SYSTEM

Product Information

SS9-RAÏ

CompactPCI® *Serial* • 6G SAS Controller

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General

The SS9-RAÏ is a quad-port SAS/SATA 6G controller for PICMG® CompactPCI® Serial systems. It is an assembly unit, comprised of the SK2-SESSION XMC module carrier card, and the DS1-LEOPARD XMC mezzanine module.

The front panel is provided with a Mini SAS 4x connector (SFF-8088), suitable for attachment of up to four external SAS or SATA storage devices, such as hard disk drives, solid state drives, or streamer tapes.

SS9-RAÏ

Theory of Operation

For optimum performance, the SS9-RAÏ requires a Gen2 PCI Express® x 4 link from the CompactPCI® Serial backplane, passed through from the backplane connector P1 via an on-board PCIe redriver circuit to the XMC module connector J15. As an alternate, the SS9-RAÏ can also be operated in a PCIe x 1 peripheral slot.

The on-board XMC module is equipped with a PCI Express® to SAS controller, compliant to Serial Attached SCSI (SAS-2.0), and in addition to Serial ATA (SATA 3.0). The wide (4x) SAS port provides a high-performance interconnect to SAS storage systems and high-capacity SATA JBOD applications.

SS9-RAÏ Assembly Unit

Feature Summary

- PICMG® CompactPCI® Serial standard (CPCI-S.0), peripheral slot card
- Assembly unit comprising carrier board SK2-SESSION & XMC module DS1-LEOPARD
- Single size Eurocard 3U 4HP 100x160mm^2
- 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

- Form factor XMC single-width mezzanine card 149mm x 74mm
- Stack height 10mm XMC to host board
- Host I/F connector P15 XMC (Option XMC 2.0)
- x 1, x 2 or x 4 lane PCI Express® 2.0 (5.0 Gbps) host interface
- Marvell® PCI Express® 2.0 to SAS-2.0 and SATA-3.0 host controller 88SE9445
- Four SAS/SATA 6Gbps interface ports (backward support 3Gbps and 1.5Gbps)
- Native Command Queuing
- Marvell® drivers available

- Front bezel Mini SAS connector 4X (SFF-8088) for attachment of external devices
- Shielded connector, universal key 6, 4, 2 (SAS)
- Suitable for popular Mini Multilane 4X (SFF-8088) cable assemblies 26-conductors
- Splitter cable assemblies available from Mini SAS to 4 x SATA (Y-cable Xover/Fanout)
- Mini SAS 4X cable length 1m, 2m typically, up to 5m on request

- Designed & manufactured in Germany
- ISO 9001 certified quality management system
- Long term availability
- Coating, sealing, underfilling on request
- RoHS compliant 2011/65/EC
- Operating temperature 0°C to +70°C (commercial temperature range)
- Operating temperature -40°C to +85°C on request (industrial temperature range)
- Storage temperature -40°C to +85°C, max. gradient 5°C/min
- Humidity 5% ... 95% RH non condensing
- Altitude -300m ... +3000m
- Shock 15g 0.33ms, 6g 6ms
- Vibration 1g 5-2000Hz
- MTBF tbd
- EC Regulatory EN55022, EN55024, EN60950-1 (UL60950-1/IEC60950-1)

Detailed Information

The SS9-RAÏ 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:

SS9-RAÏ Elements		
SK2-SESSION	XMC Carrier	www.ekf.com/s/sk2/sk2.html
DS1-LEOPARD	XMC Module	www.ekf.com/d/dsas/ds1/ds1.html

Ordering Information

Ordering Information
For popular SS9-RAÏ SKUs please refer to www.ekf.com/liste/liste_21.html#SS9

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