



Product Information

SC5-FESTIVAL • CompactPCI® Serial CPU Card

Intel® Mobile Workstation Processor
XEON® E3 v6 Family

Document No. 8459 • 17 June 2021



General

The SC5-FESTIVAL is a rich featured high performance 4HP/3U CompactPCI® Serial CPU board, equipped with an Intel® Xeon® E3 family mobile workstation processor (Kaby Lake Halo platform) for demanding applications. For scalability, the SC5-FESTIVAL is also available with a 7th Generation Intel® Core™ processor.

The SC5-FESTIVAL front panel is provided with two Gigabit Ethernet jacks, two USB 3.0 receptacles, and two DisplayPort connectors. In addition, up to two USB Type-C front panel receptacles are available as an option, one of them usable alternatively as (third) DisplayPort.

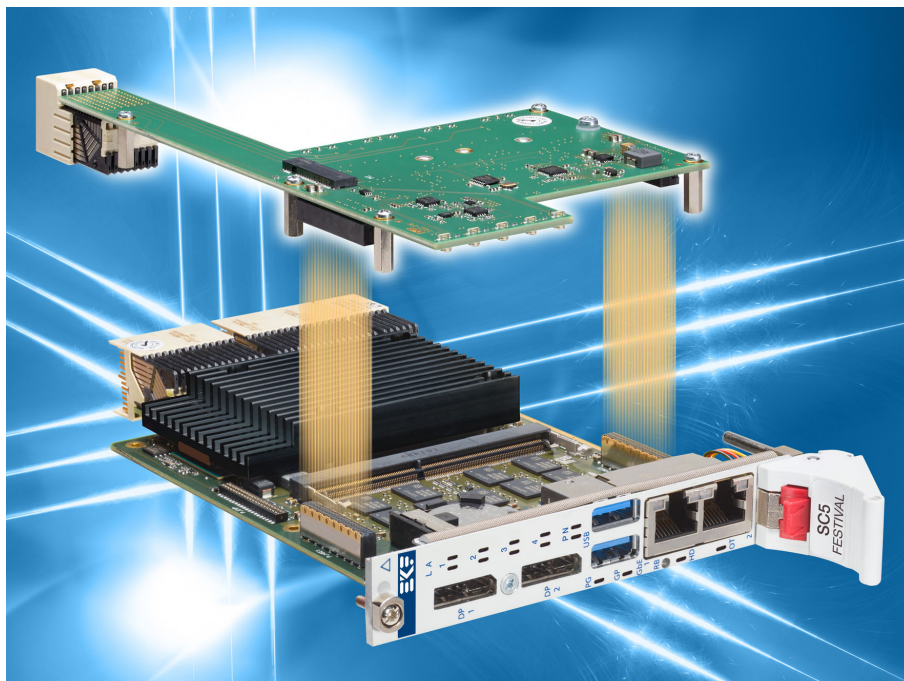
On-board mass-storage solutions are based on low profile mezzanine expansion cards, which accommodate up to two M.2 style SSD modules. One of the M.2 sockets is suitable for a fast NVMe (PCIe Gen3 x 4) module, and the other for a low cost SATA type M.2.

The SC5-FESTIVAL is equipped with up to 32GB DDR4 RAM with ECC support. Up to 16GB memory-down are provided for rugged applications, and another 16GB are available via the DDR4 ECC SO-DIMM socket.

The powerful Xeon® E3-1500 v6 series processor is accompanied by the CM238 mobile PCH, for a maximum of high speed I/O resources (e.g. PCI Express®, SATA, USB). Thus, 22 PCIe lanes are available for backplane use, and up to 8 lanes for local mezzanine expansion.

The SC5-FESTIVAL is provided with an on-board SATA hardware RAID controller, enabling high-capacity mass storage solutions across the CompactPCI® Serial backplane.

As an option, up to eight Gigabit Ethernet Ports are available via the backplane connector P6 (S80-P6 low profile mezzanine expansion card).



Feature Summary

General

- ▶ PICMG® CompactPCI® Serial (CPCI-S.0) CPU card
- ▶ Form factor single size Eurocard (board dimensions 100x160mm²)
- ▶ Mounting height 3U
- ▶ Front panel width 4HP (8HP/12HP assembly with optional mezzanine side card)
- ▶ Front panel I/O connectors for typical system configuration (2 x USB3, 2 x DisplayPort, 2 x GbE)
- ▶ Backplane communication via PCI Express® Gen3, SATA 6G, USB 3.0, Gigabit Ethernet
- ▶ Local mezzanine expansion option, COTS and custom specific boards

Processor

- ▶ Intel® Kaby Lake-H mobile platform with ECC (CM238 mobile workstation PCH)
- ▶ Intel® Xeon® processor E3 v6 family (mobile workstation)
 - ▶ Xeon E3 1505M v6 ■ 3/4GHz ■ 8M ■ 4C/8T ■ DDR4 2400 ECC ■ 45/35W ■ GT2 - P630 ■ vPRO™/AMT
 - ▶ Xeon E3 1505L v6 ■ 2.2/3GHz ■ 8M ■ 4C/8T ■ DDR4 2400 ECC ■ 25W ■ GT2 - P630 ■ vPRO™/AMT
 - ▶ Xeon E3 1501M v6 ■ 2.9/3.6GHz ■ 6M ■ 4C/8T ■ DDR4 2400 ECC ■ 45/35W ■ GT2 - P630 ■ vPRO™/AMT
 - ▶ Xeon E3 1501L v6 ■ 2.1/2.9GHz ■ 6M ■ 4C/8T ■ DDR4 2400 ECC ■ 25W ■ GT2 - P630 ■ vPRO™/AMT
- ▶ 7th Generation Intel® Core™ mobile processor
 - ▶ i3 7100E ■ 2.9GHz ■ 3M ■ 2C/4T ■ DDR4 2400 ECC ■ 35W ■ GT2 - 630
 - ▶ i3 7102E ■ 2.1GHz ■ 3M ■ 2C/4T ■ DDR4 2400 ECC ■ 25W ■ GT2 - 630

Firmware

- ▶ Phoenix® UEFI (Unified Extensible Firmware Interface) with CSM*
- ▶ Fully customizable by EKF
- ▶ Secure Boot and Measured Boot supported - meeting all demands as specified by Microsoft®
- ▶ Windows®, Linux and other (RT)OS' supported
- ▶ Intel® AMT supported for Intel® Xeon® E3 v6 (disabled by default, must be enabled via BIOS setup)

* CSM (Compatibility Support Module) emulates a legacy BIOS environment, which allows to boot a legacy operating system such as DOS, 32-bit Windows and some RTOS'

Main Memory

- ▶ Integrated memory controller up to 32GB DDR4 2400 +ECC
- ▶ DDR4 +ECC soldered memory up to 16GB
- ▶ DDR4 +ECC SO-DIMM memory module socket up to 16GB

Feature Summary

Graphics

- ▶ Integrated graphics engine, 3 symmetric independent displays
- ▶ 3D HW acceleration DirectX12, OpenCL 2.x, OpenGL 4.3/4.4, ES 2.0
- ▶ HW video decode/encode HEVC10b 10-bit, VP9 10-bit, JPEG
- ▶ HDR (High Dynamic Range) Rec. 2020 Wide Color Gamut
- ▶ Content protection
- ▶ UHD premium content playback
- ▶ Front panel options: Dual DisplayPort (DP) connectors
- ▶ 3rd DisplayPort optional via Type-C connector on low profile mezzanine card
- ▶ Max resolution 4096 x 2304 @60Hz (any DisplayPort, concurrent operation)
- ▶ DisplayPort™ 1.2 Multi-Stream Transport (MST) - display daisy chaining
- ▶ MST max resolution via single DP connector 2880x1800@60Hz (2 displays), 2304x1440@60Hz (3 displays)
- ▶ Integrated audio (3 independent audio streams)

