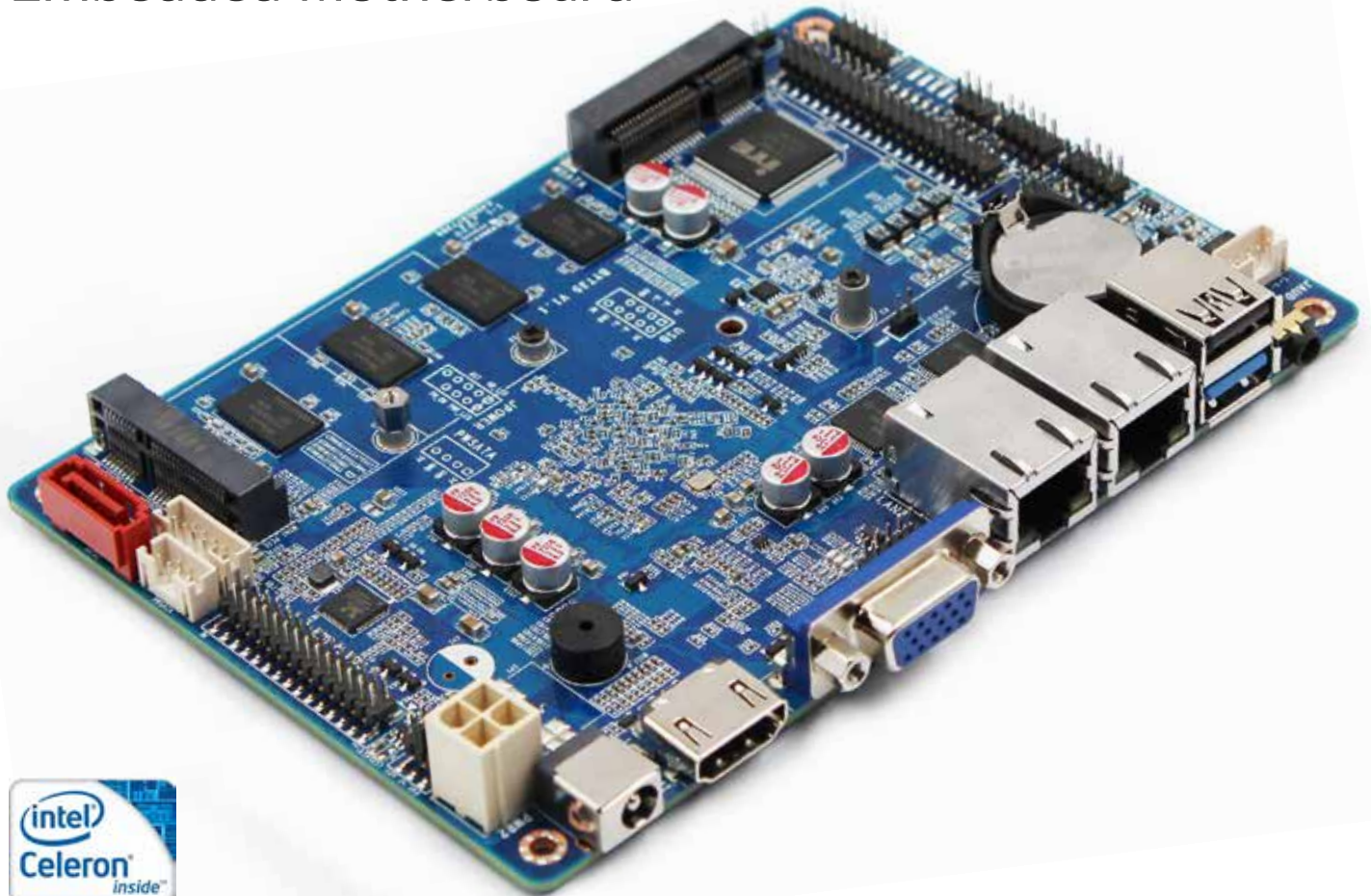


SBC-BYT35

Intel® Bay Trail 3.5" Industrial Embedded Motherboard



Features

- Intel Bay Trail BGA processor
- Dual channel DDR3L up to 4GB
- Display interfaces: VGA, HDMI, eDP/LVDS
- 10/100/1000Mbit ethernet card
- SATA2.0, mSATA, eMMC (optional)
- 9~24V DC input (9~36V, optional)



Introduction

The SBC-BYT35 is a low power consumption 3.5" single board computer, supporting Intel® Bay Trail Platform processors, Celeron J1800, Celeron J1900, N2940 and E3845. It offers onboard 2GB or 4GB system memory for higher bandwidth and lower latencies for processes. Powered by Intel® i211 controllers, this board is equipped with Dual Intel Gigabit Ethernet.

