



CompactPCI® Technology

Solutions from the Specialist.

Shortform Catalogue 2017
Industrial Microcomputers – Made in Germany



About EKF...

Founded back in 1972, the EKF story of success has been ongoing for more than 40 years. In the late 70s EKF began to develop modular industrial microcomputers with 8 bit technology and Eurocard form factor. During the mid-80s VMEbus boards and systems in 16/32 bit technology and 3U/6U size expanded the EKF portfolio. In 1998 EKF started 3U/6U, a CompactPCI product line based on the CPCI 2.0 standard. From 2009 onwards the new sub-standard CompactPCI PlusIO was implemented. Since 2011 the CompactPCI Serial product portfolio has been growing continuously: today EKF is a leading vendor for CompactPCI technology, building on more than 30 years of experience in Eurocard and 19" system design. Apart from a portfolio

with a wide range of standard products, EKF is also offering customized development.

As a privately owned German manufacturer EKF Elektronik is 100% powered from its own resources and is independent. The company is located in Hamm in the heart of Westphalia. All products are designed and manufactured by EKF to guarantee a high level of quality, flexibility and long-time availability.

EKF products are doing a reliable job worldwide in a wide range of different applications, quite often under harsh conditions.



Transportation



Industry & Automation



Medical



Telecommunication



Energy Distribution



Research & Development



Automotive



Mining

System Controller

cPCI PlusIO/cPCI Classic



PC3-ALLEGRO

CompactPCI®/PlusIO® CPU board with 3rd. Gen Intel® Core i7® processor, 16GB DDR3 RAM with ECC (8GB soldered), dual mDP or VGA, 2x GbE, 2x USB3.0, I/O options via sideboard, PlusIO® on J2, opt. CompactPCI® 64Bit/PXI compatible



PC4-PRESTO

CompactPCI®/PlusIO® CPU board with Intel® Core i7® Gen. 4 processor QC (1.70GHz) or DC (2.7GHz), 16GB DDR3 RAM with ECC (8GB soldered), dual mDP or VGA, 2x GbE, 2x USB3.0 frontside, further I/O options via sideboard, PlusIO® on J2, opt. CompactPCI® 64Bit/PXI compatible



PC5-LARGO

CompactPCI®/PlusIO® CPU board with 5th Gen. Intel® Core i7® processor, 24 GB DDR3 RAM with ECC (8GB soldered), dual mDP or VGA, 2x GbE, 2x USB3.0 frontside, further I/O options via sideboard, PlusIO® on J2, opt. CompactPCI® 64Bit/PXI compatible



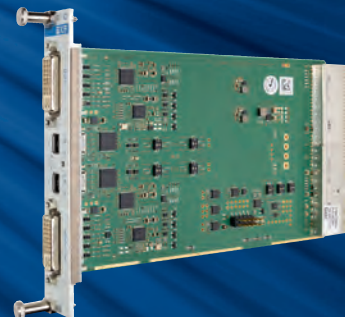
PC6-TANGO

CompactPCI®/PlusIO® CPU board with Intel® Atom™ SoC E39XX (Apollo Lake), dual DP, 2x USB3.0, 2x GbE frontside, up to 8GB DDR3+ECC, HD Graphics, CFast slot, I/O options via sideboards, opt. CompactPCI® 64bit/PXI compatible



PR1-RIO

CompactPCI®/PlusIO® CPU rear I/O transition module via J2, 2x GbE and dual eSATA on back panel, onboard 4x PCIe for cabling, 2x SATA, 2x USB, aux. power connector

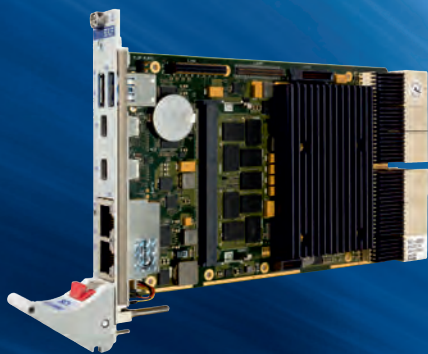


CVX-DVI

Dual (m)DP to DVI Adapter, output path selectable to DVI-D or VGA adapter, for CompactPCI® slot, RIO option J1/2

