

Pico-ITX Series

VIA

EPIA-P830

Pico-ITX Nano™ E Board
with Full HD Video Support,
SATA, GigaLAN, USB, and
VGA/HDMI®/LVDS

Features

- Supports wide temperature from -20°C up to 70°C (only for EPIA-P830-12LW2)
- Integrated VIA Chrome9™ HD DX9 3D/2D graphics with VC1, MPEG-2, WMV9 and H.264 decoding acceleration
- Supports high-bandwidth DDR3 memory, up to 4GB
- Supports two SATA
- Supports one PCIe Gigabit Ethernet
- Supports seven USB 2.0 ports (five as pin headers)
- Supports digital I/O
- Supports one VGA and one HDMI port
- Supports one single-channel 24-bit LVDS panel



Board Placement

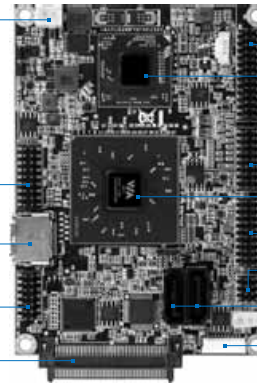
DC-in

VGA/USB pin connector

HDMI

GigaLAN pin connector

2 x 1-lane PCIe



LPC/SMBus/GPIO pin connector

VIA Nano™ E processor

Front panel/PS2 pin connector

VIA VX900H chipset

USB 2.0 x 5 pin connector

Front audio connector

SATA connector

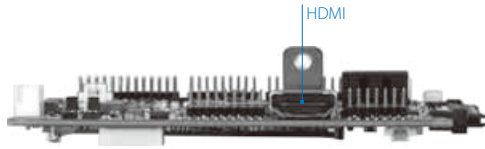
UART port

Specifications

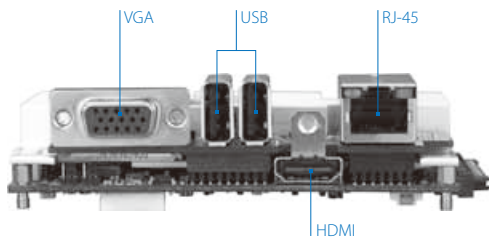
Model Name	EPIA-P830-12L	EPIA-P830-12LW2
Processor	1.2GHz VIA Nano™ E	
Chipset	VIA VX900H Media System Processor	
System Memory	1 x DDR3 800/1066 SODIMM socket Up to 4GB memory size	DDR3 1066 2GB memory (pre-assembly)
VGA	Integrated VIA Chrome9™ HD DX9 3D/2D graphics with VC1, MPEG-2, WMV9 and H.264 decoding acceleration	
Onboard Serial ATA	2 x SATA connectors	
Onboard LAN	1 x VIA VT6130 PCIe Gigabit Ethernet controller	
Onboard Audio	VIA VT1708S High Definition Audio Codec	
Onboard Super IO	Fintek F81801U-I	
Onboard I/O Connectors	1 x USB pin connector for 5 additional USB 2.0 ports 1 x LPC pin connector 1 x SMBus pin connector 1 x Front panel pin connector 1 x PS2 mouse/keyboard pin connector 1 x Fan pin connectors: Sys FAN 1 x 1-CH 24-bit LVDS panel pin connector 1 x Audio pin connector for Line-in, Line-out & MIC-in 1 x LAN pin connector 1 x DIO pin connector (4GPI+4GPO) 2 x UART port pin-headers 1 x Backlight control for panel 1 x SPI flash connector/VCP 1 x SATA power connector 1 x 12V DC-in power connector	
Back Panel I/O	1 x HDMI port 1 x VGA port 1 x GigaLAN port 2 x USB 2.0 ports	
BIOS	AMI BIOS 8Mbit SPI flash memory	
Operating System	Windows 7, Windows Embedded CE, Windows Embedded Standard, Windows XP, Linux	
System Monitoring & Management	Wake-on LAN, Keyboard Power-on, Timer Power-on System power management, AC power failure recovery Watch Dog Timer	
Operating Temperature	0°C up to 60°C	-20°C up to 70°C
Operating Humidity	0% ~ 95% (relative humidity; non-condensing)	
Form Factor	Pico-ITX 10 cm x 7.2 cm	
Compliance	CE/FCC/BSMI/RoHS	

Back Panel I/O

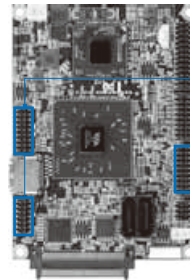
I/O of EPIA-P830 Board



I/O of EPIA-P830 Board with P830-A



Accessories



P830-A
VGA/GigaLAN/2 USB 2.0

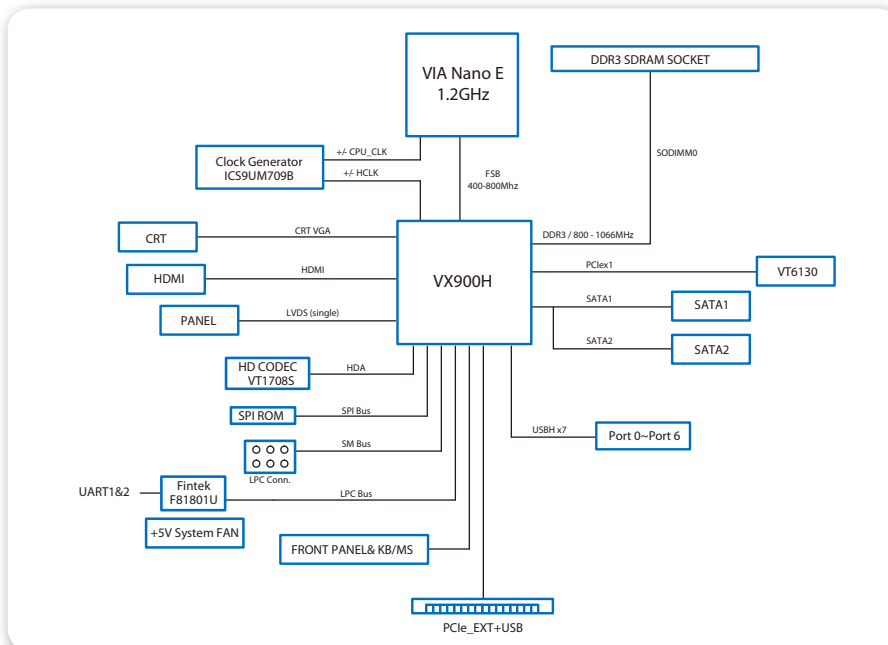


WLAN USB Module
802.11b/g/n standards

Ordering Information

Model Name	CPU Frequency	Description
EPIA-P830-12L	1.2GHz Nano™ E	Pico-ITX Board with 1.2GHz Nano™ E CPU, VC1, MPEG-2, WMV9, H.264, 2 SATA, 1 GLAN, 7 USB, 1 VGA, 1 HDMI, 1 LVDS
EPIA-P830-12LW2	1.2GHz Nano™ E	Pico-ITX Board with 1.2GHz Nano™ E CPU, VC1, MPEG-2, WMV9, H.264, 2 SATA, 1 GLAN, 7 USB, 1 VGA, 1 HDMI, 1 LVDS, DDR3 2GB Memory (Pre-assembly)

Block Diagram



Packing List

Items
1 x EPIA-P830-A IO card (pre-assembled)
1 x DC power cable
1 x SATA cable
1 x SATA power cable