Measuring only 146mm x 102mm(LxW), this embedded board features rich I/O, including 1xHDMI, 1xVGA, 1xeDP/LVDS (optional), 1xAudio, 2x10M/100M/1000M BASE-T gigabit LAN(Intel i211), 1xUSB3.0, 5xUSB2.0, 4xRS232, 2xRS485, 1xLPC (optional), 8xGPIO. A whole heatsink will be attached to the bottom of the board for better cooling performance.



H/W Monitor



Watchdog

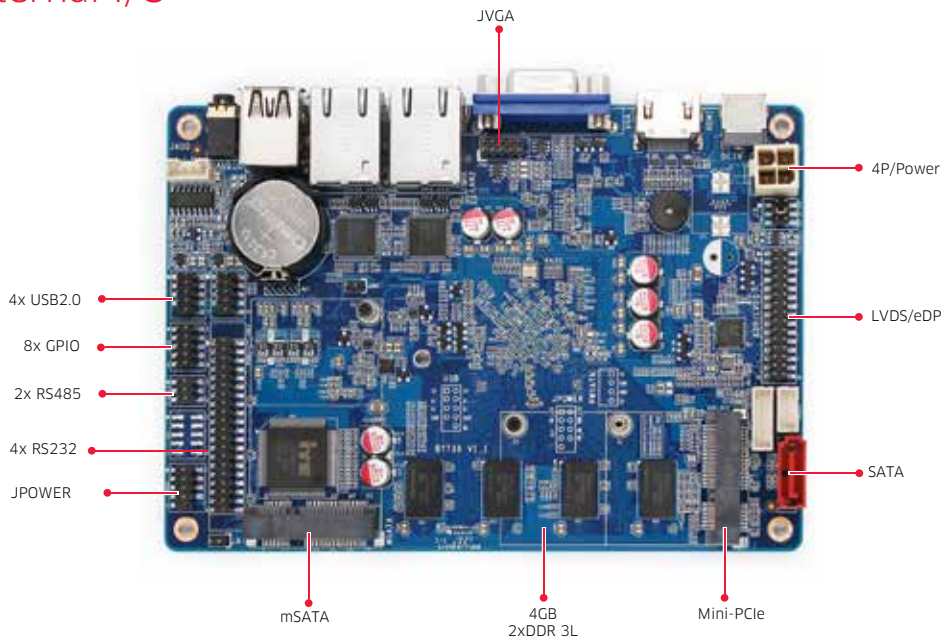


GPIO

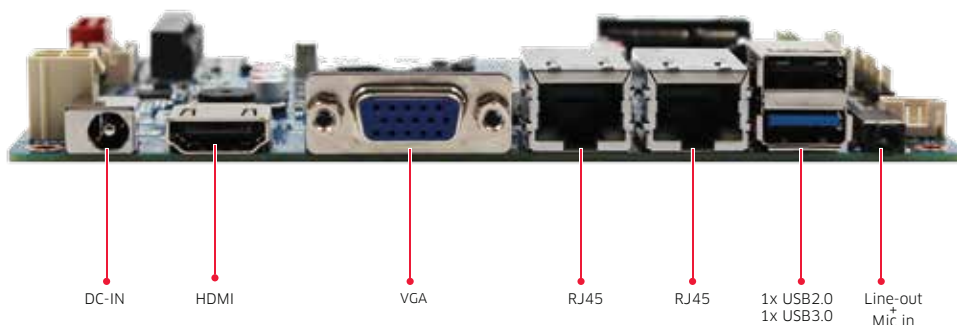


Brightness

Internal I/O



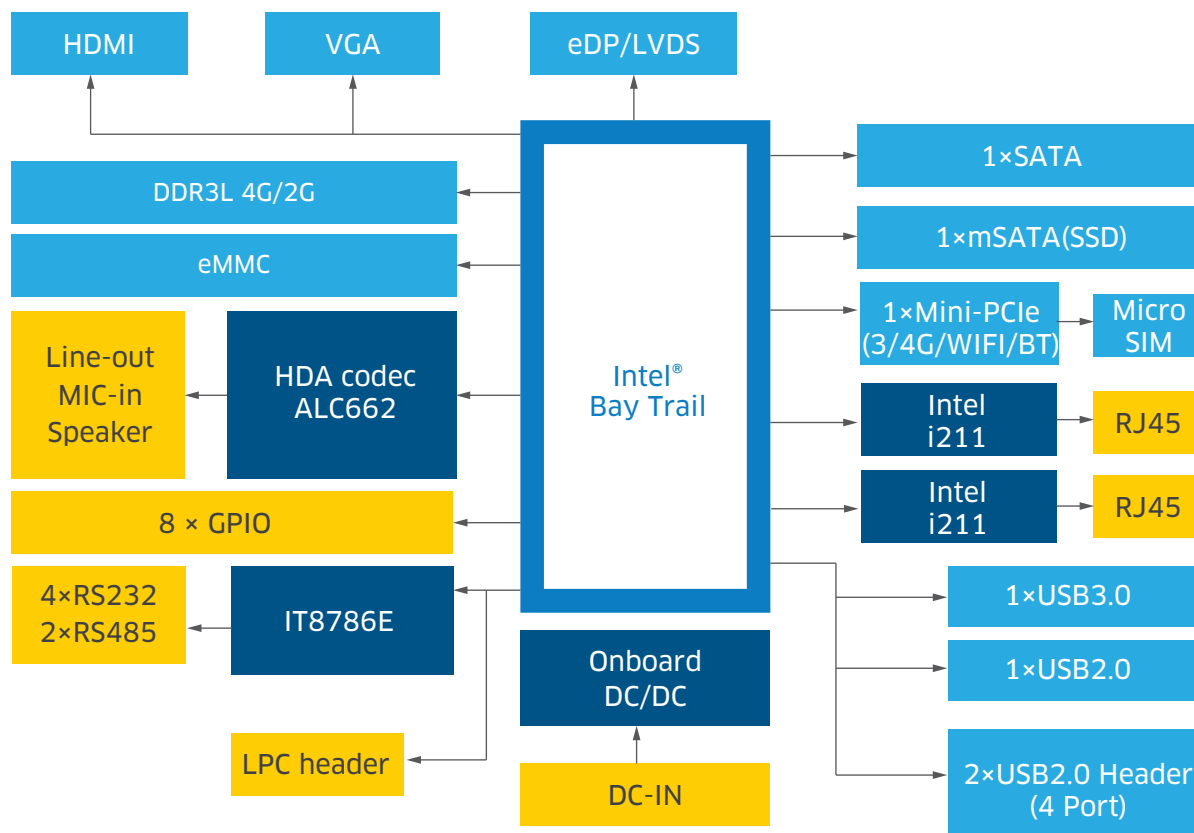
Rear I/O Interfaces



Technical Specifications

Processor	CPU	J1800	J1900	N2940	E3845
	Core frequency	2.41 GHz	2.00 GHz	1.83 GHz	1.91GHz
	Burst frequency	2.58 GHz	2.42 GHz	2.25 GHz	
	Cache	1MBL2	2MBL2	2MBL2	2MBL2
	BIOS	AMI 8Mb/16Mb UEFI BIOS			
Memory	Type	DDR3L Onboard 2GB(optional)/4GB			
	Capacity	Max. 4GB			
Display	GPU	Intel HD Graphics (varies to CPU)			
	HDMI	1			
	VGA	1			
	eDP/LVDS	Optional			
	Multiple display	HDMI+VGA+eDP/LVDS			
Ethernet	Speed	10/100/1000Mbps			
	Controller	2×intel i211			
	Interface	2×RJ45			
	Wake on LAN	Yes			
Audio	Audio codec	Realtek HD ALC662			
	Interface	Line-out and MIC-in in one, amplifier header (connect passive speaker)			
