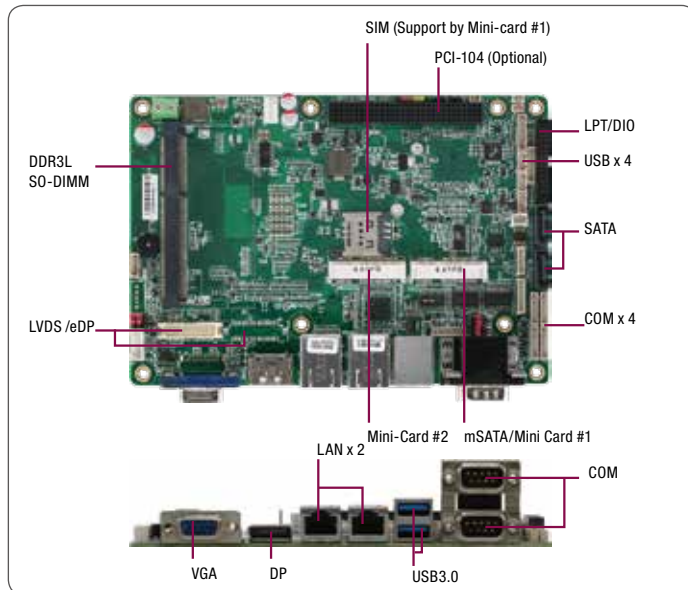


EPIC Board with 5th Generation Intel® Core™ i Series ULT Processor SoC



## Features

- Onboard 5th Generation Intel® Core™ i Series ULT Processor SoC
- DDR3L 1600 MHz SODIMM x 1, Up to 8 GB
- Gigabit Ethernet x 2, RJ-45 x 2
- VGA, LVDS, DP, LVDS (Optional), eDP (Optional)
- SATA 6.0 Gb/s x 2, mSATA/Mini-Card x 1
- USB 3.0 x 2, USB 2.0 x 4
- RS-232 x 4, RS-232/422/485 x 2
- Optional Touch Screen, TPM and PCI-104
- Mini-Card x 1, SIM x 1 (Optional)
- 9-24V Operation
- 15W TDP
- SoC Solder up Design

## Specifications

| System                      |  |
|-----------------------------|--|
| Form Factor                 | EPIC   |
| Processor                   | 5th Generation Intel® Core™ i series ULT Processor SoC   |
| System Memory               | 204-pin SODIMM DDR3L 1600 MHz, up to 8 GB  |
| Chipset                     | 5th Generation Intel® Core™ i series ULT Processor SoC   |
| I/O Chipset                 | Fintek 81866D  |
| Ethernet                    | Intel® WGI211AT x 1/ WGI218LM x 1, RJ-45 x 2   |
| BIOS                        | AMI/SPI  |
| Wake On LAN                 | Yes  |
| Watchdog Timer              | 1~255sec support by AAEON Hi-safe  |
| H/W Status Monitoring       | Support by AAEON Hi-safe   |
| Expansion Interface         | Mini-card full size #1 (Shared with mSATA) (Optional)<br>SIM slot x 1 support by mini-card#1 full size (Optional)<br>Mini-card half size #2<br>PCI-104 x 1(optional)<br>Touch panel screen controller and connector x 1 (optional)<br>TPM x 1 (optional) |
| Battery                     | Lithium RTC battery  |
| Power Requirement           | +12V or +9~24V AT/ATX(default)   |
| Power Consumption (Typical) | —  |
| System Cooling              | Heat spreader, cooler (Optional)   |
| Board Size                  | 4.5" x 6.5" (115mm x 165mm)  |
| Gross Weight                | 1.2 lb (0.5 Kg)  |
| Operation Temperature       | 32°F ~ 140°F ( 0°C ~ 60°C)   |
| Storage Temperature         | -40 °F ~ 176 °F (-40 °C ~ 80 °C)   |
| Operation Humidity          | 0% ~ 90% relative humidity, non-condensing   |
| MTBF                        | —  |
| Display                     | Supports 3 simultaneous display  |
| Chipset                     | 5th Generation Intel® Core™ i series ULT Processor SoC   |
| Resolutions                 | VGA up to 1920 x 1200 @ 60 Hz or DP up to 3840 x 2160 @ 60 Hz<br>LVDS (18/24-bit dual-channel) up to 1920 x 1200 @ 60 Hz   |
| LCD Interface               | VGA, LVDS1, DP2, LVDS2 (Optional), eDP (Optional)  |
| I/O                         |  |
| Storage                     | SATA 6.0 Gb/s x 2, mSATA x 1   |
| Serial Port                 | COM: RS-232 x 4<br>COM2, COM3: RS-232/422/485 x 2 (Ring/+5V/+12V)  |
| Parallel Port               | SPP/EPP/ECP x 1 (co-lay with DIO) (Optional)   |
| USB                         | USB 3.0 x 2, USB 2.0 x 4<br>USB 1/2 total support 1.5A on rear I/O   |
| Digital I/O                 | Supports 16-bits (Programmable, 8-in/8-out) (Default)  |
| Audio                       | Line-out, Line-in, Mic-in; Audio 2W Amp.   |



