



Unleash the
POWER

- CompactPCI Modular Computers
- Industrial IoT Product Line
- XMC Modules
- Customized Designs

Shortform Overview 2019

Industrial Microcomputer Solutions
Made in Germany

Unleash the POWER...

Today CompactPCI® Serial is a leading modular computing standard. The latest powerful CPU board together with high performance GPGPU processors is the basis for many artificial intelligence projects under rugged terms. Independent high speed computer segments in one crate are another domain. Do you need many I/O channels and wireless communication? No problem for CompactPCI® Serial. Apart from 8 primary peripheral slots EKF is also offering bridging solutions for further

8 CompactPCI Serial peripheral slots as well as bridging solutions to integrate CompactPCI® Express (PXle Express) and/or CompactPCI® Classic (PXI) boards fully controlled by a CompactPCI® Serial system processor. CompactPCI® Serial offers many options in many ways - Unleash the Power!

This brochure is a shortform information of latest products. Visit www.ekf.de for the full range.



Transportation



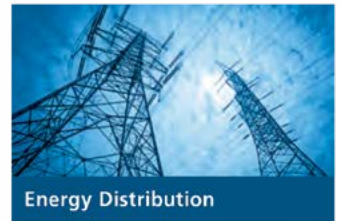
Industry & Automation



Medical



Telecommunication



Energy Distribution



Research & Development



Automotive



Mining

CPU Boards



CompactPCI® Serial

SC4 - CONCERTO	Intel® 6th. Gen. Core™, Xeon® E3 v5, CM238, 45W TDP, 8/16/32GB ECC RAM, F/P 2xDP, 2xUSB3, 2xGbE; Local Exp.: 1xUSB 3.1, 1x USB 2.0, 4 x SATA 6G or 4 x PCIe, 4xPCIe
SC5 - FESTIVAL	Intel® 7th. Gen. Core™, Xeon® E3 v6, CM238, 45W TDP, 8/16/32GB ECC RAM, F/P 2xDP, 2xUSB3, 2xGbE; Local Exp.: 1xUSB 3.1, 1x USB 2.0, 4 x SATA 6G or 4 x PCIe, 4xPCIe
SC6 - TANGO	Intel® ATOM™ E39XX, 8GB ECC RAM, 12W/6.5W TDP, F/P 2xDP, 2xUSB3, 2xGbE; Local Exp.: 2xUSB, 2xSATA6G, CFast, uSD-Card, eMMC, 4x PCIe Gen2 x1
SC7 - FLUTE	Intel® IOTG low power processor
SC8 - TOCCATA	Next Gen Intel® Core™ Technology high performance processor

ROADMAP

ROADMAP

CPU Boards



CompactPCI® PlusIO

PC4 - PRESTO	Intel® 4th. Gen Core™ i7 4XXX, QC/DC, QM87, 47W TDP, 8/16GB ECC RAM, F/P 2xDP, 2xUSB3, 2xGbE; Local Exp.: 6xUSB, 2xSATA6G, 2xSATA3G, 1DP, 4xPCIe, J2 PlusIO
PC5 - LARGO	Intel® 5th. Gen Core™ i7 5XXX, QC/DC, QM87, 47W TDP, 8/16GB ECC RAM, F/P 2xDP, 2xUSB3, 2xGbE; Local Exp.: 6xUSB, 2xSATA6G, 2xSATA3G, 1x DP, 4xPCIe, J2 PlusIO
PC6 - TANGO	Intel® ATOM™ E39XX, 8GB ECC RAM, 12W/6.5W TDP, F/P 2xDP, 2xUSB3, 2xGbE; Local Exp.: 2xUSB, 2xSATA6G, CFast, uSD-Card, J2 PlusIO
PC7 - FLUTE	Intel® Next Gen IOTG low power processor

ROADMAP

Low Profile Mezzanine Modules



S40 - NVME	M.2 NVMe, M.2 SATA, 2x Type-C USB3.1 Gen1/DP
S42 - MC	2x PCIe Express Mini Card, M.2 NVMe slot (PCIe Gen3 x4)
S80 - P6	8x GbE, Marvell Switch, M.2 NVMe
S82 - P6	4x GbE NIC, M.2 NVMe
M01 - NVSRAM	Non volatile SRAM, 4MB NVSRAM, 20 years data retention, M.2 2280, PCIe x1

