

mITX-BW10

Mini-ITX Intel® Broadwell-U Embedded Motherboard



BW10 V3.0

Features

- Intel Broadwell-U Core and Celeron processors, low power consumption
- DDR3L up to 16GB memory
- Intel HD Graphics 5500, HDMI, VGA, eDP/LVDS optional
- Support 10/100/1000M bit ethernet card
- SATA3.0, mSATA, mini-PCIe, 10xCOM
- 12V DC input



Introduction

The mITX-BW10 is a thin mini-ITX motherboard, supporting Intel® Broadwell processors including i7-5500U, i5-5200U, i3-5010U, and Celeron 3205U.

Built from Broadwell platform, it is also equipped with Intel® HD Graphics 5500 for better graphic processing. This board supports 4K playback via HDMI ports when Core CPU is onboard. It carries one DDR3L 1600MHz SO-DIMM slot with a total maximum capacity of 16GB to add higher bandwidth and lower latencies for processes.

The mITX-BW10 has 10xCOM, 2x USB3.0, 1x mSATA, 1x SATA3.0, 1x mini PCIe, 1x Mic-in and 1x Line-out, which meets most requirements for configuration in the market. It also has 2 Gigabit LAN ports for networking application. This motherboard also supports Auto Power On for more secure network.



H/W Monitor



Watchdog

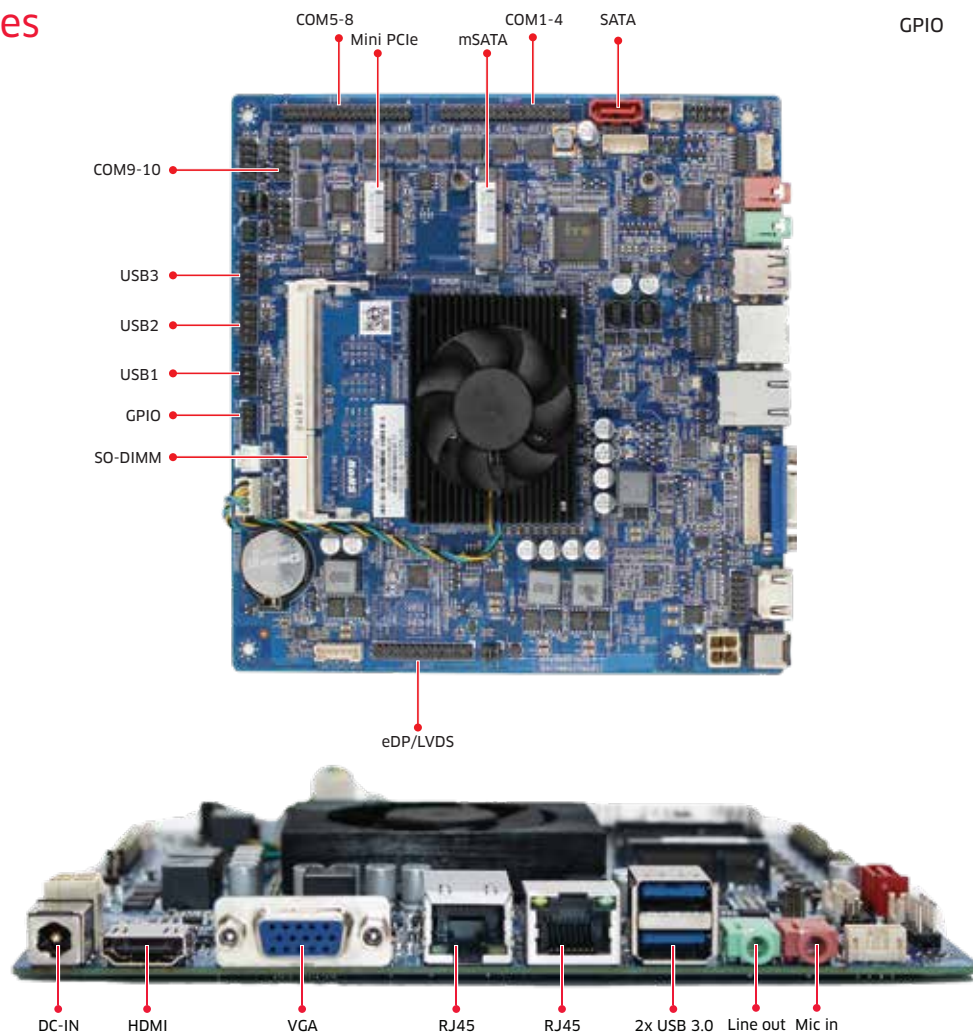


GPIO



Brightness

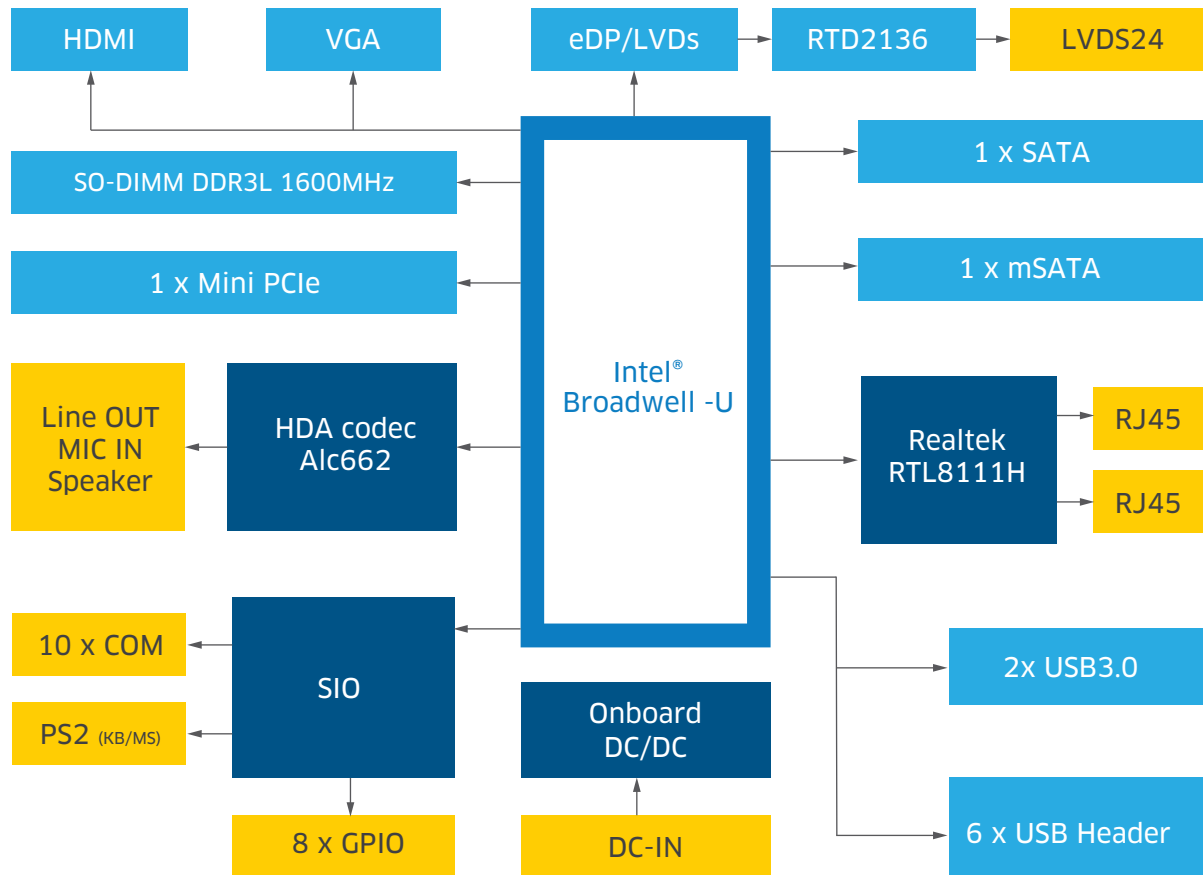
I/O Interfaces



Technical Specifications

Processor	CPU	Celeron 3205U	i3-5010U	i5-5200U	i7-5500U
	Core frequency	1.50 GHz	2.1 GHz	2.2 GHz	2.4 GHz
