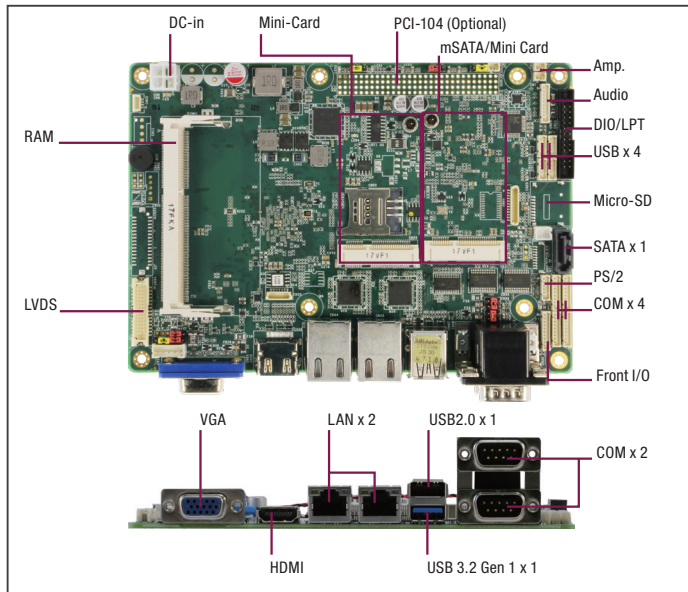


EPIC-BT07

EPIC Board with Intel® Atom®/ Celeron® Processor SoC



Specifications

System	
Form Factor	4" EPIC Board
CPU	Onboard Intel Celeron / Atom Series Processor : Celeron® J1900 (4C/4T, 2.00GHz, 10W) Celeron® N2930 (4C/4T, 1.83GHz, 7.5W) Celeron® N2807 (2C/2T, 1.58GHz, 4.3W) Atom™ E3845 (4C/4T, 1.91 GHz, 10W)
Chipset	Integrated with Intel® SoC
Memory Type	DDR3L 1333, Single Channel SODIMM x 1 , up to 8GB
BIOS	UEFI
Wake On Lan	Yes
Watchdog Timer	255 Levels
Security	TPM 2.0 (Optional)
RTC Battery	Lithium Battery 3V/240mAh
Dimension	4.53" x 6.50" (115mm x 165mm)
OS Support	Windows 7/10 (64bit) Ubuntu 21.04 / kernel 5.11.0-13-generic #14
Power	
Power Requirement	+9V to +24V (Optional : +12V)
Power Supply Type	AT/ATX
Connector	ATX 4-Pin connector or Phoenix 2-Pin Connector
Power Consumption	Intel® Celeron® Processor J1900, DDR3L 8GB , 0.99A@12V, 11.88W
Display	
Controller	Intel® HD Graphics for Intel Atom® Processor Z3700 Series
LVDS/eDP	LVDS x 1, Dual Channel 24/48bit, up to 1920 x 1080
Display Interface	VGA x 1 , up to 1920 x 1080 HDMI x 1 , up to 1920 x 1080
Multiple Display	Up to 2 Simultaneous Displays
Audio	
CODEC	Realtek ALC897
Audio Interface	Line-In / Line-Out / Mic
Speaker	2W Amp.
External I/O	
Ethernet	Intel® i210, 1GbE RJ-45 x 2
USB	USB 3.2 Gen 1 x 1 USB 2.0 x 1
Serial Port	COM2 , COM3 (RS232/422/485, support 5V/12V/RI)
Video	HDMI x 1
Internal I/O	
USB	USB 2.0 x 4
Serial Port	COM1 , COM4 , COM5 , COM6 (RS-232, support RI only)
Video	LVDS x 1 LVDS Inverter 5V/12V@2A VGA x 1

