



Product Information

SD1-DISCO • *CompactPCI[®] Serial* • SATA Storage Card

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SD1-DISCO with SSD

General

The SD1-DISCO is a peripheral slot card for CompactPCI® Serial systems. The board accommodates a 2.5-inch size SATA drive, controlled by the SATA channel derived from the backplane connector P1.

The SD1-DISCO provides SATA 6G drivers for optimum signal integrity. A solid state drive (SSD) is recommended for maximum performance. A JBOD or RAID system can be established with two or more cards.



SD1-DISCO w. SSD 2.5-Inch

System Integration Options

The SD1-DISCO 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 PC3-ALLEGRO 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 or SC2-PRESTO.

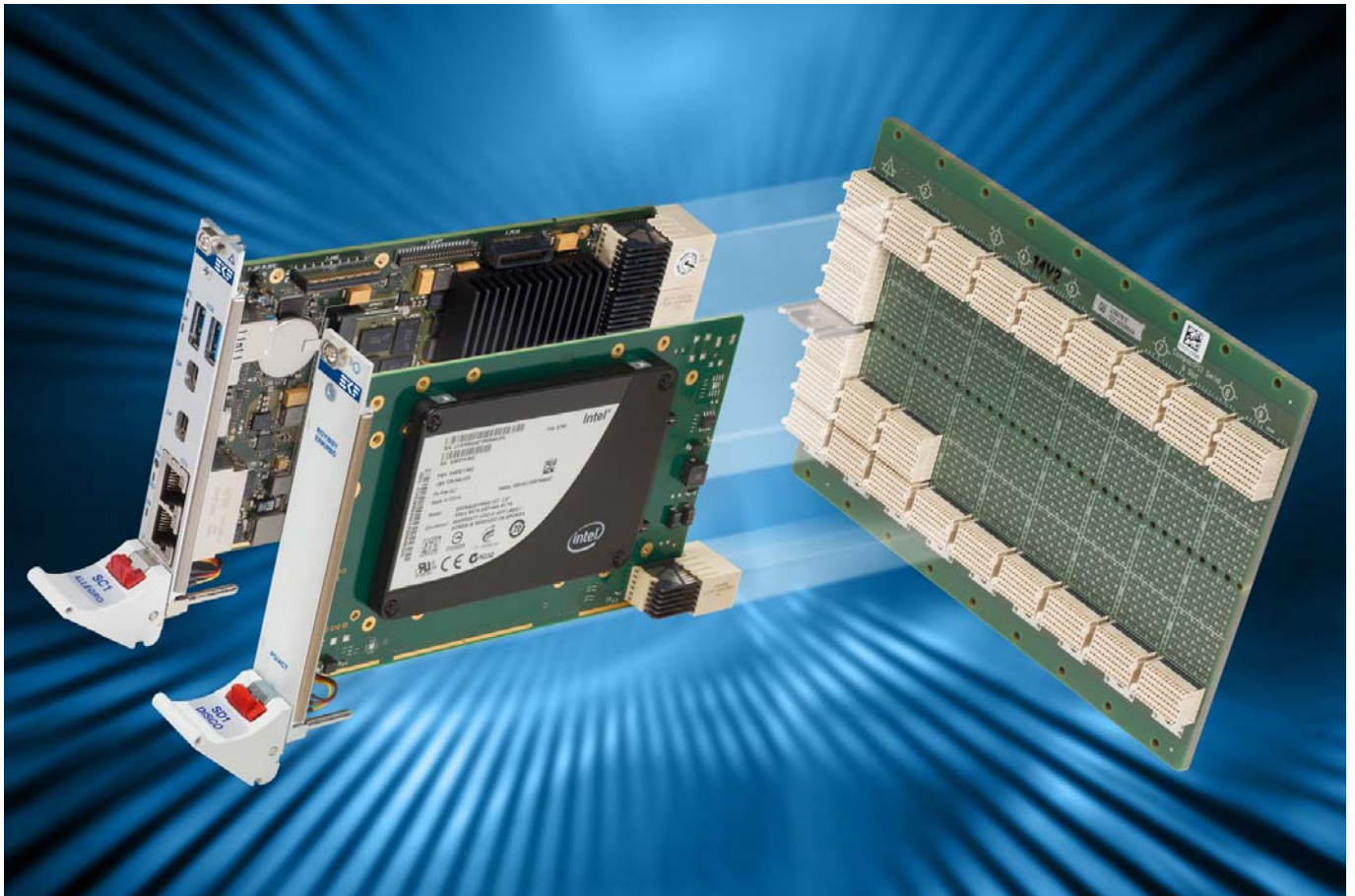
Feature Summary

- ▶ PICMG® CompactPCI® Serial Standard (CPCI-S.0)
- ▶ Peripheral Slot Card w. Backplane Connector P1 for SATA Support
- ▶ Carrier Board for a 2.5-Inch Size SATA Drive *
- ▶ Up to 8 x SD1-DISCO Cards on a CPCI-S Backplane
- ▶ Suitable for a 2.5-Inch SATA SSD or HDD (Max Power 12V/0.75A 5V/2.0A 3.3V/2A)
