

Mini-ITX Series

NEW

VIA

EPIA-M840

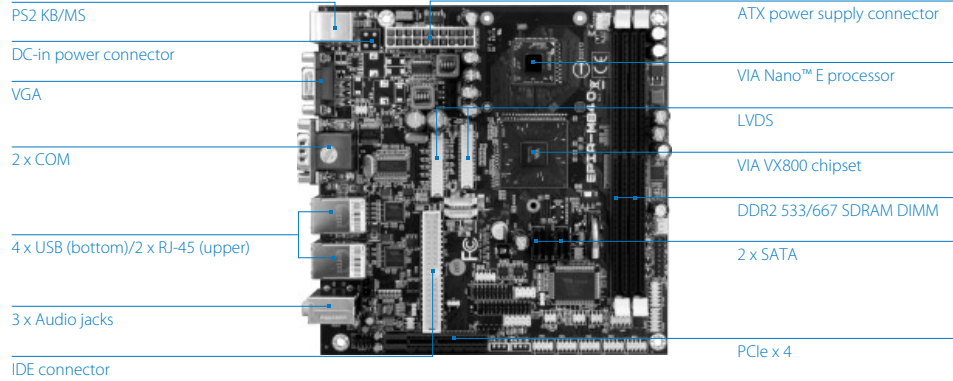
Mini-ITX Nano™ E Board with
MPEG-2 & WMV9/VC1, IDE,
SATA, CF, Dual GigaLAN,
COM, Dual LVDS & PCIe

Features

- Integrated VIA Chrome9™ HC3 DX9 3D/2D graphics with MPEG-2 and WMV9 decoding acceleration
- Supports one IDE and two SATA
- Supports two Gigabit Ethernets
- Supports one digital I/O and proprietary MFX interface
- Supports one CF (Compact Flash)
- Supports six USB 2.0 ports
- Supports eight COM ports (six as pin headers)
- Supports one 4-lane PCIe slot
- Supports two dual-channel 24-bit LVDS panels



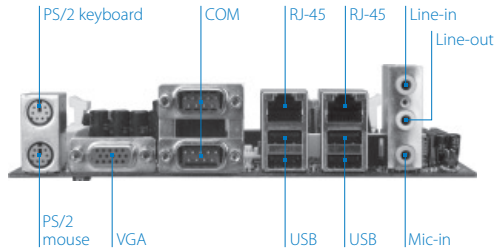
Board Placement



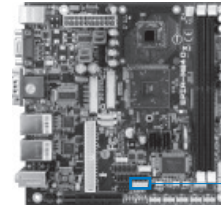
Specifications

Model Name	EPIA-M840-16	EPIA-M840-12E
Processor	1.6 GHz VIA Nano™ E (with fan)	1.2GHz VIA Nano™ E (fanless)
Chipset	VX800 Unified Digital Media IGP chipset	
Super I/O	Fintek F81865-I	
System Memory	2 x DDR2 533/667 DIMM sockets Up to 4GB memory size	
VGA	Integrated VIA Chrome9™ HC3 DX9 3D/2D graphics with VC1, MPEG-2, WMV9 decoding acceleration	
Onboard IDE	1 x UltraDMA 133/100 pin connector with 2.54mm 40-pin	
Onboard Serial ATA	2 x SATA connectors (pin#7 powered with selectable GND/5V) 2 x SATA 3.5" HDD power support (for DC-In SKU only)	
Onboard LAN	2 x VIA VT6130 Gigabit LAN controllers	
Onboard Audio	VIA VT1708S High Definition Audio Codec	
Onboard I/O Connectors	1 x CF Type I 2 x USB ports 1 x Front audio pin header 1 x PS/2 keyboard/mouse pin header 6 x RS-232 (powered with selectable 5V/12V) 1 x LPT pin header 2 x Digital I/O pin header (GPI x 8 + GPO x 8) 1 x System temperature reading pin header 1 x Front panel pin header 2 x Smart fan connectors for CPU/Sys 1 x SIR pin header (IRDA 1.0) 1 x LPC pin header 1 x SMBUS supporting VIA MFX-01 module 1 x S/PDIF-out pin header 1 x PCIe x4 slot 2 x Dual-channel 24-bit LVDS 2 x Backlight control connector for inverter power and brightness control 1 x ATX power connector or +12V DC-in (manufacturing option)	
Rear I/O Connectors	1 x PS/2 KB/MS connector 1 x VGA connector 2 x RS-232 connectors (powered with selectable 5V/12V) 4 x USB 2.0 connectors 2 x R-J45 LAN connectors 3 x Audio jacks (Line-out, Mic-in, Line-in)	
BIOS	Award BIOS 4/8Mbit SPI Flash ROM	
System Monitoring & Management	Keyboard Power-on, Timer Power-on System power management, AC power failure recovery Wake-on LAN, Watch Dog Timer	
Operating System	WinCE, XP, XPe, Linux	
Operating Temperature	0°C up to 60°C	
Operating Humidity	0% ~ 95% (relative humidity; non-condensing)	