## Packing List

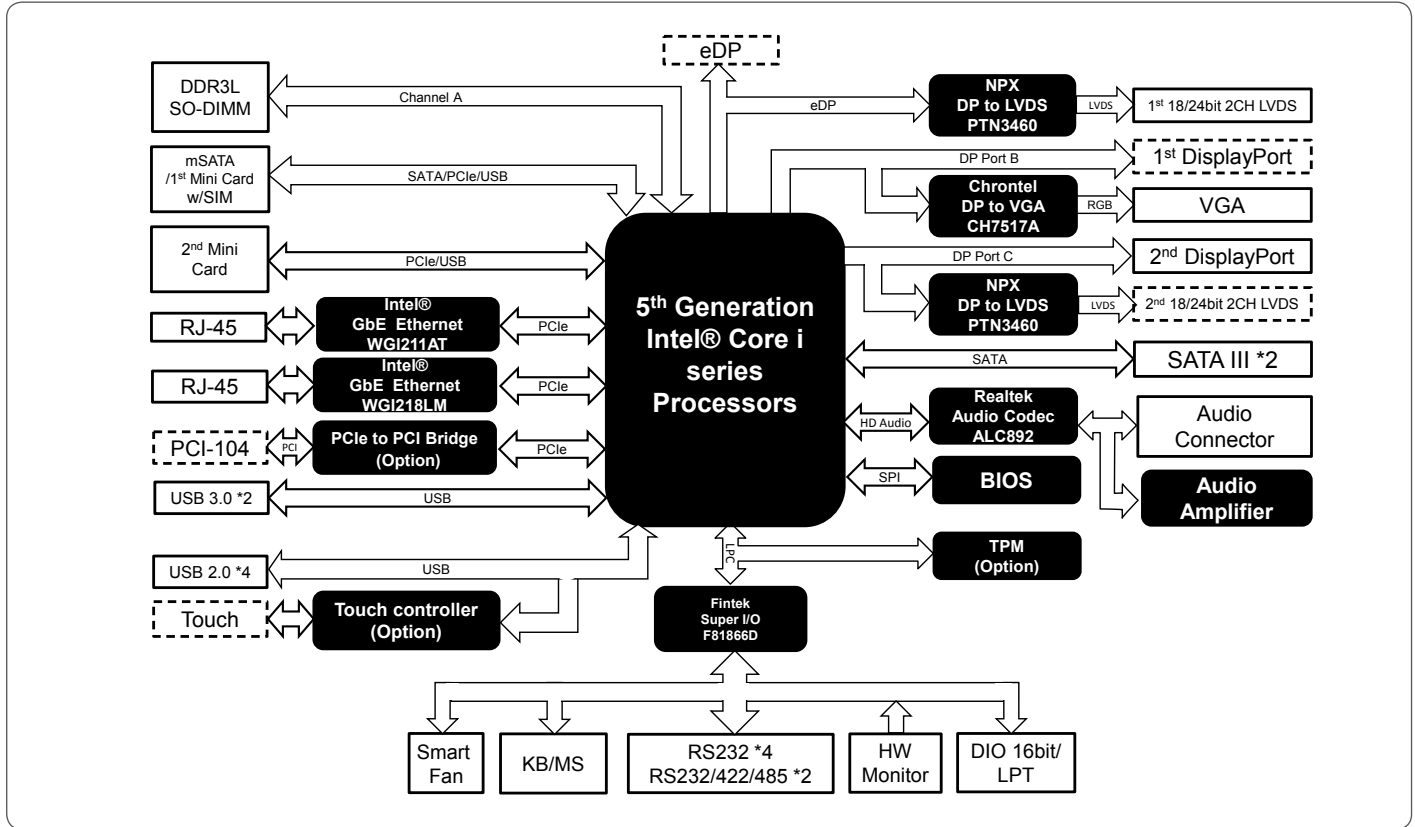
- **1709070500**  
SATA Cable, Length 50 cm
- **1702150155**  
SATA Power Cable, Length 15 cm
- **M10BDU7000**  
Heat Spreader
- **9657666600**  
Jumper Cap
- **Product DVD**
- **EPIC-BDU7**

