

ETX Series

NEW

VIA

ETX-8X90

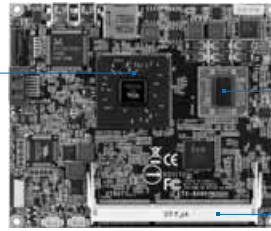
ETX Nano™ X2 E Module with
VGA, LVDS, USB, Mini USB,
IDE, LAN, COM and SD Card
Reader

Features

- Supports high-bandwidth DDR3, up to 4GB memory
- Supports Micro SD card reader
- Display interface in CRT, support resolution up to 2560 x 1600 and one 18/24-bit dual-channel LVDS panel
- Supports four USB 2.0 ports and two mini USB ports
- Support one IDE, one SATA and two COM

Board Placement

VX900 chipset



VIA Nano X2 E processor

DDR3 SODIMM socket

Specifications

Model Name	ETX-8X90	
Core	Processor	1.2GHz VIA Nano™ X2 E
	Chipset	VIA VX900 Media System Processor
	System Memory	1 x DDR3 800/1066 SO-DIMM socket, up to 4GB memory size
	BIOS	AMI BIOS, SPI 1M bytes flash memory
	Operating System	Windows 7, Windows Embedded Standard 7, Windows XP Embedded, Windows Embedded Compact 6, Linux, VxWorks
Graphics & Video	Graphics Processor	Integrated VIA UniChrome9™ HD DX9 3D/2D AGP graphics with MPEG-2, WMV9 & H.264 video decoding accelerator
	Graphics Memory	UMA, up to 512MB (BIOS setting)
	CRT	350Mhz RAMDAC, support resolution up to 2560 x 1600
	LCD	Dual channel 18-bit/24-bit LVDS panel
Ethernet	Chipset	Realtek RTL8139DL
IO & Storage (On CPU Board I/O)	Super I/O	Fintek F71869ED
	USB	2 x Mini USB ports (for debug)
	CRT	1x CRT (for debug)
	Micro SD Card Reader	1 x Micro SD card reader
	SATA	1 x SATA
Extension I/O (Based On ETX 3.02 Spec)	Audio	1 x Line out 1 x Line in 1 x Mic (Mono)
	USB	4 x USB 2.0 ports
	PCI	2 x PCI (PCI-1 support directed by VX900, PCI-2 by PC Arbiter)
	ISA	1 x ISA (not support DMA transfer)
	CRT	1 x VGA
	LVDS	1 x Dual channel 18/24 bit
	COM	2 x COM ports
	LPT	1 x LPT
	PS/2	1 x Keyboard & mouse
	IrDA	1 x SIR
	IDE	1 x IDE
	LAN	1 x LAN port (10/100M)
	Mechanical & Environment	ETX 3.02 Compliance
Dimension		114 mm x 95 mm (4.45" x 3.7")
Operating Temperature		0°C ~ 60°C
Storage Temperature		-40°C ~ 70°C
Operating Humidity		0% ~ 95% (relative humidity; non-condensing)



Base Board (ETXDB1)