Networking

- ▶ Up to 10 networking interfaces in total - 2 x front RJ45 GbE, option 8 x backplane or 4 x M12-X front
- ▶ 1000BASE-T, 100BASE-TX, 10BASE-T connections
- ▶ Front port 1 - I219LM with Intel® AMT support
- ▶ Front port 2 - Intel® I210-IT -40°C to +85°C operating temperature GbE NIC w. integrated PHY
- ▶ IPv4/IPv6 checksum offload, 9.5KB Jumbo Frame support, EEE Energy Efficient Ethernet
- ▶ IEEE 802.1Qav Audio-Video-Bridging (AVB) enhancements for time-sensitive streams
- ▶ IEEE 1588 and 802.1AS packets hardware-based time stamping for high-precision time synchronization
- ▶ Backplane Gigabit Ethernet option w. S80-P6 mezzanine module - Marvell Peridot switch
- ▶ Backplane Gigabit Ethernet option w. S82-P6 mezzanine module - 4 x Intel® I210-IT NIC
- ▶ Option quad front panel RJ45 2.5GbE ports with SCJ-VEENA side card (8HP front panel width)
- ▶ Option quad front panel M12-X GbE ports with SCL-RHYTHM side card (8HP front panel width)

Chipset

- ▶ Intel® CM238 Mobile Workstation Platform Controller Hub (PCH)
- ▶ PCIe Gen3 8GT/s
- ▶ SATA 6G
- ▶ USB3
- ▶ GbE
- ▶ LPC, Audio, Legacy

Feature Summary

On-Board Building Blocks

- ▶ Additional on-board devices, PCIe® based
- ▶ 1 x Gigabit Ethernet controller Intel® I210IT
- ▶ 1 x Gigabit Ethernet PHY Intel® I219LM
- ▶ IEEE 1588-2008 Precision Time Protocol including PPS and PPM signals supported
- ▶ SATA 6G RAID controller Marvell® 88SE9230, ARM powered subsystem for host CPU offload

Security

- ▶ Trusted Platform Module
- ▶ TPM 2.0 for highest level of certified platform protection
- ▶ Infineon Optiga™ SLB 9665 cryptographic processor
- ▶ Conforming to TCG 2.0 specification
- ▶ AES hardware acceleration support (Intel® AES-NI)

Front Panel I/O (4HP)

- ▶ 2 x Gigabit Ethernet RJ45 (1 = PCH & I219LM - Intel® AMT support, 2 = I210IT)
- ▶ 2 x DisplayPort (from processor integrated HD graphics engine, standard DP latching receptacles)
- ▶ 2 x USB 3.0
- ▶ Option 2 x Type-C USB 3.1 Gen1 (requires low profile mezzanine expansion card w. front panel I/O)
- ▶ Support for Type-C locking plugs (dual screw) according to the 'Locking Connector Spec. Rev. 1.0'
- ▶ Option DisplayPort Alt Mode on lower Type-C connector (3rd video monitor output)

CompactPCI® Serial Backplane Resources

- ▶ PICMG® CPCI-S.0 CPU card & system slot controller
- ▶ 16 x PCIe Gen3 8GT/s (2 links x 8 for two fat pipe slots, derived directly from the Xeon® or Core™ CPU)
- ▶ 6 x PCIe Gen3 8GT/s (6 links x 1 for peripheral slots, derived from CM238 PCH)
- ▶ 2 x SATA 6G (from CM238 PCH)
- ▶ 4 x SATA 6G (Marvell hardware RAID controller)
- ▶ 5 x USB2, 3 x USB3 (from CM238 PCH)
- ▶ Option 8 x Gigabit Ethernet Marvell 88E6390 switch, requires S80-P6 low profile mezzanine expansion card
- ▶ Option 4 x Gigabit Ethernet Intel® I210-IT NIC, requires S82-P6 low profile mezzanine expansion card

Feature Summary

Local Expansion & Mezzanine Mass Storage Options

- ▶ Mezzanine side card connectors for optional local expansion
- ▶ Low profile mezzanine modules available (4HP front panel) and also side cards (8HP F/P assembly)
- ▶ P-EXP - Legacy interface (from PCH)
- ▶ P-HSE1 - configurable as 4 x SATA 6G or 4 x PCIe (from CM238 PCH), 1 x USB3
- ▶ P-HSE2 - 4 x PCIe (from CM238 PCH) & 3rd DisplayPort (from CPU)

- ▶ 4HP Low profile mezzanine module preferred options:
 - ▶ C47-MSATA Mezzanine module - 2 x mSATA SSD sockets
 - ▶ C48-M2 Mezzanine module - 2 x M.2 2280 SATA SSD sockets
 - ▶ S20-NVME Mezzanine module - 1 x M.2 2280 NVME SSD socket, 1 x Type-C USB F/P connector
 - ▶ S40-NVME Mezzanine module - 1 x M.2 2280 NVME SSD socket, 1 x M.2 2280 SATA SSD socket, 2 x Type-C USB F/P Connector (1 connector enabled for DisplayPort alternate mode)
 - ▶ S42-MC Mezzanine module - 1 x M.2 2280 NVME SSD socket, 2 x Minicard sockets
 - ▶ S48-SSD Mezzanine Module - 2 x M.2 2280 NVME SSD sockets, 1 x USB Type-C
 - ▶ S80-P6 Mezzanine module - 1 x M.2 2280 NVMe SSD socket, 8 x Gigabit Ethernet via P6 backplane connector (TSN/AVB switch based solution)
 - ▶ S82-P6 Mezzanine module - M.2 NVMe SSD & 4 x GbE NIC via P6 backplane connector
 - ▶ Custom specific storage & I/O module design

- ▶ 8HP/12HP Mezzanine side card options:
 - ▶ SCJ-VEENA Quad RJ45 2.5GbE NIC & M.2 SSD storage
 - ▶ SCL-RHYTHM Quad M12-X GbE NIC & M.2 SSD storage
 - ▶ SCZ-NVM Dual M.2 NVMe SSD, quad UART
 - ▶ P01-M12 Replacement for RJ45 GbE jacks by M12-X receptacles
 - ▶ Custom specific side card design - I/O and storage

- ▶ Special purpose mezzanine side card option:
 - ▶ SCX-PCIE CompactPCI® Serial backplane doubling
 - ▶ ECX-PCIE Backplane coupler CompactPCI® Serial to CompactPCI® Express

