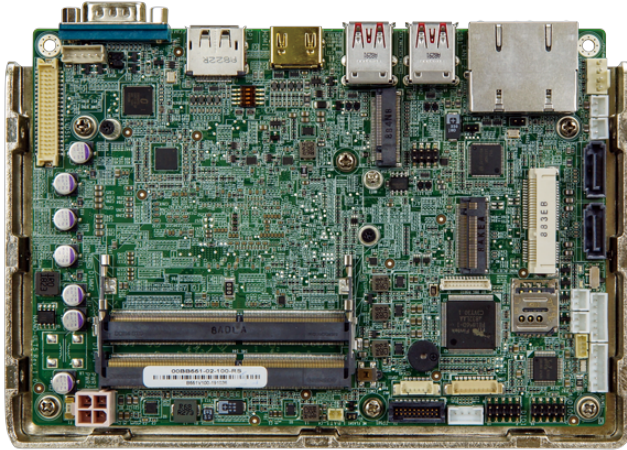


NANO-ULT5

EPIC SBC 支持 Intel® 14nm 第8代 Mobile Core™ i3/i5/i7 和 Celeron® 板载处理器 (ULT), 带有 HDMI, DP LVDS, mPCIe, M.2 A key M key, USB 3.1 Gen2, SATA 6Gb/s, COM, 音频和 RoHS, -20°C ~ 60°C



Features

- » EPIC SBC 支持 Intel® 第8代 ULT 处理器或 Celeron® 板载 SoC 支持双通道 DDR4 SO-DIMMs
- » 支持独立三显
- » 12V DC 输入设计
- » M.2 插槽 具有 A key , M.2 M Key PCIe Mini 插槽 具有 SIM 卡支架
- » COM, USB 3.1 Gen2, SATA 6Gb/s, eMMC 5.0 和音频支持
- » 支持操作温度: -20°C ~ 60°C

Specifications

System	
CPU	Intel® Celeron® processor 4305UE (2.0 GHz Dual Core, 2MB cache, TDP=15W) Intel® Core™ i3-8145UE (2.2 GHz Dual Core, 4MB cache, TDP=15W) Intel® Core™ i5-8365UE (1.6 GHz, Quad Core, 6MB cache, TDP=15W) Intel® Core™ i7-8665UE (1.7 GHz Quad Core, 8MB cache, TDP=15W)
Memory	Dual 260-pin 2400MHz Dual-channel DDR4 SO-DIMMs support
Memory Max.	32GB
Physical Characteristics	
Dimensions (LxWxH) (mm)	115 X 165
Net Weight	350g
Storage	
Storage	2 x SATA :6Gb/s with 5V SATA power connector 1 x eMMC :32GB(optional)
I/O Interface	
Display Output	1 x HDMI :up to 38400x2160@60Hz 1 x Display Port :up to 38400x2160@60Hz 1 x LVDS :up to 1920x1200@60Hz
Ethernet	Description: 1 x PCIe GbE LAN Intel® i211 controller 1 x PCIe GbE LAN Intel® i219 controller
Audio	Description: 1 X Analog audio (2x5 pin)
I/O Interface	1 x External RS-232 1 x Internal RS-232 :1x9 pin, p=1.25 1 x Internal RS-422/485 :1x4 pin, P=2.0 4 x External USB 3.2 Gen1x1 2 x Internal USB 2.0 :2x4 pin, P=2.0
Expansion	Description: 1 X SIM card 1 x PCIe mini Card Slot 2 x M.2(NGFF) :1 X 2230 A Key, 1 X 2280 M Key
Other Features	
TPM	2x10 pin
Power	
Power Supply	12V DC input

	1 x Internal power connector (2x2 pin)
	Support AT/ATX mode
Environment	
Operating Temperature	-20°C ~ 60°C
Storage Temperature	-30°C ~ 70°C
Humidity	5% ~ 95%, non-condensing

