

Em-ITX Series

NEW

VIA

EITX-3000

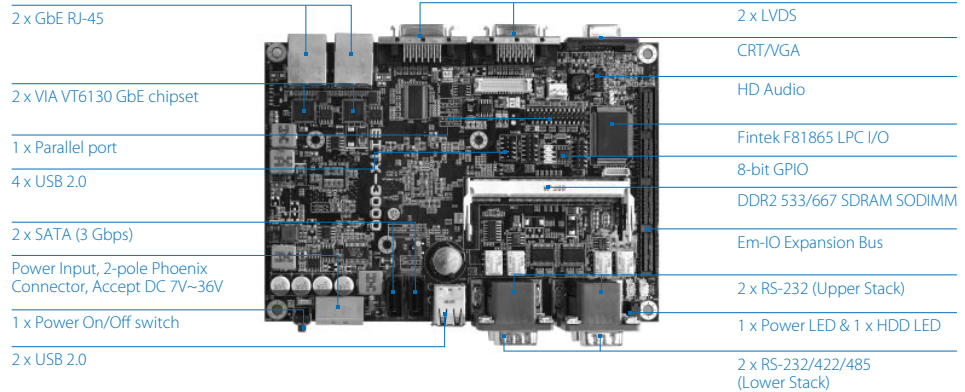
Nano™ Processor-based Em-ITX SBC, with VGA, 2 Gigabit LAN, 2 LVDS, 4 COM, 6 USB, with Built-in DC Power

Features

- VIA Nano™ ULV processor (1MB L2 Cache)
- Em-ITX form factor: 17 cm (W) x 12 cm (L)
- Dual-sided multiple I/O connector coastlines
- Em-IO expansion bus socket
- Integrated VIA Chrome9™ HC3, DX9 3D/2D graphics with MPEG-2/4 and WMV9 decoding acceleration
- Two single-channel LVDS display ports
- Two Gigabit Ethernet
- Two RS-232 and two RS-232/422/485
- Six USB ports
- Fanless and ultra low power consumption



