

Mini-ITX Series

VIA

EPIA-M850

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

Features

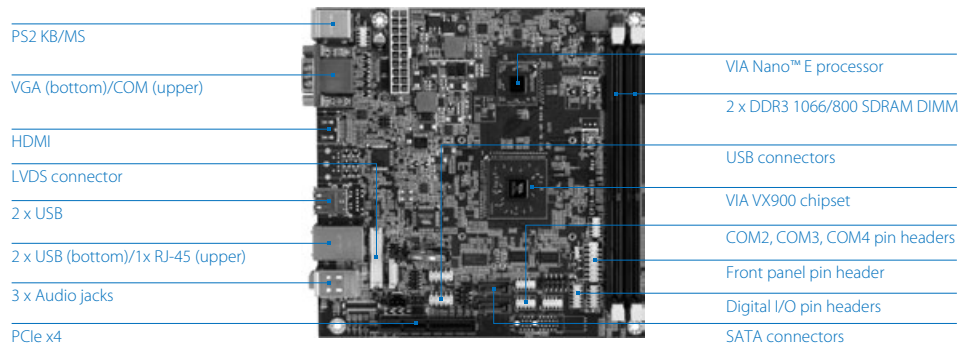
- Integrated VIA Chrome™9 HD DX9 3D/2D graphics with VC1, MPEG-2, WMV9 and H.264 decoding acceleration
- Supports high-bandwidth DDR3 memory, up to 8GB
- Supports two SATA
- Supports one Gigabit Ethernet
- Supports eight USB 2.0 ports (four as pin headers)
- Supports four COM ports (three as pin headers)
- 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



TAIWAN
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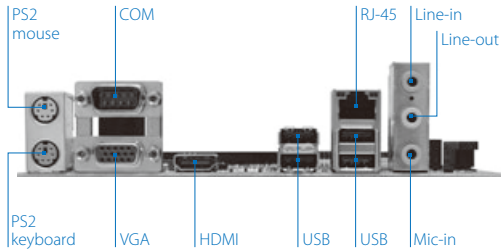
Board Placement



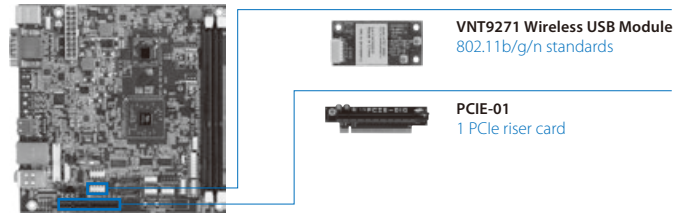
Specifications

Model Name	EPIA-M850-16L	EPIA-M850-12EL	EPIA-M850-16FL
Processor	1.6GHz VIA Nano™ E	1.2GHz VIA Nano™ E	1.6GHz VIA Nano™ E
Chipset	VIA VX900 Media System Processor		
System Memory	2 x DDR3 1066/800 DIMM sockets Up to 8GB memory size		
VGA	Integrated VIA Chrome™9 HD DX9 3D/2D graphics with VC1, MPEG-2, WMV9 and H.264 decoding acceleration		
Expansion Slot	1 x PCIe x4 slot		
Onboard LAN	1 x VIA VT6130 PCIe Gigabit Ethernet controller		
Onboard LVDS	1 x VIA VT1636 LVDS transmitter		
Onboard Audio	VIA VT1708S High Definition Audio Codec		
Onboard I/O Connectors	2 x USB pin headers for 4 USB 2.0 ports 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) - No LVDS for EPIA-M850-16FL SKU 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		
Back Panel I/O	1 x PS2 KB/MS port 1 x VGA port 1 x Serial port 1 x HDMI port 1 x GigaLAN 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) 1 x TV connector (S-Video/Component/Composite) for EPIA-M850-16FL only		
BIOS	AMI BIOS SPI 4/8Mbit flash memory		
Operating System	Windows 7, Windows XP, Windows Embedded Standard, Windows Embedded CE, Linux		
System Monitoring & Management	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		
Operating Temperature	0°C ~ 60°C		
Operating Humidity	0% ~ 95% (relative humidity; non-condensing)		
Form Factor	Mini-ITX 17 cm x 17 cm (6.7" x 6.7")		

Back Panel I/O



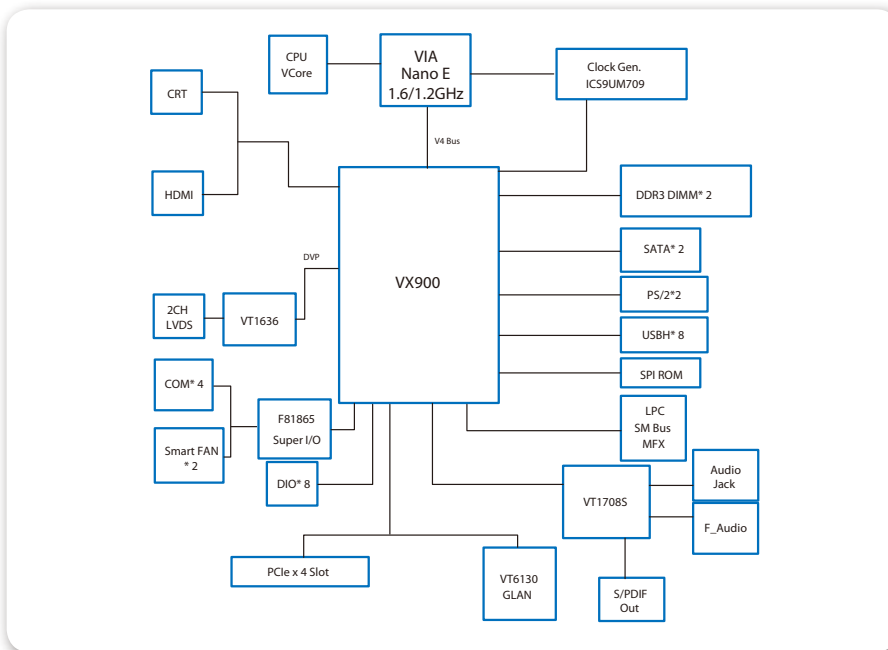
Accessories



Ordering Information

Model Name	CPU Frequency	Description
EPIA-M850-16L	1.6GHz Nano™ E	Mini-ITX Board with 1.6GHz Nano™ E CPU, 1 PCIe x4, 8 USB, 4 COM, 1 GigaLAN, 1 VGA, 1 HDMI, 1 LVDS
EPIA-M850-12EL	1.2GHz Nano™ E	Mini-ITX Board with 1.2GHz Nano™ E CPU, 1 PCIe x4, 8 USB, 4 COM, 1 GigaLAN, 1 VGA, 1 HDMI, 1 LVDS
EPIA-M850-16FL	1.6GHz Nano™ E	Mini-ITX Board with 1.6GHz Nano™ E CPU, 1 PCIe x4, 8 USB, 4 COM, 1 GigaLAN, 1 VGA, 1 HDMI, TV-out

Block Diagram



Packing List

Items
1 x SATA cable
1 x I/O bracket