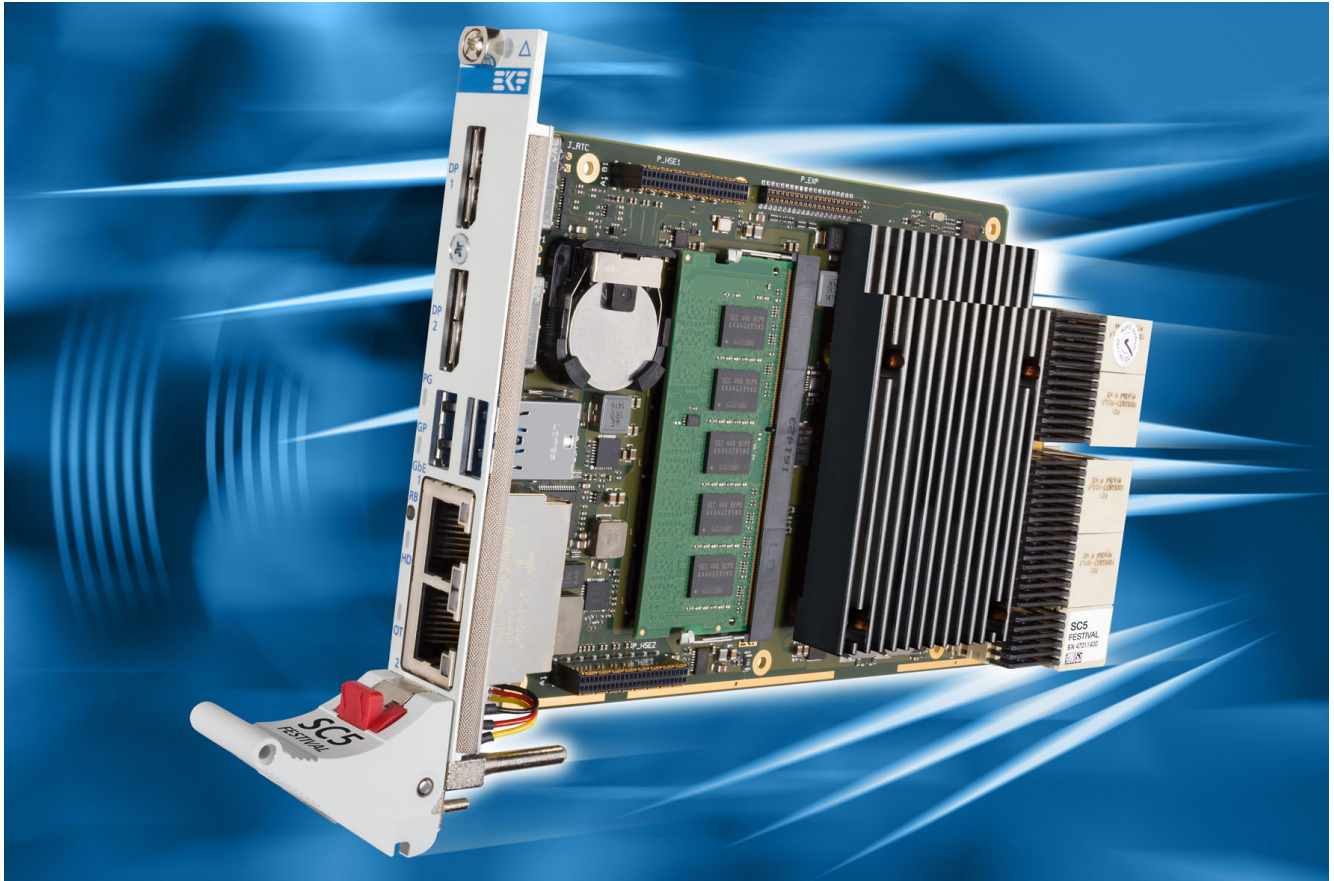
Feature Summary

Environmental & Regulatory

- ▶ Suitable e.g. for industrial, transportation & instrumentation applications
- ▶ Designed & manufactured in Germany
- ▶ ISO 9001 certified quality management
- ▶ Long term availability
- ▶ Rugged solution
- ▶ Coating, sealing, underfilling on request
- ▶ Lifetime application support
- ▶ RoHS compliant
- ▶ Operating temperature 0°C to +70°C
- ▶ Operating temperature -40°C to +85°C (industrial temperature range) on request
- ▶ Storage temperature -40°C to +85°C, max. gradient 5°C/min
- ▶ Humidity 5% ... 95% RH non condensing
- ▶ Altitude -300m ... +3000m
- ▶ Shock 15g 0.33ms, 6g 6ms
- ▶ Vibration 1g 5-2000Hz
- ▶ MTBF 21.2 years
- ▶ EC Regulatory EN55024, EN55032, EN62368-1

RT OS Board Support Packages & Driver

- ▶ LynxOS - on request
- ▶ On Time RTOS-32 - on request
- ▶ OS-9 - on request
- ▶ QNX 4.x, 6.x - on request
- ▶ Real-Time Linux (RT Patch) - on request
- ▶ RTX - on request
- ▶ VxWorks 5.5 & 6.9 - on request
- ▶ VxWorks 7.0 - on request
- ▶ Others - on request

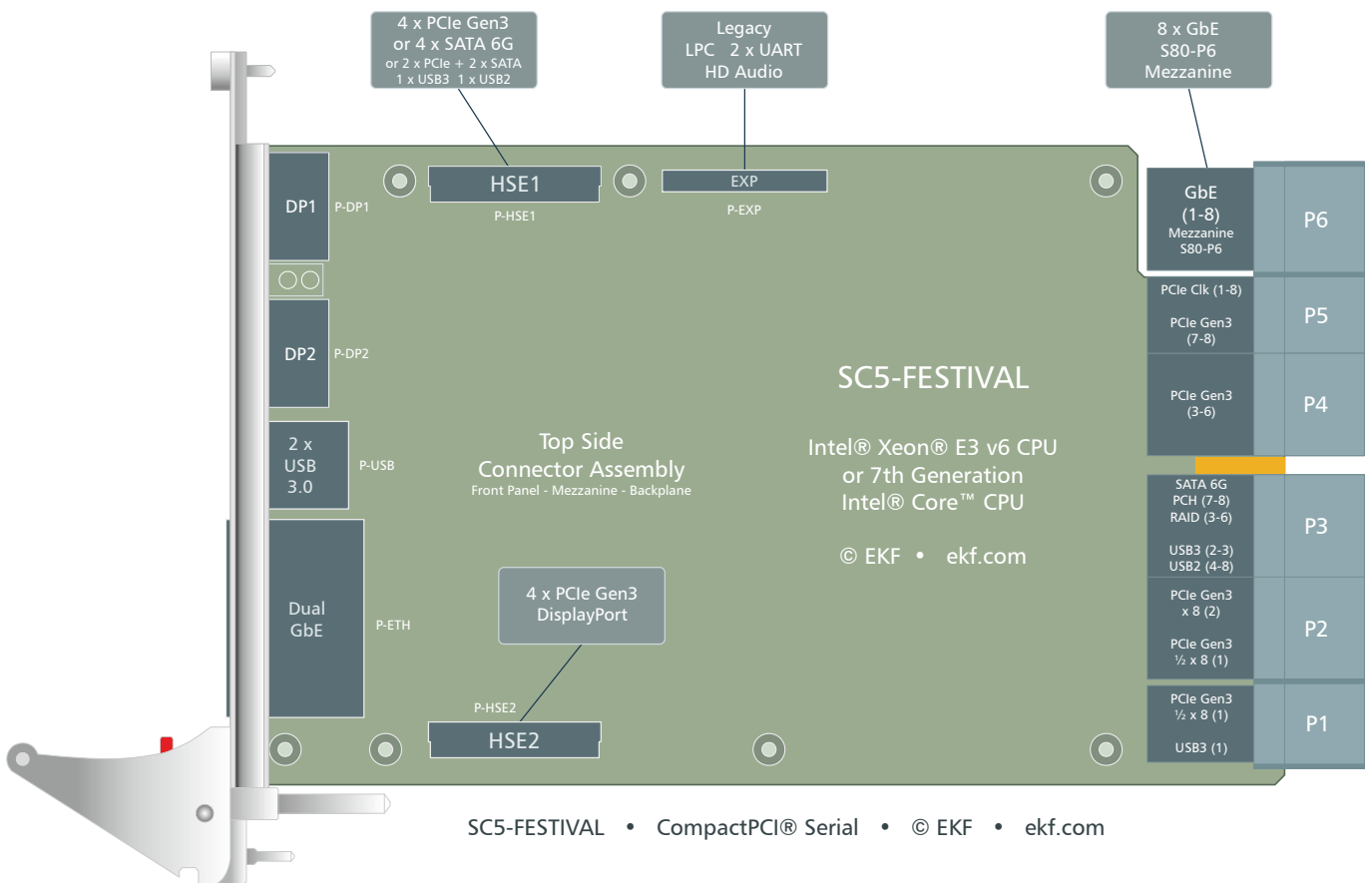


CompactPCI® Serial

While mechanically compliant to CompactPCI® Classic, CompactPCI® Serial (PICMG® CPCIS.0) defines a completely new card slot, based on PCI Express®, SATA, Gigabit Ethernet and USB serial data lines. Up to 6 high-speed backplane connectors P1 - P6 are provided on a system slot controller such as the SC5-FESTIVAL, which can be considered as a root hub with respect to most signal lines. A passive backplane is used for distribution of a defined subset of I/O channels from the system slot to each of up to eight peripheral slots in a CompactPCI® Serial system.

Most CompactPCI® Serial peripheral slot cards require only the backplane connector P1, which comprises PCIe, SATA and USB signals, resulting in a concise and inexpensive peripheral board design. More powerful peripheral cards profit from two so called Fat Pipe slots (PCIe x 8).