## Optional Accessories

| Part Number | Description                                | QTY |
|-------------|--|-----|
| 1702040151  | Power Cable (4pin), Length 15cm (Optional) | 1   |
| 1702002010  | Power Cable (2pin), Length 10cm            | 1   |
| 1709100254  | Audio Cable (3pin), Length 25cm            | 1   |
| 1700050207  | USB Cable (5pin), Length 20cm              | 4   |
| 1701260200  | LPT Cable (25pin), Length 20cm             | 1   |
| 1700060155  | PS/2 & KB Cable (6pin), Length 15cm        | 1   |
| 1701090150  | COM Cable (9pin), Length 15cm              | 4   |
| PER-A138    | CPU Cooler (Used with heat spreader)       | 1   |

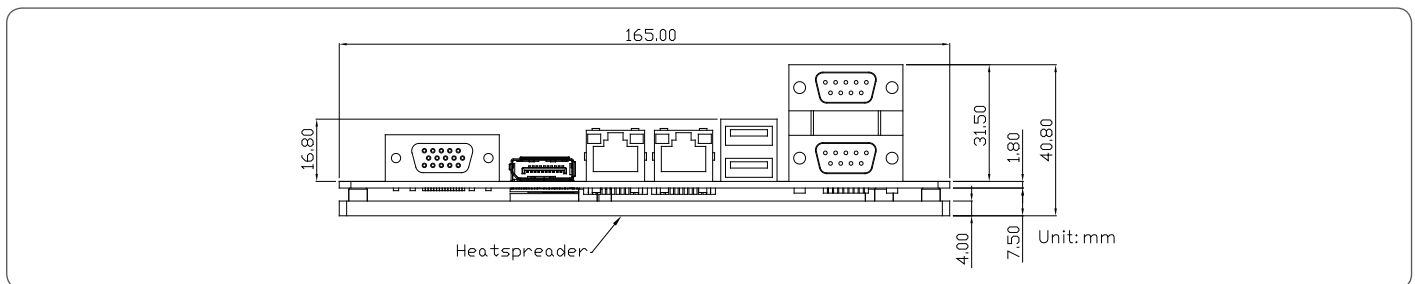
# EPIC-BDU7

## Block Diagram



## Dimension

Unit: mm



## Ordering Information

| Part Number        | CPU                          | Memory          | Thermal       | Display         | LVDS                | Storage             | LAN     | USB                      | RS-232 | RS-232/422/485 | Expansion Slot | Power       | Power Temp | Others            |
|--------------------|------------------------------|-----------------|---------------|-----------------|---------------------|---------------------|---------|--------------------------|--------|----------------|----------------|-------------|------------|-------------------|
| EPIC-BDU7-A10-0001 | Dual Core i3-5010U (2.16GHz) | DDR3L (Max 8GB) | Heat Spreader | LVDS + CRT + DP | LVDS1 18/24 bit 2CH | SATA x 1, mSATA x 1 | GbE x 2 | USB3.0 x 2<br>USB2.0 x 4 | 4      | 2              | Mini Card x 1  | 9~24V (ATX) | 0°C ~ 60°C | DIO 16-bit, Audio |
| EPIC-BDU7-A10-0002 | Dual Core i5-5350U (1.8GHz)  | DDR3L (Max 8GB) | Heat Spreader | LVDS + CRT + DP | LVDS1 18/24 bit 2CH | SATA x 1, mSATA x 1 | GbE x 2 | USB3.0 x 2<br>USB2.0 x 4 | 4      | 2              | Mini Card x 1  | 9~24V (ATX) | 0°C ~ 60°C | DIO 16-bit, Audio |