC Processor
  - -IMB-157D (N4200)
  - -IMB-157D-WF (N4200)
  - -IMB-157L (N3350)
  - -IMB-157J (J3455)
- Supports Dual Channel DDR3L SO-DIMM 1866, up to 16GB
- 1 x VGA, 1 x HDMI, 1 x eDP or LVDS (Jumper Switch)
- 4 xUSB 3.0, 4 x USB 2.0, 1 x SATA3, 6 x COM
- 1 x Mini-PCIe, 1 x PCIe x1, 1 x M.2 (KEY E), 1 x M.2 (KEY M)
- 2 x Realtek LAN
- 1 x TPM Header
- +12V or +19V~+24V DC-In (DC Jack / 4-pin DC-in PWR Con)

Specifications

Processor System	
Dimensions	Mini-ITX (6.7-in x 6.7-in)
CPU	Intel® Apollo Lake SoC Processor -IMB-157D /IMB-157D-WF (N4200, QC, 1.10 GHz, 6 W) -IMB-157L (N3350, DC, 1.10 GHz, 6 W) -IMB-157J (J3455, QC, 1.50 GHz, 10 W)
Chipset	SOC

Expansion Slot	
PCIe	1 x PCIe x1
Mini-PCIe	1 x full/half size with PCIe x1 and shared USB2.0
M.2	1 x M.2 (KEY E, 2230) with PCIe x1 and shared USB2.0 for Wireless 1 x M.2 (KEY M, 2242/2260) with SATA3 for SSD
mSATA	N/A

Memory	
Technology	Dual Channel DDR3L 1867MHz
Max	16 GB (8GB per DIMM)
Socket	2 x SO-DIMM

Graphics	
Controller	Intel® HD Graphics
VGA	Supports max resolution up to 1920 x 1200
LVDS	Supports max resolution up to 1920 x 1200@60Hz
eDP	Supports max resolution up to 4096 x 2160@60Hz
HDMI	Supports max resolution up to 4096 x 2160@24Hz
DVI	N/A
DisplayPort	N/A
Multi Display	Triple Display

Ethernet	
Controller/ Speed	2 x Realtek RTL8111G/RTL8111H-CG with 10/100/1000 Mbps

Rear I/O	
VGA	1
DVI	N/A
HDMI	1
DisplayPort	N/A
Ethernet	2
USB	4 x USB 3.0
Audio Jack	2 (Mic-in, Line-out)
Serial	N/A
PS/2	N/A

Internal Connector	
USB	4 x USB 2.0
LVDS	1
eDP	1
VGA	1 x Header (Shared with VGA Port)
Serial	4 x COM (RS-232), 2 x COM (RS-232/422/485)
SATA	1 x SATA3
Parallel	1 (shared with GPIO)
GPIO	8 x GPI + 8 x GPO (shared with LPT header)
SATA PWR Output Con	1
Speaker Header	1
TPM	1 x Header

Watchdog Timer	
Output	From Super I/O to drag RESETCON#
Interval	256 segments, 0,1,2...255sec/min

Power Requirements	
Input PWR	+12V or +19V~+24V DC-In (DC Jack / 4-pin DC-in PWR Con)
Power On	AT/ATX Supported AT : Directly PWR on as power input ready ATX : Press button to PWR on after power input ready

Environment	
Operating Temperature	0°C – 60°C
Storage Temperature	-40°C – 85° C