The SC5-FESTIVAL is a native CompactPCI® Serial CPU card, suitable for usage in a pure CPCI Serial environment. Due to its generous backplane capabilities (22 x PCI Express® Gen3, 8 x USB, 6 x SATA/RAID 6G, 8 x GbE), very powerful industrial systems can be built.



SC5-FESTIVAL Connector Suite

SC5-FESTIVAL • Resources w. 1 + 8 Slots Backplane (System Slot Left Aligned Version)

	1	2	3	4	5	6	7	8	9
P6	GbE (1-8)	GbE (1)	GbE (2)	GbE (3)	GbE (4)	GbE (5)	GbE (6)	GbE (7)	GbE (8)
P5	CLK PE (1-8) PE Gen3 (7-8)	GA 111	GA 110	GA 101	GA 100	GA 011	GA 010	GA 001	GA 000
P4	PE Gen3 (3-6)	PER 1	PER 2	PER 3	PER 4	PER 5	PER 6	PER 7	PER 8
P3	SATA PCH (7-8) SATA RAID (3-6) USB3 (2-3) USB2 (4-8)	CPU N/A N/A 0:1:0	CPU N/A N/A 0:1:1	CM238 HSIO-11 PCIe #5 0:28:4	CM238 HSIO-12 PCIe #6 0:28:5	CM238 HSIO-13 PCIe #7 0:28:6	CM238 HSIO-14 PCIe #8 0:28:7	CM238 HSIO-25 PCIe #19 0:27:2	CM238 HSIO-26 PCIe #20 0:27:3
P2	PE Gen3 x 8 (2) PE Gen3 ½ x 8 (1)			PCI Express® Root Port Function Numbers may vary according to UEFI Settings at: Advanced/Advanced Menu/PCI-IOP/PCI Express/PCIe function swap [Disabled] [Enabled]					
P1	PE Gen3 ½ x 8 (1) USB3 (1)	PE Gen3 x 8 USB3	PE Gen3 x 8 USB3						
SC5-FESTIVAL		Fat Pipe Slot	Fat Pipe Slot	Peripheral Slot	Peripheral Slot	Peripheral Slot	Peripheral Slot	Peripheral Slot	Peripheral Slot

© EKF • ekf.com

system slot connector assignment numbers in brackets (e.g. SATA PCH (7-8)) according to the CPCI-S.0 specification table 44/45
 SATA (PCH) assigned connectors are Intel CM238 Platform Controller Hub derived ports
 SATA (RAID) assigned connectors are Marvell 88SE9230 hardware RAID controller derived ports (may be operated non RAID)

Backplane Resources SC5-FESTIVAL (System Slot Right Aligned)

www.ekf.com/s/sc5/img/sc5_backplane.pdf

For backplanes with a lower number of peripheral card slots (PER#), resources shown above get lost on missing slots. Not so however regarding SATA - these channels move towards the SC5-FESTIVAL system slot. A backplane with six peripheral slots e.g. would provide SATA (RAID) on both fat pipe peripheral slots.

SC5-FESTIVAL • Resources w. 1 + 8 Slots Backplane (System Slot Right Aligned Version)

	①	②	③	④	⑤	⑥	⑦	⑧	⑨
P6	GbE (8)	GbE (7)	GbE (6)	GbE (5)	GbE (4)	GbE (3)	GbE (2)	GbE (1)	GbE (1-8)
P5	GA 000	GA 001	GA 010	GA 011	GA 100	GA 101	GA 110	GA 111	CLK PE (1-8) PE Gen3 (7-8)
P4	PER 8	PER 7	PER 6	PER 5	PER 4	PER 3	PER 2	PER 1	PE Gen3 (3-6)
P3	CM238 HSI0-26 PCIe #20 0:27:3	CM238 HSI0-25 PCIe #19 0:27:2	CM238 HSI0-14 PCIe #8 0:28:7	CM238 HSI0-13 PCIe #7 0:28:6	CM238 HSI0-12 PCIe #6 0:28:5	CM238 HSI0-11 PCIe #5 0:28:4	CPU N/A N/A 0:1:1	CPU N/A N/A 0:1:0	SATA PCH (7-8) SATA RAID (3-6) USB3 (2-3) USB2 (4-8)
P2	PCI Express® Root Port Function Numbers may vary according to UEFI Settings at: Advanced/Advanced Menu/PCH-I/O/PCI Express/PCIe function swap [Disabled] [Enabled]								
P1	Peripheral Slot PE Gen3 x 1 SATA 6G (PCH) USB2	Peripheral Slot PE Gen3 x 1 SATA 6G (PCH) USB2	Peripheral Slot PE Gen3 x 1 SATA 6G (RAID) USB2	Peripheral Slot PE Gen3 x 1 SATA 6G (RAID) USB2	Peripheral Slot PE Gen3 x 1 SATA 6G (RAID) USB2	Peripheral Slot PE Gen3 x 1 SATA 6G (RAID) USB3	Fat Pipe Slot PE Gen3 x 8 USB3	Fat Pipe Slot PE Gen3 x 8 USB3	SC5-FESTIVAL PE Gen3 1/2 x 8 (1) PE Gen3 1/2 x 8 (1) PE Gen3 1/2 x 8 (1) PE Gen3 x 8 (2)

© EKF • ekf.com

system slot connector assignment numbers in brackets (e.g. SATA PCH (7-8) according to the CPCI-S.0 specification table 44/45
SATA (PCH) assigned connectors are Intel CM238 Platform Controller Hub derived ports
SATA (RAID) assigned connectors are Marvell 88SE9230 hardware RAID controller derived ports (may be operated non RAID)

Backplane Resources SC5-FESTIVAL (System Slot Left Aligned)

www.ekf.com/s/sc5/img/sc5_backplane.pdf

For backplanes with a lower number of peripheral card slots (PER#), resources shown above get lost on missing slots. Not so however regarding SATA - these channels move towards the SC5-FESTIVAL system slot. A backplane with six peripheral slots e.g. would provide SATA (RAID) on both fat pipe peripheral slots.

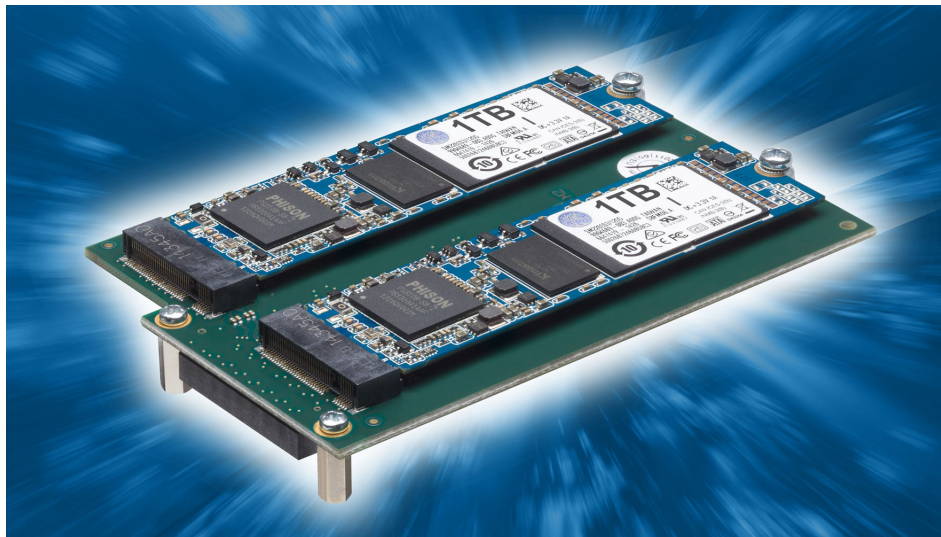
Local Expansion

The SC5-FESTIVAL is equipped with a set of high-speed local expansion interface connectors, which can be optionally used to attach either a low profile mezzanine module (fits into the 4HP front panel envelope) or a side board for an 8HP or even 12HP assembly in total.

The connectors HSE1 and HSE2 are high speed connectors, as required for PCI Express® Gen3 and SATA 6G. The socket EXP is used as a legacy interface (e.g. HD Audio, LPC) and not required for many mezzanine modules. All connectors allow board-to-board heights of 9.5mm (C4* series), 10.0mm (S20, S40), 10.8mm (S60, S80), and 18.7mm (SC* side cards 8HP assembly).