Sidecards +4HP



SCZ - NVME	2x M.2 NVMe slot, 2x (4x) RS232, DP, USB 3.1 Gen1 Typ A
SCS - TRUMPET	2.5" SSD or 2x M.2 SATA, 2x (4x) RS232, Audio IO, DP, 2x USB 3.1 Gen1
SCL - RHYTHM	4 x M12 X-coded front panel GbE NIC (Intel i210), M.2 NVMe slot PCIe Gen3 x4
PCS - BALETT	2.5" SATA or C4* port, 1x (3x) RS232, DP, Audio IO
PCU - UPTEMPO	2x M.2 SATA, 2x (4x) RS232, 2x USB 2.0 (opt. Audio I/O), Rear I/O opt. for COM (TTL), P/S, GPIO via J2

Bridging



SXC - PCIE	Secondary CompactPCI® Serial system slot controller, expand cPCI-S backplane from 8 to 16 slots, F/P 3x USB 3.1 and 3x GbE NIC, onboard NVMe&SATA mass storage, CPU board side card.
EXC - PCIE	Secondary CompactPCI® Express (PXIe) system slot controller, added 4x CompactPCI Express (PXIe) peripheral slots, F/P 3x USB 3.1 and 3x GbE NIC, onboard NVMe&SATA mass storage, CPU board side card.
SXP - JAM	CompactPCI® Serial to cPCI® Classic coupler unit, added up to 8x CompactPCI® Classic slots, F/P 3x USB 3.1 and 3x GbE NIC, onboard M.2 mass storage, dual board assembly unit.
SX5 - STREAM	Dual Port PCIe Gen3 x8 host adapter, 2x F/P connectors PCIe x8 68-pos.
SXC - LOOP	PCIe Gen3 x8 target system adapter, F/P connectors PCIe x8 68-pos.

cPCI Serial Peripheral Boards



Carrier

SA4-COUNTRY	PCI Express card adapter/carrier PCIe x1/x4/x8, max dimensions 176x68.9mm
SF1-STUDIO	2x PCIe Minicard slot dedicated for industrial IO modules, optimized for Hilscher real-time ethernet & fieldbus and ESD CAN modules
SPX-PHASE	Quad carrier for M.2 3042 style WWAN modules, e.g. 3G or 4G (LTE) modems and beyond, quad-port USB 3.0 controller, antenna combiner 4:1
SK5-BALL	XMC module carrier up to PCIe x8, suitable for 74x149mm industrial IO modules, RIO opt.
SV2-MOVIE	Carrier for MXM 3.0 Type B graphics module, 4 x DisplayPort front panel connectors, installed module e. g. Nvidia GTX 1060, PNY P3000/P5000 MXM 3.1 type B module



USB

SB3-TONE	Quad port USB 3.1 Gen 1 host controller, 4x USB connectors type A via frontpanel
SBX-DUB	4x USB 3.1 Gen 1 controller with 16 ports, 4 ports with full speed each port via F/P receptacle (switchable to rear I/O), 12 ports via rear I/O, PCIe Gen2 x4 backplane Interface
SBR-RIO	16-port USB 3.0 Rear I/O Module, 8 x on-board USB receptacles • 8 x rear panel USB connectors
SBF-CROSSOVER	Multifunction peripheral card, F/P 4x USB 3.1, 2x GbE NIC, Quad UART 2x RS232, 2xRS232/RS485 isolated, PCIe Minicard for dual CAN FD etc.



Network

SN1-REVERB	5-port GbE controller, RJ45 F/P jacks, 5 x I210-IT
SN5-TOMBAK	2-port 10-GbE controller, GEN2*8 P1/P2 2 x SFP+ module cages
SL2-BRASS	9-port GbE switch, 4 x M12 circular F/P connector, on-board NIC via P1 conform EN50155 T1 incl. coating or 4x GbE via P6
SL4-TUBA	20-port GbE switch, 5 x RJ45 front panel jacks, 8 x GbE via P6 back-plane connector, 6x GbE via P5, 1x via P1



Storage

SD4-SWEEP	4 x M.2 SATA module sockets (B key, 4.2H), for M.2 on-board SATA 6G hardware RAID controller
SE2-MOOD	Carrier card for 2 x M.2 NVMe socket, additional M.2 SATA socket
SE4-TEMPO	Carrier card for 4x M.2 NVMe socket