System Controller

cPCI Serial



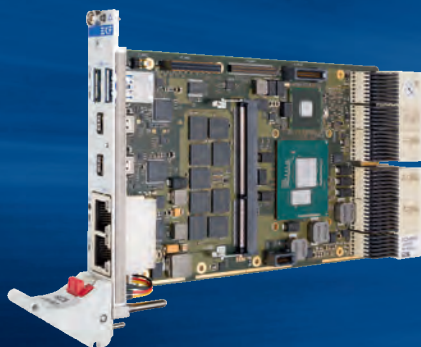
SC1-ALLEGRO

CompactPCI® Serial CPU board with Intel® Core i7® processor 2.10GHz Quad Core, 16GB DDR3 RAM with ECC (8GB soldered), dual mDP or VGA, 2x GbE, 2x USB3.0, I/O options via sideboard



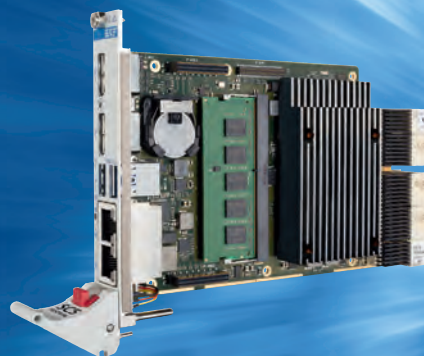
SC2-PRESTO

CompactPCI® Serial CPU board with 4th. Gen Intel® Core i7® processor e. g. QC (1.70GHz) or DC (2.7GHz), 16GB DDR3 RAM with ECC (8GB soldered), dual mDP or VGA, 2x GbE, 2x USB3.0, I/O options via sideboard



SC3-LARGO

CompactPCI® Serial CPU board with Intel® Core i7® QC/DC 5th Gen, i7-5850EQ (4 Cores, 2.7GHz) Intel® Iris™ Pro graphics or i7-5700EQ (4 Cores, 2.6GHz) Intel® HD graphics 24GB DDR3 RAM with ECC (8GB soldered), dual mDP or VGA, 2x GbE, 2x USB 3.0, I/O options via sideboard



SC4-LARGO

CompactPCI® Serial CPU board with Gen 6 Intel® Core i7® QC/DC, 32GB DDR4 RAM with ECC/non-ECC (16GB soldered), dual DP, 2x GbE, 2x USB 3.0, I/O options via sideboard



SC5-FESTIVAL

CompactPCI® Serial CPU board with Intel® Gen. 7 Xeon® E3 v6 processor, CM238 mobile workstation chipset, 32GB DDR4-ECC (16GB soldered), triple DP port 4k/60Hz, up to, 10x GbE, SSD via NVMe or SATA, various I/O options

System Controller Expansion

EKF CPU boards offer onboard connectors for optional expansion of functionality with side cards and modules. All cards are powered from the supporting CPU board. Backplane interconnect is optional for Rear I/O only. Bundles may remain in 4HP format if a small mezzanine module is selected (e.g. C47-MSATA) or can result in an 8HP or 12HP unit. Bundles are fixed by screws and have a unique panel to fulfill higher shock and vibration requirements. All bundles are shipped readily assembled.



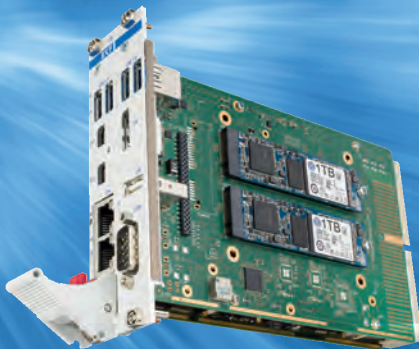
PCS-BALLET

4HP Sideboard to EKF CPU Boards, onboard SATA 2.5", 3 internal SATA Ports, 2 x USB3.0, DisplayPort F/P, Analog Audio, RS-232 (opt. Digital Audio), Rear I/O options, opt. add-on module for 2x RS232, PS/2, USB, resulting in 12HP assembly stack with CPU Card



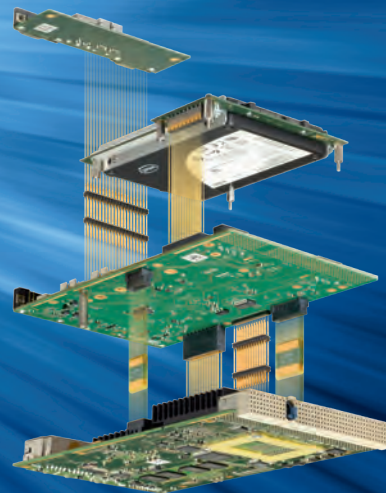
PCL-CAPELLA

4HP Sideboard to EKF CPU boards, frontaccess cFast or Micro SATA 1.8" slot, 4x GbE, 2x SATA, 4x USB, 4x UART on Rear I/O, mSATA slot, secondary cFast connector onboard



