CP32109

3U CPCI Processor Board Based on Intel® Bay Trail Platform

- Supports Intel® Atom E3800 and Celeron N2930 processors
- Up to 4GB DDR3L memory onboard
- Supports 4-channel isolated 24V input interrupt (triggers system interrupt)
- Supports VGA display output
- Hot Swap enabled
## Overview

Based on Intel® Bay Trail platform E3800 CPU and Celeron CPU, **CP32109** is a compact 3U CPCI single board computer compliant with CompactPCI® specification.

On **CP32109**, there is a CFast interface for system installation, and several peripheral interfaces include SATAII, USB2.0 and GbE.

**CP32109** integrates Intel® HD Graphics display controller, and supports VGA output.

**CP32109** has high-performance and low power consumption, and can provide better bandwidth for data transmission. With better bandwidth, ruggedized design and extended operation temperature, **CP32109** is extremely suitable for fields and applications that have high requirements on product reliability and applicability.

Besides, **LinkedHope®** provides **CP32109** with a wealth of software drivers and BSP, including VxWorks, Linux, Windows, etc., which reduce the workloads of system integrators and product developers, and greatly shorten the time-to-market.

**CP32109** is designed and produced with full life-cycle management to best guarantee the long-term supply and maintenance for special industrial applications.

### Target applications:

Rail Transportation, Command and control, Machinery, Industrial Control

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### Technical Information

#### Specification

- PICMG 2.0 R3.0

#### Serial Port

- Compliant with 16C550 UART
- 1x RS232 (simplified)

#### Processor

- Intel® Celeron® N2930, 4 cores 4 threads, 2M Cache, CPU frequency 1.83GHz, turbo Boost 2.16GHz, TDP 7.5W
- Intel® Atom® E3845, 4 cores 4 threads, 2M L2 Cache, CPU frequency 1.91GHz, TDP 10W
- Intel® Atom® E3827, 2 cores 2 threads, 1M L2 Cache, CPU frequency 1.75GHz, TDP 8W
- Intel® Atom® E3826, 2 cores 2 threads, 1M L2 Cache, CPU frequency 1.46GHz, TDP 7W
- Intel® Atom® E3815, 1 core 1 thread, 512K L2 Cache, CPU frequency 1.46GHz, TDP 5W

#### Ethernet

- 3x GbE (with one routed to front and 2 routed to rear I/O)

#### USB

- Front I/O: 2x USB3.0
- Rear I/O: 4x USB2.0

#### Chipset

- Integrated with CPU

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### Dimension

- 3U, 4 HP

### Memory

- Up to 4GB DDR3L-1333 dual channel

### Display

- Integrated Intel® HD Graphics
- Supports VGA output (resolution up to 1920x1080@60Hz or 2048x1152@60Hz)

### BUS

- 32bit, 33/66MHz CPCI bus
- Up to 7 peripheral slots
- 5V or 3.3V PCI level

### Power Consumption

- 10 ~ 15W

### Storage

- 1x CFast onboard
- 1x SATAII on rear

### Triggered Interrupt

- 4-channel isolated 24V input interrupt (can trigger system interrupt)
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**Order Information**

<table>
<thead>
<tr>
<th>Product</th>
<th>Part No.</th>
<th>Description</th>
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<tbody>
<tr>
<td>CP32109</td>
<td>10-0000-0959</td>
<td>3U 4HP CompactPCI processor board, with E3845 CPU (4x1.91GHz, 10W TDP), 2GB DDR3L 1333 on board memory, 1x CFast socket, 3x GbE, 2x RS232, 6x USB2.0, 1x SATAII, 1x VGA, and 4x24V GPIO for IRQ generating. Operation temperature: 0°C to +60°C, air cooling.</td>
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<td>CP32109</td>
<td>10-0000-0960</td>
<td>3U 4HP CompactPCI processor board, with E3845 CPU (4x1.91GHz, 10W TDP), 2GB DDR3L 1333 on board memory, 1x CFast socket, 3x GbE, 2x RS232, 6x USB2.0, 1x SATAII, 1x VGA, and 4x24V GPIO for IRQ generating. Operation temperature: -40°C to +85°C, air cooling.</td>
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<tr>
<td>CP32109</td>
<td>10-0000-0961</td>
<td>3U 4HP CompactPCI processor board, with N2930 CPU (4x1.83GHz, 7.5W TDP), 2GB DDR3L 1333 on board memory, 1x CFast socket, 3x GbE, 2x RS232, 6x USB2.0, 1x SATAII, 1x VGA, and 4x24V GPIO for IRQ generating. Operation temperature: 0°C to +60°C, air cooling.</td>
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<tr>
<td>CP32109</td>
<td>10-0000-0962</td>
<td>3U 4HP CompactPCI processor board, with N2930 CPU (4x1.83GHz, 7.5W TDP), 2GB DDR3L 1333 on board memory, 1x CFast socket, 3x GbE, 2x RS232, 6x USB2.0, 1x SATAII, 1x VGA, and 4x24V GPIO for IRQ generating. Operation temperature: -40°C to +85°C, air cooling.</td>
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More optional configuration:

- **CPU** = E3827 (2x 1.75 GHz, TDP 8W), E3826 (2x 1.46 GHz, TDP 7W), E3815 (1x 1.46 GHz, TDP 5W)
- **Storage** = 4GB, 8GB
- **Memory** = 1GB, 2GB, 4GB

Please contact LinkedHope® sales rep for more ordering information.

**Contact**

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