HSE1 can be configured for either 4 x PCIe *or* 4 x SATA, or 2 x PCIe *and* 2 x SATA, thanks to the flexible HSIO channels of the CM238 PCH. When HSE1 has been setup for SATA, the SC5-FESTIVAL can be combined e.g. with low cost SSD mass storage mezzanine modules such as the C47-MSATA (dual mSATA carrier) or C48-M2 (dual M.2 SATA sockets). For high performance NVMe based SSD mezzanine modules (S20/40/80), HSE1 must be configured as PCIe x 4.

HSE2 is assigned to 4 x PCIe, and in addition the 3rd DisplayPort video output. While S20 and S60 get along with HSE1 only, the S40 and S80 mezzanine modules depend on both HSE1 and HSE2, for additional I/O.



C48-M2 Mezzanine Module

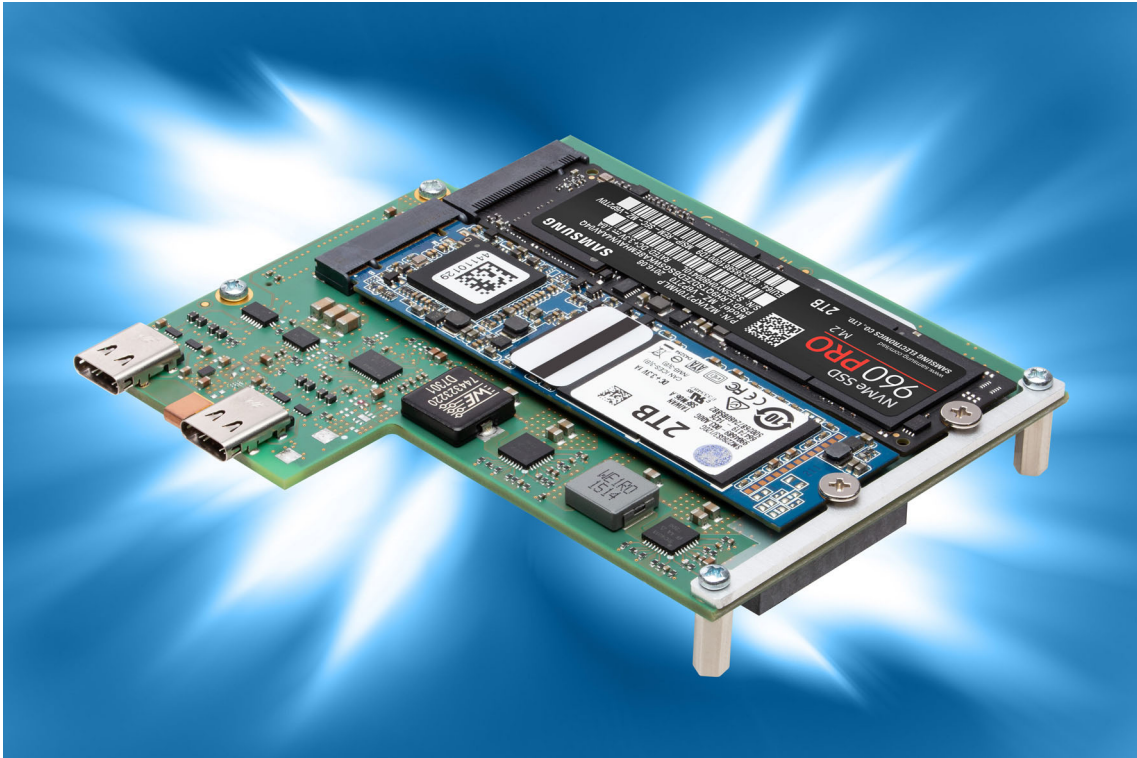
Related Information Mezzanine Connectors

