

ETX Modules

VIA

ETX-8X90

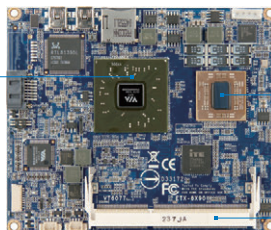
ETX® Module with high-performance multimedia capabilities

Features

- 1.2GHz VIA Nano® X2 E-Series processor
- Supports up to 4GB 1066 DDR3 SDRAM
- DX9 graphics with MPEG-2/WMV9/VC-1/H.264 decoding acceleration
- Display interface for VGA, supporting resolutions of up to 2048 x 1536, and one 18/24-bit dual-channel LVDS panel
- Supports four USB 2.0 and two mini USB 2.0 ports

Board Placement

VIA VX900 Chipset



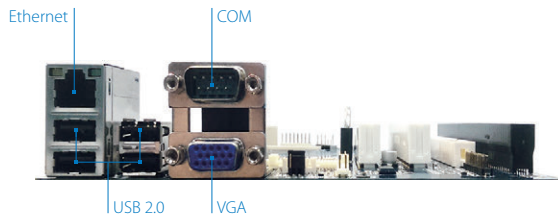
VIA Nano® X2 E-Series CPU

DDR3 SODIMM

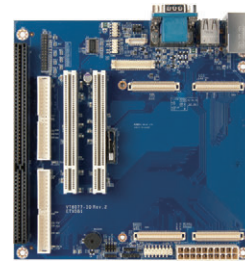
Specifications

Model Name	ETX-8X90
Processor	1.2GHz VIA Nano® X2 E-Series
Chipset	VIA VX900 Media System Processor
BIOS	AMI BIOS, 8Mbit Flash memory
System Memory	1 DDR3 1066 SODIMM slot Up to 4GB memory size
Storage	Up to 2 SATA or 2 IDE (master mode only)
Graphics	Integrated VIA C-9 HD DX9 3D/2D graphics with MPEG-2, WMV9, VC-1 and H.264 video decoding acceleration
LAN	Realtek RTL8139DL 10/100Mbps Ethernet controller
Audio	1 HD audio digital interface (supports Line-in, Line-out, Mic-in)
Super I/O	Fintek F71869ED
Supported Expansion I/O	2 PCI
Onboard I/O	2 SATA connectors (1 optional) 2 Mini USB 2.0 ports 1 Micro SD card slot
Supported I/O	1 ISA (not support DMA transfer) 2 IDE (master mode only) (1 optional) 4 USB 2.0 ports 1 VGA 1 Dual-channel 18-bit/24-bit LVDS panel 2 UART 1 10/100Mbps Ethernet 1 SMBus 1 I ² C
Operating System	Windows 7, WES 7, Windows CE, Linux
System Monitoring & Management	AC power failure recovery, CPU temperature reading, CPU fan speed reading, System power management, System voltage monitoring, Wake-on-LAN, Watchdog Timer
Operating Temperature	0°C ~ 60°C
Operating Humidity	0% ~ 95% (non-condensing)
Form Factor	11.4cm x 9.5cm (4.5" x 3.7")
Compliance	ETX 3.02, compact module

Carrier Board Back Panel I/O



Carrier Board (ETXDB1)



* The carrier board is only for evaluation purpose.

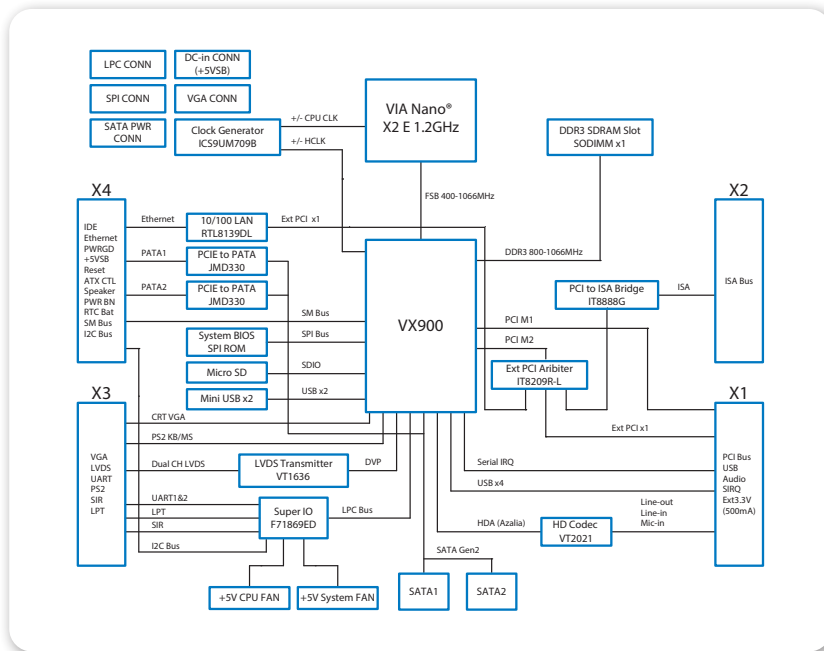
Specifications

Model Name	ETXDB1
Super I/O	Fintek F71869ED
Onboard I/O	1 ISA connector (compatible with ISA ETX 3.0) (no DMA transfer support) 2 IDE connectors (master mode only) *Support for 2 nd depends on module configuration 1 COM pin header 1 LPT pin header 1 Dual-channel 18/24-bit LVDS panel connector 1 SMBus pin header 1 I ² C pin header 1 Audio pin header for Line-in, Line-out, Mic-in 1 Backlight and panel voltage selects pin header 1 SIR pin header 1 RTC external battery holder 1 ATX power connector 2 PCI slots (compatible with PCI 2.3, 32bit/33MHz)
Rear Panel I/O	1 VGA port 4 USB 2.0 ports 1 COM port 1 10/100Mbps Ethernet port
Power Supply	ATX power connector
Operating Temperature	0°C ~ 60°C
Operating Humidity	0% ~ 95% (non-condensing)
Form Factor	Mini-ITX (17cm x 17cm, 6.7" x 6.7")

Ordering Information

Part Number	CPU Frequency	Description
10GAB12A00020	1.2GHz VIA Nano® X2 E-Series	ETX Board with 1.2GHz VIA Nano® X2 E-Series CPU with VGA, LVDS, 4 USB 2.0, 2 Mini USB 2.0, 2 UART, 10/100Mbps Ethernet, SATA, IDE, 2 PCI, Micro SD card slot, ATX power connector
ETXDB1	N/A	ETX-8X90 evaluation carrier board
99G42-01381Q	N/A	Heatsink with fan for ETX-8X90 (with ETXDB1)
99G42-01390Q	N/A	Heat Spreader for ETX-8X90 (with ETXDB1)
99G42-01469Q	N/A	Heat Spreader for ETX-8X90
STK-E8X90-00A0	1.2GHz VIA Nano® X2 E-Series	ETX-8X90 Starter Kit
STK-E8X90-01A0	1.2GHz VIA Nano® X2 E-Series	ETX-8X90 Starter Kit with Panel

Block Diagram



Packing List (Starter Kit)

Items for STK-E8X90-00A0

- ETX-8X90 ETX module board
- ETXDB1 ETX carrier board
- SATA cable
- PATA cable
- KB/MS cable
- COM cable
- LPT cable

Items for STK-E8X90-01A0

- ETX-8X90 module
- ETXDB1 carrier board
- SATA cable
- PATA cable
- KB/MS cable
- COM cable
- LPT cable
- LVDS cable
- Inverter cable
- 12.1" LCM