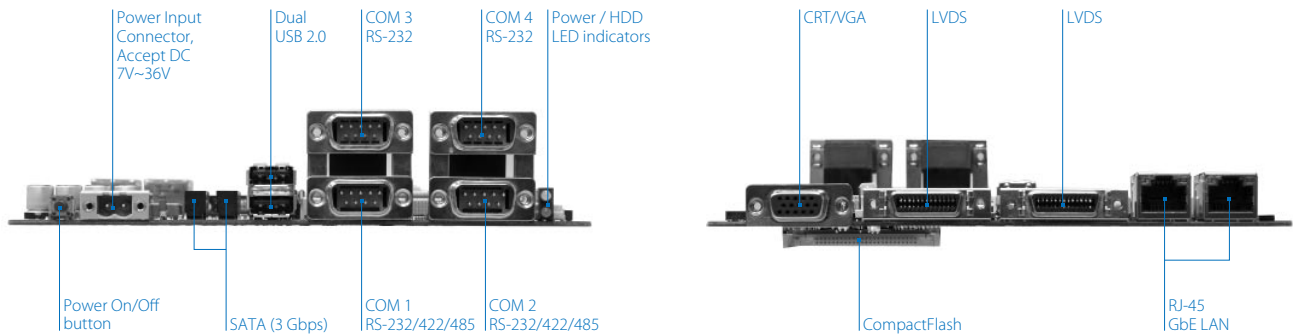
Board Placement



Specifications

Part Number		EITX-3000-N13A1	EITX-3000-N10A1	EITX-3000-E05A1
Processor System	Processor	1.3 GHz VIA Nano™ ULV	1.0 GHz VIA Nano™ ULV	500 MHz VIA Eden™ ULV
	Front Side Bus Speed	800 MHz	800 MHz	400 MHz
	L2 Cache	1 MB	1 MB	128 KB
	Chipset	VIA VX800 Unified Digital Media IGP chipset		
	BIOS	Award BIOS, 8 MBit SPI Flash BIOS		
Memory	System Power Management	Timers Power On ACPI supported		
	Technology	1 x DDR2 533/667 200-pin SDRAM SODIMM socket		
Graphic	Max. Capacity	Up to 2GB memory size		
	Controller	Integrated VIA Chrome9™ HC3 DX9 3D/2D graphics with MPEG-2/4 WMV9 decoding acceleration		
	Display Memory	Optimized Unified Memory Architecture (UMA), supports up to 256 MB frame buffer using system memory		
	CRT Interface	Onboard 1 x VGA connector Pixel Resolution support up to 1920 x 1440		
LVDS Interface	LVDS Interface	Supports two 24-bit single-channel LVDS interface connectors Up to 1280 x 1024 panel resolution Built-in Inverter control signals into the DB-26 connectors Onboard 5 V/3.3 V LCD power switch (default at 3.3 V)		
	Dual Independent Display	LVDS_1 + LVDS_2 at same resolutions, same pixel depths, and same refresh rates		
	Ethernet Controller	2 x Onboard VIA VT6130 Gigabit Ethernet controllers		
Ethernet Interface	Interface	Supports two RJ-45 connectors. Supports Wake On LAN (WOL) Supports Preboot Execution Environment (PXE)		
	HD Audio Controller	VIA VT1708B High Definition Audio Codec		
Serial	Interface	Supports Line-in, Line-out, Mic-in by onboard 2x7-pin headers		
	USB	Six onboard USB ports • 2 x USB ports (mini-DIN connector) • 4 x USB ports (pin headers with individual VCC power)		
Serial Ports	Serial Ports	Onboard Fintek F81865 LPC I/O controller Supports 4 COM ports of • 2 x RS-232/422/485 by 2 x DB-9 connectors as COM 1 and COM 2, configurable via BIOS setup • 2 x RS-232 by 2 x DB-9 connectors of COM 3 ~ 4 Supports RS-485 AutoFlow Control functions of COM1 ~ COM2		
	Parallel Printer Ports	1 x PS/2 compatible bi-directional parallel port by onboard 2 x 13-pin headers		
GPIO Storage interface	General Purpose I/O	Onboard 2 x 6-pin headers support 8-bit GPIO, and 5V power source		
	Serial ATA	2 x Onboard SATA (3 Gbps) ports, Maximum data transfer rate up to 300MB/s Only support 2.5" of SATA Hard Disk (no support to 3.5" SATA HDD)		
	Compact Flash	1 x Onboard socket support type I/II CompactFlash disk		