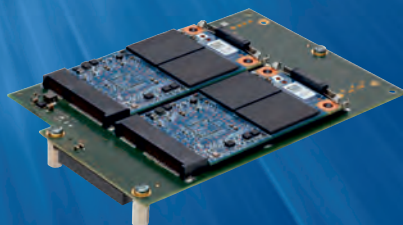
SCS-TRUMPET

4HP Sideboard to EKF CPU boards, variety of front I/O as USB3.0/2.0, DP, Audio, RS232, SATA 6G onboard 2.5" or 2x M.2 slot, Rear I/O options SATA, UART (TTL), GPIO, USB, onboard expansion



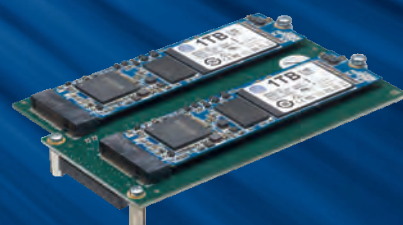
EXPANSION MODULE CONCEPT

To expand CPU board functionality EKF offers a wide range of mezzanine modules and euro-card sideboards. Together with a mezzanine module whole unit remains 4HP, with a sideboard 8HP or 12 HP (with up to 4x RS-232) results



C47-MSATA

Mezzanine Module to EKF CPU Boards, dual slot mSATA carrier, both channels operate individually or as SATA RAID level 0/1 dual drive, small pitch module



C48-M.2

Mezzanine Module to EKF CPU Boards, dual slot SATA 6G M.2 carrier, RAID level 0/1, supports module size 2230 to 2280

Peripheral Slot Controller

cPCI Serial



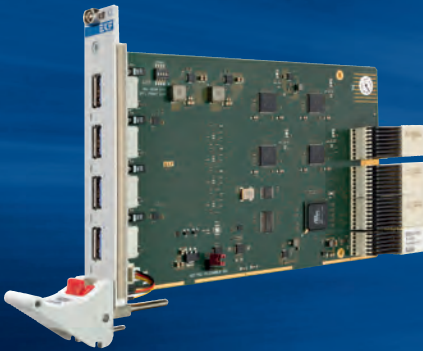
SA1-FUSION

CompactPCI® Serial peripheral board, carrier for PCIe card, supports PCIe x1, x4, x8 socket, occupies 8HP format



SB3-TONE

CompactPCI® Serial peripheral board, quad port PCIe to USB3.0 super speed controller, 4x frontside USB3 connectors



SBX-DUB

CompactPCI® Serial peripheral board, 16x USB3.0/2.0 ports, 4x USB3.0 frontside with full bandwidth each port for high performance applications, 12x or 16x ports via Rear I/O supported by SBR-RIO



SBR-RIO

Rear I/O companion board to SBX-DUB. 16x USB 3.0 channels handover via backplane connectors P3/P4. SBR-RIO offers 8 ports from the back panel. Another 8 connectors are provided on-board



SD1-DISCO

CompactPCI® Serial peripheral board, carrier for onboard 2.5" SATA device up to 6Gbps, opt. USB3.0/2.0 onboard



SD3-GLISS

CompactPCI® Serial peripheral board, quad channel mSATA module carrier, four SATA 6Gbps interface ports based on Marvell® PCIe 2.0 to SATA III controller, hardware RAID 0/1/10

Peripheral Slot Controller

cPCI Serial



SD4-SWEEP

CompactPCI® Serial peripheral board, quad channel M2. (NGFF) module carrier, four SATA 6Gb/s interface ports based on Marvell® PCIe 2.0 to SATA III controller, hardware RAID 0/1/10



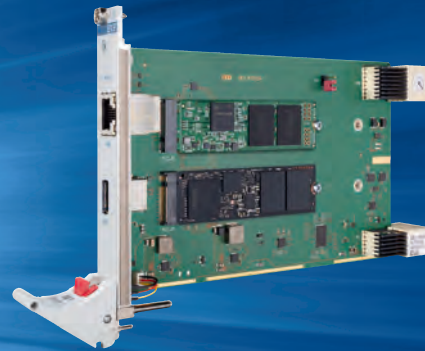
SD7-TRAK

CompactPCI® Serial peripheral board, dual port eSATA host adapter, PCIe to quad port SATA 6Gb/s controller, assembly unit comprising SK2-SESSION with DX2-EAGLE



