CompactPCI® Serial ... 

... the Smart Solution
CompactPCI® Serial Systems

Designed for performance • 40 x PCI® Express • 8 x Gigabit Ethernet • 8 x SATA • 8 x USB3

www.ekf.com/s/serial.html
CompactPCI® Serial Systems

CPCI Serial backplanes for optimum throughput

The CompactPCI® Serial system slot is located either most left or most right
CompactPCI® Serial Systems

Reverse order backplanes (system slot right aligned) for CPU cards with 4HP to 12HP front panel

www.ekf.com/s/serial.html
CompactPCI® Serial Systems

CPCI Serial BluBoxx series - small and economic

SRS-3201-BLUBOXX CompactPCI® Serial
CompactPCI® Serial Systems

SRS-4401-SERIAL CompactPCI® Serial

www.ekf.com/s/srs/srs4401/srs4401.html
CompactPCI® Serial Systems

CPCI Serial racks 84HP

www.ekf.com/s/srs/srs8423/srs8423.html
CompactPCI® Serial Systems

Hybrid backplanes available with CompactPCI® Express (PXI Express™) slots

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In a CPCI Serial system, up to 40 x PCIe lanes can be distributed across the backplane to 2 x fat pipe peripheral slots (8 lanes each) and 6 x standard peripheral slots (up to 4 lanes each)
CompactPCI® Serial Connectors

A fat pipe peripheral slot provides 8 x PCIe 1 x USB 1 x SATA
P1-P2 are mandatory on a fat pipe peripheral card
P3-P6 optionally for GbE and/or rear I/O

CompactPCI® Serial
Peripheral Card Fat Pipe Slot
8 x PCIe Connectors P1-P2 (P6 Option)

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CompactPCI® Serial Connectors

A CompactPCI® Serial peripheral slot provides up to 4 x PCIe 1 x USB 1 x SATA
P1 is mandatory on a peripheral card
P2-P6 optionally for GbE and/or rear I/O

CompactPCI® Serial Peripheral Card Standard Slot
1 to 4 x PCIe
Connector P1 (P6 Option)

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CompactPCI® Serial Systems

System expansion made easy - add mass storage cards or I/O as required by your application
CompactPCI® Serial Connectors Filling Order Rules

The System Slot board (CPU) is the root complex (source) for up to 8 x PCIe Links, 8 x SATA/SAS, 8 x USB, 8 x GbE distributed across a cPCI-S backplane to the Peripheral Slots. Please note the descending precedence order for SATA channels.
CompactPCI® Serial Connectors • Slot Types

System Slot J1-6 • Fat Pipe Slots J1-2, Option J6 • Peripheral Slots J1, Option J6
Positions not filled: RIO Option
CompactPCI® Serial CPU Card

CPU (System Board) • SC5-FESTIVAL • Intel® Xeon® E3 v6 Processor

new mezzanine connectors introduced for high performance local expansion
PCI Express Gen3 up to 8 links

M.2 NVMe & SATA SSD
Type-C support
www.ekf.com/sks0/s40.html

www.ekf.com/s/sc5/sc5.html
CompactPCI® Serial CPU Card

CPU (System Board) • SC4-CONCERTO • Intel® Xeon® E3 v5 Processor

New mezzanine connectors introduced for high performance local expansion
PCI Express Gen3 up to 8 links


M.2 NVMe & P6 8 x GbE
www.ekf.com/s/s80/s80.html
CompactPCI® Serial CPU Card

Mezzanine Side Cards for CPU Boards • Mass Storage - Networking - Mixed I/O • 8HP/12HP Assemblies

recommended usage with system slot right aligned backplane

www.ekf.com/s/scl/scl.html

www.ekf.com/s/scz/scz.html
CompactPCI® Serial CPU Card

SC5-FESTIVAL • Resources w. 1+8 Slots Backplane (System Slot Right)
CompactPCI® Serial CPU Card

CPU (SystemBoard) • SC3-LARGO • CoolConduct® Technology for High Performance Industrial Computing

Multiprocessing & Parallel Computing • Heat Exchanger System


www.ekf.com/s/srs/srs8493/srs8493.html

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CompactPCI® Serial Peripheral Card

Adapter Solutions • PCIe Card Carrier

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CompactPCI® Serial Peripheral Card

Standard I/O Ports • USB 3.0 & eSATA combo connectors

www.ekf.com/s/sb1/sb1.html

CompactPCI® Serial Peripheral Card

Standard I/O Ports • USB 3.0 & GbE

www.ekf.com/s/sbf/sbf.html
CompactPCI® Serial Peripheral Card

Standard I/O Ports • USB 3.0 • 4 x 4 Ports Front I/O & Rear I/O
CompactPCI® Serial Rear I/O Module