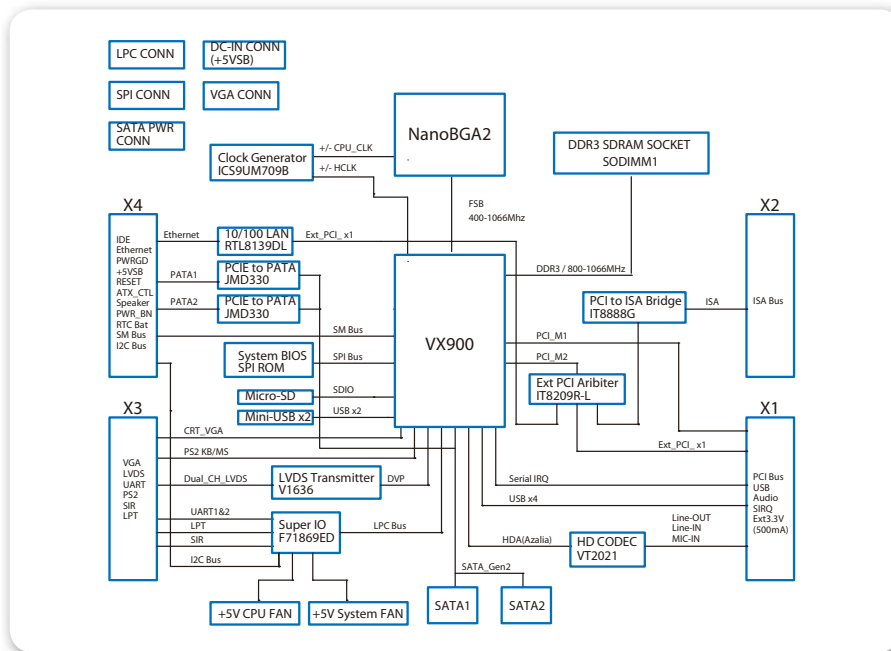
Specifications

Model Name	ETXDB1		
Onboard I/O	ISA Connector	Compatible with ISA ETX 3.0 1 x ISA connector	
	Parallel ATA	2 x EIDE connectors	
	PCI 2.3 Connector	Compatible with PCI 2.3, 32bit/33Mhz 1 x PCI slot support PCI bus master 1 x PCI slot by Arbiter	
	LVDS	Compatible with TIA/ELA-644 Pixel clock up to 85MHz Supports panel resolution up to WXGA 1366 x 768 Supports one or two-channel 18-bit or 24-bit LVDS panel	
	Backlight Power Select	1 x Backlight voltage selects pin header	
	Panel Power Select	1 x Panel power selects pin header	
	Power Connector	1 x ATX power connector	
	RTC External Battery	1 x RTC external battery holder	
	SM Bus	1 x SM bus connector	
	I²C Bus	1 x I ² C bus connector	
	IrDA	1 x SIR connector	
	Speaker	1 x Buzzer	
	Rear I/O	USB 2.0	4 x USB 2.0 ports
		PS/2 KB/MS	1 x Keyboard/mouse pin header
COM Connector		1 x COM port, 1 x COM port pin header	
LPT Connector		1 x LPT connector	
LAN		1 x LAN RJ-45 connector	
Audio		1 x Line-out/Line-in/Mic-in stack jack	
CRT		1 x D-SUB CRT connector	
PCB	- Mini-ITX type debug board - 17 cm x 17 cm (6.7" x 6.7")		

Ordering Information

Model Name	CPU Frequency	Description
ETX-8X90	1.2GHz Nano™ X2 E	ETX Board with 1.2GHz Nano™ X2 E CPU, VGA, LVDS, LAN, 4 x USB 2.0, 2 x Mini USB, 1 x IDE, 2 x COM, 1 x SD Card Reader, 1 x SATA
ETXDB1	N/A	ETX-8X90 Evaluation Base Board
10GAB12A100A2	N/A	ETX-8X90 Starter Kit with Panel
10GAB12A200A2	N/A	ETX-8X90 Starter Kit

Block Diagram



Packing List (Starter Kit)

Items for 10GAB12A100A2	
1 x ETX-8X90 ETX module board	
1 x ETXDB1 ETX carrier board	
1 x SATA cable	
1 x PATA cable	
1 x KB/MS cable	
1 x COM cable	
1 x LPT cable	
1 x Quick guide	
1 x LVDS cable	
1 x Inverter cable	
1 x 12.1" LCM	

Items for 10GAB12A200A2	
1 x ETX-8X90 ETX module board	
1 x ETXDB1 ETX carrier board	
1 x SATA cable	
1 x PATA cable	
1 x KB/MS cable	
1 x COM cable	
1 x LPT cable	
1 x Quick guide	