Back Panel I/O



Accessories



WLAN USB module
802.11 b/g standards

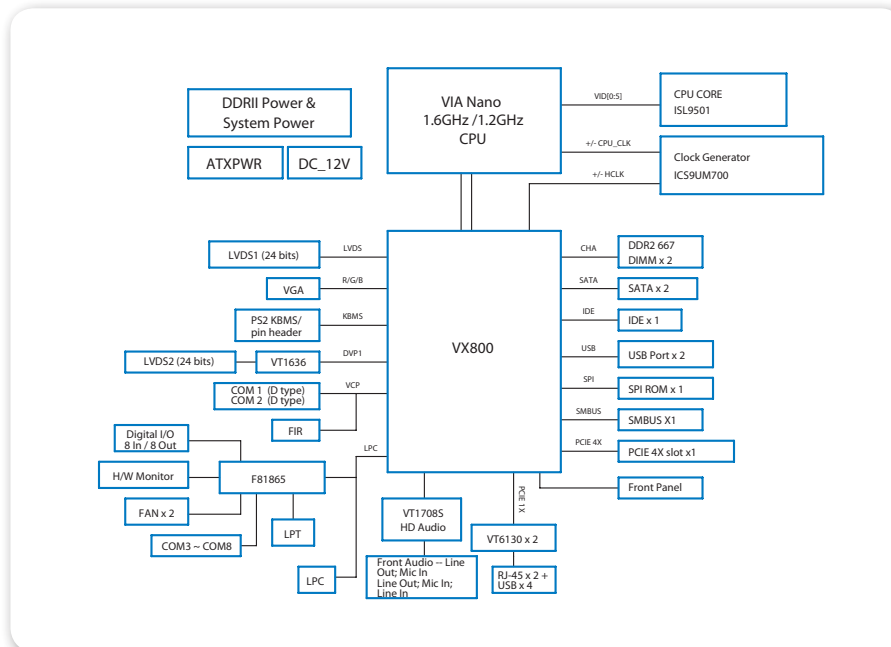
Specifications

Model Name	EPIA-M840-16	EPIA-M840-12E
Form Factor	Mini-ITX 17 cm x 17 cm	
Compliance	CE/FCC/RoHS	

Ordering Information

Model Name	CPU Frequency	Description
M840-16	1.6 GHz Nano™ E	Mini-ITX Board with 1.6GHz Nano™ E CPU, 1 PCIe x4, 8 COMs, 1 CF, 2 GLAN, 2 LVDS
M840-12E	1.2GHz Nano™ E	Mini-ITX Board with 1.2GHz Nano™ E CPU, 1 PCIe x4, 8 COMs, 1 CF, 2 GLAN, 2 LVDS

Block Diagram



Packing List

Items
1 x SATA cable
1 x Driver Utility CD
1 x I/O bracket