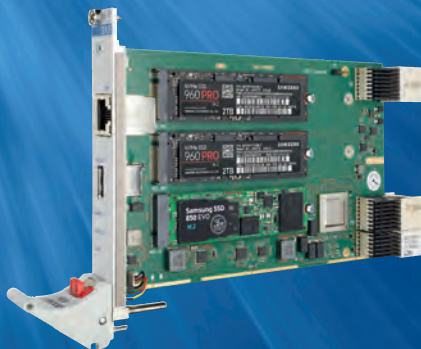
SD8-STEEL

CompactPCI® Serial peripheral board, carrier for SATA device 2.5", fast device change via front panel door, opt. available standalone version



SE1-PITCH

CompactPCI® Serial peripheral board, carrier for two M.2 slots, 1x M.2 NVMe SSD module socket according to socket 3 PCIe x4 SSD, 1x M.2 SATA SSD module socket according to socket 2 SATA SSD, supports module size 2230 to 22110



SE2-MOOD

CompactPCI® Serial peripheral board, carrier for 3x M.2 slots, 2x M.2 NVMe SSD module socket according to socket 3 PCIe x4 SSD for module size 2230 to 22110, 1x M.2 SATA SSD module socket according to socket 2 SATA SSD for module size 2230 to 2280



SF1-STUDIO

CompactPCI® Serial peripheral board, carrier for 2x PCIe Minicard modules, suitable for Hilscher PCIe Mini Card real-time Ethernet & fieldbus modules e.g. EtherCAD, POWERLINK, PROFINET IO, CANopen, DeviceNet etc.

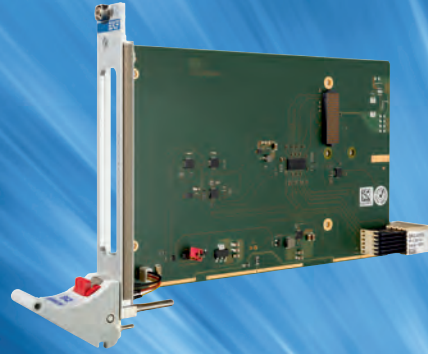
Peripheral Slot Controller

cPCI Serial



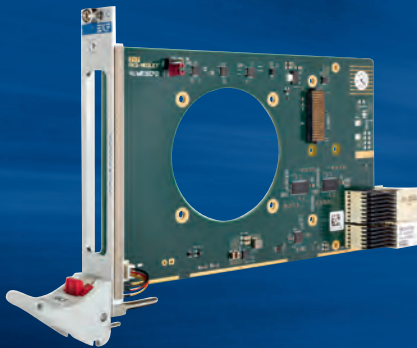
SK1-CHORD

CompactPCI® Serial peripheral board, carrier for PMC module, supports 32bit 33/66MHz modules, frontside I/O access



SK2-SESSION

CompactPCI® Serial peripheral board, carrier for XMC module, frontside I/O access



SK3-MEDLEY

CompactPCI® Serial peripheral board, 1x XMC slot, supports up to PCIe Gen3 x8 modules, frontside I/O access



SK4-Waltz

CompactPCI® Serial peripheral board, carrier for XMC module type 139mm and 149mm length, up to PCIe Gen3 x8, rear I/O via P3-P5



SL1-COMBO

CompactPCI® Serial peripheral board, 7 port GbE unmanaged switch with Marvell® controller, 5x RJ45 frontpanel ports, 2x backplane ports via P6 and P1 (NIC)



SL2-BRASS

CompactPCI® Serial peripheral board, 9 port GbE switch, 4x M12 X-coded front panel receptacles, 4x backplane ports via P6, SerDes port via P1

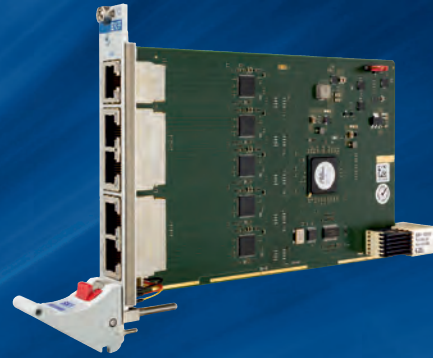
Peripheral Slot Controller

cPCI Serial



SL4-TUBA

CompactPCI® Serial peripheral board, 20 port Giga-ETH switch, quad Marvell® 88E6350, 5x RJ45 frontpanel, 14x via P5/P6 backplane connector, 1x with Intel® i210 Controller via P1