www.ekf.com/s/sc5/new_mezzanine_connectors.pdf



SC5-FESTIVAL w. S20-NVME





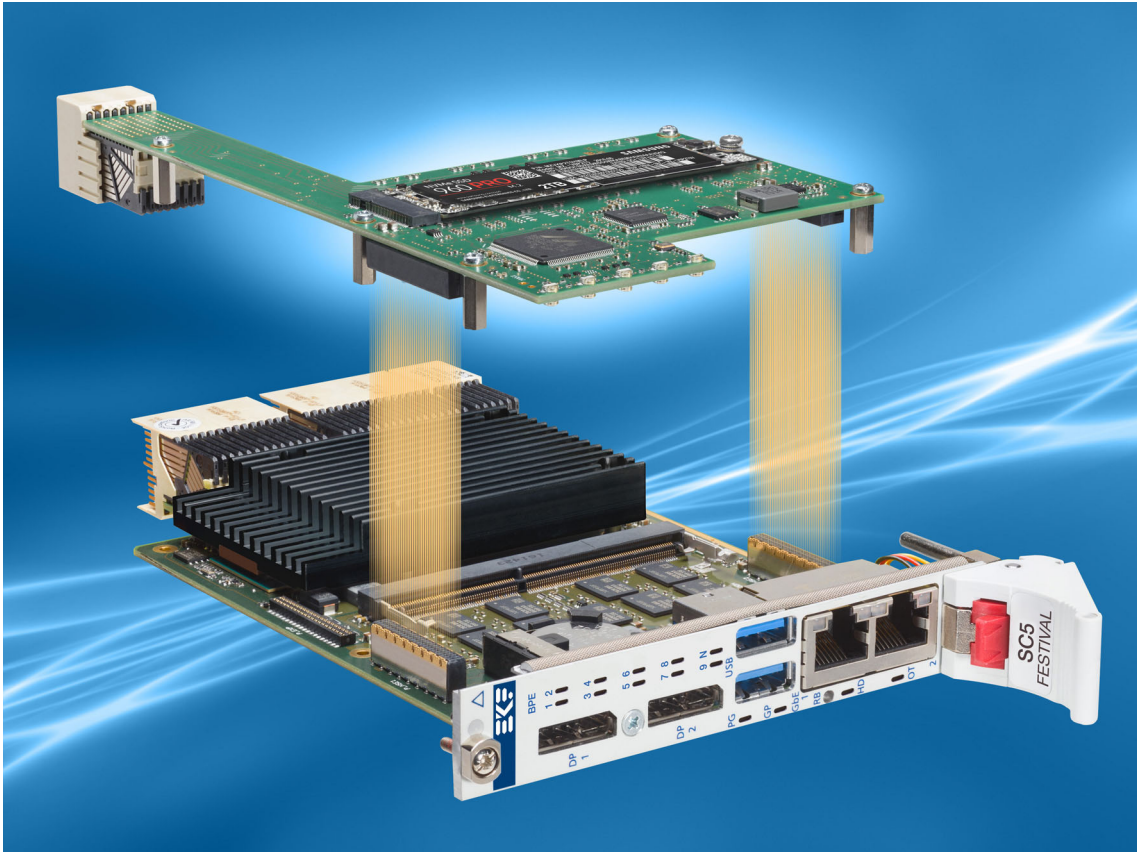
S40-NVME Mezzanine Module





SC5-FESTIVAL w. S40-NVME



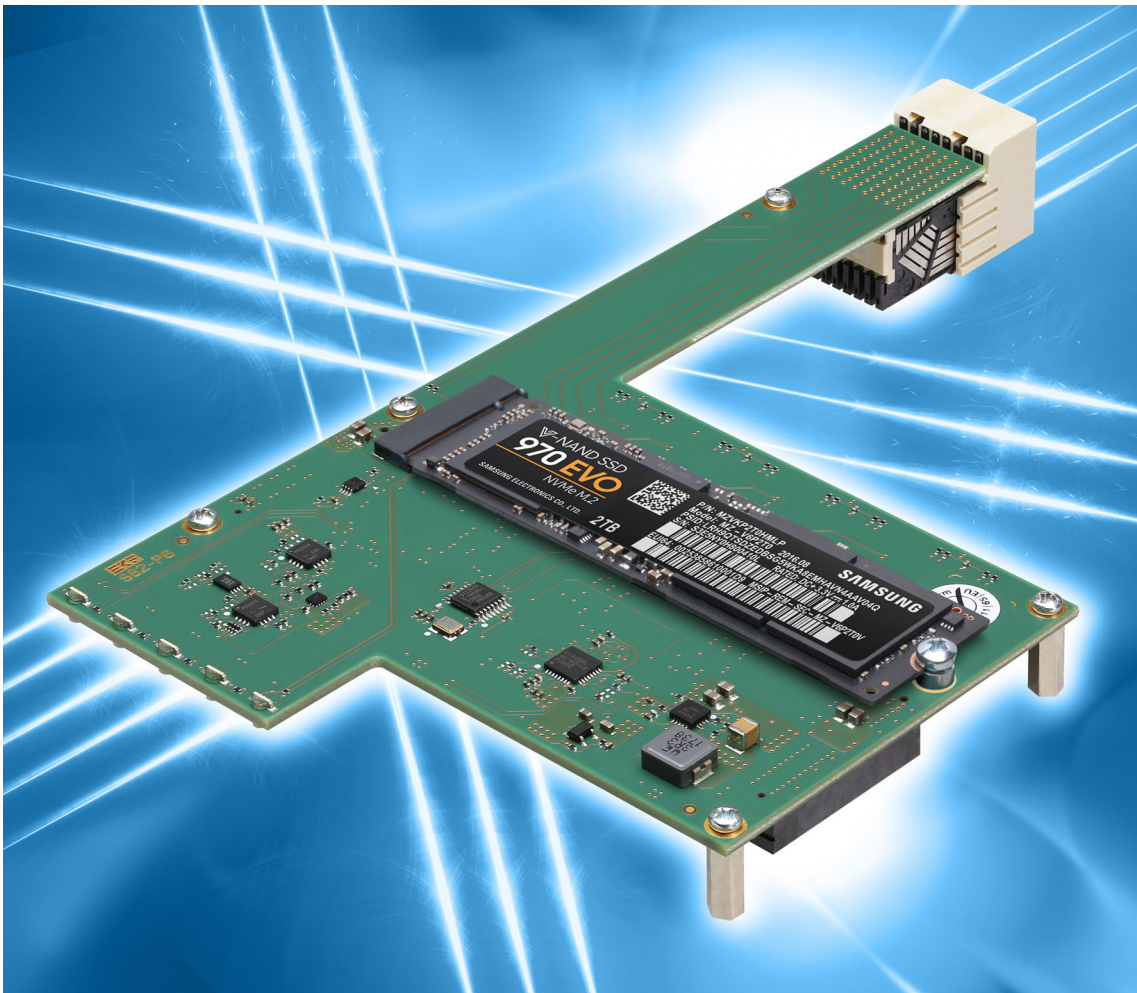


SC5-FESTIVAL w. S80-P6





SC5-FESTIVAL w. S82-P6

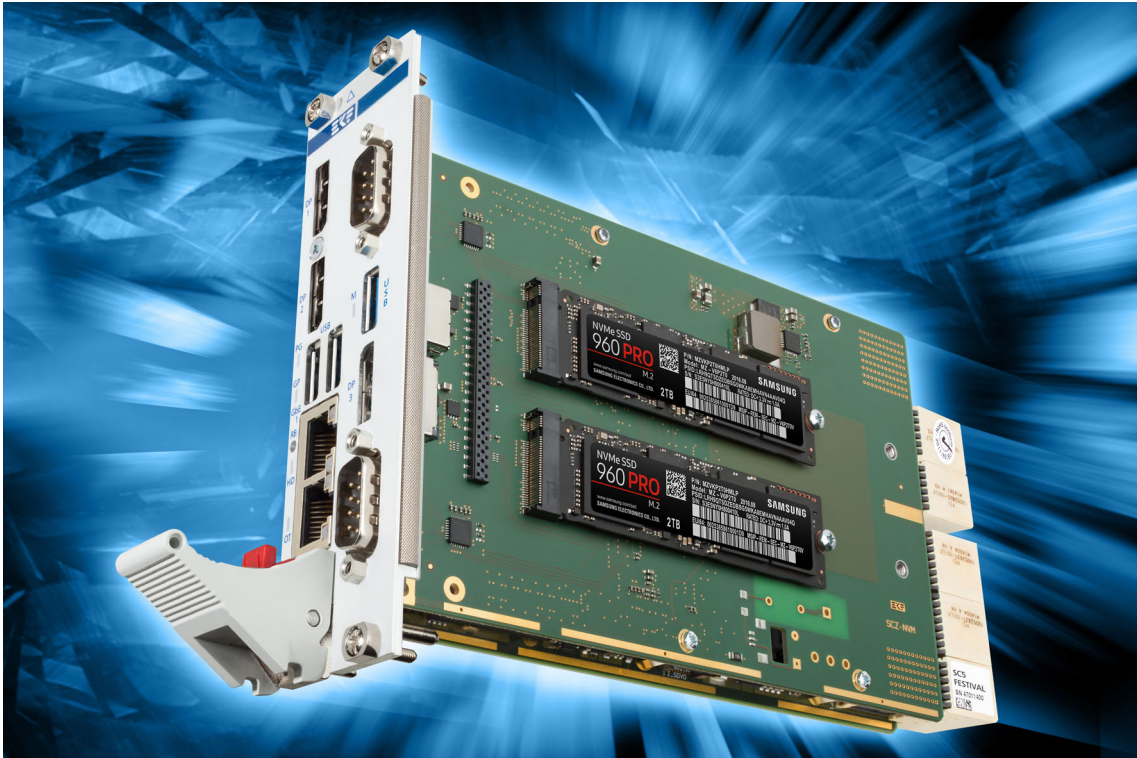




8HP Assembly SC5-FESTIVAL w. SCL-RHYTHM Side Card



8HP Assembly SC5-FESTIVAL w. S40-NVME & P01-M12

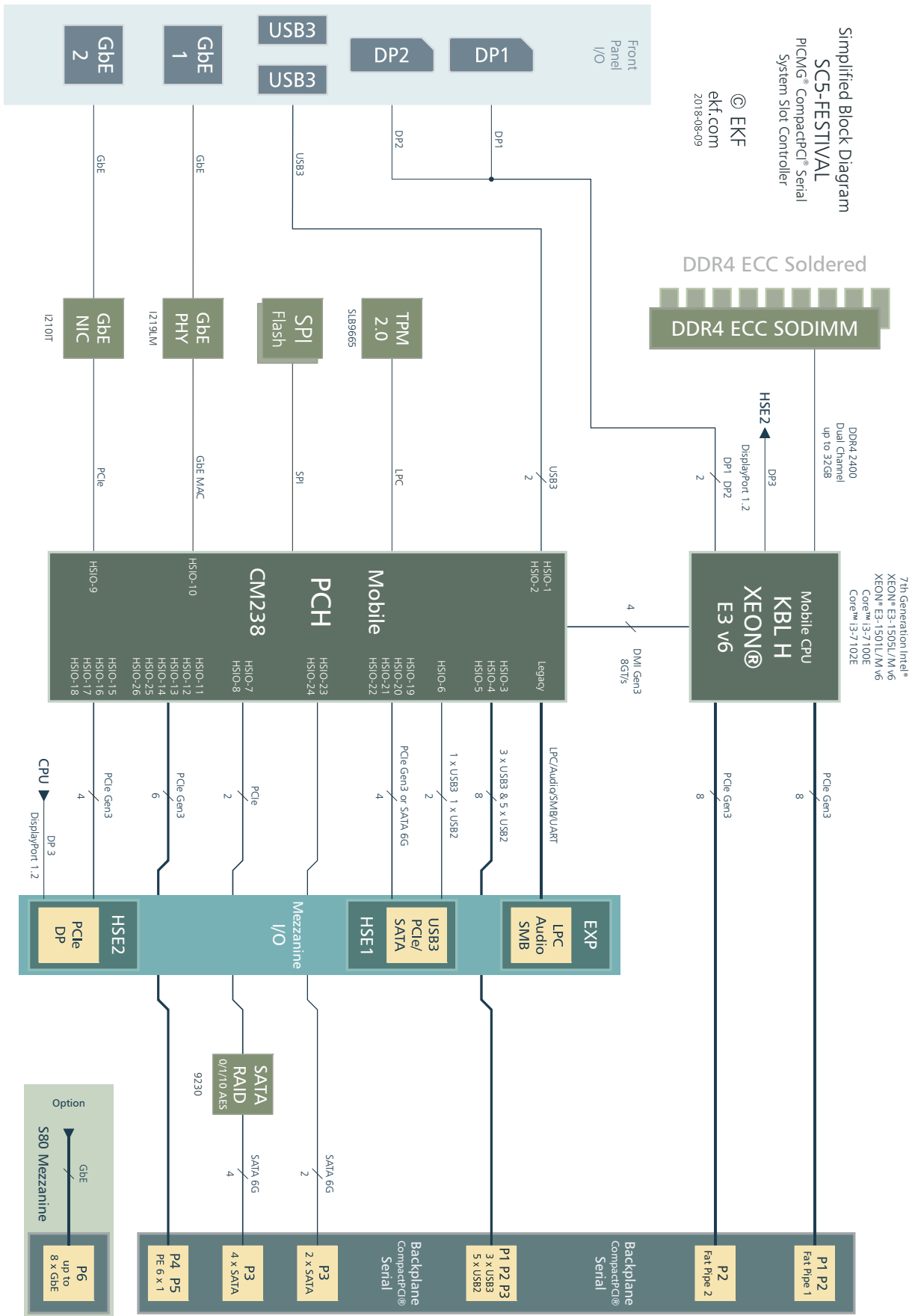


