

Quick Guide

Accessory Category	Module	Description	Compatible Model
Graphics Card	eH1 NEW	S3 5400E graphics card supports two displays (HDMI, DVI/VGA)	EPIA-M850, M840, M830, VB8001
Display Module	DVI-05	Supports DVI monitor	EPIA-M800, M700
	HDMI-01	Supports HDMI monitor	EPIA-M800, M700
	LVDS-08	Supports 18-bit or 24-bit LCD panel display	EPIA NX
	LVDS-07	Supports 18-bit or 24-bit LCD panel display	EPIA EN
Power Board	PWB-M120	DC-DC power board: 12-24 V input/ 120 W output	Mini-ITX series with C7® & Nano™ CPU
	PWB-N550	DC-DC power board: 12 V input/ 60 W output	EPIA PX, NX, NR
Expansion Module	EXT-PCI	One to two PCI riser card	Mini-ITX series with PCI slot
	PCIE-01	One PCIe riser card	EPIA-M850, M840, M830, VB8001
	LPC-01	Expansion module for four RS232 ports (5 V or 12 V)	Boards with standard LPC pin header
	LPC-02	Expansion module for two RS232 ports and two RS232/422/485 ports (5 V or 12 V)	Boards with standard LPC pin header
WLAN Module	WLAN Mini PCI	Supports IEEE 802.11b/g	EPIA-N800, N700, NX, NR, VB8001
	WLAN Mini PCIe NEW	Supports IEEE 802.11b/g/n	EPIA-M860, M830
	WLAN USB module	Supports IEEE 802.11b/g	Boards with USB pin header
	WLAN USB module NEW	Supports IEEE 802.11b/g/n	Boards with USB pin header

Graphics Card Series

NEW

VIA eH1

S3 Chrome® 5400E DDR3
512MB Low Profile HDMI®,
DVI, PCI-Express Add-in
Graphics Card



Features

- Powered by S3 5400E GPU
- PCI Express 2.0 (5.0Gbps) x16, with support for fractional x1, x4 and x8 link-widths
- Supports two displays (HDMI, DVI/VGA)
- Supports Windows® XP, Windows® 7, Windows® Embedded Standard 7 and Linux
- Microsoft® DirectX® 10.1, OpenGL 3.1
- Blu-ray support (H.264, VC-1, MPEG-2)
- Stereoscopic 3D capable*
- Supports dual-link DVI
- Supports HDCP
- Display resolution up to 2560 x 1600
- Power management optimizations

Specifications

Model Name	eH1	
GPU	S3 Chrome 5400E	
Memory	Memory Size	512MB
	Memory Type	DDR3
3D API	DirectX	DirectX® 10.1, Shader Model 4.1
	OpenGL	3.1
Interface	PCI Express™ Gen 2 x16	
Ports & Display	HDMI (with HDCP™)	1 (Integrated HD Audio Controller)
	DVI (with HDCP™)	1 (Dual Link)
	Single and Multi-Display Configurations	Single display options: - HDMI - Dual-link DVI - CRT requires DVI-CRT adapter Two-display options - HDMI + dual-link DVI - HDMI + HDMI via DVI-HDMI cable (audio available under Windows Vista and Win 7) - DVI + DVI via HDMI-DVI cable (no audio)
	General	Maximum HD Resolution
	Maximum Resolution	2560 x 1600
	Power Management Optimizations	Dynamic voltage and frequency scaling and integrated temperature sensor technology
	Operating System	Windows XP, Windows 7, Windows Embedded Standard 7 and Linux
	Dimension	167.64 mm x 68.90mm
	Compatible model	EPIA-M850, M840, M830, VB8001

Packing List

Items
1 x eH1 graphics card
1 x DVI-VGA adapter
1 x Driver CD

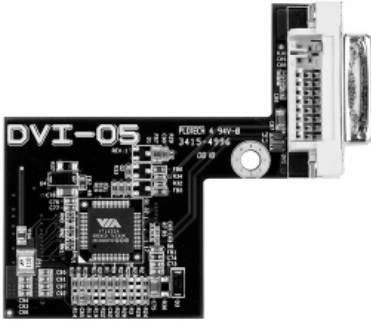
* 3D capable monitor and additional accessories may be required for stereoscopic 3D.



Display Module

DVI-05

DVI Monitor Support



Features

- Supports DVI monitor
- Transmitter Chip: VIA VT1632A
- I/O interface: 1 x DVI connector
- Compatible Model: EPIA-M800, M700
- Size: 72.8 mm x 69 mm

Packing List

2 x Screws

1 x Bolt

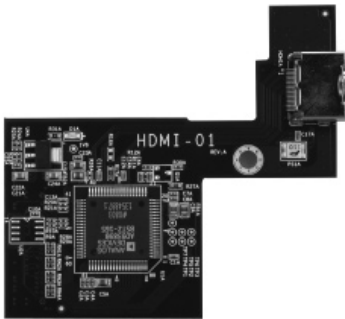
1 x Washer

* This product is only available for special projects. Please contact your regional sales representative for more details.

