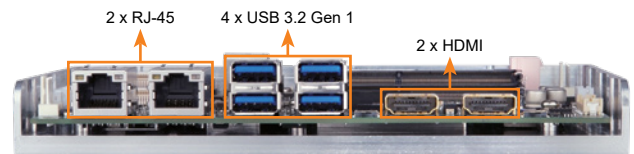
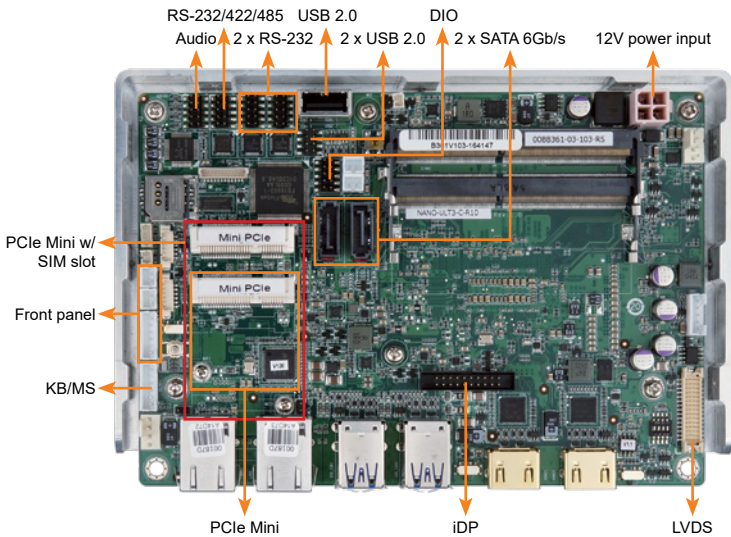


# NANO-ULT3

EPIC SBC supports Intel® 14nm 6th Generation Mobile Core™ i7/i5/i3 and Celeron® on-board Processor (ULT) with HDMI/LVDS/iDP, Dual PCIe GbE, USB 3.2 Gen 1 (5Gb/s), PCIe Mini, SATA 6Gb/s, mSATA, COM, Audio and RoHS