Ordering Information

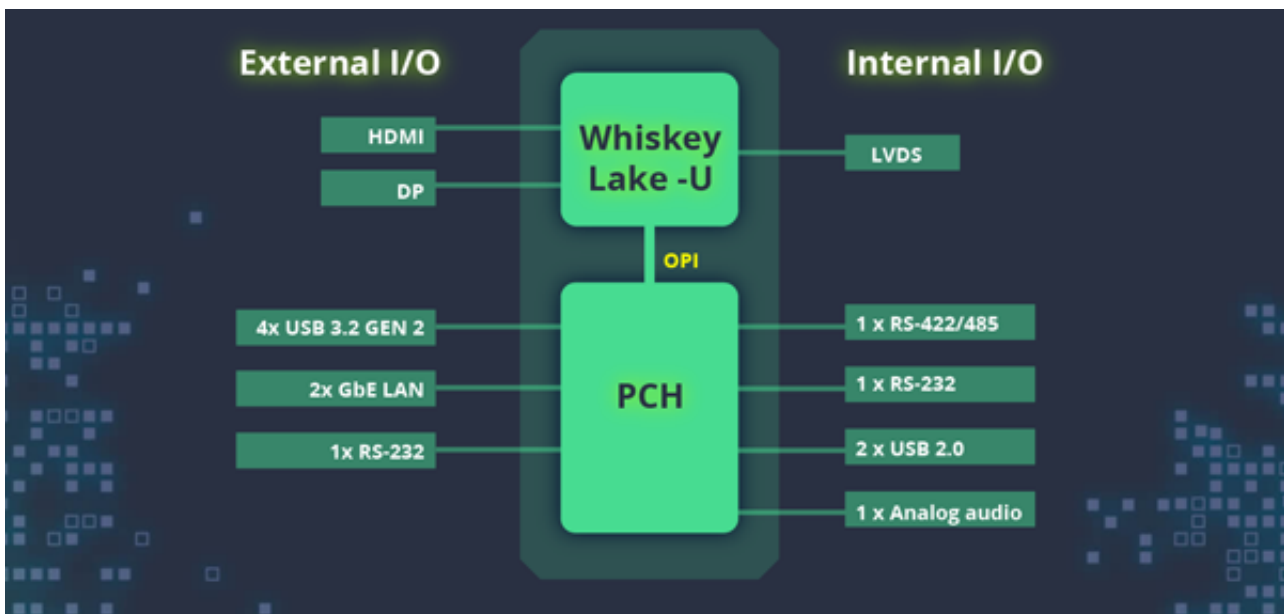
NANO-ULT5-i7-R10	EPIC SBC supports Intel® 14nm 8th Generation Mobile Core™ i7-8665UE (15W) on-board Processor (ULT) with HDMI/LVDS/DP, Dual PCIe GbE, USB 3.1 Gen 2, PCIe Mini, M.2 A & M Key, SATA 6Gb/s, COM, SPI TPM, Audio and RoHS
NANO-ULT5-i5-R10	EPIC SBC supports Intel® 14nm 8th Generation Mobile Core™ i5-8365UE (15W) on-board Processor (ULT) with HDMI/LVDS/DP, Dual PCIe GbE, USB 3.1 Gen 2, PCIe Mini, M.2 A & M Key, SATA 6Gb/s, COM, SPI TPM, Audio and RoHS
NANO-ULT5-i3-R10	EPIC SBC supports Intel® 14nm 8th Generation Mobile Core™ i3-8145UE (15W) on-board Processor (ULT) with HDMI/LVDS/DP, Dual PCIe GbE, USB 3.1 Gen 2, PCIe Mini, M.2 A & M Key, SATA 6Gb/s, SPI TPM, COM, Audio and RoHS
NANO-ULT5-C-R10	EPIC SBC supports Intel® 14nm 8th Generation Mobile Celeron™ 4305UE (15W) on-board Processor (ULT) with HDMI/LVDS/DP, Dual PCIe GbE, USB 3.1 Gen 2, PCIe Mini, M.2 A & M Key, SATA 6Gb/s, SPI TPM, COM, Audio and RoHS

Packing List

1 x NANO-ULT5 单板机, 带散热片	1 x 电源线
1 x SATA, 带电源线套件	2 x RS-232 线
1 x Audio 线	1 x QIG (快速安装指南)

Intel's 8th Gen Core (Whiskey Lake-U) SoC

IEI's 4" EPIC Board NANO-ULT5 based on Intel® Whiskey Lake-U 15W SoC, which is aimed at embedded applications. The NANO-ULT5 mainboard is designed for applications like Panel PC, small size embedded system, point-of-sales systems, kiosks, and digital signage, but can be used for regular low-power computers in a EPIC form-factor.

