

## Mini-ITX Series

NEW

VIA

# EPIA-M850

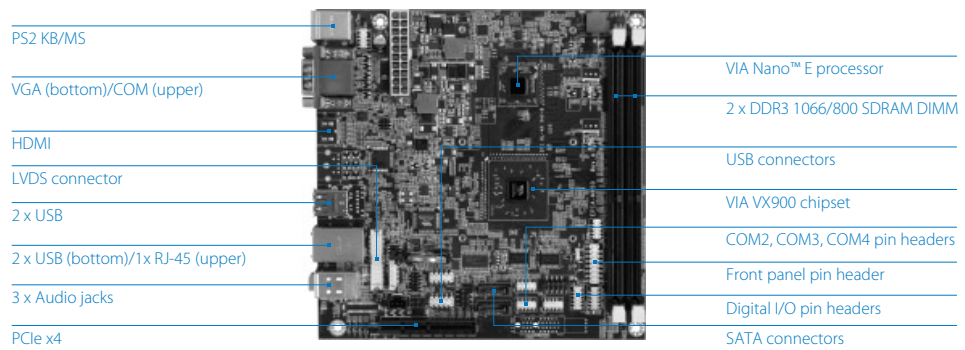
Mini-ITX Board with Nano™ E CPU, Full HD Video Support, SATA, GigaLAN, COM, USB, VGA/HDMI®/LVDS & PCIe

## Features

- Integrated VIA Chrome9™ HC DX9 3D/2D graphics with VC1, MPEG-2, WMV9 and H.264 decoding acceleration
- Supports high-bandwidth DDR3 memory, up to 8GB
- Supports two SATA
- Supports one Gigabit Ethernet
- Supports eight USB 2.0 ports (four as pin headers) and one USB device port
- Supports four COM ports (three as pin headers)
- Supports two 16-bit GPIO (8 x GPI + 8 x GPO)
- Supports one 4-lane PCIe slot
- Supports one VGA and one HDMI port
- Supports one dual-channel 24-bit LVDS panel



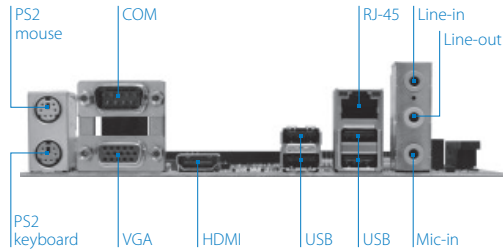
## Board Placement



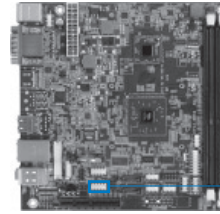
## Specifications

Model Name	EPIA-M850-16L	EPIA-M850-12EL
<b>Processor</b>	1.6 GHz VIA Nano™ E	1.2 GHz VIA Nano™ E
<b>Chipset</b>	VIA VX900 advanced all-in-one system processor	
<b>System Memory</b>	2 x DDR3 1066/800 DIMM sockets Up to 8GB memory size	
<b>VGA</b>	Integrated VIA Chrome9™ HC DX9 3D/2D graphics with VC1, MPEG-2, WMV9 and H.264 decoding acceleration	
<b>Expansion Slot</b>	1 x PCIe x4 slot	
<b>Onboard LAN</b>	1 x VIA VT6130 PCIe Gigabit Ethernet controller	
<b>Onboard LVDS</b>	1 x VIA VT1636 LVDS transmitter	
<b>Onboard Audio</b>	VIA VT1708S High Definition Audio Codec	
<b>Onboard I/O Connectors</b>	2 x USB pin headers for 4 USB 2.0 ports 1 x USB pin header for 1 USB device port 1 x Front-panel audio pin header 1 x S/PDIF out connector 2 x Digital I/O pin headers (8 x GPI + 8 x GPO) 1 x KB/MS pin header 1 x LVDS connector (2-CH 24bit LVDS) 3 x Serial port pin headers for COM ports 1 x LPC pin header 1 x SMBus pin header 1 x Front audio pin header 1 x SPI pin header 1 x ATX power connector 2 x SATA port connectors 2 x Smart Fan connectors for CPU and system fans	
<b>Back Panel I/O</b>	1 x PS2 KB/MS connector 1 x VGA connector 1 x Serial port connector 1 x HDMI connector 1 x RJ-45 LAN port 4 x USB 2.0 ports 3 x Audio phone jacks: Line-out, Line-in and Mic-in (Vertical type, Smart 5.1 support)	
<b>BIOS</b>	AMI BIOS SPI 4/8Mbit flash memory	
<b>Operating System</b>	Windows 7 / XP / XPe / CE & Linux	
<b>System Monitoring &amp; Management</b>	CPU voltage monitoring, System temperature reading Wake-on LAN, Keyboard Power-on, Timer Power-on, Watch Dog Timer, FAN speed detection System power management, AC power failure recovery	
<b>Operating Temperature</b>	0°C up to 60°C	
<b>Operating Humidity</b>	0% ~ 95% (relative humidity; non-condensing)	
<b>Form Factor</b>	Mini-ITX 17 cm x 17 cm	

