XPand1030

3U cPCI Two-Slot Conduction-Cooled Development System for Cisco® 5940

- Supports system slot
  3U cPCI module
- Supports Cisco® 5940 in peripheral slot
- Integrated heatsink fins
- Built-in cooling fans
- Reset switch
- CompactPCI bus routed between slots
- One front panel RJ-45
  Gigabit Ethernet port from SBC
- Three front panel RJ-45
  Gigabit Ethernet ports from Cisco® 5940
- RS-232 serial port from
  each slot routed to micro-DB-9 connectors
- Front panel HDMI port
  from SBC
- Front panel USB 2.0 port
  from SBC
- Front panel eSATA port
  from SBC

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The XPand1030 system is a low-cost debug, development, and display platform for 3U conduction-cooled cards. It supports one X-ES CompactPCI SBC and the Cisco® 5940 with direct Ethernet and serial I/O access to each board.

The XPand1030 backplane provides CompactPCI bus between the two slots. Ethernet, RS-232 serial I/O, and DVI are routed to RJ-45, micro-DB-9, and HDMI connectors for easy access.

The XPand1030 is the ideal solution for rapid prototyping mobile ad hoc networks (MANET) based on the Cisco® 5940 ESR. The 5940 3U cPCI hardware is complemented by Cisco IOS® Software and Cisco® Mobile Ready Net capabilities. With support for Dynamic Link Exchange Protocol (DLEP), the latest protocol in the Radio Aware Routing (RAR) family of protocols that enable communication between a router and a radio in a mobile ad hoc network, the 5940 provides highly secure yet scalable video, voice, and data services for mobile and embedded outdoor networks.

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Connectors
• One 3U cPCI SBC slot
• One Cisco® 5940 slot
• ATX power supply connector
• Four RJ-45 Ethernet connectors
• One USB Type A connector
• One eSATA connector
• One HDMI connector
• Two micro-DB-9 connectors

Utility Functions
• Front panel reset switch
• Back panel power switch
• Back panel power rail LED indicators

Cisco® 5940 Module
• Ruggedized 3U CompactPCI embedded router
• Cisco IOS® Software

I/O Routing
• J1 (SBC slot) Ethernet port 0 routed to J2 (Cisco® 5940 slot) Ethernet port 0
• J1 (SBC slot) Ethernet port 1 routed to RJ-45 connector
• J2 (Cisco® 5940 slot) Ethernet ports 1 through 3 routed to RJ-45 connectors
• J1 and J2 serial ports routed to micro-DB-9 connectors

External Power Supply
• ATX power supply

Maximum Power Capacity
• 100 W total

*Connection between slots made via bottom-side cat5 jumper cable which can be removed for custom configurations, allowing direct access to SBC GbE0 and Cisco 5940 GbE0 ports