	Turbo frequency			2.7GHz	3.0 GHz
	Cache	2 MB	3MB	3MB	4MB
	TDP	15W	15W	15W	15W
	BIOS	AMI 8MB UEFI BIOS			
	Memory	Type	1 x DDR3L 1600MHz		
Max.		16GB			
Display	GPU	Intel HD Graphics 5500 (Based on CPU)			
	HDMI	1 x HDMI 1.4			
	VGA	Yes			
	Multiple display	HDMI+VGA+eDP/LVDS (optional)			
Ethernet	Speed	10/100/1000Mbps			
	Controller	Realtek RTL8111H			
	Interface	2 x RJ45			
	Wake on LAN	Yes			
Audio	Audio codec	Realtek HD ALC662			
	Interface	Line-out, MIC-in, audio header, amplifier header			
Hardware	CPU system temperature, onboard voltage, watchdog, auto power on				
Storage	SATA	1 x SATA3.0 + 1 x mSATA			
Expansion	Mini-PCIe	1 x Mini-PCIe for Wi-Fi			
Rear Panel I/O	Audio	1 x Line-out, 1 x Mic-in			
	LAN	2			
	VGA	1			
	USB3.0	2			
	HDMI	1			
	I/O header	RS232	10 x RS232, and COM 2 can change to RS485		
USB2.0		6 x USB2.0 header			
HDMI		1 x HDMI header			
PS/2		1 x PS/2 header			
VGA		1 x VGA header			
Power		Standard port	1 x 12V DC-IN		
	Peripheral	For fan and SATA			
Board Type	Mini-ITX				
Dimension	170mm x 170mm (L x W)				
Temperature	Operating Temp.	-20°C to 60°C			
	Storage Temp.	-40°C to 80°C			
Operating System	Win7/8/8.1/10 32/64bit, Linux 32/64 bit				

BW10 Functional Block Diagram



Applications

- Digital signage: low power, multi-display
- POS/POI: lower power, high performance
- Industrial automation: rich I/O, long cycle
- Embedded control systems