8HP Assembly SC5-FESTIVAL w. SCZ-NVM Side Card



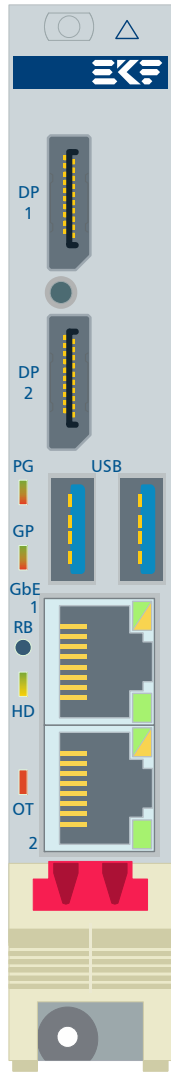
12HP Assembly

Block Diagram

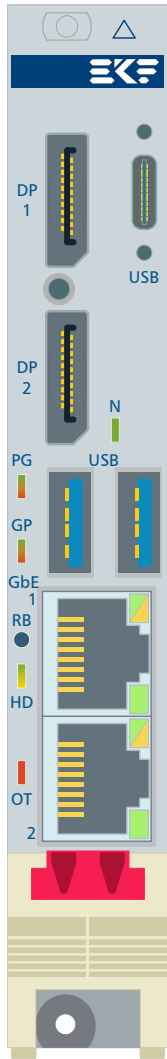


www.ekf.com/s/sc5/img/sc5_blk.pdf

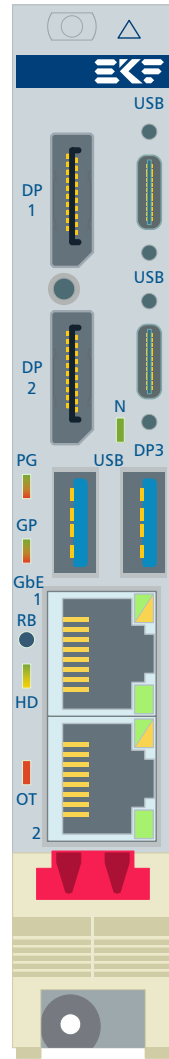
Front Panel Options



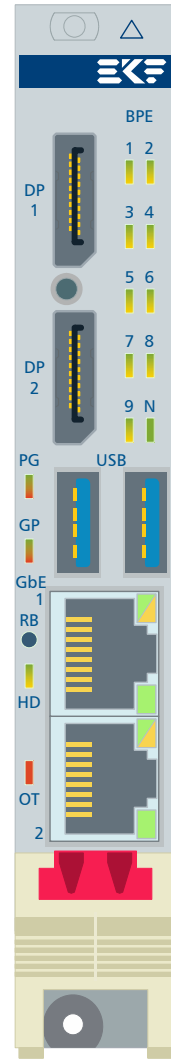
SC5-FESTIVAL



SC5-FESTIVAL w. S20



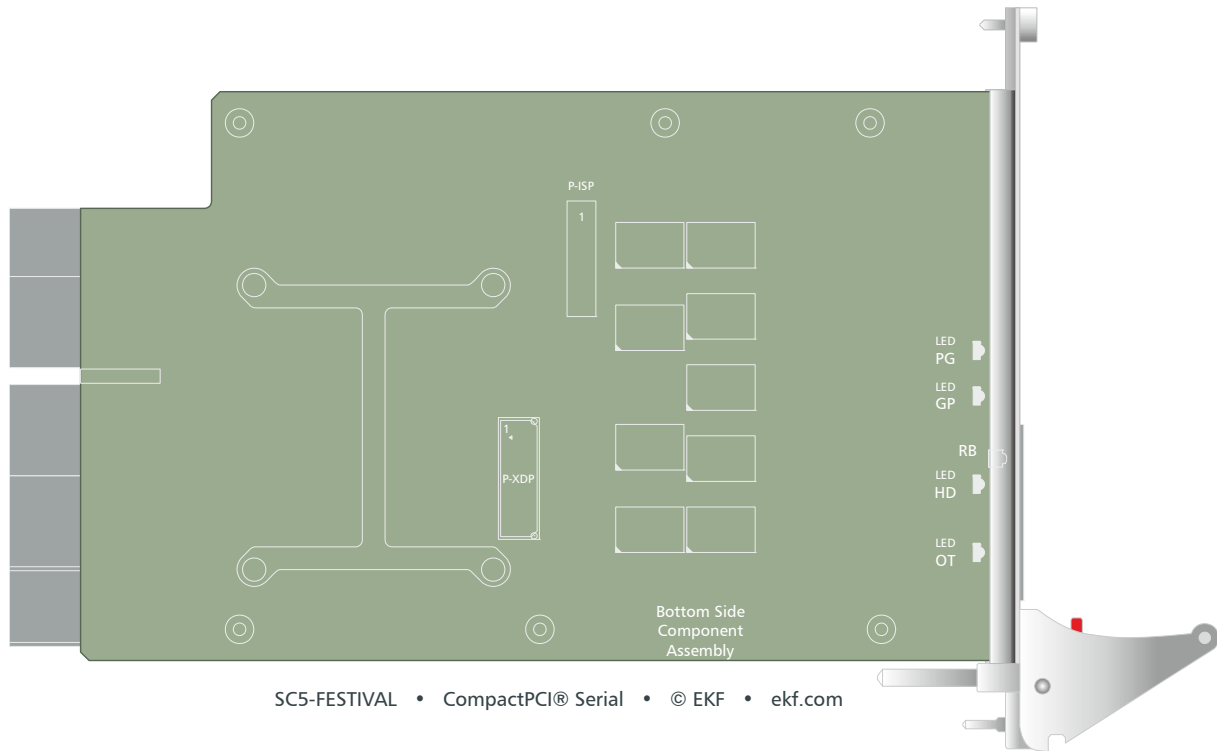
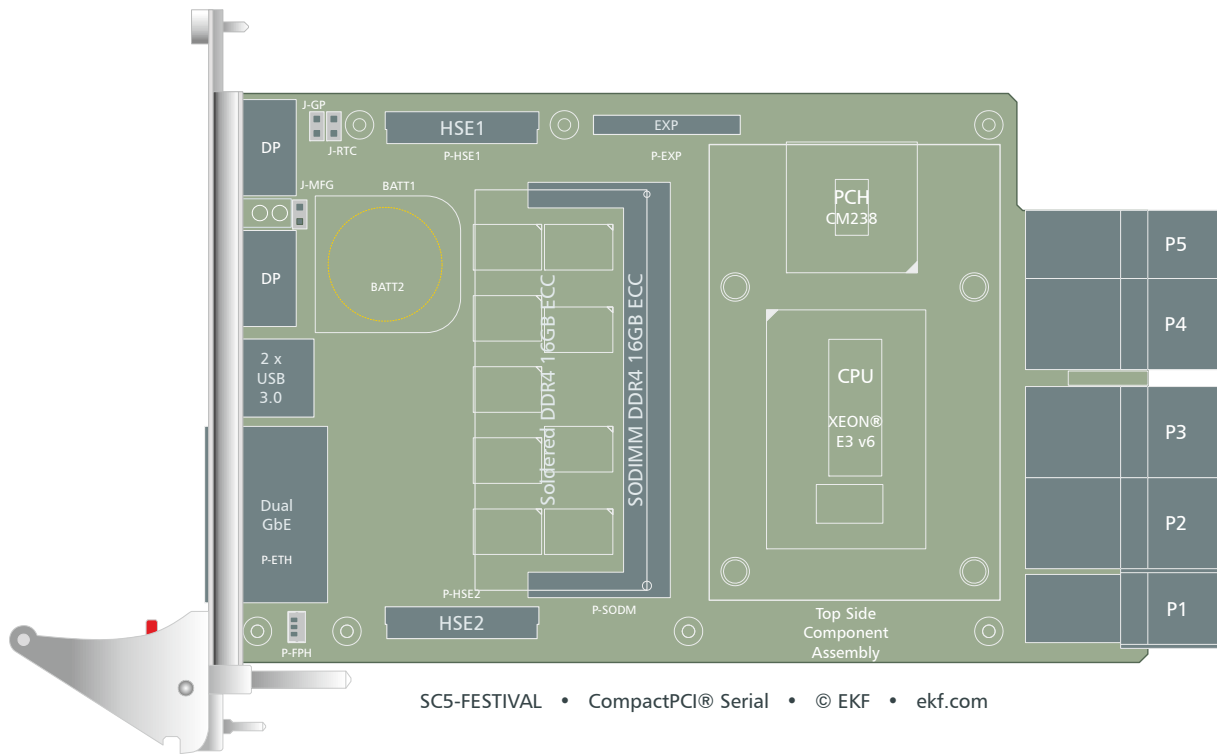
SC5-FESTIVAL w. S40