Hardware		CPU/system temperature, onboard DC-IN voltage, watchdog, Auto power on			
Storage	mSATA	1×mSATA for SSD			
	SATA2.0	1×SATA2.0			
	eMMC	Optional			
Expansion	Mini-PCIe	1×Mini-PCIe for WIFI,3/4G and BT			
	Micro SIM	1			
Rear Panel I/O	Audio	1×Line-out+MIC-in in one			
	LAN	2(10/100/1000Mbps)			
	USB3.0+USB2.0	1+1			
	VGA	1			
	HDMI	1			
Internal I/O	COM	4×RS232, 2×RS485(COM1 to COM4 with power, optional)			
	USB2.0	4×USB2.0			
	Digital I/O	8×GPIO			
	LPC	Optional			
Power	Standard port	1×9~24V(9~36V, optional) DC-IN/4 PIN Power			
	Peripheral Input	For SATA power			
	LED Indicator	POWER indicator			
Mechanical & Environmental	Type	3.5"			
	Size	146mm ×102mm (L x W)			
	Operating Temp.	-20°C ~60°C			
	Storage Temp.	-40°C ~80°C			
Operating System		Win7/Win10 32 bit/64 bit, Linux			

SBC-BYT35 Functional Block Diagram



Ordering Information

Model	CPU	Memory	HDMI	VGA	eDP or LVDS	LAN	Audio	RS232	RS485	USB3.0	USB2.0	SATA2.0	mSATA	Mini PCIe	Power	Cooling
DTJ1800-I	J1800	4G	1	1	1	2	1	4	2	1	5	1	1	1	DC-IN	Passive
DTJ1900-I	J1900	4G	1	1	1	2	1	4	2	1	5	1	1	1	DC-IN	Passive
DTN2940-I	N2940	4G	1	1	1	2	1	4	2	1	5	1	1	1	DC-IN	Passive
DTE3845-I	E3845	4G	1	1	1	2	1	4	2	1	5	1	1	1	DC-IN	Passive