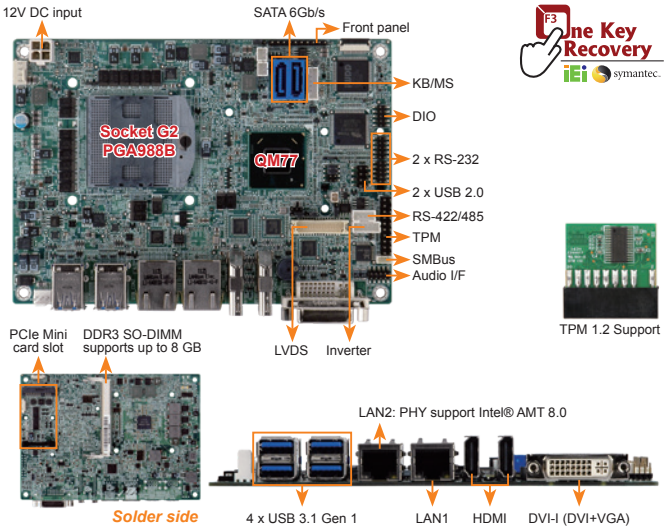
Backplane Systems Technology Pty Ltd
TEL 02 9457 6400
sales@backplane.com.au
www.backplane.com.au

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



TPM 1.2 Support

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

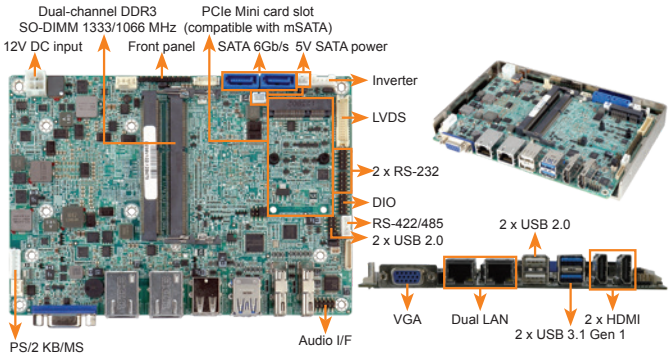
1 x NANO-QM770 single board computer	
1 x Audio cable	2 x SATA with power cable kit
1 x Power cable	1 x Mini jumper pack
2 x RS-232 cable	1 x QIG

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
32000-023800-RS	PS/2 KB/MS cable, 135mm/110mm, P=2.0
32000-044300-RS	Dual port USB cable, 210mm, P=2.54
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

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 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)
  2 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