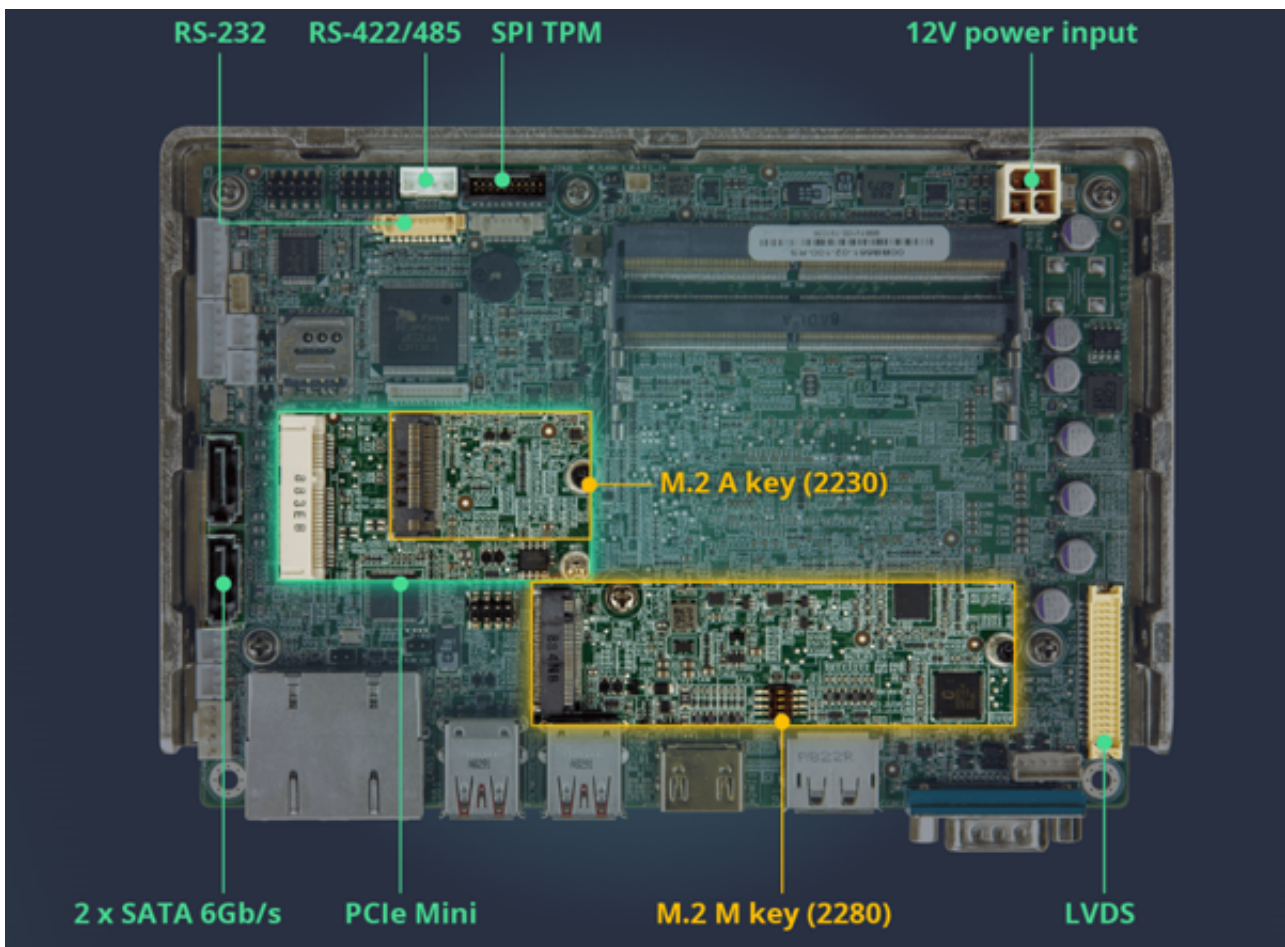


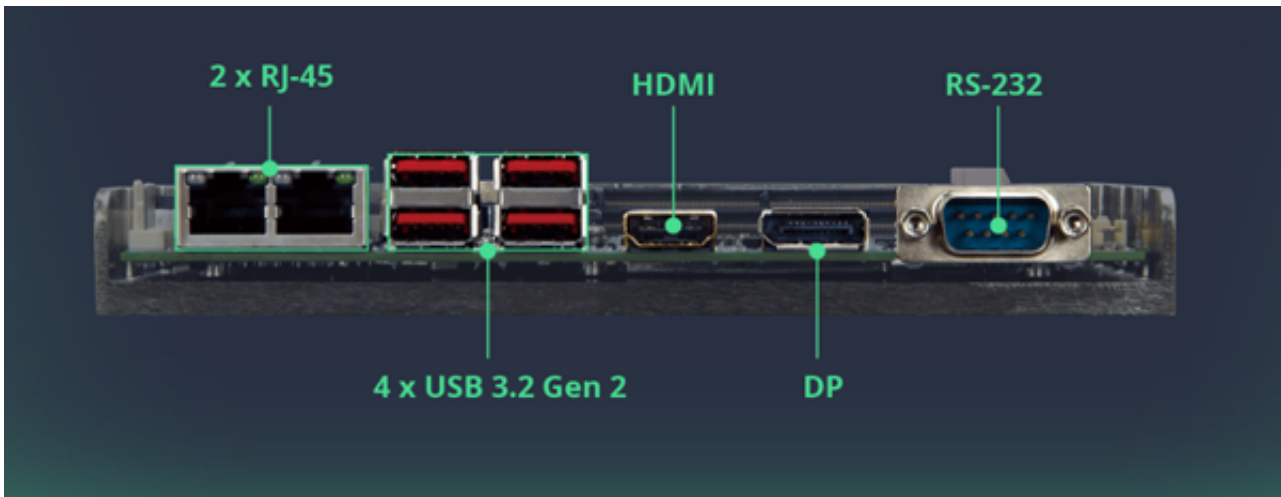
Multiple expansion slot for diverse solution

The design concept for NANO-ULT5 is to multiple expansion for diverse applications and make it an easy and better solution for users.



