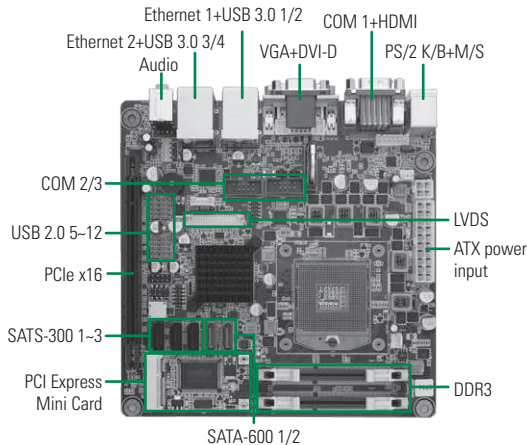


MANO870

Socket G2 Intel® Core™ i7/ i5/ i3/ Celeron® Mini ITX SBC with Intel® QM77 PCH, HDMI/ DVI-D/VGA/LVDS, PCI Express Gen3, SATA-600, Dual LANs and HD Audio



System

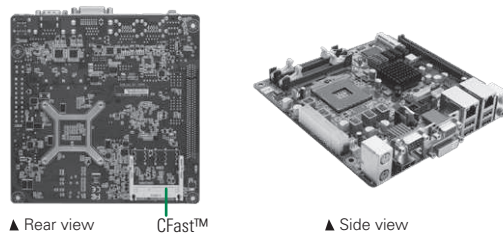
CPU	Socket G2 (rPGA 988B) for 3rd Generation Intel® Core™ i7/ i5/ i3/ Celeron® processors (Ivy Bridge)
System Memory	2 x 204-pin SO-DIMM dual channel DDR3-1333/1600 max. up to 16 GB
Chipset	Intel® QM77
BIOS	AMI
SSD	1 x CFast™
Watchdog Timer	255 level, 1 ~ 255 sec
Expansion Interface	1 x PCIe x16 Gen3 1 x PCI Express mini card
Battery	Lithium 3V/220 mAh
Power Requirements	Intel® Core™ i5-3610ME 2.7 GHz, 4GB DDR3 1333 x 2 +5V @ 1.4A, +12V @ 6.7A, -12V @ 0.1A, +5VSB @ 0.4A, +3.3V @ 1.0A
Size	170 x 170 mm
Board Thickness	1.6 mm
Temperature	0° ~ +60°C (32°F ~ 14°F), operation
Operation Humidity	10% ~ 95% relative humidity, non-condensing

I/O

MIO	1 x PS/2 keyboard/mouse 3 x RS-232 (COM1-3) with 5V/12V power
SATA	2 x SATA-600; 3 x SATA-300; with RAID 0,1,5,10
Hardware Monitoring	Detect CPU/System temperature, voltage and fan speed
Ethernet	1st port as 10/100/1000 Mbps supports WOL, PXE with Intel® 82579LM (LAN1) 2nd port as 10/100/1000 Mbps supports WOL, PXE with Intel® 82583V (LAN2)
Audio	HD Audio as Mic-in/Line-out with Realtek ALC892
USB	4 x USB 3.0 8 x USB 2.0
TPM	Infineon TPM 1.2 SLB9635
Digital I/O	8 Channels (4-IN & 4-OUT)
SM BUS	N/A

Features

- Socket G2 (rPGA 988B) for 3rd Generation Intel® Core™ i7/ i5/ i3/ Celeron® processors (Ivy Bridge)
- 2 DDR3-1333/1600 MHz up to 16 GB
- PCIe x16 Gen 3 supported
- 4 USB 3.0 supported
- 2 SATA-600 supported
- CFast™ supported
- iAMT 8.0 supported
- TPM 1.2 supported
- Dual view display



▲ Rear view

CFast™

▲ Side view

Display

Chipset	Intel® Integrated GMA
Memory Size	Shared memory
Display Interface	1 x HDMI 1 x DVI-D 1 x VGA 1 x LVDS

Packing List

Quick installation guide, user's manual/utility CD, cable

Ordering Information

Standard	
MANO870	Socket G2 Mini ITX SBC with Intel® Core™ i7/ i5/ i3/ Celeron®, HDMI/DVI-D/VGA/LVDS, PCI Express Gen3, SATA-600, 2 10/100/1000Mbps and audio

SBC
Services
and Solutions

Systems
on
Modules

Embedded
SBCs
>EPIC

Embedded
SBCs
>3.5" Capa

Embedded
SBCs
>Nano-ITX

Embedded
SBCs
>Pico-ITX

Embedded
SBCs
>PC/104

Industrial
Mother-
boards

Slot
CPU
Cards

Accessories

Appendix