SN1-REVERB

CompactPCI® Serial peripheral board, 5 port GbE NIC with Intel® i210 controller, 5x RJ45 on frontpanel



SN2-VIBRATO

CompactPCI® Serial peripheral board, 5 port GbE NIC with Intel® i210 controller, 5x M12 X-coded on frontpanel



SN3-GONG

CompactPCI® Serial peripheral board, 2 port 10 Gigabit Ethernet NIC, Ethernet controller Intel® X540, supports PCIe x1, x2, x4 and x8 links



SN5-TOMBAK

CompactPCI® Serial peripheral board, dual 10 Gigabit Ethernet NIC, Intel® 82599E5 controller, up to PCIe x8, 2x SFP+ front connector for optical or copper cables



SP4-MAMBO

CompactPCI® Serial peripheral board, quad PCIe Minicard carrier, fullsize and halfsize cards, supports PCIe and USB, quad SIM Card slot, 6x SMA/RP antenna connectors, additional mSATA Minicard slot

Peripheral Slot Controller

cPCI Serial



SPX-PHASE

CompactPCI® Serial peripheral board, quad M.2 LTE module carrier board, 4x SIM card slots frontside access, 1x SMA antenna with onboard combiner module, software controlled functions for each M.2 module



SS9-RAI

CompactPCI® Serial peripheral board, four SAS/SATA 6Gbps interface ports, frontside mini-SAS connector, assembly unit comprising SK2-SESSION with DS1-LEOPARD



COMING SOON

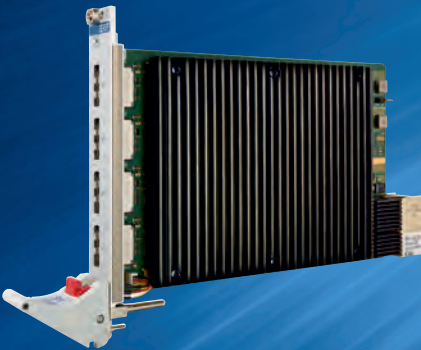


SU1- TWIST

CompactPCI® Serial peripheral board, octal PCIe to UART controller, 4x frontside isolated RS-485 port via Micro-D, 4x RIO port TTL level, as SU2-BALLAD with isolated RS-232 front ports

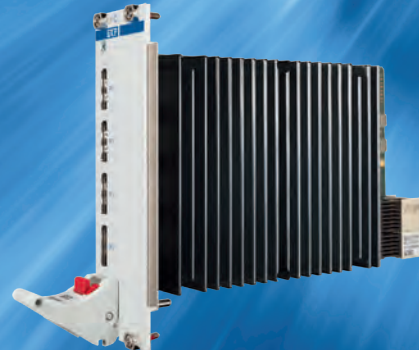
SU4-SOPRANO

CompactPCI® Serial peripheral board, octal PCIe to UART controller, each port configurable either RS232 or RS485, 8x mini D-SUB 9. via frontpanel, all ports via Rear I/O in TTL format



SV1-CLIP

CompactPCI® Serial peripheral board, carrier for type A MXM 3.0 graphics module, PCIe x8 Gen3 interface, with installed module, 4x Display Port front panel



SV2-MOVIE

CompactPCI® Serial peripheral board, carrier for type B MXM 3.0 graphics module, PCIe x8 Gen3 interface, with installed Nvidia GTX MXM 3.0 type B or AMD module

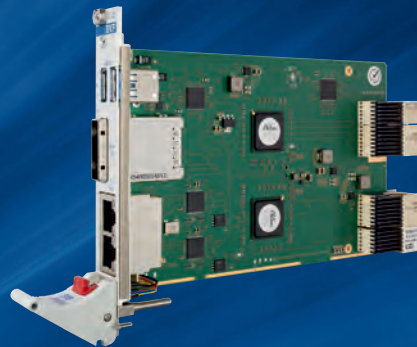
PCIe over Cable Expansion

cPCI Serial



SX2-SLIDE

CompactPCI® Serial peripheral board, PCIe over cable host side adapter, two cable expansion ports PCIe x4, copper (7m) or active optical cable (300m)



