

## Mini-ITX Series

VIA

# EPIA-M840

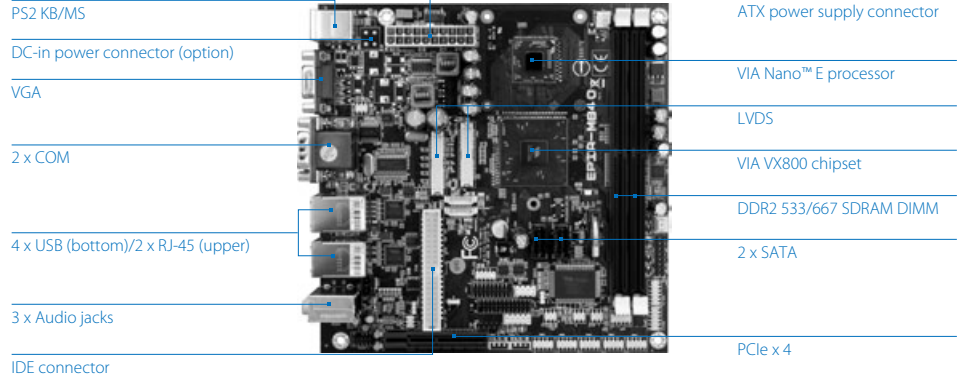
Mini-ITX Nano™ E Board with MPEG-2 & WMV9/VC1, IDE, SATA, CF, Dual GigaLAN, COM, Dual LVDS & PCIe

## Features

- Integrated VIA Chrome™9 HC3 DX9 3D/2D graphics with MPEG-2 and WMV9 decoding acceleration
- Supports one IDE and two SATA
- Supports two Gigabit Ethernet
- 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



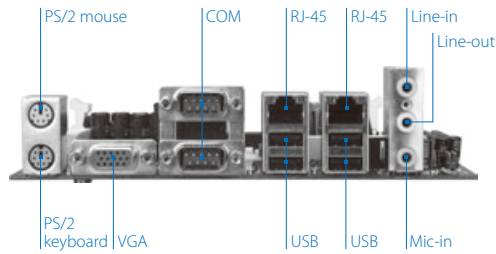
## Board Placement



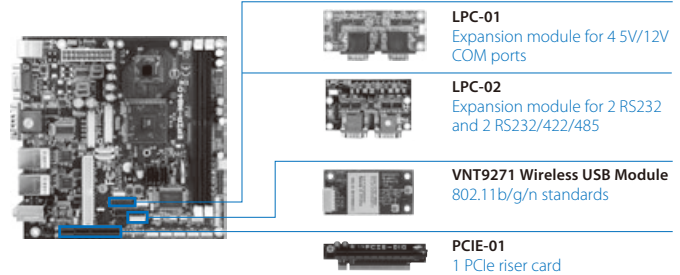
## Specifications

Model Name	EPIA-M840-16/EPIA-M840-16P	EPIA-M840-12E/EPIA-M840-12PE
<b>Processor</b>	1.6GHz VIA Nano™ E (with fan)	1.2GHz VIA Nano™ E (fanless)
<b>Chipset</b>	VX800 Unified Digital Media IGP chipset	
<b>Super I/O</b>	Fintek F81865-I	
<b>System Memory</b>	2 x DDR2 533/667 DIMM sockets Up to 4GB memory size	
<b>VGA</b>	Integrated VIA Chrome™9 HC3 DX9 3D/2D graphics with VC1, MPEG-2, WMV9 decoding acceleration	
<b>Onboard IDE</b>	1 x UltraDMA 133/100 pin connector with 2.54mm 40-pin	
<b>Onboard Serial ATA</b>	2 x SATA connectors (pin#7 powered with selectable GND/5V) 2 x SATA 3.5" HDD power support (for DC-In SKU only)	
<b>Onboard LAN</b>	2 x VIA VT6130 Gigabit LAN controllers	
<b>Onboard Audio</b>	VIA VT1708S High Definition Audio Codec	
<b>Onboard I/O Connectors</b>	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 pin headers (powered with selectable 5V/12V) 1 x LPT pin header 2 x Digital I/O pin headers (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 connectors for inverter power and brightness control	
<b>Rear I/O Connectors</b>	1 x PS/2 KB/MS port 1 x VGA port 2 x Serial ports (powered with selectable 5V/12V) 4 x USB 2.0 ports 2 x GigaLAN ports 3 x Audio jacks (Line-out, Mic-in, Line-in)	
<b>BIOS</b>	Award BIOS 4/8Mbit SPI Flash ROM	
<b>System Monitoring &amp; Management</b>	Keyboard Power-on, Timer Power-on System power management, AC power failure recovery Wake-on LAN, Watch Dog Timer	
<b>Operating System</b>	Windows Embedded CE, Windows XP, Windows Embedded Standard, Linux	
<b>Power</b>	ATX Power (for EPIA-M840-16 & EPIA-M840-12E) 12V DC-in (for EPIA-M840-16P & EPIA-M840-12PE)	

