RELAX
It's all rugged.

EKF SYSTEM

CompactPCI® Serial
Modular Architecture

Embedded Blue®
Boxed Solutions

Shortform Overview 2020
Industrial Microcomputer Solutions
Made in Germany

Systems and more...

Today EKF Elektronik is a leading manufacturer of standardized CompactPCI® Serial based solutions. A wide range of CPU cards (from high performance to low power) together with an impressive portfolio of peripheral boards provides an answer for nearly all Industrial applications. Briding modules and carrier cards allow hybrid systems, mass storage arrays and much more. Besides boards EKF offers a wide range of standard and customized housings, from full 19" crate to customized box.

EKF reliable Industrial Computing solutions are made for rugged application: extended temperature requirements as well as conformal coating are business as usal.

If flexibility is needed to a lesser extent the answer is Embedded Blue. A growing portfolio of box solutions is coming onstream. Industrial Switches with TSN support, M12 X-Coded or SPE connector are all available today already. Low power box computing based on Intel® Atom™ processors is available for many dedicated applications. Of course this includes wireless conectivity. Obviously with EKF quality inside here as well!

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

Transportation | SYSTEM | Research & Development | Industry & Automation | Telecommunication

CompactPCI® Serial CPU

SC5 - FESTIVAL	Intel® 7th. Gen. Core™, Xeon® E3 v6, CM238, 45W TDP, 8/16/32GB ECC RAM, F/P 2xmDP, 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	Advanced Low Power, Intel® Atom™ xxx-I ROADMAP
SC8 - FORTE	Networking Performance, Intel® XEON™ xxx-D ROADMAP

CompactPCI® PlusIO CPU

PC5 - LARGO	Intel® 5th. Gen Core™ i7 5XXX,QC/DC, QM87, 47W TDP, 8/16GB ECC RAM, F/P 2xmDP, 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 - FESTIVAL	Intel® 7th. Gen. Core™, Xeon® E3 v6, CM238, 45W TDP, 8/16/32GB ECC RAM, F/P 2xmDP, 2xUSB3, 2xGbE; Local Exp.: J2 PlusIO

Low Profile Mezzanine Modules

S40-NVME	M.2 NVMe, M.2 SATA, 2x Type-C USB3.1 Gen1/DP
S80-P6	8x GbE, Marvell Switch, M.2 NVMe
S82-P6	4x GbE NIC, M.2 NVMe

Sidecards +4HP

SCZ-NVME	2x M.2 NVMe slot, 2x (4x) RS232, DP, USB 3.1 Gen1 Typ A
SCL-RHYTHM	4 x M12 X-coded front panel GbE NIC (Intel i210), M.2 NVMe slot PCIe Gen3 x4
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.

Carrier

SF1-STUDIO	2x PCIe Minicard slot dedicated for industrial IO modules, optimized for Hilscher real-time ethernet & fieldbus and ESD CAN modules
SK5-BALL	XMC module carrier up to PCIe x8, suitable for 74x149mm industrial IO modules, RIO opt.
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
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

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
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
SL4-TUBA	20-port GbE switch, 5 x RJ45 front panel jacks, 8 x GbE via P6 backplane 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
SE4-TEMPO	Carrier card for 4x M.2 NVMe socket

UART

SU1-TWIST	Octal UART, 4x isolated RS-485 (RS-232 with SU2-BALLAD) 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 RI/O (TTL)

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

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-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

Embedded Blue® - A Series

Embedded Blue® - The new IIoT product line by EKF offers box based solutions for rugged applications

The Embedded Blue A series comes in optimized size and is suited for DIN rail or wall mount assembly. The portfolio covers different switch modules with M12, SPE or RJ45 interconnect as well as system solutions based on Intel® ATOM™ E39xx CPU or Marvell® ARMADA™ processor for among others AVB/TSN real time networking.

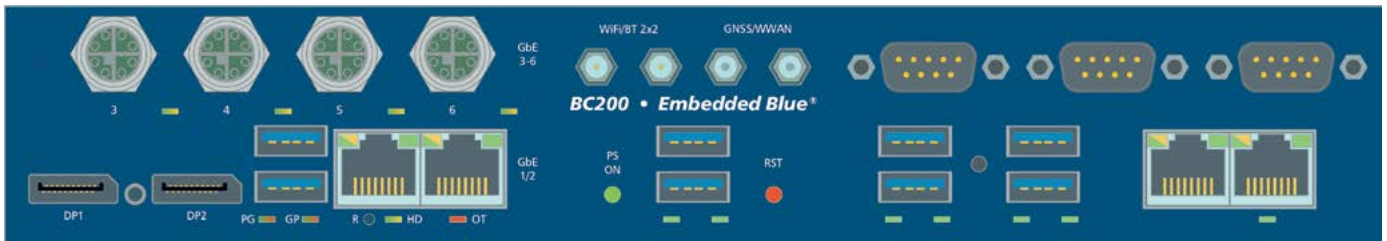|	
AC370	Marvell® ARMADA™ 3700 SoC, 2GB RAM, RJ45 GbE, USB 3.0, M.2, M12 DC-IN etc.
AC600	Intel® ATOM™E39xx, 8GB RAM, dual DisplayPort, dual USB 3.1, dual M12-X GbE, M12 DC-IN, expan. port WWAN, Wi-Fi, Bluetooth etc.
AL100	M12-X 5 to 15 port unmanaged GbE switch
AL110	M12-X 5 port GbE switch w. ARM® V8 CPU
AL200	RJ45 8 port unmanaged GbE switch
AJ200	Ethernet midspan power injector, 802.3at PoE+ (up to 30W/port)
AL210	RJ45 8 port GbE switch w. ARM® V8 CPU
AL220	RJ45 8 port unmanaged PoE+ GbE switch
AL230	RJ45 8 port PoE+ GbE switch w. ARM® V8 CPU

Embedded Blue® - B Series

The Embedded Blue® B series offers high performance computing with a maximum of flexibility. The pizzabox system with integrated T-model construction houses a CompactPCI Serial CPU card and offers 2 fat pipe docking ports for CompactPCI Serial peripheral cards to integrate high end GPU, KI modules or I/O functionality.

Onboard devices such as NVMe mass storage, wireless modules etc. are integrated via M.2 sockets. Three long life fans are PWM regulated for optomized cooling. Embedded Blue B series is made for rugged environmental applications eg. harvesting, transportation, edge computing.

BC200	Industrial PC box based on CompactPCI® Serial technology, NVMe or SATA storage, M.2 wireless communication, PWM controlled fans, 6 - 36VDC IN, 256mm (W) x 312mm (D) x 44mm (H)

Contact

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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!