- ▶ SSD Recommended for R/W High Speed, HDD Recommended for High Storage Capacity
- ▶ On-Board SATA 6G Redrivers (Compliant w. SATA 3G/1.5G)
- ▶ Front Panel SATA Activity LED
- ▶ Suitable for RAID or Non-RAID Operation
- ▶ Option on-Board USB 3.0 Receptacle (Available Concurrent to 2.5-Inch SSD) **
- ▶ CompactPCI® Serial Backplanes Available (Hybrid or Native)
- ▶ Suitable e.g. for CompactPCI® Serial System Slot Controller SC2-PRESTO (CPU Board)
- ▶ Suitable e.g. for CompactPCI® PlusIO System Slot Controller PC3-ALLEGRO (CPU Board)
- ▶ Rugged Solution (Coating/Sealing Available on Request)
- ▶ RoHS compliant
- ▶ MTBF 122.8 Years

* requires SATA enabled CompactPCI® Serial peripheral card backplane slot

** requires USB enabled CompactPCI® Serial peripheral card backplane slot

Please note: This document reflects revision 3 of the SD1-DISCO PCB, as of 2014-08. The option Micro SATA (1.8-inch SSD) is no longer supported. The SATA routing and the redriver settings were optimized for best signal eye opening at 6G speed. The USB connector is 3.0 SuperSpeed compliant now.