Display Module

HDMI-01

HDMI Monitor Support



Features

- Supports HDMI display
- Transmitter chips: AD9389B
- IO interface: 1 x HDMI connector
- Compatible model: EPIA-M800, M700
- Size: 72.8 mm x 69 mm

Packing List

2 x Screws

1 x Bolt

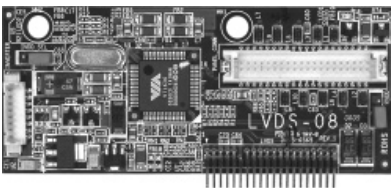
1 x Washer

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Display Module

LVDS-08

LCD Panel Display Support



Features

- Supports 18-bit and 24-bit LCD panel display
- Transmitter chip: VIA VT1636
- Both single and dual channel support, with resolutions up to 1600 x 1200
- Compatible model: EPIA NX
- Size: 75 mm x 30 mm

Packing List

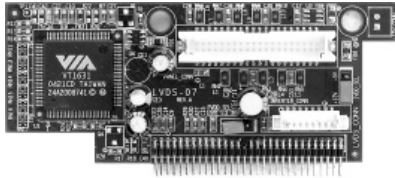
1 x LVDS-08 module

2 x Screws

Display Module

LVDS-07

LCD Panel Display Support



Features

- Supports 18-bit or 24-bit LCD panel display, selectable by SKU
- Transmitter Chip: VIA VT1631L
- Both single and dual channel support, with resolutions up to 1600 x 1200
- Compatible model: EPIA EN
- Size: 78 mm x 32 mm

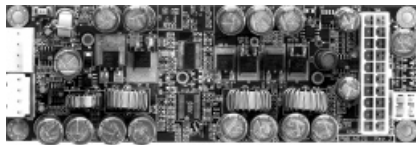
Packing List

- 1 x LVDS-07 module
- 2 x Screws

Power Board

PWB-M120

DC to DC Power Board



Features

- **Protection**
 - Output Voltage Protection (Over Voltage Protection) OVP
 - Output Current Protection (Output Short Protection)
 - Output Voltage Protection (Under Voltage Protection) UVP
- **Operating Temperature:** 0 ~ 50°C
- **Operating Humidity:** 0% ~ 95% (relative humidity; non-condensing)
- **Form Factor:**
 - 4-layer
 - 150 mm x 51 mm
- **Compatible Model:** Mini-ITX series with C7® & Nano™ CPU
- **DC Input**

Input	Minimum	Nominal	Maximum
Voltage	11.4 V~22.8 V	12 V~24 V	12.6 V~25.2 V
Current		5.42 A~10.84 A	

- **DC Output Voltage**

Output	Minimum	Nominal	Maximum	Maximum Combined Power
+5 V_SB	4.75 V	5 V	5.25 V	122.2 W
+3.3 V	3.14 V	3.3 V	3.47 V	
+5 V	4.75 V	5 V	5.25 V	
+12 V	11.4 V	12 V	12.6 V	
Power Good	4.75 V	5 V	5.25 V	

- **DC Output Current**

+5 V_SB	+3.3 V	+5 V	+12 V	-12 V	Power Good	Maximum Combined Power
2 A	6 A	6 A	5 A	200 mA	0.1 A	122.2 W

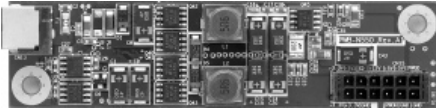
Packing List

- 1 x PWB-M120 power board
- 1 x DC-in module
- 1 x DC input power cable
- 1 x 20-pin power cable with IDE/FDD connectors

Power Board

PWB-N550

DC to DC Power Board



Features

- **Protection**
 - Input Voltage Protection (Over Voltage Protection)
 - Output Voltage Protection (Over Voltage Protection) OVP
 - Output Current Protection (Output Short Protection)
 - Output Voltage Protection (Under Voltage Protection) UVP
- **Operating Temperature:** 0~50°C
- **Operating Humidity:** 0% ~ 95% (relative humidity; non-condensing)
- **Form Factor:**
 - 4-layer
 - 100 mm x 25 mm
- **Compatible Model:** EPIA PX, NX, NR
- **DC Input**

Input	Minimum	Nominal	Maximum
Voltage	11.4 V	12 V	12.6 V
Current		5 A	

- **DC Output Voltage**

Output	Minimum	Nominal	Maximum	Maximum Combined Power
+5 V_SB	4.75 V	5 V	5.25 V	61.2 W
+3.3 V	3.14 V	3.3 V	3.47 V	
+5 V	4.75 V	5 V	5.25 V	
+12 V	11.4 V	12 V	12.6 V	
Power Good	4.75 V	5 V	5.25 V	