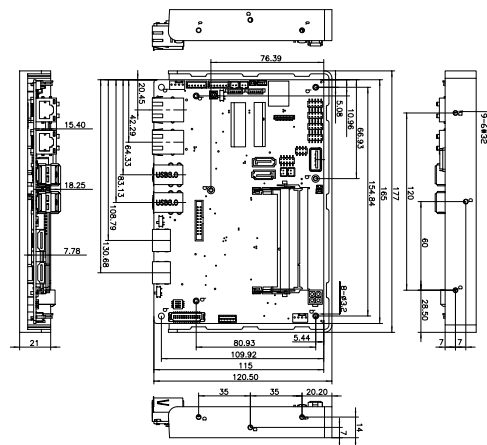
## Specifications

- ◆ SoC
  - 6th generation Intel® mobile ULT on-board SoC
  - Intel® Core™ i7-6600U (up to 3.4GHz, dual-core, 4MB cache, TDP=15W)
  - Intel® Core™ i5-6300U (up to 3.0GHz, dual-core, 3MB cache, TDP=15W)
  - Intel® Core™ i3-6100U (up to 2.3GHz, dual-core, 3MB cache, TDP=15W)
  - Intel® Celeron® processor 3955U (up to 2.0GHz, dual-core, 2MB cache, TDP=15W)
  - Intel® Celeron® processor 3855U (up to 1.6GHz, dual-core, 2MB cache, TDP=15W)
- ◆ BIOS
  - AMI UEFI BIOS
- ◆ Memory
  - Two 260-pin 2133/1866 MHz dual-channel DDR4 non-ECC unbuffered SO-DIMMs support up to 32GB
- ◆ Graphics Engine
  - Intel® HD Graphics Gen 9 Engine with 16 low-power execution units, supporting DX11/12, OpenGL 4.3/4.4 and OpenCL2.x, ES 2.0
- ◆ Display Output
  - Triple independent display
  - 2 x HDMI (up to 4096x2160@24Hz)
  - 1 x 18/24-bit dual-channel LVDS (up to 1920x1200@60Hz)
  - 1 x iDP interface for HDMI, LVDS, VGA, DVI, DP (up to 3840x2160@60Hz) (colay with HDMI1)
- ◆ Ethernet
  - LAN1: Intel® I219-LM PHY with Intel® AMT 11.0 supported
  - LAN2: Intel® I211-AT PCIe GbE controller
- ◆ External I/O Interface
  - 4 x USB 3.2 Gen 1 (5Gb/s)
- ◆ Internal I/O Interface
  - 1 x 8 GB eMMC (optional)
  - 1 x KB/MS (1x6 pin)
  - 1 x RS-232/422/485 (2x5 pin, P=2.0)
  - 2 x SATA 6Gb/s with 5V SATA power connector (no RAID)
  - 1 x USB 2.0 (180° Type-A)
  - 2 x USB 2.0 (2x4 pin, P=2.0)
  - 2 x RS-232 (2x5 pin, P=2.0)
- ◆ SMBus
  - 1 x SMBus (1x4 pin)
- ◆ Audio
  - Realtek ALC662 HD codec
  - 1 x Front audio (2x5 pin)
- ◆ Front panel
  - 1 x Power LED & HDD LED (1x6 pin)
  - 1 x Power button (1x2 pin)
  - 1 x Reset button (1x2 pin)
- ◆ LAN LED
  - 2 x LAN LED (1x2 pin)
- ◆ Expansion
  - 1 x Full-size PCIe Mini card slot (with SIM holder & mSATA support)
  - 1 x Half-size PCIe Mini card slot
  - \* 3855U belongs to Skylake ULT Base series which supports PCIe Gen 2 signal only.
- ◆ Digital I/O
  - 8-bit digital I/O (2x5 pin)
- ◆ Fan Connector
  - 1 x CPU fan connector (1x4 pin)
  - 1 x System fan connector (1x4 pin)
- ◆ Power Supply
  - 12V only DC input
  - 1 x Internal power connector (2x2 pin)
  - Support AT/ATX mode
- ◆ Watchdog Timer
  - Software programmable supports 1~255 sec. system reset
- ◆ Power Consumption
  - 12V@2.48A (Intel® Core™ i3-6100U CPU with two 8 GB memory)
  - ◆ Operating Temperature: -20°C ~ 60°C
  - ◆ Storage Temperature: -30°C ~ 70°C
  - ◆ Operating Humidity: 5% ~ 95%, non-condensing
  - ◆ Dimensions: 115mm x 165mm
  - ◆ Weight: GW: 850g / NW: 350g
  - ◆ CE/FCC compliant

## Features

- EPIC SBC with 6th generation Intel® ULT processor supports dual-channel DDR4 SO-DIMMs
- Triple independent display support
- Easy assembly heat spreader for thermal management
- Full-size PCIe Mini slot with SIM sockets for 3G/LTE expansion
- COM, USB 3.2 Gen 1 (5Gb/s), SATA 6Gb/s, mSATA, eMMC 5.0 and audio support

## Dimensions (Unit: mm)



## Packing List

1 x NANO-ULT3 single board computer with heatspreader	1 x Audio cable
1 x RS-232 cable	1 x Power cable
1 x SATA with power cable kit	1 x QIG

## Ordering Information

Part No.	Description
NANO-ULT3-i7-R10	EPIC SBC supports Intel® 14nm 6th Generation Mobile Core™ i7-6600U (15W) on-board Processor (ULT) with HDMI/LVDS/iDP, Dual PCIe GbE, USB 3.2 Gen 1 (5Gb/s), SATA 6Gb/s, Dual PCIe Mini, mSATA, COM, Audio and RoHS
NANO-ULT3-i5-R10	EPIC SBC supports Intel® 14nm 6th Generation Mobile Core™ i5-6300U (15W) on-board Processor (ULT) with HDMI/LVDS/iDP, Dual PCIe GbE, USB 3.2 Gen 1 (5Gb/s), SATA 6Gb/s, Dual PCIe Mini, mSATA, COM, Audio and RoHS
NANO-ULT3-i3-R10	EPIC SBC supports Intel® 14nm 6th Generation Mobile Core™ i3-6100U (15W) on-board Processor (ULT) with HDMI/LVDS/iDP, Dual PCIe GbE, USB 3.2 Gen 1 (5Gb/s), SATA 6Gb/s, Dual PCIe Mini, mSATA, COM, Audio and RoHS
NANO-ULT3-C-R10	EPIC SBC supports Intel® 14nm 6th Generation Mobile Celeron® 3955U (15W) on-board Processor (ULT) with HDMI/LVDS/iDP, Dual PCIe GbE, USB 3.2 Gen 1 (5Gb/s), SATA 6Gb/s, Dual PCIe Mini, mSATA, COM, Audio and RoHS
NANO-ULT3-CE-R10*	EPIC SBC supports Intel® 14nm 6th Generation Mobile Celeron® 3855U (15W) on-board Processor (ULT) with HDMI/LVDS/iDP, Dual PCIe GbE, USB 3.2 Gen 1 (5Gb/s), SATA 6Gb/s, Dual PCIe Mini, COM, Audio and RoHS
32001-008600-200-RS	Dual-port USB cable, 210mm, P=2.0
32006-001100-201-RS	PS/2 KB/MS cable, 135mm/110mm, P=2.0

\*Without full functions support, please refer to user manual.