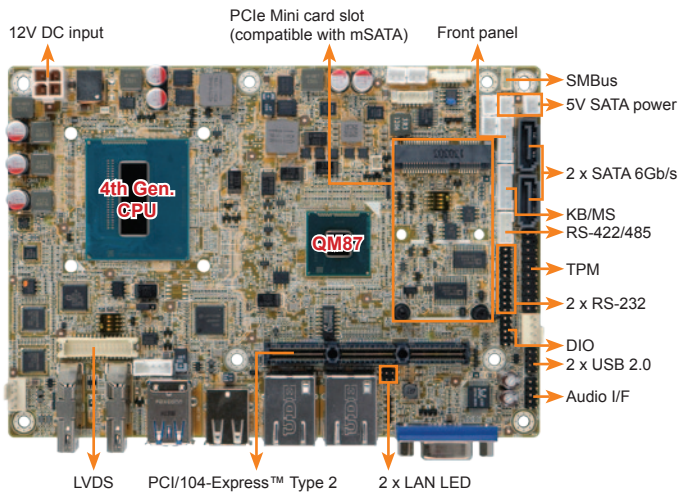


NANO-QM871

EPIC SBC supports Intel® 22nm 4th Generation Mobile Core™ i7/i5/i3 and Celeron® on-board Processor with VGA/Dual HDMI/LVDS, Dual PCIe GbE, USB 3.0, PCIe Mini, PCI/104-Express™, SATA 6Gb/s and Audio



IEI provides the latest PC/104 embedded specification by PCI/104-Express™ Type 2 for EPIC board



Customers can order compatible add-in cards from IEI or ODM for expanding I/O interface like PCI-104 slot, USB 3.0 port, PCIe Mini slot, mSATA or PCIe GbE

Labels for add-in card: Dual-channel DDR3 SO-DIMM 1333/1066 MHz, Solder Side, PCI/104-Express™, Stackable PCIe Connector, PCIe® Bus.

Feature	Type 2
USB 2.0	2
SMB	1
PCIe x1	4
PCIe x4	2
USB 3.0	2
SATA	2
LPC	1

Labels for front panel: 2 x HDMI, 2 x USB 3.0, 2 x USB 2.0, GbE1, GbE2, VGA.

Specifications

- ◆ CPU
 - Intel® mobile Core™ i7-4700EQ on-board processor with Intel® AMT 9.0 support (2.4GHz, quad-core, 6MB cache, TDP=47W)
 - Intel® mobile Core™ i5-4400E on-board processor with Intel® AMT 9.0 support (2.7GHz, dual-core, 3MB cache, TDP=37W)
 - Intel® mobile Core™ i3-4100E on-board processor (2.4GHz, dual-core, 3MB cache, TDP=37W)
 - Intel® mobile Celeron® 2000E on-board processor (2.2GHz, dual-core, 2MB cache, TDP=37W)
 - Intel® mobile Core™ i5-4402E on-board processor with Intel® AMT 9.0 support (1.6GHz, dual-core, 3MB cache, TDP=25W) (by request)
 - Intel® mobile Core™ i3-4102E on-board processor (1.6GHz, dual-core, 3MB cache, TDP=25W) (by request)
 - Intel® mobile Celeron® 2002E on-board processor (1.5GHz, dual-core, 2MB cache, TDP=25W) (by request)
- ◆ System Chipset: Intel® QM87
- ◆ BIOS: UEFI BIOS
- ◆ Memory: One 204-pin 1600/1333MHz dual-channel DDR3 & DDR3L SDRAM unbuffered DIMMs support up to 8GB
- ◆ Graphics Engine: Intel® HD Graphics Gen 7.5 supports DX11.1 and OpenCL 1.2, OpenGL 3.2 Full MPEG2, VC1, AVC Decode
- ◆ Display Output:
 - VGA (up to 1920x1200@60Hz)
 - 18/24-bit dual-channel LVDS by CH7511B DP to LVDS converter (up to 1920x1200@60Hz)
 - Dual HDMI (up to 2500x1600@60Hz)
- ◆ LAN:
 - GbE1: Intel® I217LM PHY with Intel® AMT 9.0 support
 - GbE2: Intel® I211-AT PCIe controller
- ◆ Super I/O: Fintek F81866
- ◆ I/O Interface:
 - 2 x RS-232
 - 1 x 6-pin wafer for PS/2 KB/MS
 - 2 x USB 2.0 (on rear I/O)
 - 2 x SATA 6G/s with 5V SATA power connector (RAID 0,1 supported)
 - 1 x RS-422/485
 - 2 x USB 2.0 (by pin header)
 - 2 x USB 3.0 (on rear I/O)
- ◆ TPM: 1 x 20-pin (2x10) header
- ◆ SMBus: 1 x 4-pin (1x4) wafer
- ◆ Audio: Realtek ALC662 HD Audio codec
- ◆ Front Panel:
 - 1 x 6-pin (1x6) wafer for power LED & HDD LED
 - 1 x 2-pin (1x2) wafer for power button
 - 1 x 2-pin (1x2) wafer for power reset
- ◆ LAN LED: 2 x 2-pin headers for LAN1 Link LED, LAN2 Link LED
- ◆ Expansion:
 - 1 x Full-size PCIe Mini card slot (supports mSATA, SATA 6Gb/s signal only)
 - 1 x PCIe/104 Type 2 slot
- ◆ Watchdog Timer: Software programmable, support 1~255 sec. system reset
- ◆ Digital I/O: 8-bit digital I/O (4-bit input, 4-bit output)
- ◆ Fan Connector:
 - 1 x 4-pin CPU fan connector
 - 1 x 4-pin system fan connector
- ◆ Power supply:
 - 12V only DC input
 - 1 x Internal 4-pin (2x2) power connector
 - Support AT/ATX mode
- ◆ Power Consumption:
 - 12V@4.78A (Intel® Core™ i7-4770EQ, 2.4GHz CPU with 4GB 1333MHz DDR3 memory)
- ◆ Operating Temperature: -10°C ~ 60°C
- ◆ Storage Temperature: -20°C ~ 60°C
- ◆ Operating Humidity: 5% ~95%, non-condensing
- ◆ Dimensions: 115 mm x 165 mm
- ◆ Weight: GW:850g / NW:350g