Features

- Onboard Intel® Atom™ E3845/ Celeron® J1900, N2807 Processor
- DDR3L 1333MHz SODIMM x 1, Up to 8GB
- Dual Display Configuration: VGA+ LVDS, VGA + HDMI or HDMI + LVDS
- SATA 3.0Gb/s x 1, mSATA/ Mini-Card x 1, Micro-SD Slot x 1 (E3800 Series Only)
- USB 3.2 Gen 1 x 1, USB2.0 x 5, RS-232 x 4, RS-232/422/485 x 2 (COM2, COM3)
- Mini-Card x 1, SIM x 1, PCI-104 (Optional)
- 16-bit Digital IO/LPT, SMBus x 1, I2C (Optional)
- Audio 2CH, 2W Audio Amp., TPM (Optional), Touch Controller (Optional)
- 9 ~ 24VDC Wide Range or 12VDC Power Input
- SoC Processor on Solder Side Design

SATA	SATA 3.0 Gbps x 1 (Default) (up to SATA x 2 shared with mSATA, BOM Optional)
Audio	Line-In / Line-Out / Mic
DIO/GPIO	GPIO 8-bits
SMBus/I2C	SMBUS / I2C (Default : SMBus)
Touch	4/5/8-wire Touch Controller x 1 (Optional)
Fan	DC Fan x 1
SIM	SIM x 1
Front Panel	Power Button, Reset Button, Power LED, SATA LED, Buzzer
Others	Micro-SD x 1 (Optional, only E3800 series) PCI-104 x 1 (Optional, only E3800 series) LPT (SPP/EPP/ECP) x 1 (Optional, co-lay with GPIO, selected by BIOS)
Expansion	
Mini PCI-E/mSATA	Full Sized-mPCIe x 1 Full Sized-mSATA x 1
M.2	—
Others	—
ENVIRONMENT & CERTIFICATION	
Operating Temperature	32°F ~ 140°F (0°C ~ 60°C) 32°F ~ 185°F (-40°C ~ 85°C) W2 Support (E3845 sku only)
Storage Temperature	32°F ~ 185°F (-40°C ~ 85°C)
Operating Humidity	0% ~ 90% relative humidity, non-condensing
MTBF (Hours)	358,806
EMC	CE/FCC Class A

