

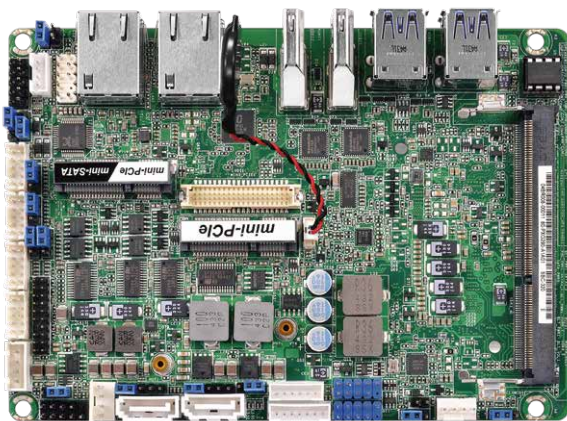


SBC-310/ SBC-311

3.5" SBC Motherboard

KEY FEATURES

- Intel® 4th Gen (Haswell-U) Core™ Processors
- 1 x 204-pin SO-DIMM up to 8GB DDR3L 1333/1600 MHz
- 4 x USB 3.1 Gen1, 4 x USB 2.0, 1 x mini-PCIe, 1 x mSATA/mini-PCIe, 4 x COM, 2 x SATA3
- 1 x Intel 1 Gigabit LAN, 1 x Realtek 1 Gigabit LAN
- Supports triple display, 2 x HDMI 1.4a, 1 x LVDS
- TPM Header
- 9~36V DC-In



SPECIFICATIONS

Form Factor	SBC-310	SBC-311
Dimensions	3.5" SBC (5.8-in x 4.0-in)	
Processor System		
CPU	Intel® 4 th Gen (Haswell-U) Core™ Processors	
	- SBC-310P (i7-4650U, QC, 1.70 GHz, 15W)	- SBC-311V (i3-4010U, QC, 1.70 GHz, 15W)
	- SBC-310M (i5-4300U, QC, 1.90 GHz, 15W)	
Chipset	MCP	
Socket	N/A	
BIOS	AMI SPI 64 Mbit	

Memory	
Technology	Single Channel DDR3L 1333/1600MHz
Capacity	8 GB
Socket	1 x 204-pin SO-DIMM

Graphics	
Controller	Intel® Gen9 Graphics DX 11
HDMI	HDMI 1.4a Max resolution up to 4096x2304@60Hz
DisplayPort	N/A
VGA	N/A
LVDS	Dual channel 24 bit up to 1920x1200@60Hz
eDP	N/A
DVI	N/A
MultiDisplay	Triple Display

Expansion Slot	
PCIe	N/A
PCI	N/A
mini-PCIe	1 x Full size with PCIe x1 and USB 2.0
mSATA/mini-PCIe	1 x Full size with SATA3 and USB 2.0
M.2	N/A
SIM Socket	N/A

Audio	
Interface	N/A

Ethernet	
Controller/ Speed	SBC-310P/310M LAN1: 1 x Realtek RTL8111G with 10/100/1000 Mbps LAN2: 1 x Intel® I218LM with 10/100/1000 Mbps SBC-311V LAN1: 1 x Realtek RTL8111G with 10/100/1000 Mbps LAN2: 1 x Intel® I218V with 10/100/1000 Mbps
Connector	2 x RJ-45

Rear I/O	
HDMI	2 x HDMI 1.4a
DisplayPort	N/A
VGA	N/A
DVI	N/A
Ethernet	2 x 1 Gigabit LAN
USB	4 x USB 3.1 Gen1
Audio	N/A
COM	N/A
PS2	N/A

Internal Connector	
USB	4 x USB 2.0 (2x 2.54 pitch header)
COM	2 x COM (RS-232/422/485), 2 x COM (RS-232)
Parallel	N/A
GPIO	4 x GPI, 4 x GPO
TPM	TPM Header
LVDS	1
eDP	N/A
VGA	N/A
SATA PWR Output	1
Speaker Header	1

Storage	
M.2	N/A
mSATA	1 x Half size with PCIe x1, SATA3 and USB 2.0 colay with mini-PCIe
SATA	2 x SATA3 (6Gb/s)
eMMC	N/A

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

Power Requirements	
Input PWR	9~36V (DC In)
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%