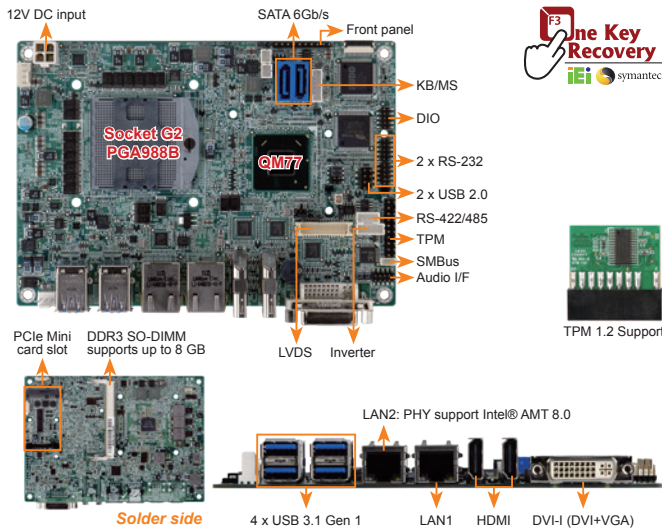


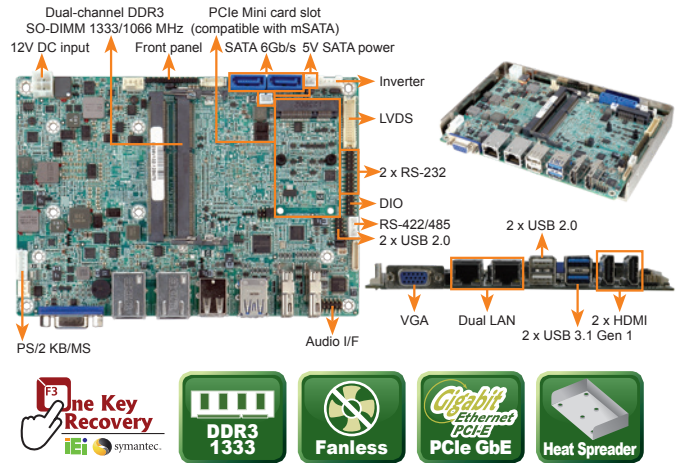
# NANO-QM770

EPIC SBC Supports Socket G2 for Intel® 22nm Mobile CPU, DVI-I/Dual HDMI/LVDS, Dual PCIe GbE, USB 3.1 Gen 1 (5Gb/s), PCIe Mini, SATA 6Gb/s and Audio



# NANO-HM651

EPIC SBC with on-board Intel® Celeron® Dual Core 847E 1.1GHz CPU, Dual HDMI/VGA/LVDS, Dual GbE, USB 3.1 Gen 1 (5Gb/s), PCIe Mini, SATA 6Gb/s and Audio



## Features

- EPIC SBC with Socket G2 for Intel® 22nm mobile processor
- Triple independent display supports with dual HDMI+DVI/dual HDMI+LVDS (HDMI V1.3a compliant)
- 1066/1333/1600 MHz DDR3 SDRAM supports up to 8 GB
- Supports three COM, four USB 3.1 Gen 1 (5Gb/s), two SATA 6Gb/s and audio
- Intel® GbE LAN with Intel® AMT 8.0 supported
- IEI One Key Recovery solution allows you to create rapid OS backup and recovery

## Specifications

- ◆ CPU: Socket G2 for 3rd generation 22nm Intel® mobile processor
- ◆ Chipset: Intel® QM77
- ◆ BIOS: UEFI BIOS
- ◆ Memory: One 204-pin 1600/1333 MHz single-channel DDR3 & DDR3L SDRAM unbuffered SO-DIMM slot supports up to 8 GB
- ◆ Graphics: Intel® HD Graphics Gen 7 with 12 execution units DirectX 11, OpenGL 3.1, OpenCL 1.1
- ◆ Display Output: 1 x DVI-I (up to 2048x1536@75Hz), 1 x 18/24-bit dual-channel LVDS (up to 1920x1200@60Hz), 2 x HDMI (up to 1920x1200@60Hz)
- ◆ Ethernet: LAN1: Intel® 82583V PCIe controller, LAN2: Intel® 82579 PHY with Intel® AMT 8.0 support
- ◆ External I/O Interface: 4 x USB 3.1 Gen 1 (5Gb/s)
- ◆ Internal I/O Interface: 1 x KB/MS (1x6 pin), 2 x USB 2.0 (2x4 pin, P=2.54), 1 x RS-422/485 (1x4 pin, P=2.0), 2 x RS-232 (2x5 pin, P=2.0), 2 x SATA 6Gb/s with 5V SATA power connector (RAID 0, 1 supported)
- ◆ TPM: 1 x TPM (2x10 pin)
- ◆ Audio: Realtek ALC662 HD codec, 1 x Front audio (2x5 pin)
- ◆ Front Panel: 1 x Front panel (1x10 pin)
- ◆ Expansion: 1 x Full-size PCIe Mini card slot (supports mSATA)
- ◆ Watchdog Timer: Software programmable supports 1~255 sec. system reset
- ◆ Programmable I/O: 8-bit digital I/O
- ◆ Fan Connector: 1 x CPU smart fan (1x4 pin), 1 x System smart fan (1x3 pin)
- ◆ Power Supply: 12V only DC input, 1 x Internal power connector (2x2 pin), Support AT/ATX mode
- ◆ Power Consumption: 12V@4.89A (Intel® 1.8GHz CPU with one 1333 MHz 4 GB DDR3 SO-DIMM), Operating Temperature: -10°C ~ 60°C, Storage Temperature: -20°C ~ 70°C, Operating Humidity: 5% ~ 95%, non-condensing, Dimensions: 115 mm x 165 mm, Weight: GW: 850g / NW: 350g, CE/FCC compliant

