

3U CompactPCI® Side Card

- 4 HP extension for 3U Intel® SBCs
- 2 DVI interfaces
- 4 USB 2.0 interfaces
- SSD up to 512 GB
- Three x1 PCIe links
- Conformal coating for industrial use



The BF1904 is a 4HP I/O extension card for 3U Intel based CompactPCI single-board computers. It can be used in combination with the F23 and compatible SBCs. Connection to SBC is provided by a 114-pin matched impedance plug connector, MICTOR 0.64 mm grid.

The BF1904 modules provides four USB 2.0 and two DVI interfaces. Two USB and one DVI interfaces are routed to standard front-panel connectors, the other can be accessed on the CompactPCI rear I/O connectors.

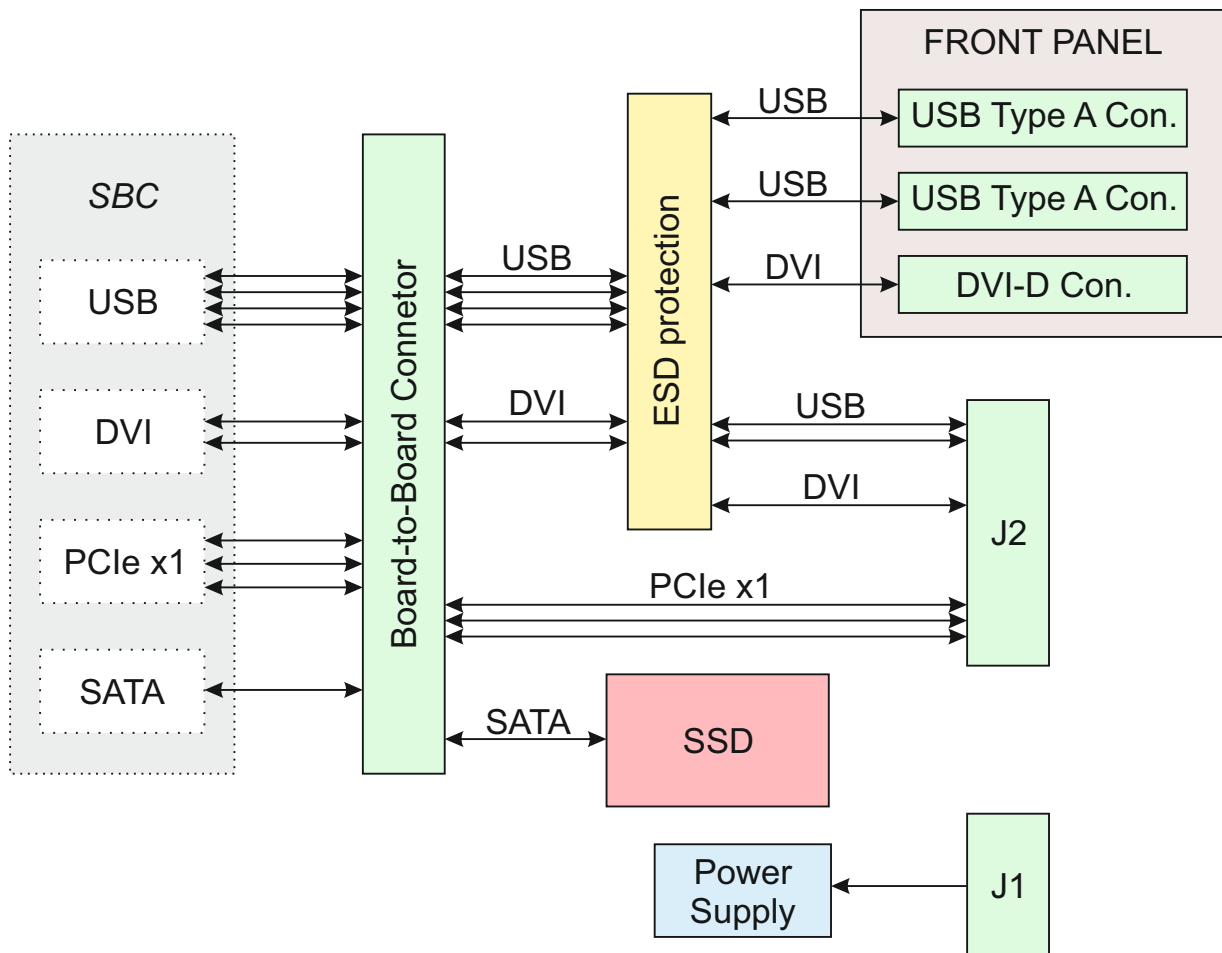
The DVI interface supporting the digital PanelLink technology deliver a maximum of 2560 x 1600 pixels at 60 Hz. On BF1904 the three x1 PCIe links are available for use via rear I/O. SSD is installed on the BF1904 via miniPCIe connector.

The BF1904 is plugged to the right side of the respective singleboard computer directly. A robust connector makes for high mechanical stability. The BF1904 delivered with an 8HP front panel, replacing the 4HP front panel of a 3U single-board computer and thus front panel is solid and one-piece.

Technical Data

I/O	<ul style="list-style-type: none">• DVI<ul style="list-style-type: none">• One DVI-D connector at front panel• One DVI port on the J2 rear I/O connector• Maximum resolution: 2560 x 1600 pixels at 60 Hz• USB<ul style="list-style-type: none">• Two Type A connectors at front panel, USB 2.0 (480 Mbit/s)• Two channels on the J2 rear I/O connector, USB 2.0 (480 Mbit/s)• PCI Express<ul style="list-style-type: none">• Three x1 links (500 MB/s per link), PCIe 2.x (5 Gbit/s per lane)• Ethernet (optional)<ul style="list-style-type: none">• One channel, 1000BASE-T (instead of one PCIe links)
Mass Storage	<ul style="list-style-type: none">• Serial ATA (SATA)<ul style="list-style-type: none">• SATA Revision 2.x (3 Gbit/s), RAID level 0/1/5/10 support• Transfer rates: Read 130 MB/s (max), Write 120 MB/s (max)• Flash Type: SLC (Single Level Cell)• Density up to 64 GB• Flash Endurance: 100 000 program/erase cycles
Miscellaneous	<ul style="list-style-type: none">• CompactPCI® J1 connector are assembled for power supply• CompactPCI® J2 rear I/O connector for interface I/O
Electrical Specifications	<ul style="list-style-type: none">• Supply voltage/power consumption:<ul style="list-style-type: none">• +5V (-3%/+5%), 100mA typ.• +3.3V (-3%/+5%), 300 mA typ.
Mechanical Specifications	<ul style="list-style-type: none">• Dimensions: conforming to CompactPCI® specification for 3U boards 8HP• Weight: 200g (with 8HP front panel)
Environmental Specifications	<ul style="list-style-type: none">• Temperature range (operation): -40..+85°C• Temperature range (storage): -50..+90°C• Relative humidity (operation): max. 98% non-condensing• Shock: 120g/1ms• Vibration (sinusoidal): 2g/1..200Hz• Conformal coating on request
MTBF	1 000 000 h @ 40°C (derived from MIL-HDBK-217F)
Software Support	<ul style="list-style-type: none">• Driver software can be found in the data sheet of the CPU board that you use

Block Diagram



Pin Assignment - I/O Connector

in the process of development

Contact Information

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