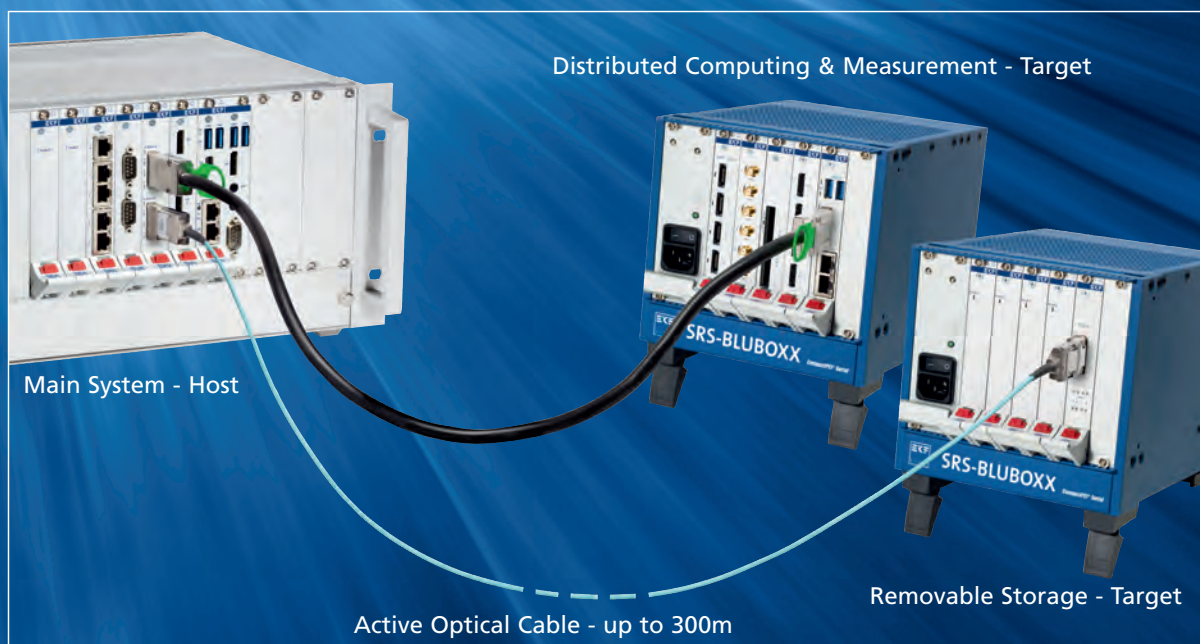
SX9-HOWL

CompactPCI® Serial system slot board, PCIe over cable target system adapter, 17x PCIe Gen2 for peripheral slot access, cable expansion ports PCIe x4 for copper (7m) or active optical cable (300m), dual GbE on frontpanel, dual USB3.0 on frontpanel



SXS-STRING

CompactPCI® Serial system slot board, PCIe over cable target system adapter, enables SATA based peripheral cards, dual quad port SATA RAID controller



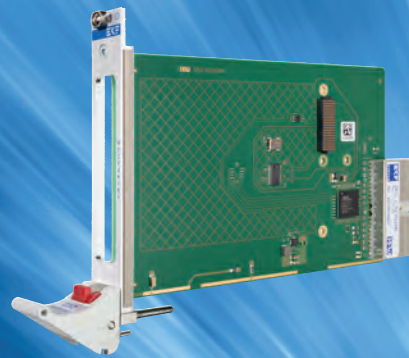
Peripheral Slot Controller

cPCI Classic



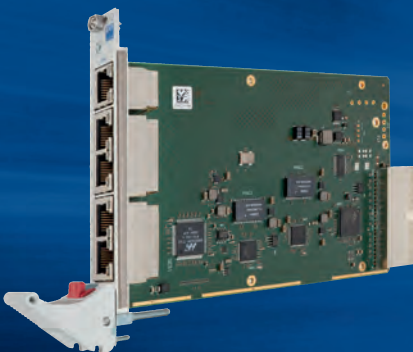
CB3-TONE

CompactPCI® peripheral board, quad port UBS 3.0/2.0 controller, 4 x front panel USB3.0 type A receptacles, backplane interface 32bit PCI 33/66MHz



CK2-SESSION

CompactPCI® peripheral board, carrier for XMC module, frontside I/O access, backplane interface 32bit PCI 33/66MHz