## Packing List

1 x NANO-QM770 single board computer	
1 x Audio cable	2 x SATA with power cable kit
1 x Power cable	1 x Mini jumper pack
2 x RS-232 cable	1 x QIG

## Ordering Information

Part No.	Description
NANO-QM770-R10	EPIC SBC supports Socket G2 for Intel® 22nm mobile CPU, DVI-I/dual HDMI/LVDS, dual PCIe GbE, PCIe Mini, USB 3.1 Gen 1 (5Gb/s), SATA 6Gb/s and Audio
32000-044300-RS	Dual port USB cable, 210mm, P=2.54
32006-001100-201-RS	PS/2 KB/MS cable, 135mm/110mm, P=2.0
32205-003800-300-RS	RS-422/485 cable, 200mm, P=2.0
CF-989A-RS-R12	CPU cooler for mobile socket-G (PGA988) up to 55W processor, copper, 60 x 60 x 27.6mm, RoHS
TPM-IN01-R20	20-pin Infineon TPM module, software management tool, firmware v3.17

## Features

- EPIC SBC with on-board mobile 32nm Intel® Celeron® dual-core 847E 1.1GHz processor
- Dual HDMI/VGA with dual display support
- Dual-channel 204-pin 1333/1066 MHz DDR3 SO-DIMMs support up to 8 GB
- Easy assembly heat spreader for thermal management
- Supports three COM, four USB 3.1 Gen 1 (5Gb/s), two SATA 6Gb/s and audio
- IEI One Key Recovery solution allows you to create rapid OS backup and recovery

## Specifications

- ◆ CPU: 1.1GHz Intel® Celeron® 847E dual-core processor
- ◆ Chipset: Intel® HM65
- ◆ BIOS: UEFI BIOS
- ◆ Memory: Two 204-pin 1333/1066 MHz dual-channel DDR3 SO-DIMMs support up to 16 GB
- ◆ Graphics: Intel® HD Graphics Gen 6 supports DX10.1 and OpenGL 3.0, Full MPEG-2, VC1, AVC Decode
- ◆ Display Output: 1 x VGA (up to 2048x1536@75Hz), 1 x 18/24-bit dual-channel LVDS (up to 1920x1200@60Hz), 2 x HDMI (up to 1920x1200@60Hz)
- ◆ Ethernet: Dual LAN: Realtek RTL8111E PCIe GbE controller with ASF 2.0 support
- ◆ Audio: Realtek ALC662 HD Audio codec, 1 x Front audio (2x5 pin)
- ◆ Front Panel: 1 x Front panel (1x10 pin)
- ◆ Expansion: 1 x Full-size PCIe Mini card slot (supports mSATA)
- ◆ Digital I/O: 8-bit digital I/O (2x5 pin)
- ◆ External I/O Interface: 2 x USB 2.0, 2 x USB 3.1 Gen 1 (5Gb/s)
- ◆ Internal I/O Interface: 1 x KB/MS (1x6 pin), 1 x RS-422/485 (1x4 pin, P=2.0), 1 x RS-232 (2x5 pin, P=2.0), 2 x USB 2.0 (2x4 pin, P=2.0), 2 x SATA 6Gb/s with 5V SATA power connector (RAID 0, 1 supported)
- ◆ Watchdog Timer: Software programmable supports 1~255 sec. system reset
- ◆ Fan Connector: 1 x CPU smart fan (1x4 pin), 1 x System smart fan (1x4 pin)
- ◆ Power Supply: 12V only DC input, 1 x Internal power connector (2x2 pin), Support AT/ATX mode
- ◆ Power Consumption: 12V@1.88A (Intel® Celeron® with two 1333 MHz 4 GB DDR3 SO-DIMM)
- ◆ Operating Temperature: -10°C ~ 60°C
- ◆ Storage Temperature: -20°C ~ 70°C
- ◆ Operating Humidity: 5% ~ 95%, non-condensing
- ◆ Dimensions: 115 mm x 165 mm
- ◆ Weight: GW: 850g / NW: 350g, CE/FCC compliant

## Packing List

1 x NANO-HM651 single board computer	
1 x Audio cable	2 x RS-232 cable
1 x Power cable	1 x Heat spreader
1 x SATA with power cable kit	1 x Mini jumper pack
2 x Plastic shaft for securing half-size PCIe Mini card	1 x QIG

## Ordering Information

Part No.	Description
NANO-HM651-847E-R10	EPIC SBC supports Intel® Celeron® dual core 847E 1.1GHz CPU, dual HDMI/VGA/LVDS, dual GbE, PCIe Mini, USB 3.1 Gen 1 (5Gb/s), SATA 6Gb/s and Audio
32001-008600-200-RS	Dual-port USB cable, 210mm, P=2.0