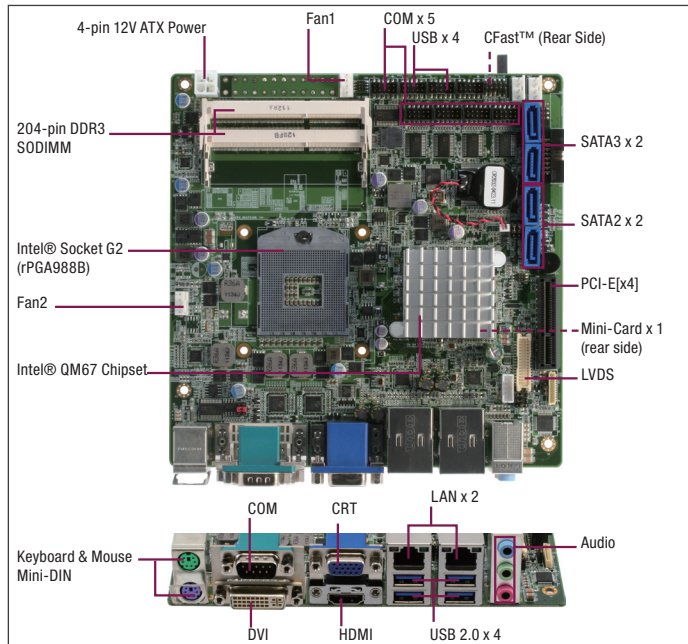


Embedded Motherboard with Socket G2 (rPGA988B) 2nd Generation Intel® Core™ i7/i5/Celeron® QC/ DC Processor



Specifications

System	
Processor	Socket 2nd Generation Intel® rPGA988 Processor
Chipset	Intel® QM67
Memory	Dual-channel with 204-pin SDRAM x 2, DDR3 1600/1333/1066, up to 16GB
I/O Chipset	ITE IT8728F+Fintek F81216DG
Ethernet	Intel® PHY WG82579LM / Realtek® RTL 8111E, Gb LAN x 2
Audio	Realtek® ALC892/886/662
TPM	Infineon SLB9635TT 1.2 (Optional)
Expansion Slots	PCIe [x4] x 1, Mini-PCIe x 1, CFast x 1
BIOS	AMI BIOS - 64MB ROM
H/W Monitor	Supports system temperature, voltage, and cooling fan status monitoring
WatchDog Timer	1~255 steps by software program
Smart Fan Control	CPU Fan/Chassis Fan
Wake On LAN/PXE	Yes
Power State	S3,S4,S5
Graphics	
Graphics Chipset	Intel® Core™ i7/i5/Celeron® + QM67
Graphics Multi Display	VGA+HDMI, VGA + LVDS, VGA+DVI, HDMI+DVI, HDMI+LVDS, DVI+LVDS
VGA	1
DVI	1
HDMI	1
Display Port	—
LVDS	1
eDP	—
Backlight Control	Voltage
Environment & Power & ME	
Battery	Lithium Battery
Power Requirement	12V DC
Operating Temperature	32°F ~ 140°F (0°C ~ 60°C)
Storage Temperature	-40°F ~ 176°F (-40°C ~ 80°C)
Operating Humidity	0% ~ 90% R/H, non-condensing
Certificate	CE/FCC
Form Factor	Mini-ITX: 6.7" x 6.7" (170 mm x 170 mm)
Weight	1.32 lb (0.6 kg)
MTBF	70,000
Rear Panel I/O Ports	
USB	USB 2.0 x 4
Display I/O	HDMI x 1, DVI-D x 1, VGA x 1
Audio I/O	Line-in, Mic-in, Line-out
LAN I/O	RJ-45 x 2

Features

- Socket G2 (rPGA988B) for 2nd Generation Intel® Core™ i7/i5/Celeron® QC/ DC Processor
- Intel® QM67
- 204-pin Dual-Channel DDR3 1066/1333/1600 MHz SODIMM x 2, Up to 16 GB
- Gigabit Ethernet x 2
- Intel® Integrated Graphics Engine Supports Dual View by VGA, DVI, HDMI, 24b, 2CH LVDS
- HD Audio
- SATA 3.0 Gb/s x 2, Supports RAID 0,1,5,10
- USB 2.0 x 8, COM x 6
- PCI-Express [x4] x 1, Mini-PCIe x 1, CFast™ x 1, TPM x 1 (Optional)



Serial Port	RS-232/422/485 x 1
PS/2 Port	Mini-Din PS/2 K/B and Mouse x 1
Others	—
Internal I/O Connectors	
Storage	SATA 3.0 Gb/s x 2, Supports RAID 0,1,5,10
USB	USB 2.0 x 4
Display I/O	LVDS x 1
Audio I/O	—
Serial Port	RS-232 x 5
PS/2 Port	—
Parallel Port	—
DIO	8-bit programmable (4-in/4-out)
FAN	CPU Fan connector(s) (4-pin) x 1, Chassis Fan connector(s) (4-pin) x 1
Power	4-pin connector x 1
Others	—
OS	
OS Support	Windows® XP, Windows® 7 32/64-bit, Linux Fedora