## Back Panel I/O



## Accessories

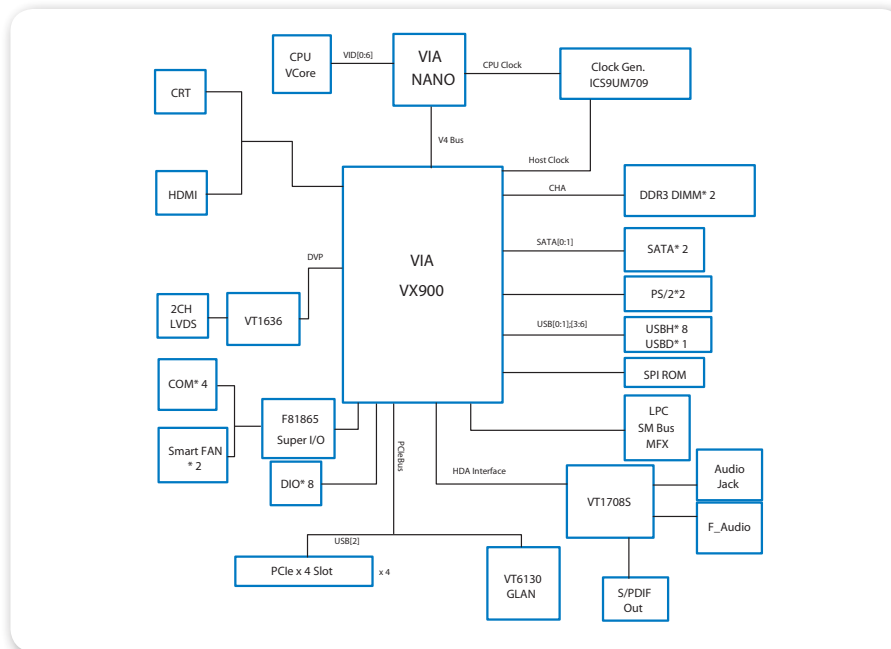


WLAN USB module  
802.11 b/g standards

## Ordering Information

Model Name	CPU Frequency	Description
M850-16L	1.6 GHz Nano™ E	Mini-ITX Board with 1.6 GHz Nano™ E CPU, 1 PCIe x4, 8 USB, 4 COMs, 1 GLAN, 1 VGA, 1 HDMI, 1 LVDS
M850-12EL	1.2 GHz Nano™ E	Mini-ITX Board with 1.2 GHz Nano™ E CPU, 1 PCIe x4, 8 USB, 4 COMs, 1 GLAN, 1 VGA, 1 HDMI, 1 LVDS

## Block Diagram



## Packing List

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