## Back Panel I/O



## Accessories



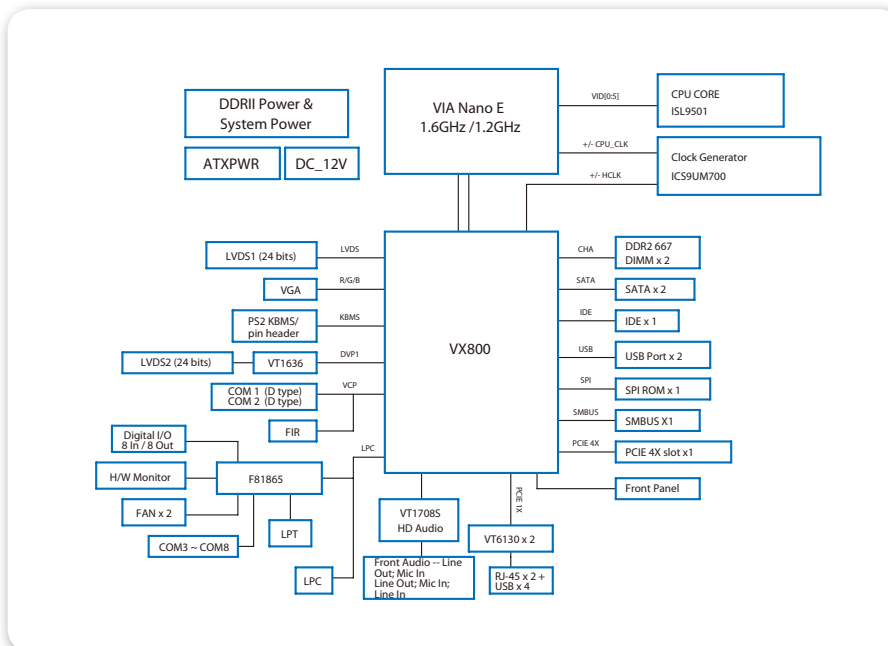
## Specifications

Model Name	EPIA-M840-16/EPIA-M840-16P	EPIA-M840-12E/EPIA-M840-12PE
Operating Temperature	0°C up to 60°C	
Operating Humidity	0% ~ 95% (relative humidity; non-condensing)	
Form Factor	Mini-ITX 17 cm x 17 cm (6.7" x 6.7")	
Compliance	CE/FCC/RoHS	

## Ordering Information

Model Name	CPU Frequency	Description
EPIA-M840-16	1.6GHz Nano™ E	Mini-ITX Board with 1.6GHz Nano™ E CPU, 1 PCIe x4, 8 COM, 1 CF, 2 GLAN, 2 LVDS (w/ ATX Power Connector)
EPIA-M840-16P	1.6GHz Nano™ E	Mini-ITX Board with 1.6GHz Nano™ E CPU, 1 PCIe x4, 8 COM, 1 CF, 2 GLAN, 2 LVDS (w/ 12V DC-in)
EPIA-M840-12E	1.2GHz Nano™ E	Mini-ITX Board with 1.2GHz Nano™ E CPU, 1 PCIe x4, 8 COM, 1 CF, 2 GLAN, 2 LVDS (w/ ATX Power Connector)
EPIA-M840-12PE	1.2GHz Nano™ E	Mini-ITX Board with 1.2GHz Nano™ E CPU, 1 PCIe x4, 8 COM, 1 CF, 2 GLAN, 2 LVDS (w/ 12V DC-in)

## Block Diagram



## Packing List

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