

VBase-PCIE104

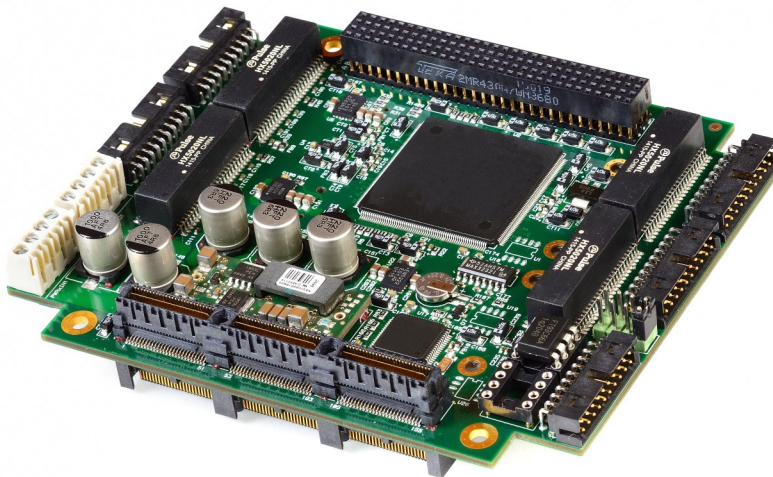
Rugged Vehicle Baseboard for PCIe104 systems



**Advanced Micro
Peripherals**

THE EMBEDDED VIDEO EXPERTS

The VBase-PCIE104 is a highly integrated PCIe104 module providing a number of essential functions specially for rugged vehicle applications. The VBase-PCIE104 features an integrated vehicle power supply, 8-port gigabit Ethernet switch fabric and slots for mounting miniPCIE and mSATA modules to a PCIe104 stack.



VBase-PCIE104

The VBase-PCIE104 allows IP subsystems such as IP cameras, network video recorders (NVR), network attached storage (NAS) to be combined through 1Gbit Ethernet Fabric producing powerful embedded systems.

The VBase-PCIE104 power supply unit accepts a DC input voltage from +9V to 28V and provides +5V to the PCIe104 and PCI104 busses. Vehicle specific enhancements of the power supply include reverse voltage input protection, vehicle load dump protection, and transient voltage protection.

PRELIMINARY INFORMATION (Rev A.00)

Subject to change without notification

Advanced Micro Peripherals Ltd
Cambridge, CB6 2HY, England
Tel (+44) 1353 659500
Fax (+44) 1353 659600
sales@ampitd.com
<http://www.ampitd.com>

Advanced Micro Peripherals Inc
New York, NY10016, USA
Tel (+1) 212 951 7205
Fax (+1) 212 951 7206
sales@amp-usa.com
<http://www.amp-usa.com>

Integrated Vehicle

Power Supply

8 port Gigabit

Ethernet Switch

Fabric

mPCIe and mSATA

sockets



VBase-PCle104

Rugged Vehicle Baseboard for PCIe104 systems



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The VBase-PCle104 also functions at a miniPCle adapter and allows miniPCle expansion modules to be easily added to PCIe104 systems.

For attaching rugged flash storage the VBase-PCle104 features a mSATA socket that is connected to the SATA signalling carried on the PCIe104 bus.

Features

- ♦ Integrated vehicle power supply
 - ♦ DC input range from +9V to 28V
 - ♦ +5V DC output at up to 7A
- ♦ 8 Port Gigabit Ethernet Switch/Fabric
- ♦ miniPCle socket
- ♦ mSATA socket
- ♦ Operating temp -40°C to +85°C (Ext temp option)
- ♦ Standard PCIe104 mechanical form factor

Applications

- ♦ Multiple IP camera surveillance
- ♦ Networked mission data and video recorders
- ♦ Transportation
- ♦ Heterogeneous intra-platform network
- ♦ Intelligent sensors
- ♦ Distributed systems

Ideal for

IP Camera

Aggregation,

Network Video

Recorders,

Mission Data

Recorders

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sales@amp-usa.com
<http://www.amp-usa.com>



PC/104-Express Bus Interface

Single x1 PCI Express Link

PCI104

PCI104 (PCI) connector passthru

Ethernet Switch

Unmanaged Gigabit Ethernet Switch Fabric
 8x 10/100/1000 Mbps Ethernet ports
 Fully compliant with IEEE802.3 and IEEE802.3x
 IEEE802.3az EEE (Energy Efficient Ethernet) support
 IEEE802.3as support
 Jumbo Frame Support (up to 9720 bytes)

Power Supply

+9V to +28V DC Input
 +5V Output at 7A
 Over-voltage protection
 Vehicle Load-Dump protection
 Reverse voltage protection
 +5V Outputs to:
 PCIe104 connector
 PCI104 connector
 Auxiliary power output

mPCI-e

1x miniPCI-express slot

mSATA

1x mSATA slot

Requires CPU with SATA support on PCIe104 connector.

Mechanical

4.55in x 3.775in PCIe104 form factor
 Operating temp 0°C to 60°C
 Operating temp -40°C to +85°C (extended temp option)

Ordering Information**VBase-PCIe104**

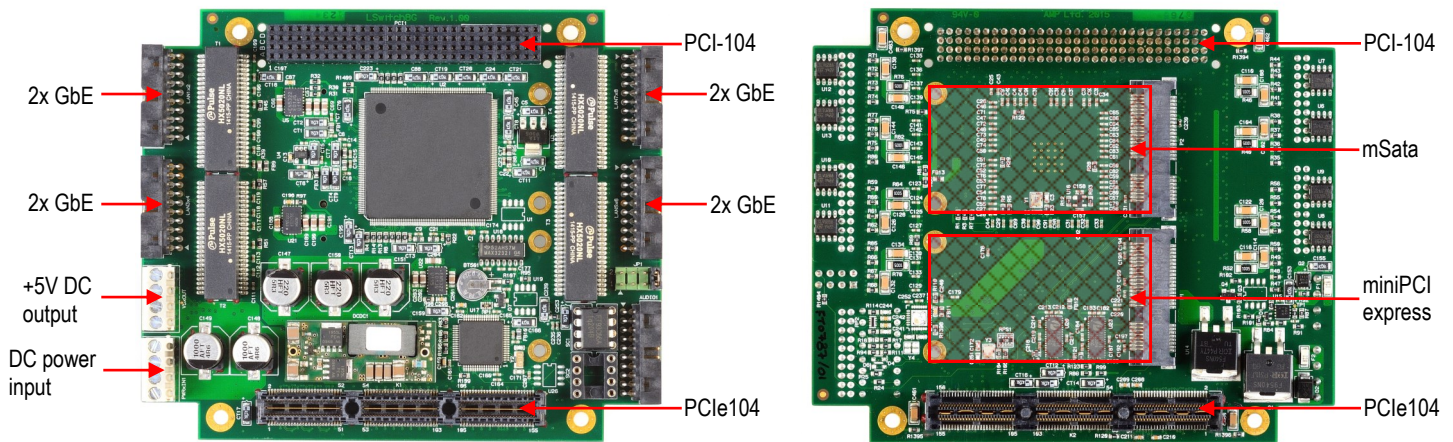
Rugged Vehicle Baseboard (0 to 60°C)

VBase-PCIe104

Rugged Vehicle Baseboard (-40°C to +85°C)

Related Products**TinyATOM**

PCI/104-Express Intel® Atom™ SBC

**VBase-PCIe104**