



Product Information

SB9-SKA

CompactPCI® Serial • Quad Port USB 3.0 Controller

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General

The SB9-SKA is a quad port USB 3.0 controller for PICMG® CompactPCI® Serial systems. It is an assembly unit, comprised of the SK2-SESSION XMC module carrier card, and the DB4-EAGLE SuperSpeed USB 3.0 controller XMC module.

The SB9-SKA is a CompactPCI® Serial peripheral slot board. Its 5Gbps (xHCI SuperSpeed) USB 3.0 front panel connectors are also suitable for attachment of legacy USB 2.0 compliant devices.



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Theory of Operation

The SB9-SKA requires a single PCI Express® lane from the backplane, passed through across the connector P1 to a PCIe redriver circuit. The XMC module connector J15 is directly tied to the redriver circuit.

The on-board XMC module USB 3.0 controller is equipped with three front panel receptacles. As an ordering option, another USB 3.0 jack is available on-board for internal use e.g. with an USB stick.

Summary of Features

- ▶ PICMG® CompactPCI® Serial Standard (CPCI-S.0) Peripheral Slot Card
- ▶ Assembly Unit Comprising Carrier Board SK2-SESSION & XMC Module DB4-EAGLE
- ▶ Single Size Eurocard 3U 4HP 100x160mm²
- ▶ CPCI-S Backplane Connector P1
- ▶ XMC Module Carrier Board, Equipped with XMC Connector J15
- ▶ PCI Express® Gen1 (2.5Gbps) or Gen2 (5.0Gbps) Supported
- ▶ Bidirectional PCIe ReDriver/Repeater for Optimum Signal Integrity
- ▶ PCI Express® Clock Buffer for Optimum Signal Integrity
- ▶ XMC Module Equipped with 5Gbps Quad Port USB 3.0 Controller
- ▶ xHCI Compliant Drivers Available
- ▶ 3 x Front Panel Type A Connectors for Attachment of External USB 3.0 & USB 2.0 Devices
- ▶ 1 x On-Board USB 3.0 Connector for Internal Usage
- ▶ USB SuperSpeed, High-Speed, Full-Speed, Low-Speed Supported
- ▶ Up to 1.5A VBUS on Each Connector (Electronic Switches for Circuit Protection)
- ▶ Commercial and Industrial Temperature Range
- ▶ Long Term Availability
- ▶ Rugged Solution (Coating/Sealing Available on Request)
- ▶ RoHS compliant

System Integration Options

The SB9-SKA is a CompactPCI® Serial peripheral card. CompactPCI® Serial (CPCI-S.0) is a PICMG® standard for modular industrial computers, which provides high speed serial I/O (PCI Express®, SATA, USB, Gigabit Ethernet) over the backplane. The CPCI-S mechanical design is fully backward compatible to CompactPCI® Classic and will interoperate with existing systems, by means of a hybrid backplane.

Hybrid systems (providing card slots for both CPCI Classic & CPCI Serial) can be configured by means of a CompactPCI® PlusIO CPU card such as the PC1-GROOVE or PC2-LIMBO in combination with a suitable hybrid backplane.

Native CompactPCI® Serial systems (up to 8 CPCI Serial peripheral card slots) can be built around a suitable system slot CPU board such as the SC1-ALLEGRO.



SB9-SKA Assembly Unit

Detailed Information

The SB9-SKA is an assembly unit, which is comprised of a XMC module carrier card, and the XMC module itself. For more detailed information on these components please refer to the table below:

| SB9-SKA Elements | | |
|------------------|-------------|--|
| SK2-SESSION | XMC Carrier | www.ekf.com/s/sk2/sk2.html |
| DB4-EAGLE | XMC Module | www.ekf.com/d/dusb/db4/db4.html |

Ordering Information

| Ordering Information |
|---|
| For popular SB9-SKA SKUs please refer to www.ekf.com/liste/liste_21.html#SB9 |

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