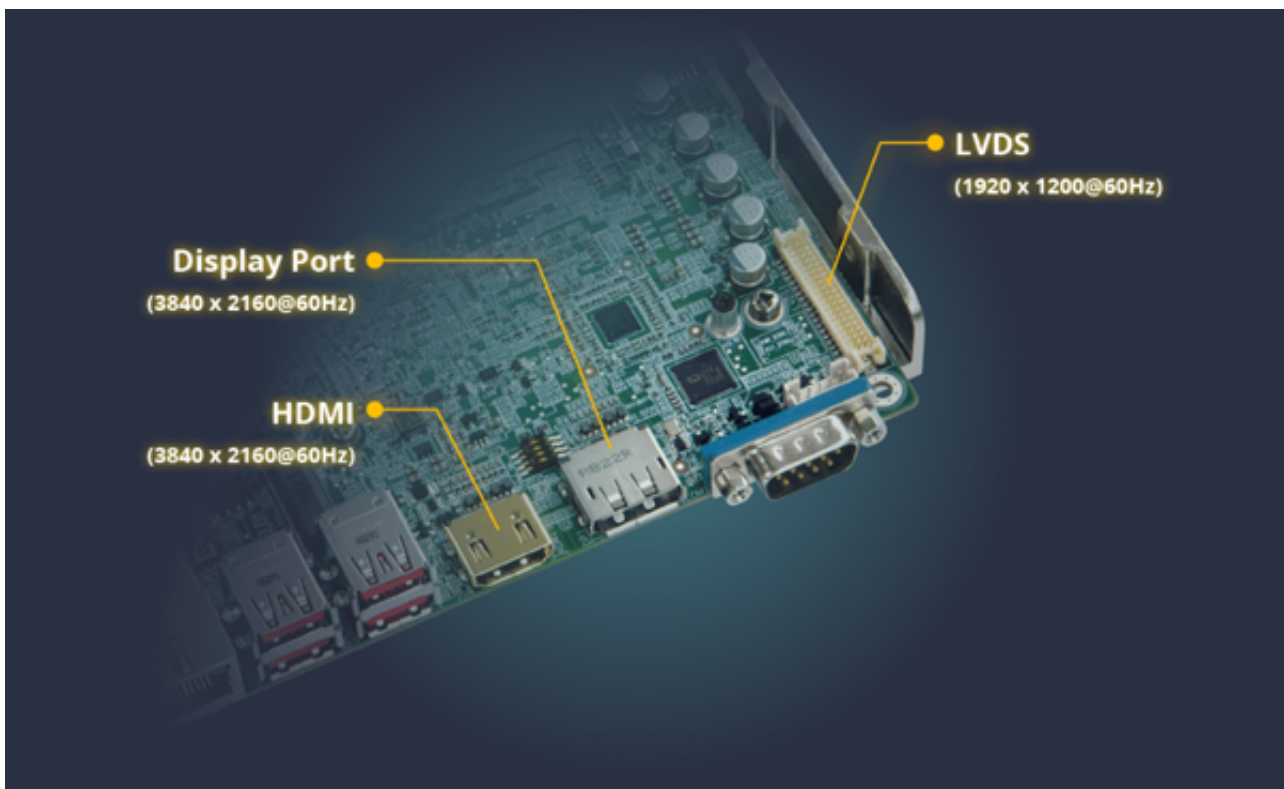
Product Overview





Triple Independent Display

The NANO-ULT5 is equipped with Intel® HD Graphics Gen9 which supports 16 execution units and 4K codec decode, and allows to display videos and images in stunning 4K resolution. With triple independent displays (eDP + HDMI+DP), the HDMI and DisplayPort support up to 4K high resolution. The enhanced visual quality responds the demand of high precision displaying.



Application Field

For the application field, NANO-ULT series are suitable for various application. With LVDS as a panel PC or using triple independent display in the hospital as a monitoring system. In factory automation field, RS-232 could connect with processing machine. A real case for us is a self-service ordering machine, by using USB and HDMI to connector with partner's touch panel and M.2 A key for transferring order to the kitchen. In makes customer easily make an order without waiting.



Panel PC



Hospital monitoring system



Factory monitor



Self-service ordering machine