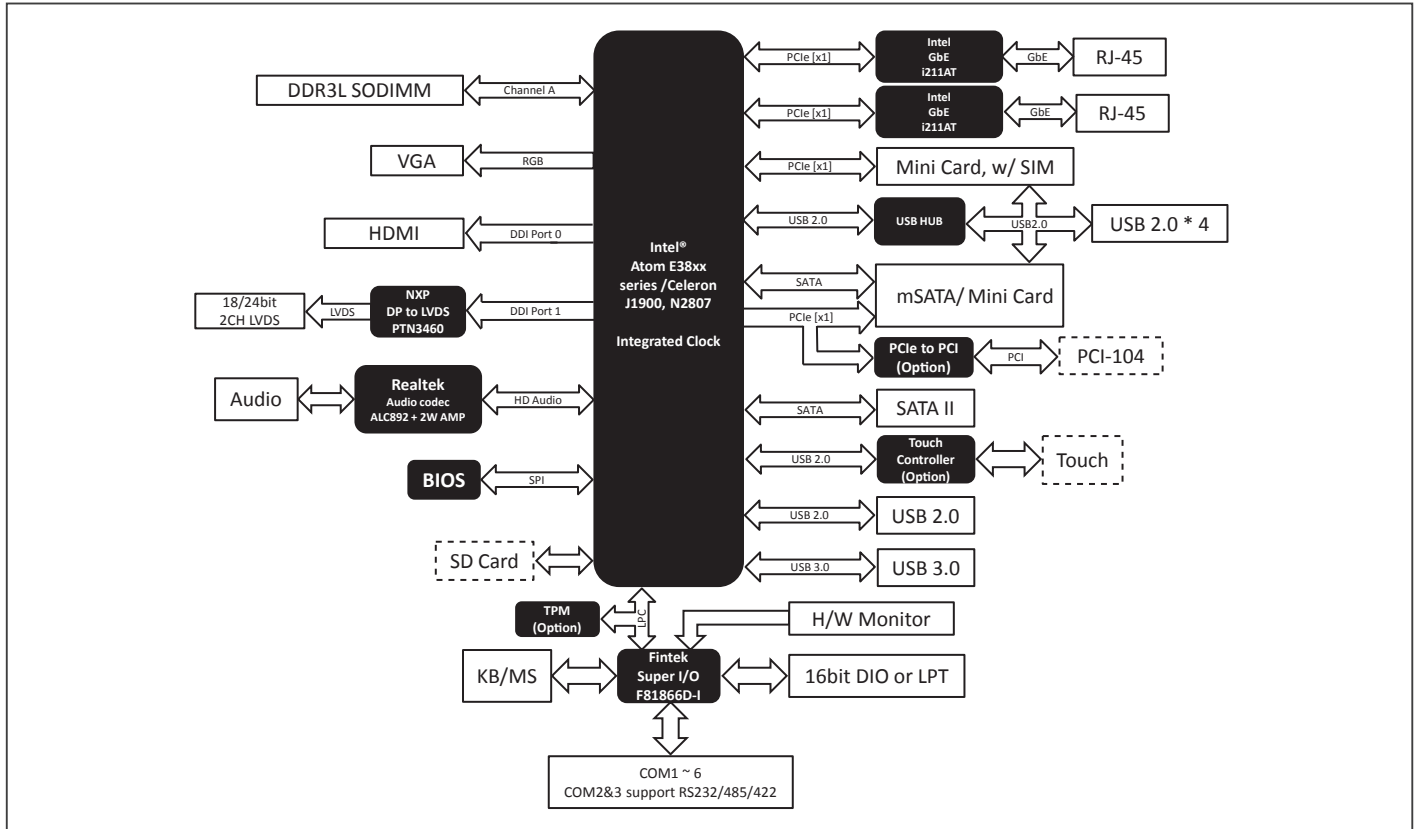
Packing List

- EPIC-BT07 x 1
- SATA Cable x 1
- SATA Power Cable x 1
- Heat-Spreader x 1
- Screw kit x 1

Optional Accessories

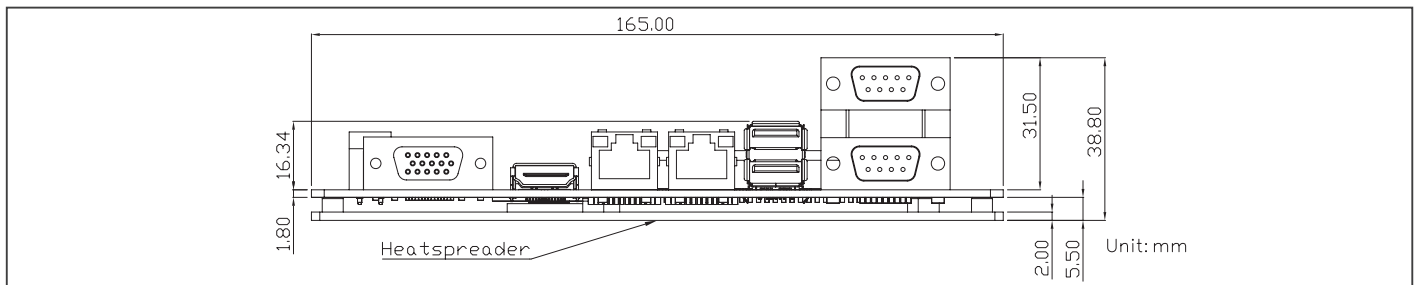
Part Number	Description	QTY
170204010R	2-Pin Power in to 4-Pin Housing Cable	1
1709100254	Audio Cable	1
1701260200	DIO/LPT Cable	1
1700050207	USB Cable	4
1700060155	PS/2 KB/Mouse Cable	1
1701090150	COM Cable	4
EPIC-BT07-HSK01	Metal, AI, Heat Sink, 165*95*14mm, Silver, EPIC-BT07 (Used with heatspreader)	1

