



LinkedHope Intelligent Technologies Co., Ltd

VP32004

3U VPX Board Based on Intel® 3rd Gen Core™ Processors



- 👍 Based on Intel® 3rd Generation Core™ i7/i5/i3/Celeron® processor, 4 cores/ 8 threads
- 👍 Intel® QM77 chipset
- 👍 PCIe 3.0 data planes
- 👍 Up to 16GB DDR3 memory onboard
- 👍 Support mSATA flash disk
- 👍 Air Cooling and Conduction Cooling versions

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Overview

VP32004 is a high-performance PC-based 3U VPX processor board developed by **Linkedhope®**. It supports 3rd Gen Intel Core series processor and Intel QM77 chipset. It supports up to 16GB of on-board DDR3 ECC memory and supports mSATA SSD. In order to ensure that **VP32004** works stably in a strong shock and vibration environment. **VP32004** provides rich I/O interface, including 2x SATA III channels, 2x 1000 Base-BX/T, 1x RS232 front debug serial port, 3x RS232/422/485 interfaces (BIOS configurable), 4x USB2.0 interface, 1x USB3.0 interface, 1x Mini-DisplayPort display interface, 1x rear VGA display interface, 1x PS/2 interface.

The board provides a flexible PCIe bus interface to the backplane that supports multiple configurations and can be configured as 1 x8, 2 x4, 4 x2 PCIe. This feature

makes it suitable for both distributed and centralized switching systems.

In order to facilitate users to quickly form an application solution based on **VP32004**, **Linkedhope®** developed a complete driver package for **VP32004**, supporting Windows, VxWorks, Linux and QNX operating systems.

Apart from the traditional Air Cooling version, **VP32004** provides a Conduction Cooling version to guarantee its performance in harsh environment and in an extended working temperature.

Target applications:

Industrial Control, Transportation, Aerospace, Security & Government

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Technical Information

Specification
<ul style="list-style-type: none"> VITA46, VITA65 MOD3-PAY-2F2U-16.2.3-3 profile compliant MOD3-PAY-2F2T-16.2.5-3 profile compliant
Weight
<ul style="list-style-type: none"> ≤490g
Processor
<ul style="list-style-type: none"> 3rd Generation Intel® processor up to 4 cores/8 threads Intel® Core™ i7/i5/i3/Celeron® embedded (Ivy Bridge)
Memory
<ul style="list-style-type: none"> Up to 16GB DDR3 SDRAM (1066/1333/1600MHz) Dual channel with ECC support Soldered on board
VPX Rear I/O
<ul style="list-style-type: none"> P1 VPX Date Plane 01-02: 1x8 PCIe Port (1x8,2x4,4x2 optional) VPX Ctp01-02: 2x1000BASE-T/BX (BIOS configuration) 2x SATA III; 2x USB2.0; 1x RS232/422/485(BIOS configuration) P2 VPX Rear I/O VGA, 3xGPIOs, 2x USB2.0, 1x PS/2; 2x RS232/422/485(BIOS configuration)
Serial port
<ul style="list-style-type: none"> COM1 ports to the front panel (RS232 on RJ45) COM2 ports to P1(RS232/422/485) COM3&COM4 ports to P2(RS232/422/485)

Dimension
<ul style="list-style-type: none"> 3U, 4HP/5HP
MTBF
<ul style="list-style-type: none"> >150000 h
Chipset
<ul style="list-style-type: none"> Intel® Mobile QM77 Intel® HM76 PCH (Celeron versions)
Storage
<ul style="list-style-type: none"> mSATA 2x SATA III on VPX rear I/O
PCIe
<ul style="list-style-type: none"> x8 Lanes PCI Express 3.0 to PCIe Switch x4 Lanes PCI Express 2.0 to Intel 82580EB
Display
<ul style="list-style-type: none"> Mini DisplayPort (Front panel) VGA On VPX Rear Connector P2
Network Interface
<ul style="list-style-type: none"> One Intel® 82580EB Quad Gigabit Ethernet Controller

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Front I/O (Air Cooling version optional)

- Mini DisplayPort
- 1x USB 3.0
- 1x GbE: RJ-45 connector
- RS232: RJ-45 connector

OS&BSP

- Windows XP(e), Windows 7/WES 7, Windows 8
- Linux
- VxWorks
- QNX

Humidity

- 95% RH at 40°C

Temperature

- Operation Temperature:
0°C to +60°C & -40°C to +70°C
- Storage Temperature:
-55°C to +85°C

Order Information

Product	Part No.	Description
VP32004	10-0000-1032	4HP 3U payload, Intel Core i7-3517UE, 2x 1.7 GHz, Intel QM77, Memory4GB, 4x 2PCIe, 2x GbE, 3x RS232/422/485, 4x USB2.0, 2x SATA+1x mSATA, 1x VGA, PS/2, Without front I/O, -40°C ~ +70°C, Conduction Cooling.
VP32004	10-0000-1076	4HP 3U payload, Intel Core i7-3517UE, 2x 1.7 GHz, Intel QM77, Memory4GB, 4x 2PCIe, 2x GbE, 3x RS232/422/485, 4x USB2.0, 2x SATA+1x mSATA, 1x VGA, PS/2, Front I/O: 1x USB3.0, 1x Mini-DisplayPort, 1x RS232, 1x GbE; -40°C ~ +70°C, Air Cooling.
VP32004	10-0000-0940	4HP 3U payload, Intel Core i7-3555LE, 2x 2.5 GHz, Intel QM77, Memory4GB, 4x 2PCIe, 2x GbE, 3x RS232/422/485, 4x USB2.0, 2x SATA+1x mSATA, 1x VGA, PS/2, Without front I/O, -40°C ~ +70°C, Conduction Cooling.
VP32004	10-0000-1077	4HP 3U payload, Intel Core i7-3555LE, 2x 2.5 GHz, Intel QM77, Memory4GB, 4x 2PCIe, 2x GbE, 3x RS232/422/485, 4x USB2.0, 2x SATA+1x mSATA, 1x VGA, PS/2, Front I/O: 1x USB3.0, 1x Mini-DisplayPort, 1x RS232, 1x GbE; -40°C ~ +70°C, Air Cooling.

More optional configuration:

CPU = i7-3615QE (4x2.3GHz), i7-3612QE (4x2.1GHz), **i7-3555LE (2x2.5GHz)**, i7-3517UE(2x1.7GHz),
i5-3610ME (2x2.7GHz), i3-3120ME(2x2.4GHz), i3-3217UE(2x1.6GHz), Celeron 1020E(2x2.2GHz),
Celeron 1047UE(2x1.4GHz), Celeron 927UE(1x1.5GHz)

Memory = **4GB**, 8GB, 16GB

Front Panel = 4HP, **5HP**

Thermal Dissipation = **Air Cooling**, Conduction Cooling

Please contact LinkedHope® sales rep for more ordering information.

Contact

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