



SBC-310/SBC-311

3.5" SBC Motherboard

Spotlight Features

- BGA Haswell MCP with ULT for Intel Core i7/i5 (SBC-310)
BGA Haswell MCP with ULT for Intel Core i3/Celeron (SBC-311)
- Integrated Intel® HD Graphics Built-in Visuals
- Supports DDR3L 1333/1600MHz, 1 x SO-DIMM, up to 8GB system memory
- 2 x HDMI, 1 x 24 bit Dual Channel LVDS co-lay with eDP
- 4 x USB 3.0, 4 x USB 2.0, 2 x SATA3
- 1 x mini-PCIe, 1x mSATA,
- Gigabit LAN : 1 x RTL8111G, 1 x Intel I218LM(4650U/4300U SKU)
- Gigabit LAN : 1 x RTL8111G, 1 x Intel I218V(4010U/2980U SKU)
- 1 x TPM Header



Specifications

Processor System	SBC-310	SBC-311
Dimension	3.5" SBC (5.8-in x 4.0-in) / (146 x 102 mm)	
CPU	BGA Haswell MCP with ULT for Intel Core i7-4650U/ i5-4300U	BGA Haswell MCP with ULT for Intel Core i3-4010U/ Celeron 2980U
Core Number	(By CPU, Max 4)	
Max Speed	(By CPU)	
L2 Cache	(By CPU)	
Chipset	(By CPU)	
BIOS	UEFI	
Expansion Slot		
PCI	0	
Mini-PCIe	1 (Half Size) + 1 (Full Size) shared with mSATA	
mSATA	1 (Full Size) shared with SATA2	
PCIe	0	
CFast Card Socket	0	
Memory		
Technology	Single Channel DDR3L 1333/1600 MHz SDRAM	
Max.	8GB	
Socket	1 x SO-DIMM	
Graphics		
Controller	Intel HD Graphics (By CPU)	
VRAM	Shared Memory	
VGA	0	
LVDS	1 co-lay with eDP	
HDMI	Supports HDMI 1.4a, supported with Level Shift, resolution up to 4096x2304 (1x HDMI)	
DVI	0	
Display Port	0	
Multi Display	Yes(Three Display)	
Ethernet		
Interface	10/100/1000 Mbps	
Controller	1 x RTL8111G, 1 x Intel I218LM	1 x RTL8111G, 1 x Intel I218V
Connector	2 x RJ 45	
SATA		
Max Data Transfer Rate	SATA3 (6.0Gb/s)	

Rear I/O	SBC-310	SBC-311
VGA	0	
HDMI	2	
DVI-I/D	0	
Display Port	0	
Ethernet	2	
USB	4 x USB 3.0	
Audio	0	
Serial	0	
e-SATA	0	
PS/2	0	
Internal Connector		
USB	4 (2 x USB Header 2.54mm pitch)	
LVDS/Inverter	24 bit dual channel LVDS co-lay with eDP	
VGA	0	
Serial	4 (2 RS-232/422/485, 2 RS-232)	
SATA	2 x SATA3 (6.0Gb/s)	
m-SATA	1(shared)	
Mini-PCIe	1	
Parallel	0	
IrDA	0	
GPIO	4 x GPI + 4 x GPO	
SATA PWR Output Con	1	
Speaker Header	1	

Watchdog Timer	
Output	Output from super I/O to drag RESETCON#
Interval	256 Segments, 0,1,2...255 Sec/Min

Power Requirements	
Input PWR	DC 9-36 input
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