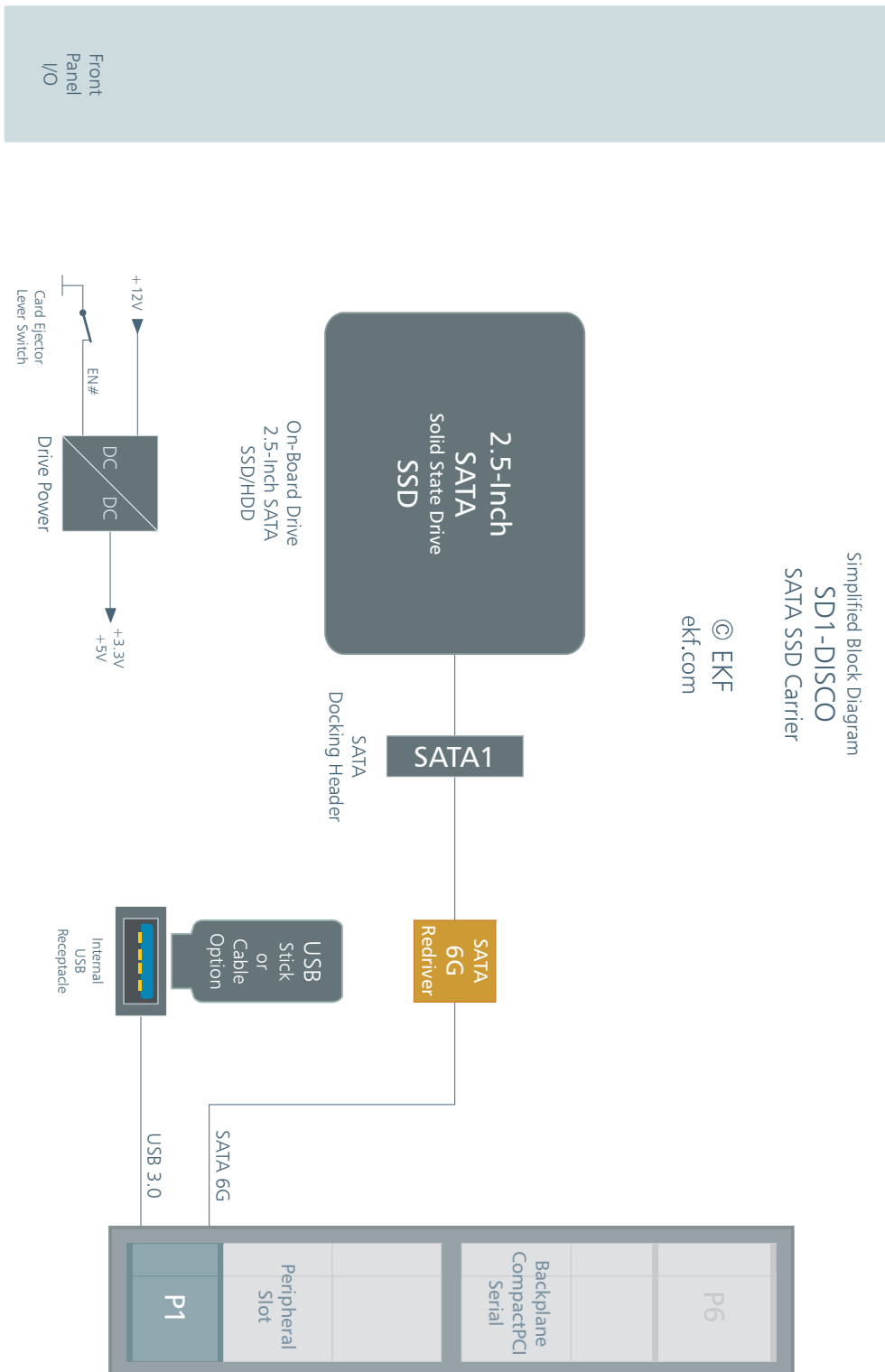


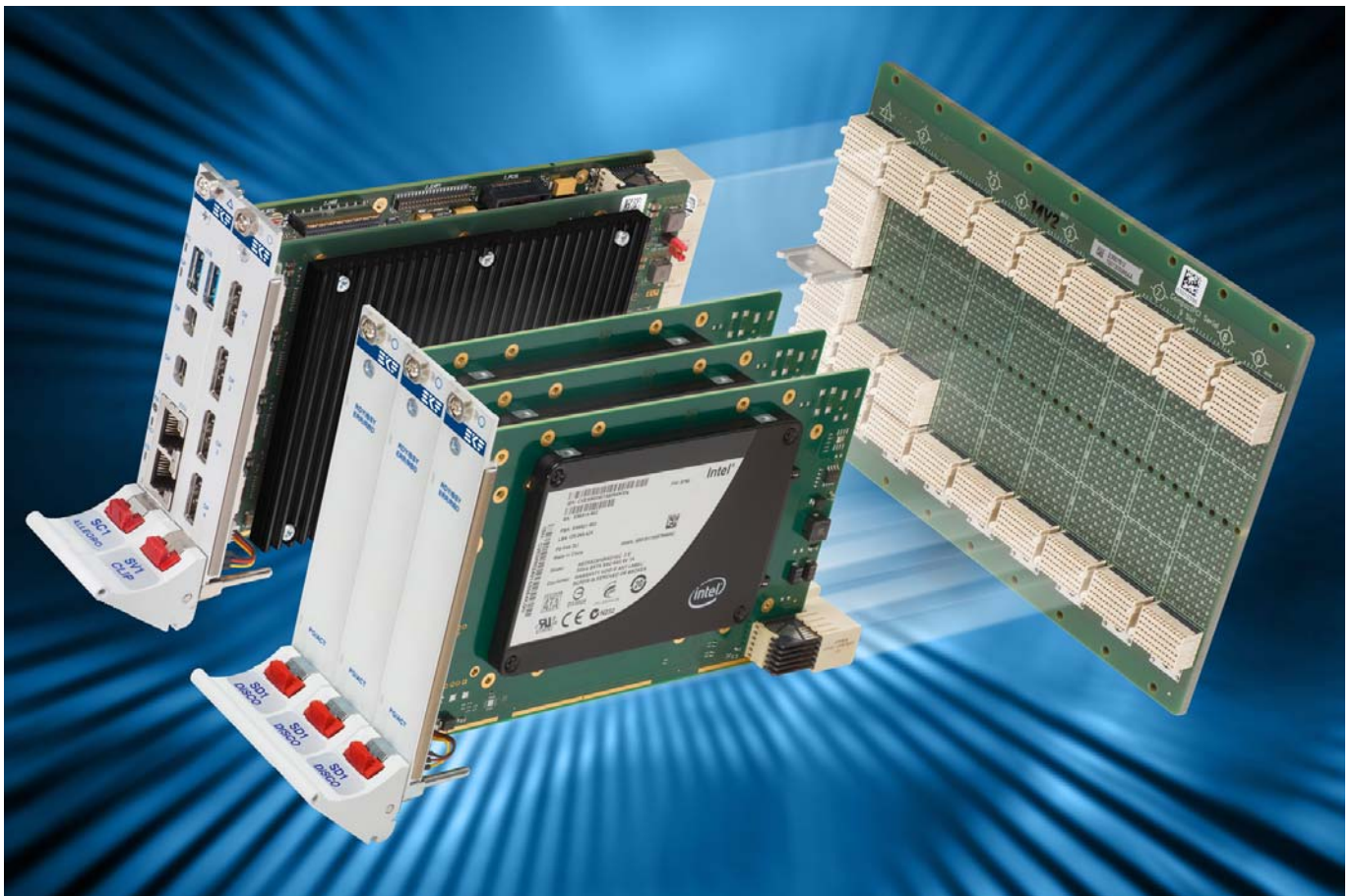
SD1-DISCO with CompactPCI® Serial CPU Card & CompactPCI® Serial Backplane



SD1-DISCO with CompactPCI® PlusIO CPU Card & Hybrid Backplane

Block Diagram





Multiple SD1-DISCO Boards (e.g. for JBOD or RAID Configuration)

Ordering Information

For popular SD1-DISCO SKUs please refer to
www.ekf.com/liste/liste_21.html#SD1

Related Links to CompactPCI® Serial SATA Cards

| | |
|-----------------------------------|--|
| SD1-DISCO Home | www.ekf.com/s/sd1/sd1.html |
| CompactPCI® Serial SATA Solutions | www.ekf.com/s/serial.html#SD |

Related Documents CompactPCI® Serial & CompactPCI® PlusIO

| | |
|---|--|
| Basics / Overview CompactPCI® Serial & CompactPCI® PlusIO | www.ekf.com/s/smart_solution.pdf |
| CompactPCI® Serial Home | www.ekf.com/s/serial.html |
| CompactPCI® PlusIO Home | www.ekf.com/p/plus.html |

Recommended CPU Cards

P = PlusIO • PICMG® 2.30 CompactPCI® PlusIO
 S = Serial • PICMG® CPCI-S.0 CompactPCI® Serial

