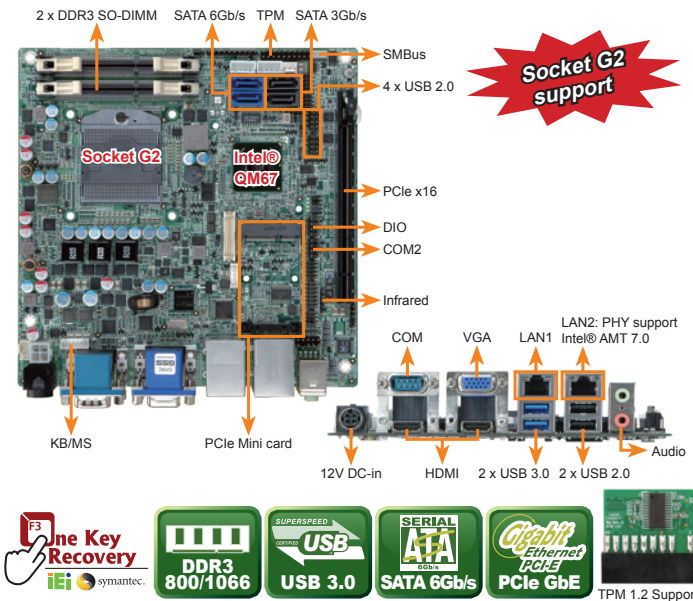


KINO-QM670-R20

Mini-ITX SBC with Socket G2 for Intel® mobile Core™ i7/i5/i3 CPU, VGA/dual HDMI/LVDS, dual PCIe GbE, USB 3.0, PCIe Mini, SATA 6Gb/s and audio



Features

- Mini-ITX SBC with Socket G2 for Intel® Core™ i7/i5/i3 processor
- Dual-channel 1333/1066MHz DDR3 SDRAM (system max. 8 GB)
- HDMI 1.3 compliant
- 3D micro-architecture enhancement supports DX*10.1 and OGL*3.0
- Rich media acceleration for hardware decoding and encoding acceleration
- Intel® GbE LAN with Intel® AMT 7.0 supported
- High speed I/O interface for PCIe Gen2 add-on card, USB 3.0 and SATA 6Gb/s

Specifications

- ◆ CPU: Socket G2 for Intel® Core™ i7/i5/i3 processor
- ◆ Chipset: Intel® QM67
- ◆ Memory
 - Two 204-pin 1333/1066 MHz dual-channel unbuffered DDR3L SDRAM SO-DIMM support up to 8 GB
- ◆ BIOS: UEFI BIOS
- ◆ Ethernet
 - LAN1: Intel® 82583V PCIe controller
 - LAN2: Intel® 82579 PHY with Intel® AMT 7.0 supported
- ◆ Graphics Engine
 - Support for DX10.1 and OpenGL3.0
 - Full MPEG2, VC1, AVC Decode
- ◆ Display Output
 - Dual display supported
 - 1 x VGA (up to 2048x1536@75Hz)
 - 2 x HDMI (up to 1920x1200@60Hz)
 - 1 x 18/24-bit dual-channel LVDS (up to 1920x1200@60Hz)
- ◆ External I/O Interface
 - 1 x RS-232 2 x USB 2.0 2 x USB 3.0
- ◆ Internal I/O Interface
 - 1 x RS-422/485 (1x4 pin, P=2.0)
 - 2 x SATA 3Gb/s
 - 2 x SATA 6Gb/s (RAID 0/1/5/10 supported)
 - 4 x USB 2.0 (2x4 pin, P=2.54)
- ◆ SMBus: 1 x SMBus (1x4 pin)
- ◆ TPM: 1 x TPM (2x10 pin)
- ◆ Audio
 - Realtek ALC892 HD codec
 - 2 x Audio jacks (line-out, mic-in) on rear IO
- ◆ Expansion
 - 1 x PCIe x16 slot 1 x PCIe Mini card slot
- ◆ Watchdog Timer
 - Software programmable supports 1~255 sec. system reset
- ◆ Digital I/O
 - 8-bit digital I/O (2x5 pin)
- ◆ Infrared Interface: 1 x 5-pin header
- ◆ Fan Connector
 - 1 x CPU smart fan (1x4 pin)
 - 1 x System smart fan (1x3 pin)
- ◆ Power Supply
 - 12V DC input
 - 1 x External DC jack (4-pin DIN)
 - 1 x Internal power connector (2x2 pin)
- ◆ Power Consumption
 - 12V@6.5A (2.1GHz Intel® Core™ i7-2710QE CPU with two 1333 MHz 2 GB DDR3 DIMM)
 - ◆ Operating Temperature: -10°C ~ 60°C
 - ◆ Storage Temperature: -20°C ~ 70°C
 - ◆ Operating Humidity
 - 5% ~ 95%, non-condensing
 - ◆ Dimensions: 170mm x 170mm
 - ◆ Weight: GW: 900g / NW: 450g
 - ◆ CE/FCC compliant