Features

- 4th generation Intel® mobile Core™ i7/i5/i3 or Celeron® on-board processor
- IEI jumper-less function
- Triple independent display via dual HDMI+VGA, dual HDMI+LVDS or HDMI+LVDS+VGA
- DDR3/DDR3L 1600/1333 MHz SDRAM support up to 8GB
- COM, USB 3.0, SATA 6Gb/s and audio support
- Intel® GbE LAN with Intel® AMT 9.0 support
- IEI One Key Recovery solution allows you to create rapid OS backup and recovery

Packing List

1 x NANO-QM871 single board computer	
2 x SATA with power cable kit (P/N: 32801-000201-100-RS)	
1 x Audio cable (P/N: 32007-002600-100-RS)	
1 x Power cable (P/N: 32100-087100-RS)	1 x CPU cooler
2 x RS-232 cable (P/N: 32200-000049-RS)	1 x Utility CD
1 x QIG (Quick Installation Guide)	1 x One Key Recovery CD

Ordering Information

Part No.	Description
NANO-QM871-i7-R10	EPIC SBC supports Intel® 22nm Mobile Core™ i7-4700EQ on-board Processor with VGA/Dual HDMI/LVDS, Dual PCIe GbE, AMT 9.0, USB 3.0, PCIe Mini, PCI/104-Express™, SATA 6Gb/s and Audio
NANO-QM871-i5-R10	EPIC SBC supports Intel® 22nm Mobile Core™ i5-4400E on-board Processor with VGA/Dual HDMI/LVDS, Dual PCIe GbE, AMT 9.0, USB 3.0, PCIe Mini, PCI/104-Express™, SATA 6Gb/s and Audio
NANO-QM871-i3-R10	EPIC SBC supports Intel® 22nm Mobile Core™ i3-4100E on-board Processor with VGA/Dual HDMI/LVDS, Dual PCIe GbE, USB 3.0, PCIe Mini, PCI/104-Express™, SATA 6Gb/s and Audio
NANO-QM871-C-R10	EPIC SBC supports Intel® 22nm Celeron 2000E on-board Processor (37W) with VGA/Dual HDMI/LVDS, Dual PCIe GbE, USB 3.0, PCIe Mini, PCI/104-Express™, SATA 6Gb/s and Audio
32000-070301-RS	Dual-port USB 2.0 cable
32205-003800-100-RS	RS-422/485 cable, 200mm
32006-001100-100-RS	PS/2 KB/MS Y-cable with bracket, 135mm
TPM-IN01-R11	20-pin Infineon TPM module, software management tool, firmware V3.17