

H1503

Intel® Atom™ E3800 Series Fanless Embedded System



The H1503 is a fanless embedded system characterized by versatility and compact size. Options include Intel® Atom™ E3845 quad core and E3815 single core processors.

The system is equipped with on-board 2GB or 4GB DDR3L with support for error correcting code, ECC. Three Mini-PCIe slots give room for expansion with functionality like Wi-Fi, Bluetooth or CAN. The system is also prepared with a SIM-card holder so that 3G/4G-modems can be used. There are multiple storage alternatives like S-ATA, mSATA, MicroSD or an eMMC flash. The H1503 is powered with a wide input 9-36V DC input or through an optional AC/DC power adaptor. The system is available in both standard and extended operating temperature.



FEATURES

- Intel Atom processor E3800 series
- 4x COM, 3x USB and 1x Ethernet ports
- HDMI and DVI or VGA
- 9V to 36V DC input voltage

LOOKING FOR SOMETHING SLIGHTLY DIFFERENT?

In most cases standard products can be customized to your specification. With small modifications to hardware and software, you can have the qualities and functions you need.

Call us. We will be happy to suggest and implement changes in standard products to meet your requirements exactly.

H1503 – Technical Specifications

PROCESSOR OPTIONS

- Intel Atom E3845, Quad Core, 2M Cache, 1.91GHz, 10W*
 - Intel Atom E3815, Single Core, 0.5M Cache, 1.46GHz, 5W*
- * TDP

SYSTEM MEMORY

4GB or 2GB DDR3L on-board
Supports ECC

GRAPHICS

Intel® HD Graphics
DVI display resolution up to 2560x1600 @ 24Hz
HDMI display resolution up to 1920x1200 @ 60Hz resolution
VGA display resolution up to 2560x1600 pixels with 24-bit Colour @ 60Hz
Display outputs: 1 HDMI and 1 DVI/VGA

STORAGE

1 2.5 inch SATA drive bay
1 mSATA module via a Mini PCIe slot
Supports 4GB, 8GB, 16GB and 32GB eMMC on-board (option)

ETHERNET

Intel® WG1210AT PCI Express Gigabit Ethernet controller
Integrated 10/100/1000 transceiver
Fully compliant with IEEE 802.3, IEEE 802.3u, IEEE 802.3ab

AUDIO

Realtek® ALC888 2-channel High Definition Audio
1 line-out and 1 mic-in

COM

4 DB-9 ports
- 3 DB-9 port supports RS232/422/485 COM port
- 1 DB-9 port supports RS232/422/485 COM or 8 bit DIO

EXPANSION

3 Mini PCIe slots
- 2 slots for communication
- One slot supports PCIe x1, USB, and LPC signals for Wi-Fi module or LPC module
- One slot supports PCIe x1, USB, and 3G signals for 3G/4G or GPRS module (option)
- 1 slot for storage
- Supports mSATA module
1 SIM card socket

DIO

1 8-bit DIO via the DB-9 port (signal+power)

I/O PORTS

Front Panel
- 3 DB-9 RS232/422/485 COM ports
- 1 USB 3.0 (Type A) port
- 1 HDMI port
- 1 status LED
- 1 HDD LED
- 1 reset button
- 1 power button

Rear Panel

- 1 DB-9 port provides one of the following options
- 1 RS232/422/485 COM
- 1 8-bit DIO
- 1 DVI port
- 1 Line-out jack
- 1 Mic-in jack
- 1 antennae hole
- 2 USB 2.0 (Type A) ports
- 2 RJ45 LAN ports
- 1 9 to 36V DC-in jack

POWER

Power input voltage: 9 to 36V DC-in

ENVIRONMENT

Temperature
- Operating: 0°C to 60°C
- Optional: -20 to 70°C
- Storage: -40°C to 85°C
Operating Vibration
- MIL-STD-810F 514-5C-2 (SSD/mSATA)
- MIL-STD-810F 514-5C-1 (HDD)
Operating Shock
- Half sine wave 15G, 11ms, 3 shock per axis (SSD/mSATA)
- Half sine wave 3G, 11ms, 3 shock per axis (HDD)

MOUNTING

Wall/VESA mount
- Mounting brackets and screws (optional)

DIMENSIONS

180mm x 33mm x 121.2mm (W x H x D)

WATCHDOG TIMER

Watchdog timeout programmable via software from 1 to 255 seconds