Packing List

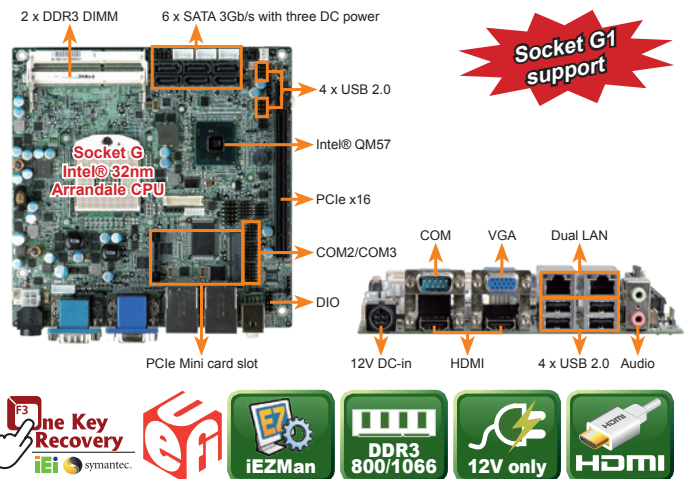
1 x KINO-QM670 single board computer	1 x Mini jumper pack
1 x I/O shielding	1 x One Key Recovery CD
1 x RS-232 cable	1 x QIG
2 x SATA with power output cable	1 x Utility CD

Ordering Information

Part No.	Description
KINO-QM670-R20	Mini-ITX SBC with Socket G2 for Intel® mobile Core i7/i5/i3 CPU, VGA/dual HDMI/LVDS, dual PCIe GbE, USB 3.0, PCIe Mini, SATA 6Gb/s and audio
19800-003100-100-RS	Dual port USB 2.0 cable with bracket, 300mm, P=2.54
32000-023800-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
SACF-KIT01-R10	SATA to CF converter board
TPM-IN01-R20	20-pin Infineon TPM module, software management tool, firmware v3.17

KINO-QM57A

Mini-ITX SBC with Socket G1 for Intel® mobile Core™ i7/i5/i3/Celeron® CPU, VGA/dual HDMI/LVDS, PCIe GbE, USB 2.0, PCIe Mini, SATA 3Gb/s, audio and RoHS



Features

- Mini-ITX SBC with Socket G1 for Intel® 32nm/45nm mobile Core™ i7/i5/i3 and Celeron® processor
- 800/1066MHz dual-channel DDR3 SO-DIMM supported (system max. 8 GB)
- Analog CRT/18-bit or 24-bit dual-channel LVDS/Dual HDMI outputs supported
- Intel® GbE LAN with Intel® AMT 6.0 support, iEzMan UI is bounded for remote control under Windows® environment
- UEFI software interface between OS and platform firmware
- IEI One Key Recovery solution allows you to create rapid OS backup and recovery