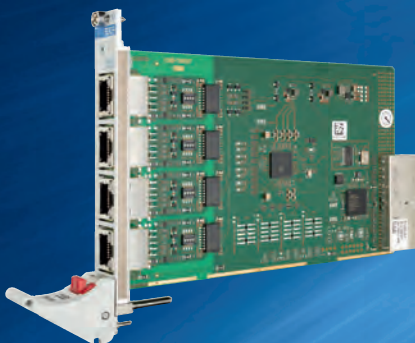
CL1-COMBO

CompactPCI® peripheral board, 5+1 port GbE switch unmanaged, 5 ports frontside via RJ45, 1 port onboard or via CompactPCI® interface (NIC), backplane interface 32bit PCI 33/66MHz, available also as CL2-BRASS with M12 instead of RJ45 connectors and opt. as standalone version



CN7-REVERB

CompactPCI® peripheral board, 5-Port Gigabit Ethernet hostadapter, 5x Intel® 82574IT GbE controllers, all ports on frontpanel via RJ45, backplane interface 32bit PCI 33/66MHz



CUD-TWIST

CompactPCI® peripheral board, octal PCIe to UART controller, 4x isolated frontpanel ports RS485 via RJ45, 4 ports with TTL level optionally onboard or RIO access. With CUE-BALLAD EKF offers a solution for isolated RS232

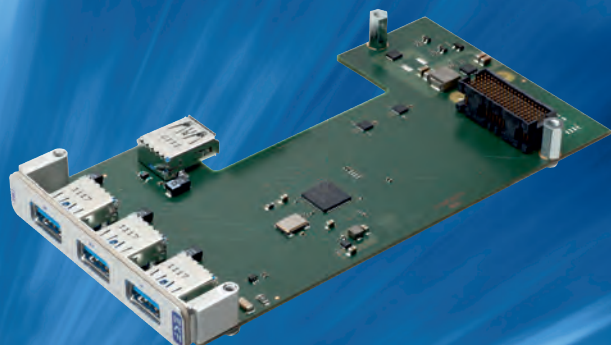


CV2-LOUNGE

CompactPCI® peripheral board, dual screen graphics controller, up to 1920x1080 (single display) or 1600x1200 (dual display) resolution, SM750 graphics controller with 16MB, available with DV-I or VGA each port, backplane interface 32bit PCI 33/66MHz

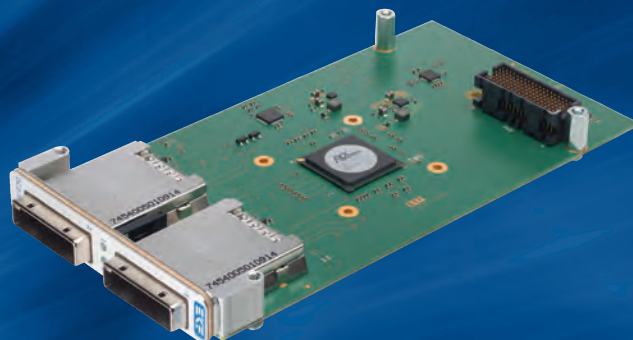
XMC Mezzanine Modules

Open standard PCI mezzanine modules according to XMC specification (VITA 42) complete EKF product portfolio. Some modules with PMC (parallel PCI) are also available. Due to carrier for all CompactPCI standards modules can be integrated into system solutions. Thanks to open standard XMC/PMC slots outside CompactPCI® Technology can integrate EKF modules also.



DB4-EAGLE

XMC mezzanine card, quad port USB3.0 controller, 3x USB F/P, 1x USB onboard optionally



DC2-STAG

XMC mezzanine card, PCI Express® external cabling host side adapter, two connectors PCIe x 4 38-pos., two target systems can be attached simultaneously



DN1-PIKE

XMC mezzanine card, 4x i210 (Intel®) GbE NIC, 4x RJ45 F/P



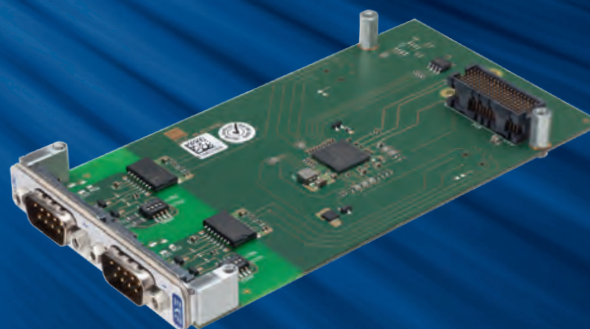
DN3-SHARK

XMC mezzanine card, dual port 10 Gigabit Ethernet controller, 2x SFP+ front bezel connector cages, for either optical or copper cables