Standard I/O Ports • USB 3.0 • Front I/O & Rear I/O

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www.ekf.com/s/sbr/sbr.html
CompactPCI® Serial Peripheral Card

Storage Solutions • SATA SSD fixed and removable

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CompactPCI® Serial Peripheral Card

Storage Solutions • mSATA RAID • M.2 SATA RAID


CompactPCI® Serial Peripheral Card

Storage Solutions • 6G SAS Controller

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CompactPCI® Serial Peripheral Card

Storage Solutions • 3U/16HP 8 x SATA SSD Cassette

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SDC-SATA • CompactPCI® Serial • © EKF • ekf.com
CompactPCI® Serial Peripheral Card

Storage Solutions • M.2 NVMe (PCIe)
CompactPCI® Serial Peripheral Card

XMC Module Carrier

SK2-SESSION • PCI Express® x 4 • XMC Size 139/149mm x 74mm

SK3-MEDLEY • PCI Express® x 8 • XMC Size 139mm x 74mm

www.ekf.com/s/sk2/sk2.html

CompactPCI® Serial Peripheral Card

XMC Module Carrier

PCI Express® x 8 • XMC Size 139/149mm • Rear I/O Option • Lengthened Front

SE Rear I/O Routing

www.ekf.com/s/sk5/sk5.html
Diff Pair Rear I/O Routing
CompactPCI® Serial Peripheral Card

Networking (NIC) • 5-Port Gigabit Ethernet controller • RJ45 & M12
CompactPCI® Serial Peripheral Card

Networking (NIC) • Dual-Port 10 Gigabit Ethernet controller w. RJ45 jacks

CompactPCI® Serial Peripheral Card

Networking (NIC) • Dual-Port 10 Gigabit Ethernet controller w. SFP+ cages

www.ekf.com/applications/vision/ekf_vision_en.pdf
www.ekf.com/s/sn5/sn5.html
CompactPCI® Serial Peripheral Card

Networking (Switching) • 7-20 Port Gigabit Ethernet unmanaged switch

www.ekf.com/s/sl1/sl1.html

CompactPCI® Serial Peripheral Card

Networking (Switching) • 9-Port Gigabit Ethernet switch • M12-X
CompactPCI® Serial Peripheral Card

Networking (Switching) • Scalable Solutions w. or w/o CPU Card

www.ekf.com/applications/train/ekf_train.pdf

www.ekf.com/s/sl2/sl2.html

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CompactPCI® Serial Peripheral Card

Networking (Industrial) • FPGA Based Universal Networking Platform

www.ekf.com/s/sy8/sy8.html
CompactPCI® Serial Peripheral Card

Networking (Real-Time) • Industrial Ethernet & Fieldbus module carrier • CAN FD
CompactPCI® Serial Peripheral Card

Wireless Technologies • 4 x PE Mini Card • 4 x M.2

www.ekf.com/sp4/sp4.html

www.ekf.com/spx/spx.html
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8-Port UART • RS-485 & RS-232 Isolated • RS-485 & RS-232 Configurable • RIO Option

www.ekf.com/s/su4/su4.html
CompactPCI® Serial Peripheral Card

DisplayPort • MXM 3.0 Type B graphics module carrier (performance & CUDA)

www.ekf.com/s/sv2/sv2.html
CompactPCI® Serial Peripheral Card

DisplayPort • MXM 3.0 Type B graphics module carrier (performance & CUDA) • CoolConduct® technology • heat exchanger system

CoolConduct®

http://www.ekf.com/s/srs/srs8493/srs8493.html

www.ekf.com/s/sv2/sv2.html
CompactPCI® Serial System Expansion

PCI Express® External Cabling • Host System Adapter
Dual PCIe x4 • Dual PCIe x8 • 7m Copper Cable - 300m AOC (Optical)

CompactPCI® Serial - the Smart Solution

www.ekf.com/s/sx2/sx2.html

www.ekf.com/s/sx5/sx5.html
CompactPCI® Serial System Expansion

PCI Express® External Cabling • Distributed Storage & Computing • High Performance Image Processing

Main System - Host

Distributed Computing & Measurement - Target

Active Optical Cable - up to 300m

Removable Storage - Target

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CompactPCI® Serial System Expansion

PCI Express® External Cabling • Target System Adapter • PCIe x4 • PCIe x8

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