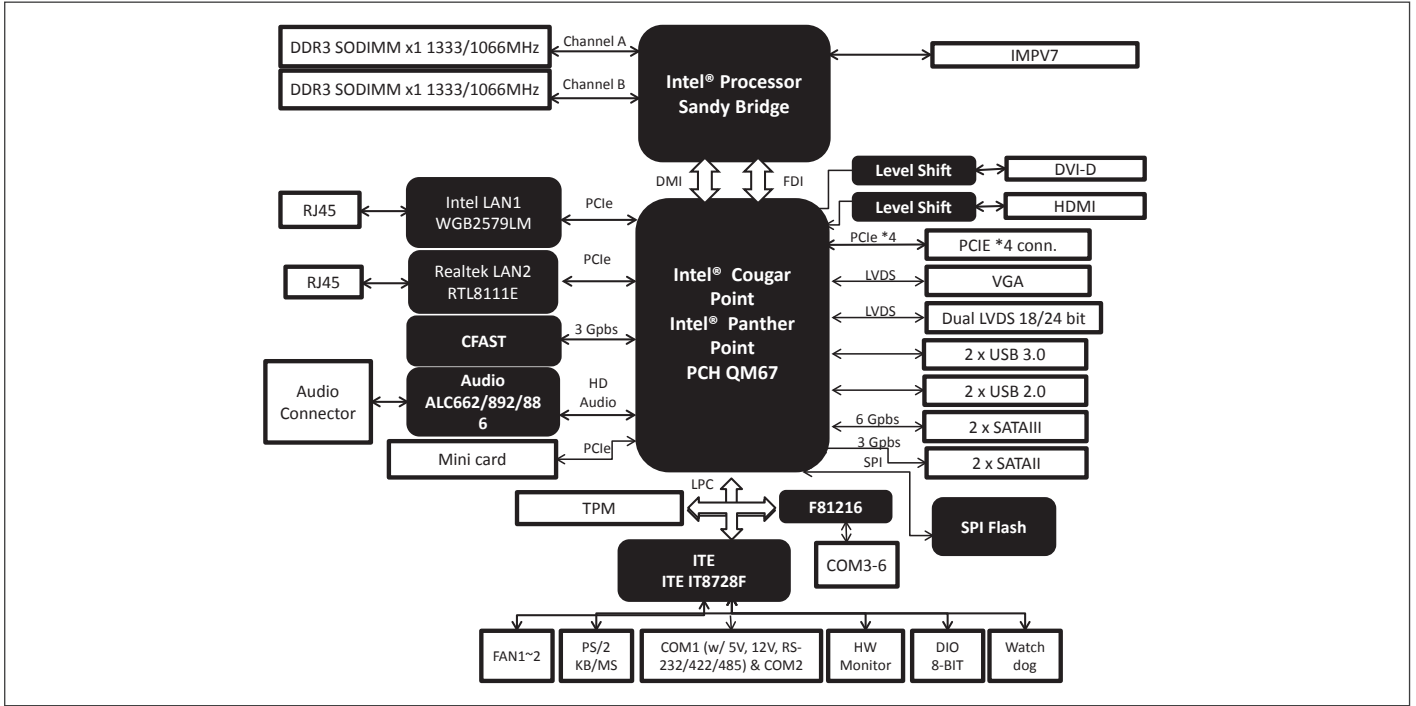
Packing List

- 1709070800
SATA Cable
- 1702151201
SATA Power Cable
- M200QM6700
Metal I/O Bracket
- 1701100206
COM Cable
- EMB-QM67

Optional Accessories

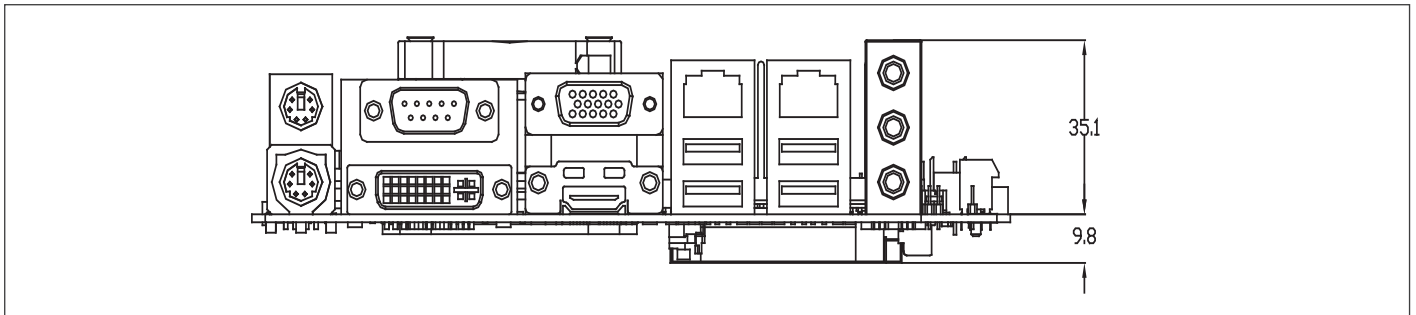
- 17592QM671
CPU Cooler, Fan + Heatsink, 3P, 60 x 60 x 27 mm for EMB-QM67
- 1709100208
USB Cable
- 17592QM672
CPU Cooler, Fan + Heatsink, 4P, 60mm x 60mm x 27mm

Block Diagram



Dimension

Unit: mm



Ordering Information

Part Number	CPU	RAM	Fan/Fanless	Display	Storage	LAN	USB	RS-232	RS-232/422/485	Expansion Slot	Power	TPM	Temp.
TF-EMB-QM67-A12	Socket	DDR3 16GB	Fan	VGA/DVI-D/LVDS/HDMI	SATA2 x 2, SATA3 x 2, CFAST x 1	GbE x 2	USB 2.0 x 8	5	1	PCIe [x4] x 1, mPCIe x 1	+12V DC	—	32°F ~ 140°F (0°C ~ 60°C)
TF-EMB-QM67-A12-01	Socket	DDR3 16GB	Fan	VGA/DVI-D/LVDS/HDMI	SATA2 x 2, SATA3 x 2, CFAST x 1	GbE x 2	USB 2.0 x 8	5	1	PCIe [x4] x 1, mPCIe x 1	ATX	—	32°F ~ 140°F (0°C ~ 60°C)