Block Diagram



Dimension

Unit: mm



Ordering Information

Part Number	CPU	Memory	Display	Storage	LAN	USB	COM Port	Expansion	TPM	Power	Operating Temperature	Others
EPIC-BT07-A13-00A1	E3845	DDR3L SODIMM x 1	LVDS x 1, VGA x 1, HDMI x 1	SATA 3.0 Gbps x 1	GbE x 2	USB3.2 Gen1 x 1, USB2.0 x 5	RS232/422/485 x 2, RS232 x 4	Mini Card (Full Size) x 1, mSATA (Full Size) x 1	Optional	+9V to +24V (4 Pin ATX Connector)	0°C ~ 60°C	SIM x 1, PCI-104 x 1, Micro-SD x 1, GPIO 16 bits, Touch x 1
EPIC-BT07-A13-00A2	J1900	DDR3L SODIMM x 1	LVDS x 1, VGA x 1, HDMI x 1	SATA 3.0 Gbps x 1	GbE x 2	USB3.2 Gen1 x 1, USB2.0 x 5	RS232/422/485 x 2, RS232 x 4	Mini Card (Full Size) x 1, mSATA (Full Size) x 1	Optional	+9V to +24V (4 Pin ATX Connector)	0°C ~ 60°C	SIM x 1, GPIO 16 bits, Touch x 1
EPIC-BT07-A13-00A3	N2807	DDR3L SODIMM x 1	LVDS x 1, VGA x 1, HDMI x 1	SATA 3.0 Gbps x 1	GbE x 2	USB3.2 Gen1 x 1, USB2.0 x 5	RS232/422/485 x 2, RS232 x 4	Mini Card (Full Size) x 1, mSATA (Full Size) x 1	Optional	+9V to +24V (4 Pin ATX Connector)	0°C ~ 60°C	SIM x 1, GPIO 16 bits, Touch x 1
EPIC-BT07-A13-00A5	E3845	DDR3L SODIMM x 1	LVDS x 1, VGA x 1, HDMI x 1	SATA 3.0 Gbps x 1	GbE x 2	USB3.2 Gen1 x 1, USB2.0 x 5	RS232/422/485 x 2, RS232 x 4	Mini Card (Full Size) x 1, mSATA (Full Size) x 1	Optional	+9V to +24V (2 Pin Phoenix Connector)	0°C ~ 60°C	SIM x 1, PCI-104 x 1, Micro-SD x 1, GPIO 16 bits, Touch x 1
EPIC-BT07-A13-00A6	J1900	DDR3L SODIMM x 1	LVDS x 1, VGA x 1, HDMI x 1	SATA 3.0 Gbps x 1	GbE x 2	USB3.2 Gen1 x 1, USB2.0 x 5	RS232/422/485 x 2, RS232 x 4	Mini Card (Full Size) x 1, mSATA (Full Size) x 1	Optional	+9V to +24V (2 Pin Phoenix Connector)	0°C ~ 60°C	SIM x 1, Touch x 1
EPIC-BT07-A13-00A7	N2807	DDR3L SODIMM x 1	LVDS x 1, VGA x 1, HDMI x 1	SATA 3.0 Gbps x 1	GbE x 2	USB3.2 Gen1 x 1, USB2.0 x 5	RS232/422/485 x 2, RS232 x 4	Mini Card (Full Size) x 1, mSATA (Full Size) x 1	Optional	+9V to +24V (2 Pin Phoenix Connector)	0°C ~ 60°C	SIM x 1, GPIO 16 bits, Touch x 1
EPIC-BT07W2-A13-00A2	E3845	DDR3L SODIMM x 1	LVDS x 1, VGA x 1, HDMI x 1	SATA 3.0 Gbps x 1	GbE x 2	USB3.2 Gen1 x 1, USB2.0 x 5	RS232/422/485 x 2, RS232 x 4	Mini Card (Full Size) x 1, mSATA (Full Size) x 1	Optional	+9V to +24V (4 Pin ATX Connector)	-40°C ~ 85°C	SIM x 1, PCI-104 x 1, Micro-SD x 1, GPIO 16 bits, Touch x 1

Note: All specifications are subject to change without notice.

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