DS1-LEOPARD

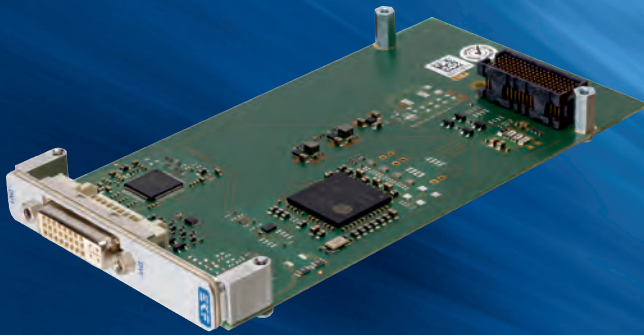
XMC mezzanine card, four SAS/SATA 6Gbps interface ports, frontside mini-SAS connector



DU1-MUSTANG

XMC mezzanine card, dual port isolated RS485 interface, 2x D-SUB 9 front ports. 2x isolated RS232 ports available with DU2-PONY

XMC Mezzanine Modules



DV1-DRAGON

XMC mezzanine card, SM750 graphics controller, 1x DVI-I or 2x VGA port F/P



DX2-COUGAR

XMC mezzanine card, quad SATA 6Gb/s controller, 2x eSATA F/P, one or two 1.8" SATA device slots onboard, optional RAID 0/1/10



DX4-BADGER

XMC mezzanine card, PCIe to 4 SATA 6Gbps interface controller, 3x mSATA module slots, 1x eSATA front connector



DX5-ANT

XMC mezzanine card, PCIe to 4 SATA 6Gbps interface controller, triple M.2 (NGFF) modules, size 2230 to 2280, 1x eSATA front connector, RAID 0,1,10 support

System Solutions

EKF offers a wide range of systems services. COTS and customized crates are available also turn key ready according to specification.



SRS-3201-BLUBOXX

CompactPCI® Serial system for desk top and wall mount, 4U/32HP format, 8HP CPU slot with 4x peripheral slots, 150W PSU AC- or DC-IN, bottom fan



SRP-4401-PlusIO

CompactPCI®/PlusIO® Rack 4U/44HP, hybrid backplane with 3x CompactPCI® and 4x cPCI Serial peripheral slots, rem. PSU unit. SRS-4401-SERIAL offers a native crate



SRS-842X

CompactPCI® Serial full 19" series, single or dual backplane, simple or redundancy PSU, 1U fan unit etc.



RUGGED SOLUTIONS

Together with partners EKF offers a wide range of system solutions in a rough environment e. g. ATR chassis etc.



SRS-849X-CC

19" CompactPCI® Serial liquid cooling system, conductive cooling concept to work with EKF off the shelf high end CPU boards and graphics solutions

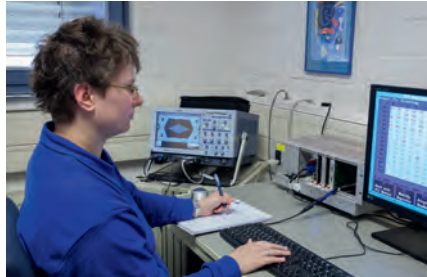
EKF Elektronik – A Full Service Company

To guarantee high quality, flexibility and short lead times, it is vital to keep the whole workflow under control from start to finish. Therefore EKF Elektronik is not only a research and development company. EKF does not outsource – its own manufacturing services guarantee

the high quality of EKF products, give the flexibility for customization and make short lead times possible. Today, two own buildings in direct vicinity offer more than 2.000sqm of floorspace with the opportunity for further expansion.



Pssst... development staff is working...



Whole manufacturing process inhouse



Development, Sales, Support

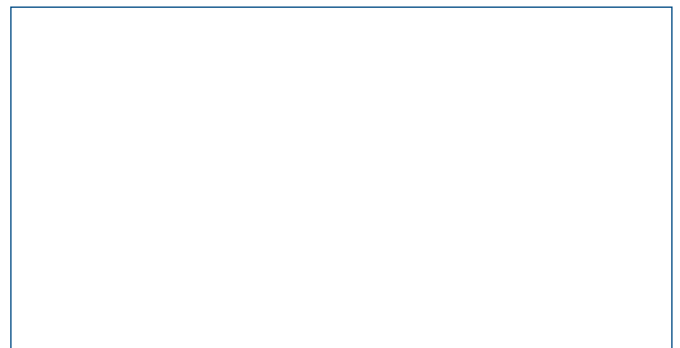


Manufacturing, Test Area, Purchasing, Administration



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