

MB8100 - Intel® Atom Mini-ITX Motherboard with Intel® 945GSE Chipset and 24-bit LVDS

FEATURES



- Onboard Intel® Atom 270 processor, 1.6GHz
- One DIMM up to 2GB of DDR2 400/533MHz memory
- One 10/100/1000 LAN
- Supports VGA CRT and dual channel LVDS display
- 2x SATA, 1x IDE, 8x USB 2.0, 4x COM, Watchdog timer
- 1x PCI, 1x PCI-E, 1x MiniPCle
- Digital I/O, DC-in for +12V/+19V input or 2x2 P412V
- Onboard 8 watts Audio

MB8100 SPECIFICATIONS

CPU

Intel Atom N270 Single Core processor

1.60GHz speed

CPU Front Side Bus (FSB)

533MHz

Chipset

Intel® 945GSE

ICH7M

BIOS

Award BIOS, ACPI supported

System Memory

One sockets support up to

2GB DDR2 SDRAM

Integrated VGA

Intel® 945GSE integrated Graphics

Media Accelerator (GMA 950)

supports CRT

LVDS

Supports 18/24-bit dual channel LVDS

DVI

Onboard Chronitel CH7307C for DVI; connector on edge

LAN

10/100/1000 Realtek 8111C

Audio

ICH7M integrated audio controller with ALC662 high definition codec for 5.1 channels + 8 Watts Amplifier

LPC I/O

Winbond W83627EHG chipset

supports COM1 (RS232), COM2

(RS232/422/485), LPT port; Hardware monitoring

Secondary I/O

Fintek F81216DG chipset for COM3 & COM4(RS232) and Parallel port.

Serial Ports

One RS232/422/485

and three RS-232 COM ports

Serial ATA

Supports 2x SATA ports

IDE

ICH7M built-in one channel

Ultra DMA 33/66/100, CF connector (solder side)

USB (2.0)

Supports 8 USB ports (6 ports + 2 ports via pin header)

Keyboard and Mouse Connector

PS/2 type

Watchdog Timer

Generates system reset; 256 levels

Hardware Monitoring

Built in W83627EHG; monitors system/CPU

temperature and voltage status

Digital I/O

4 in / 4 out

Power Connector

DC power jack for +12V/+19V DC-in (external)

or P412V 2x2 (Internal)

Expansion Slots

1x PCI, 1x PCI-E (x1), 1x Mini PCI-E

Edge Connectors

PS/2 connector for keyboard/mouse, Gigabit LAN RJ-45

connector, 6xUSB connector, Dual USB stack connector for

USB5/USB6, DB15 connector for VGA output, 2x1 stack mini

jacks (0.125") for audio (Line-Out, Microphone-In); DC-in jack

Onboard Connectors/Headers

2x LVDS, 2x SATA, IDE, CF (solder side), USB7/USB8, LPT,

4x COM, Line out, Microphone, Digital I/O, two specials

connectors for the speakers.

Form Factor

Mini-ITX Motherboard

Dimensions

170mm x 170mm

Environmental Factors:

Operating Temperature:

0°C~60°C (32°F~140°F)

Storage Temperature:

-20°C~80°C (-68°F~176°F)

Relative Humidity:

10%~90% (non-condensing)



MB8100 Edge Connectors

Ordering Information:

MB8100 - Intel® Atom N270 1.6GHz Mini-ITX motherboard ITX 945GSE+ICH7M, 10/100/1000 LAN, VGA (CRT/LVDS-24bit), COMx4, DC-In 12V/19V (RoHS)

*Information are subject to change without notice, Engineering specs may differ slightly from brochure.