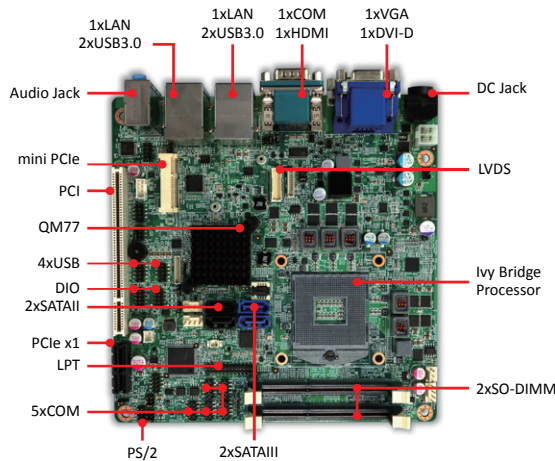


INS8335A

PERFECTRON

Mini ITX Intel® 22nm Ivy Bridge Processor (Mobile) socket type Industrial Motherboard



Main Features

- Intel® 22nm Ivy Bridge Processor (Mobile)(rPGA988B)
- 1 x PCIe x1, 1 x Mini PCIe, 1 x PCI
- 4 x SATA (2 x SATAIII, 2 x SATAII)
- 8 x USB
- 6 x COM (3 x RS232/422/485: 1 with 5V/12V selectable; 3 x RS232: 2 with 5V/12V selectable)
- 2 x DDRIII SO-DIMM up to 8GB
- 1 x LPT
- 8-bit DIO (4in/4out)
- 9V ~ 24V DC in
- Wide operating temp. -20°C ~ +70°C (-40°C ~ +85°C optional)

► Specifications

System

CPU Type	Intel® 22nm Ivy Bridge Processor (Mobile) socket type
Chipset	Intel® QM77 Express Chipset
Memory Type	2 x 204pin SO-DIMM support up to 8GB dual channel DDR3 1333/1600, Non-ECC
BIOS Core	AMI® UEFI BIOS
BIOS Flash	SPI Flash
Supoer I/O	F81866D-I
Watchdog	255 levels, 1~255 sec.

Expansion Slot

1 x PCIe x1
1 x Mini PCIe
1 x PCI

Display

Chipset	Integrated GFX in Ivy Bridge processor
Video Memory	Shared Memory
Onboard VGA	Yes, Max: SXGA 2048 x1536@60Hz
LVDS	Dual Channel 24-bit LVDS, Max: 1920 x 1200
Onboard DVI-D	Yes, Max resolution 1920 x 1200
Onboard HDMI	Yes, Max resolution 1920 x 1200
Independent Displays Capability	VGA, LVDS, DVI, HDMI