Back Panel I/O



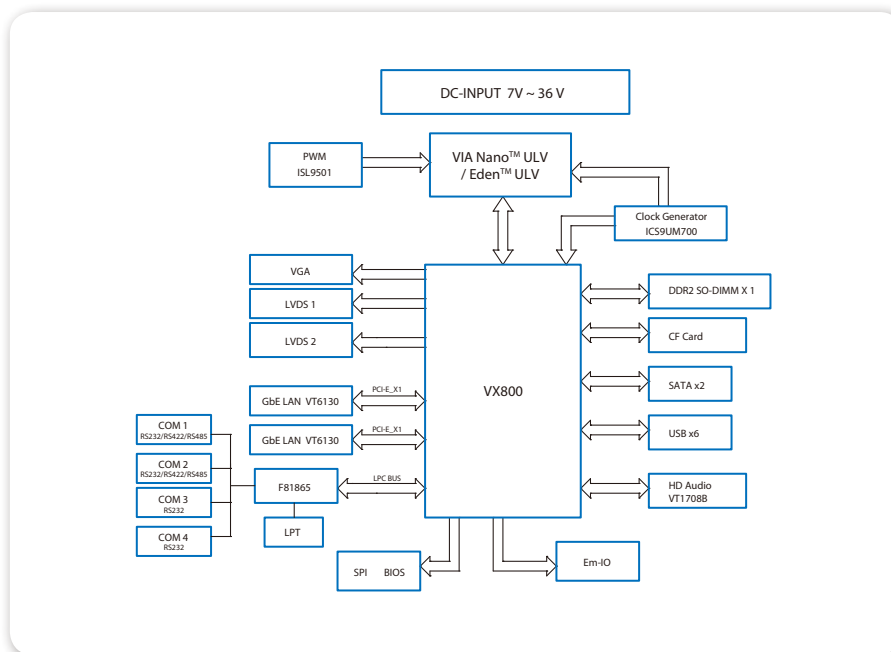
Specifications

Part Number		EITX-3000-N13A1	EITX-3000-N10A1	EITX-3000-E05A1
H/W Monitoring	Temperature Sensor	Built-in one Thermal Sensor by onboard 1 x 3-pin headers		
System Indicator	Power Status LED	One green color LED		
	HDD Activity LED	One red color LED		
Watchdog Timer	Output	System reset		
	Interval	Programmable 1 ~ 255 sec		
System Expansion	Em-IO Bus Expansion Interface	Onboard 160-pin Em-IO Bus Expansion interface socket		
Onboard I/O Connectors	Front I/O Coastline	1 x HDD & PWR LED 2 x RS-232/422/485 COM port connectors as COM 1 and COM2 2 x RS-232 COM port connectors as COM3 and COM4 2 x USB mini-DIN connectors 1 x 2-pole of Phoenix power input connector 1 x ATX power On/Off switch		
	Rear I/O Coastline	1 x VGA connector 2 x DB-26 connectors for dual 24-bit single channel LVDS interface, as LVDS1 and LVDS2 2 x RJ45 connectors for dual Gigabit Ethernet connection		
Onboard I/O Pin-headers	Onboard I/O Pin-headers	1 of 2 x 15-pin box headers for LVDS1 (co-lay with LVDS1) 2 of 1 x 3-pin headers for LCD Power 3.3V/5V selection 1 of 2 x 5-pin headers; plus a 2 x 6-pin headers, with individual VCC power support for 4 x USB 2.0 ports 1 of 2 x 13-pin headers for LPT port 1 of 2 x 5-pin headers for Line-out, Line-in and Mic-in 1 of 2 x 5-pin headers for thermal sensor 2 of SATA data connectors, only support connection with 2.5" HDD 2 of SATA power connectors, only support 5V power 1 of 1 x 3-pin headers for selecting the AT or ATX mode		
Onboard DC to DC Power Supply	Input Voltage	Built-in onboard DC-to-DC converter Accept wide range of Power Input of DC 7V ~ 36V Supports AT and ATX mode		
	Power Input Connector	1 x 2-pole Phoenix connector		
	AT/ATX Selector	Onboard AT/ATX switch by a 1 x 3-pin headers		
	Fuse Rating	7 A / 125 V		
Heatsink	Construction	Aluminum modeling		
	Dimensions (WxHxD)	245 mm x 50 mm x 124.8 mm		
Physical Characteristics	Form Factor	Em-ITX		
	Board Dimension	17 cm (W) x 12 cm (L)		
	Weight	1 Kg (weight of total package)		
Environmental Specification	Operating Temperature	-10°C ~ 70 °C		
	Storage Temperature	-20°C ~ 70 °C		
	Operating Humidity	10% ~ 90%, relative humidity, non-condensing		

Ordering Information

Part Number	CPU Frequency	Description
EITX-3000-N13A1	1.3GHz Nano™ ULV (10W)	1.3GHz VIA Nano™ ULV CPU based Fanless Em-ITX board, with 1xVGA, 2xLVDS, 2xRS-232/422/485, and 2xRS-232, 6xUSB, 2xGbE, 2xSATA, DC-in 7~36V, Em-IO expansion socket
EITX-3000-N10A1	1.0GHz Nano™ ULV (7W)	1.0GHz VIA Nano™ ULV CPU based Fanless Em-ITX board, with 1xVGA, 2xLVDS, 2xRS-232/422/485, and 2xRS-232, 6xUSB, 2xGbE, 2xSATA, DC-in 7~36V, Em-IO expansion socket
EITX-3000-E05A1	500MHz Eden™ ULV (1W)	500MHz VIA Eden™ ULV CPU based Fanless Em-ITX board, with 1xVGA, 2xLVDS, 2xRS-232/422/485, and 2xRS-232, 6xUSB, 2xGbE, 2xSATA, DC-in 7~36V, Em-IO expansion socket

Block Diagram

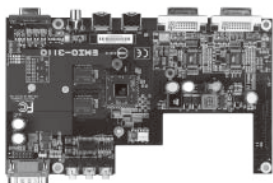


Packing List

Items
1 x EITX-3000 board
1 x Driver & Utility CD Disk
1 x Mini-jumper pack
1 x 8-bit GPIO cable
1 x HD Audio cable
1 x Parallel Port cable
2 x SATA Data cable (only support 2.5" HDD)
2 x SATA Power cable (only support 2.5" HDD)
1 x Power cable, 2-pole Phoenix plug to DC-Plug

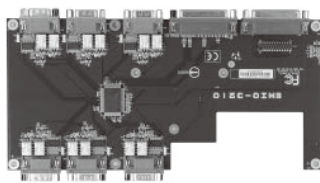
Em-ITX I/O Cards

EMIO-3110



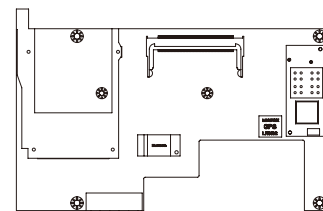
■ Applications: Digital signage, POI, gaming

EMIO-3210



■ Applications: Kiosk, factory automation

EMIO-3430



■ Applications: Vehicle/feet management, logistic control