



KEY FEATURES

- Intel® Apollo Lake SoC Processors
- 2 x 204-pin SO-DIMM up to 16 GB DDR3L 1867 MHz (8GB per DIMM)
- 4 x USB 3.2 Gen1, 4 x USB 2.0, 1 x mini-PCIe, 1 x PCIe x1, 1 x M.2 Key E, 1 x M.2 Key M, 6 x COM, 1 x SATA3
- 2 x Realtek 1 Gigabit LAN
- Supports Triple display, 1 x HDMI 1.4b, 1 x VGA, 1 x LVDS or eDP
- TPM Header
- 12V or 19V~24V DC-In (DC Jack / 4-pin DC-in PWR Con)

SPECIFICATIONS

Form Factor

Dimensions	Mini-ITX (6.7-in x 6.7-in x 0.84-in, 17.0 cm x 17.0 cm x 2.13 cm)
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Processor System

CPU	Intel® Apollo Lake SoC Processors IMB-157D (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
BIOS	AMI SPI 128 Mbit

Memory

Technology	Dual Channel DDR3L 1867 MHz
Capacity	16GB (8GB per DIMM)
Socket	2 x 204-pin SO-DIMM

Graphics

Controller	Intel® UHD Graphics
HDMI	HDMI 1.4b Max resolution up to 4096x2160@24Hz
VGA	Max resolution up to 1920x1200@60Hz
LVDS	Dual channel 24 bit up to 1920 x 1200@60Hz
eDP	Max resolution up to 1920 x 1080@60Hz
MultiDisplay	Triple Display

Expansion Slot

PCIe	1 x PCIe x1
Mini-PCIe	1 x Full/Half size with PCIe x1 and USB 2.0
M.2	1 x M.2 (Key E, 2230) with PCIe x1, USB 2.0 and CNVi for Wireless

Audio

Interface	Realtek ALC897, High Definition Audio. Line-out, Mic-in
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Ethernet

Controller/ Speed	LAN1: Realtek RTL8111H-CG with 10/100/1000 Mbps LAN2: Realtek RTL8111H-CG with 10/100/1000 Mbps
Connector	2 x RJ-45

Rear I/O

HDMI	1 x HDMI1.4b
VGA	1
Ethernet	2 x 1 Gigabit LAN
USB	4 x USB 3.2 Gen1
Audio	2 (Mic-in, Line-out)

Internal Connector

USB	4 x USB 2.0 (2x2.54mm header)
COM	COM1, COM2 (RS-232/422/485) COM3, COM4, COM5, COM6 (RS-232)
Parallel	1 (shared with GPIO)
GPIO	8 x GPI, 8 x GPO (shared with LPT header)
TPM	TPM Header
LVDS	1 (shared with eDP, switch by BIOS)
eDP	1 (shared with LVDS, switch by BIOS)
VGA	1 x Header (Shared with VGA Port)
SATA PWR Output	1
Speaker Header	1

Storage

M.2	1 x M.2 (Key M, 2242/2260) with SATA3 for SSD
SATA	1 x SATA3 (6Gb/s)

Watchdog Timer

Output	From Super I/O to drag RESETCON#
Interval	256 Segments, 0, 1, 2, ..., 255sec

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 Temp	0°C ~ 60°C
Storage Temp	-40°C ~ 85°C
Operating Humidity	5% ~ 90%
Storage Humidity	5% ~ 90%