Audio

Codec	ALC892
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Ethernet

Chipset	Intel® 82579LM & 82574IT GbE
WOL	Yes
Boot from LAN	Yes for PXE

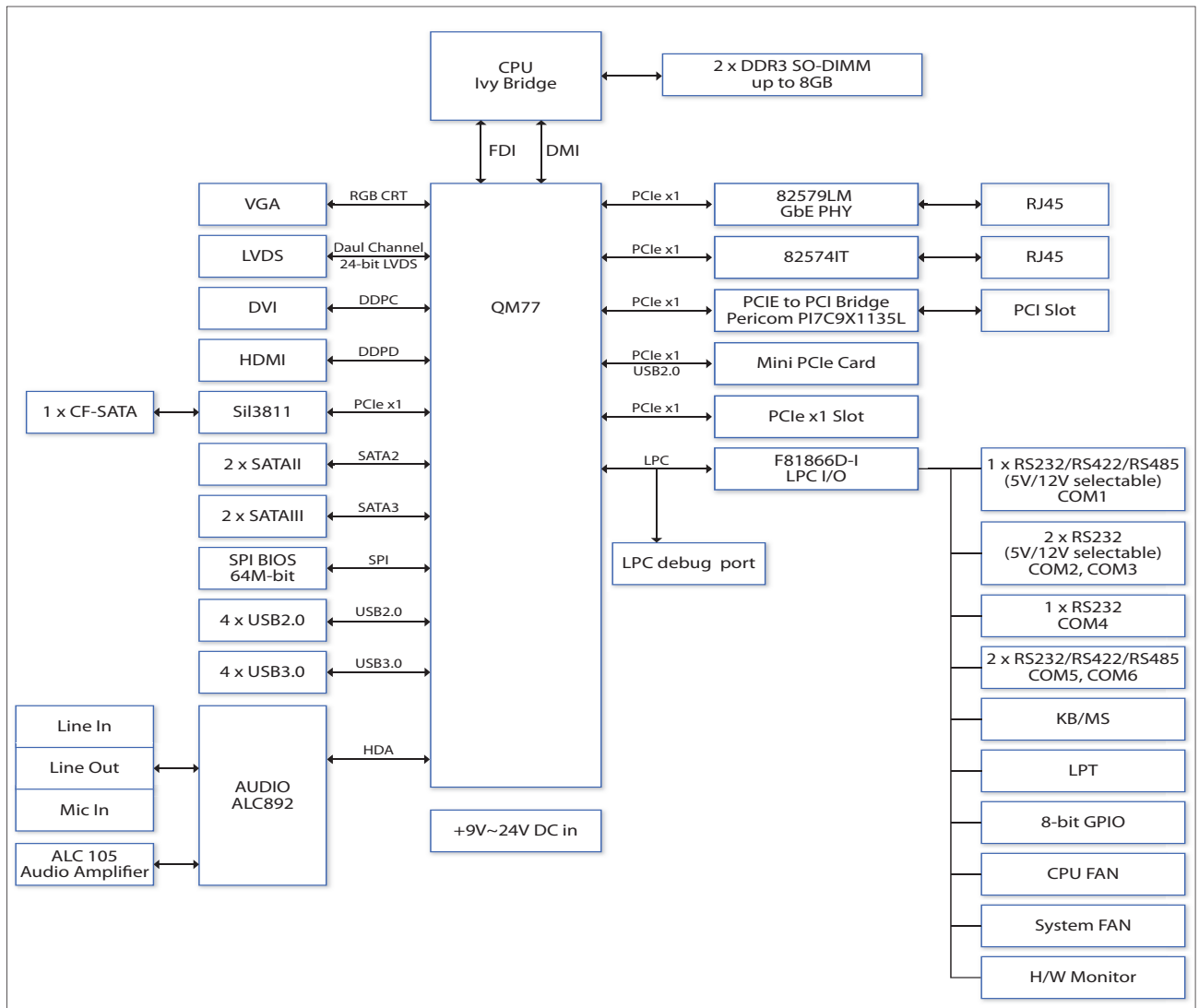
Rear I/O

VGA	1
DVI-D	1
HDMI	1
Ethernet	2
USB 3.0	4
Audio	Line-out, Mic-In, Line-in
COM port	1x RS232/422/485 with 5V/12V selectable
DC Jack	1 (with lock)

I/O Interface

SATA	2 x SATAIII (6Gb/s) 2 x SATAII (3Gb/s)
CF-SATA	1
LVDS	1
USB 1.1/2.0	2 x pin-header for 4 USB 2.0
COM port	2 x RS232 with 5V/12V selectable 1 x RS232 2 x RS232/422/485
DIO	8-bit (4in/4out)
PS/2	1 x pin-header for PS/2 KB and Mouse
Buzzer	1
Battery	1
Smart Fan	1 x CPU Fan 1 x System Fan
Parallel port	1 x LPT

► Block Diagram



Mechanical and Environment

Form Factor	Mini ITX
Power Type	9V ~ 24V DC in
Dimension	170 x 170mm
Operating Temperature	-40°C ~ 70°C
Storage Temperature	-40°C ~ 70°C
Relative humidity	10% to 90%, non-condensing

► Ordering Information

Modules

Model Number	Description
INS8335A-ET	Mini ITX Intel® 22nm Ivy Bridge Processor (Mobile) socket type Industrial Motherboard (-20°C ~ +70°C)
INS8335A-UT	Mini ITX Intel® 22nm Ivy Bridge Processor (Mobile) socket type Industrial Motherboard (-40°C ~ +85°C optional)