- **DC Output Current**

+5 V_SB	+3.3 V	+5 V	+12 V	Power Good	Maximum Combined Power
0.8 A	4 A	4 A	2 A	-	61.2 W

Packing List

- 1 x PWB-N550 power board
- 1 x 12-pin power cable with IDE/FDD connectors for Nano-ITX
(or 1 x 12-pin power cable for Pico-ITX)

Expansion Module

EXT-PCI

One to Two PCI Riser Card



Features

- Supports one to two PCI riser card
- Compatible model: Mini-ITX series with PCI slot
- Size: 112 mm x 46 mm

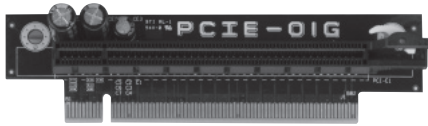
Packing List

- 1 x EXT-PCI module

Expansion Module

PCIE-01

One PCIe Riser Card



Features

- PCIe riser card to support one 16-lane PCIe slot
- Compatible model: EPIA-M850, M840, M830, VB8001
- Size: 120 mm x 32 mm

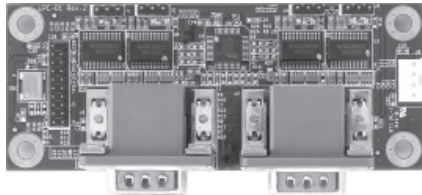
Packing List

1 x PCIE-01 module

Expansion Module

LPC-01

Expansion Module for Four RS232 Ports
(5 V or 12 V)



Features

- Expansion module for four COM ports (5 V or 12 V)
- Compatible model: Boards with standard LPC pin header
- Size: 100 mm x 40 mm

Optional



LPC Cable

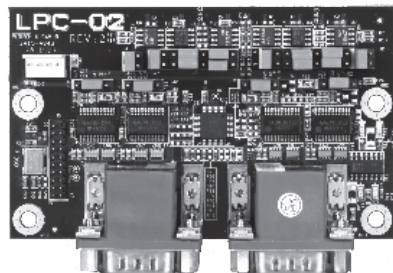
Packing List

1 x LPC-01 module
1 x LPC cable (For specific SKU)

Expansion Module

LPC-02

Expansion Module for Two RS232 Ports and Two
RS232/422/485 Ports (5 V or 12 V)



Features

- Expansion module for four COM ports (5 V or 12 V)
- COM1 & COM2 are selectable for RS232/422/485, and COM3 & COM4 are dedicated for RS232
- Compatible model: Boards with standard LPC pin header
- Size: 100 mm x 60 mm

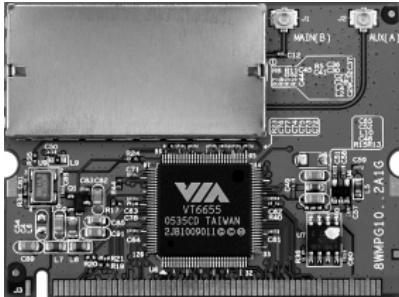
Packing List

1 x LPC-02 module
1 x LPC cable (for specific SKU)

WLAN Module

WLAN Mini PCI

IEEE 802.11 b/g Standards



Features

- Supports 802.11 b/g standards
- WLAN controller: VT6655
- Compatible model: EPIA-N800, N700, NX, NR, VB8001
- Size: 60 mm x 45 mm

Packing List

1 x WLAN Mini PCI module

WLAN Module

NEW

WLAN Mini PCIe

IEEE 802.11b/g/n Standards



Features

- Supports 802.11b/g/n standards
- WLAN controller: Atheros AR9285
- Compatible model: EPIA-M860, M830
- Size: 30mm x 26.8mm

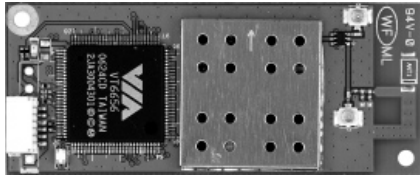
Packing List

1 x WLAN Mini PCIe module

WLAN Module

WLAN USB Module

IEEE 802.11 b/g Standards



Features

- Supports 802.11 b/g standards
- WLAN controller: VT6656
- Compatible model: Boards with USB pin header
- Size: 25 mm x 60 mm

Packing List

1 x WLAN USB module

WLAN Module

NEW

WLAN USB Module

IEEE 802.11 b/g/n Standards



Features

- Supports 802.11b/g/n standards
- WLAN controller: Atheros AR9271
- Compatible model: Boards with USB pin header
- Size: 35mm x 17mm

Packing List

1 x WLAN USB module