Specifications

- ◆ CPU
 - Socket G1 for Intel® mobile Core™ i7/i5/i3 and Celeron® processor (Socket 988)
- ◆ Chipset: Intel® QM57
- ◆ Memory
 - Two 204-pin 1066/800 MHz dual-channel unbuffered DDR3L SDRAM SO-DIMM support up to 16 GB
- ◆ BIOS: UEFI BIOS
- ◆ Ethernet
 - LAN1: Intel® 82577 GbE LAN controller with Intel® AMT 6.0 supported by iEzMan software UI
 - LAN2: Intel® 82574L GbE LAN
- ◆ Graphics Engine
 - Gen 5.75 with 12 execution units support DirectX* 10, OpenGL* 2.1
- ◆ Display Output
 - Dual display supported
 - 1 x VGA (up to 2048x1536@75Hz)
 - 2 x HDMI (up to 1920x1200@60Hz)
 - 1 x 18/24-bit dual-channel LVDS (up to 1920x1200@60Hz)
- ◆ External I/O Interface
 - 1 x RS-232 4 x USB 2.0
- ◆ Internal I/O Interface
 - 1 x KB/MS (1x6 pin)
 - 1 x RS-232/422/485 (2x7 pin, P=2.0)
 - 2 x RS-232 (2x5 pin, P=2.0)
 - 4 x USB 2.0 (2x4 pin, P=2.54)
 - 6 x SATA3Gb/s (RAID 0/1/5/10 supported)
- ◆ Expansion
 - 1 x PCIe x16 slot 1 x PCIe Mini card slot
- ◆ Watchdog Timer
 - Software programmable supports 1~255 sec. system reset
- ◆ Digital I/O: 8-bit digital I/O (2x5 pin)
- ◆ Fan Connector
 - 1 x CPU smart fan (1x4 pin)
 - 1 x System smart fan (1x3 pin)
- ◆ Power Supply
 - 12V DC input
 - 1 x External DC jack (4-pin DIN)
 - 1 x Internal power connector (2x2 pin)
- ◆ Power Consumption
 - 12V@5.27A (2.66GHz Intel® Core™ i7 620M CPU with two 2 GB 1333 MHz DDR3 DIMMs)
- ◆ Operating Temperature
 - 0°C ~ 60°C (32°F ~ 140°F)
- ◆ Storage Temperature: -10°C ~ 70°C
- ◆ Operating Humidity: 5% ~ 95%, non-condensing
- ◆ Dimensions: 170mm x 170mm
- ◆ Weight: GW: 1000g / NW: 350g
- ◆ CE/FCC compliant

Packing List

1 x KINO-QM57A single board computer	1 x Mini jumper pack
1 x Dual RS-232 cable w/ bracket	1 x One Key Recovery CD
1 x I/O shielding	1 x QIG
3 x SATA with power output cable	1 x Utility CD

Ordering Information

Part No.	Description
KINO-QM57A-R10	Mini-ITX SBC with Socket G1 for Intel® mobile Core™ i7/i5/i3/Celeron® CPU, VGA/dual HDMI/LVDS, PCIe GbE, USB 2.0, PCIe Mini, SATA 3Gb/s and audio, RoHS
19800-003100-100-RS	Dual port USB 2.0 cable with bracket, 300mm, P=2.54
19800-004300-100-RS	RS-232 & RS-422/485 cable with bracket, 14-pin to two DB-9, 250mm, P=2.0
63040-010096-100-RS	96W/12V power adaptor 90VAC~260VAC, 4-pin DIN
CF-989A-RS-R12	CPU cooler for mobile socket-G (PGA988) up to 55W processor, copper, 60mm x 60mm x 27.6mm, RoHS
CF-989B-RS-R11	CPU cooler for mobile socket-G (PGA988) 50W processor, aluminum, 60mm x 60mm x 27.6mm, RoHS
SAIDE-KIT01-R10	SATA to IDE/CF converter board