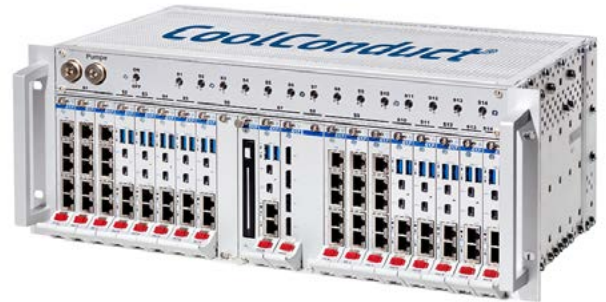
UART

SU1-TWIST	Octal UART, 4x isolated RS-485 on front panel via Micro-D connector (optional RJ45 or 3x DSUB 9), 4x rear I/O UART ports (TTL) via P3
SU2-BALLAD	Octal UART, 4x isolated RS-232 on front panel via Micro-D connector (optional RJ45 or 3x DSUB 9), 4x rear I/O UART ports (TTL) via P3
SU4-SOPRANO	Octal UART, RS-232/RS-485 individually selectable, 8x Micro-D on front panel or via R/I/O (TTL)

cPCI Serial Systems



SRS -1201-BluBrick	Wall mount crate, passive cooling (opt. fan), 3/2 slot, power supply selectable for industrial, automotive or railway
SRS -3201 BLUBOXX	4U/32HP cPCI Serial system rack, 1 + 4 slots cPCI Serial backplane, system slot right, bottom mounted fan 12V, PSU 8HP 150W
SRS -4401-SERIAL	4U/44HP rugged system rack, top mount dual-fan, removable PSU, 9-slot CPCI Serial backplane, PCI Serial PSU 300W
SRS -8401-SERIAL	4U/84HP cPCI Serial rack, 9-slot native cPCI-S.0 backplane without Rear I/O option, systemslot right, plugable cPCI-S.0 PSU 300W AC-IN 90-264V, removable fan unit, depth 280mm, backside power access
SRS -8493 -CoolConduct	4U/84HP cPCI Serial rack, suitable for demanding industrial applications such as multiprocessing across several CPU cards or GPU boards (CUDA). A special technology was developed by EKF and partners for optimum cooling of each card slot, named CoolConduct



Miscellaneous



CompactPCI® Express (PXI Express™)

EA4 -COUNTRY	PCI Express card carrier for PCIe card x8 (x4, x1), maximum card dimensions 176.0mm x 68.9mm
EB3 -TONE	Quad port USB 3.1 Gen 1 host controller, 4x USB connectors type A via frontpanel
EK4 -WALTZ	XMC module carrier up to PCIe x8, suitable for 74x149mm size XMC modules

XMC Mezzanine Cards

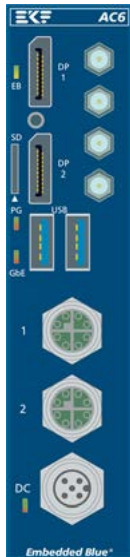


DB4 -EAGLE	QUAD USB 3.0 controller, 3 x F/P connector 1x port internal
DN1-PIKE	Quad Gigabit Ethernet NIC I210, 4 x RJ45
DN3 -SHARK	Dual-port 10 GbE NIC X520, 2 x SFP+, PCIe x 8 Gen2
DX4 -BADGER	Quad port SATA III controller, 3 x on-board mSATA socket, 1x eSATA F/P
DX5 -ANT	Quad port SATA III controller, 3 x M.2 SSD sockets, 1 x eSATA F/P

Embedded Blue®

Embedded Blue - the brand new IoT Product Line by EKF. If an industrial TSN Switch module is required or a small computer solution to control different I/O in a network etc. the new Embedded Blue product line by EKF is first choice. In this space we are offering a first information

and a short overview. Further details will be available soon on our website. Just like Eurocard systems, Embedded Blue products are designed and manufactured by EKF Elektronik.



AC6	Industrial Box PC (ca. 140x130mm) with Intel ATOM™ E39XX, 8GB ECC RAM, 2x DP, 2x M12 X-coded GbE, M.2 mass storage, wireless I/O, Industrial I/O options, power supply via M.12
B01	Industrial Box PC (ca. 250x280mm), Intel Core™ processor based multi I/O system for enhanced PCIe peripheral boards.
B02	Industrial Box PC (ca. 250x280mm), Intel Core™ processor based multi I/O system for flexible industrial cPCI-S peripheral boards.
AG1	Industrial Gateway - Connectivity: CAN, digital & analog I/O, LTE / WLAN
AL1	Industrial switch (ca. 132x70mm) - Stackable 4-to-12-port M12 x-coded GbE switch
AL2	Industrial switch (ca. 132x70mm) - 8-port RJ45 PoE+ GbE switch
AL5	Industrial switch (ca. 132x70mm) - 4-port Automotive Ethernet 1000Base-T1 with Weidmüller connector
AL6	Industrial switch (ca. 132x70mm) - 4-port Automotive Ethernet 1000Base-T1 with Harting connector

This brochure is a shortform information of latest products. Visit www.ekf.de for the full range.

If you did not find what you are looking for or need diverse functionality combined on one board please don't hesitate to contact sales@ekf.de to start on the path to your perfect tailored solution!



Development, Sales, Support



Manufacturing, Test Area, Administration



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