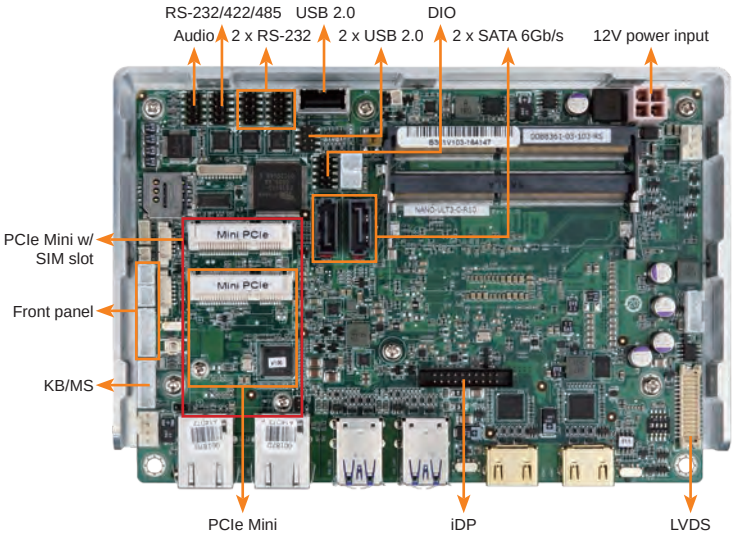
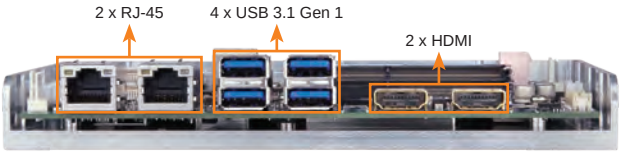
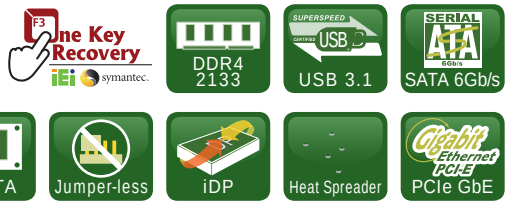
NANO-ULT3

EPIC SBC supports Intel® 14nm 6th Generarion Mobile Core™ i7/i5/i3 and Celeron® on-board Processor (ULT) with HDMI/LVDS/iDP, Dual PCIe GbE, USB 3.1 Gen 1 (5Gb/s), PCIe Mini, SATA 6Gb/s, mSATA, COM, Audio and RoHS







Features

- EPIC SBC with 6th generation Intel® ULT proccessor 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 3.1 Gen 1 (5Gb/s), SATA 6Gb/s, mSATA, eMMC 5.0 and audio support
- IEI One Key Recovery solution allows you to create rapid OS backup and recovery

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 3.1 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)

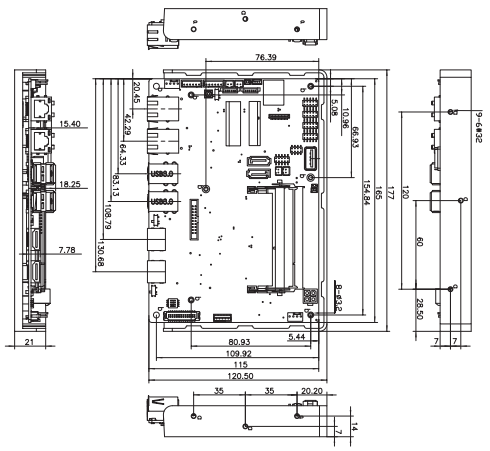
◆ Power Supply
12V only DC input
1 x Internal power connector (2x2 pin)
Support AT/ATX mode

◆ 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

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 3.1 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 3.1 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 3.1 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 3.1 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 3.1 Gen 1 (5Gb/s), SATA 6Gb/s, Dual PCIe Mini, COM, Audio and RoHS
32000-023800-RS	PS/2 KB/MS cable, 135mm/110mm, P=2.0
32001-008600-200-RS	Dual-port USB cable, 210mm, P=2.0

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