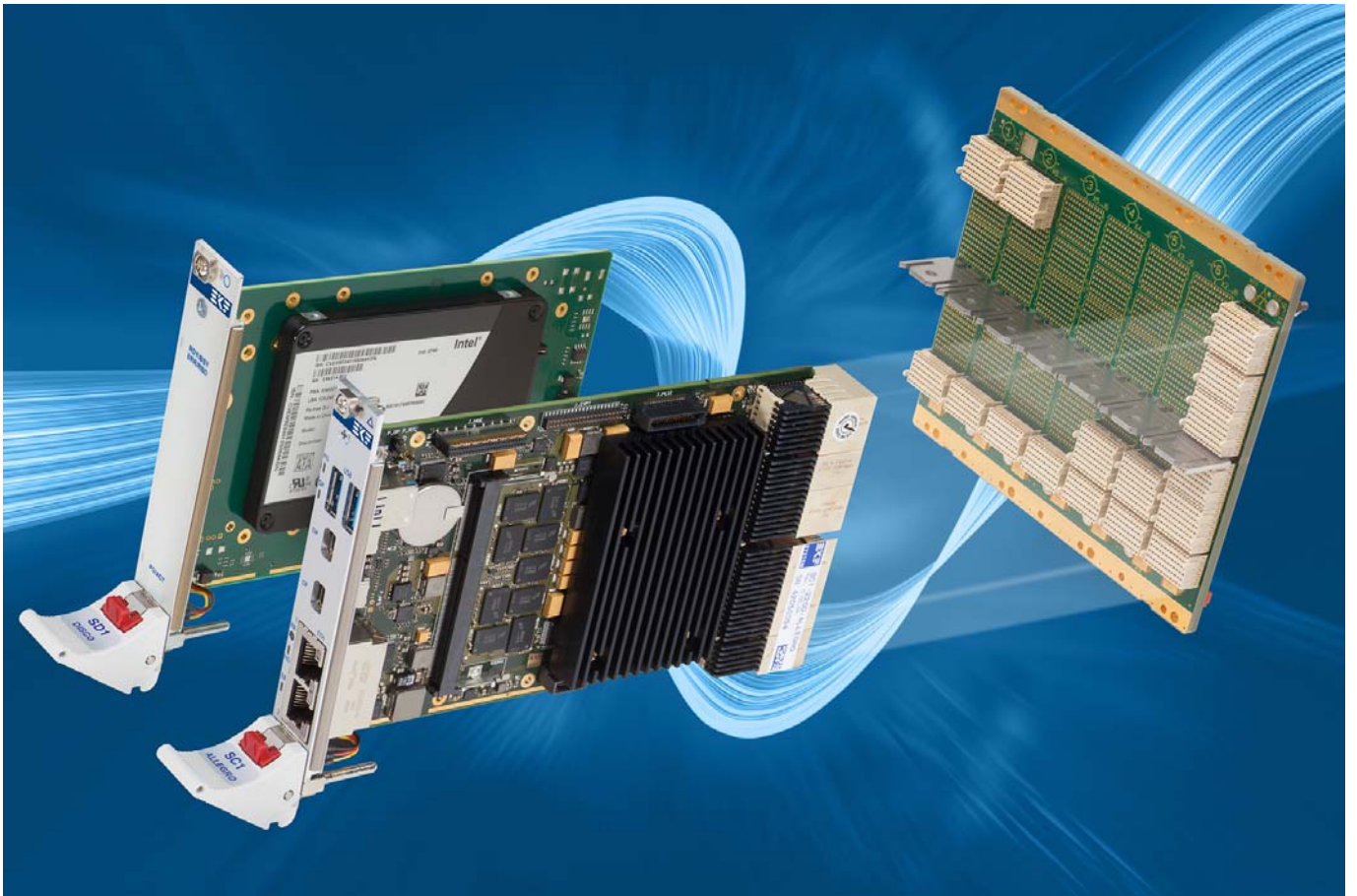
| | |
|-------------|--|
| PC1-GROOVE | CompactPCI® PlusIO CPU Card • www.ekf.com/p/pc1/pc1.html |
| PC3-ALLEGRO | CompactPCI® PlusIO CPU Card • www.ekf.com/p/pc3/pc3.html |
| SC1-ALLEGRO | CompactPCI® Serial CPU Card • www.ekf.com/s/sc1/sc1.html |
| SC2-PRESTO | CompactPCI® Serial CPU Card • www.ekf.com/s/sc2/sc2.html |



2.5-Inch SATA SSD

Please note: The on-board SATA drive is not included in delivery unless ordered separately by customer





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