SC5-FESTIVAL w. S80



Component Orientation



Related Information

SC5-FESTIVAL Home	www.ekf.com/s/sc5/sc5.html
SC5-FESTIVAL User Guide	www.ekf.com/s/sc5/sc5_ug.pdf
S20-NVME Low Profile Mezzanine	www.ekf.com/s/s20/s20.html
S40-NVME Low Profile Mezzanine	www.ekf.com/s/s40/s40.html
S42-MC Low Profile Mezzanine	www.ekf.com/s/s42/s42.html
<i>S48-SSD Low Profile Mezzanine</i>	www.ekf.com/s/s48/s48.html
S80-P6 Low Profile Mezzanine	www.ekf.com/s/s80/s80.html
S82-P6 Low Profile Mezzanine	www.ekf.com/s/s82/s82.html
SCJ-VEENA Mezzanine Side Card	www.ekf.com/s/scj/scj.html
SCL-RHYTHM Mezzanine Side Card	www.ekf.com/s/scl/scl.html
SCX-PCIE Mezzanine Side Card	www.ekf.com/s/scx/scx.html
SCZ-NVM Mezzanine Side Card	www.ekf.com/s/scz/scz.html
ECX-PCIE Mezzanine Side Card	www.ekf.com/e/ecx/ecx.html
New Mezzanine Connectors Explained	www.ekf.com/s/sc4/new_mezzanine_connectors.pdf

General Information CompactPCI® Serial

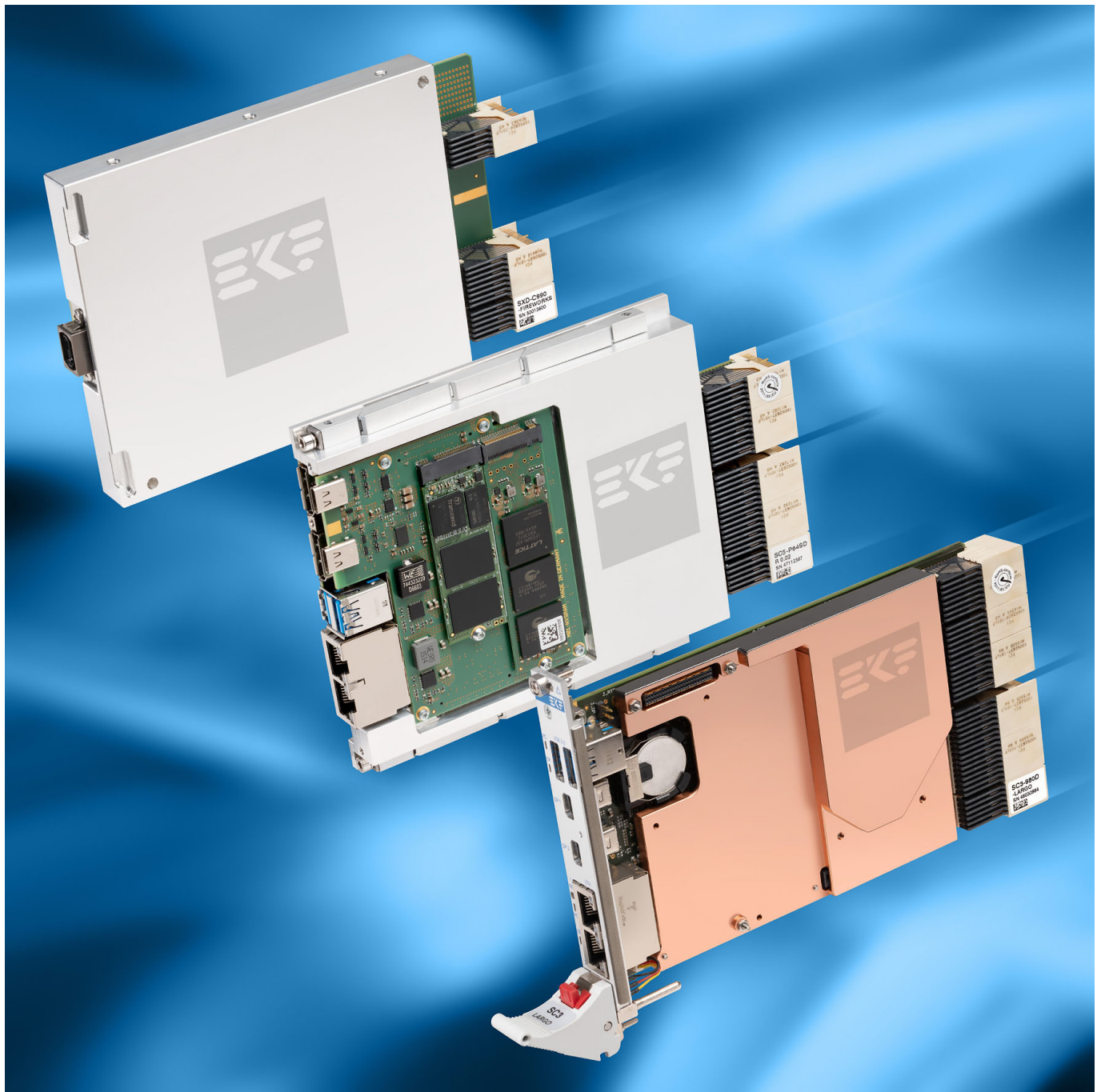
CompactPCI® Serial Concise Overview	www.ekf.com/s/serial_concise.pdf
CompactPCI® Serial All You Need to Know	www.ekf.com/s/smart_solution.pdf
CompactPCI® Serial Home	www.ekf.com/s/serial.html

Ordering Information

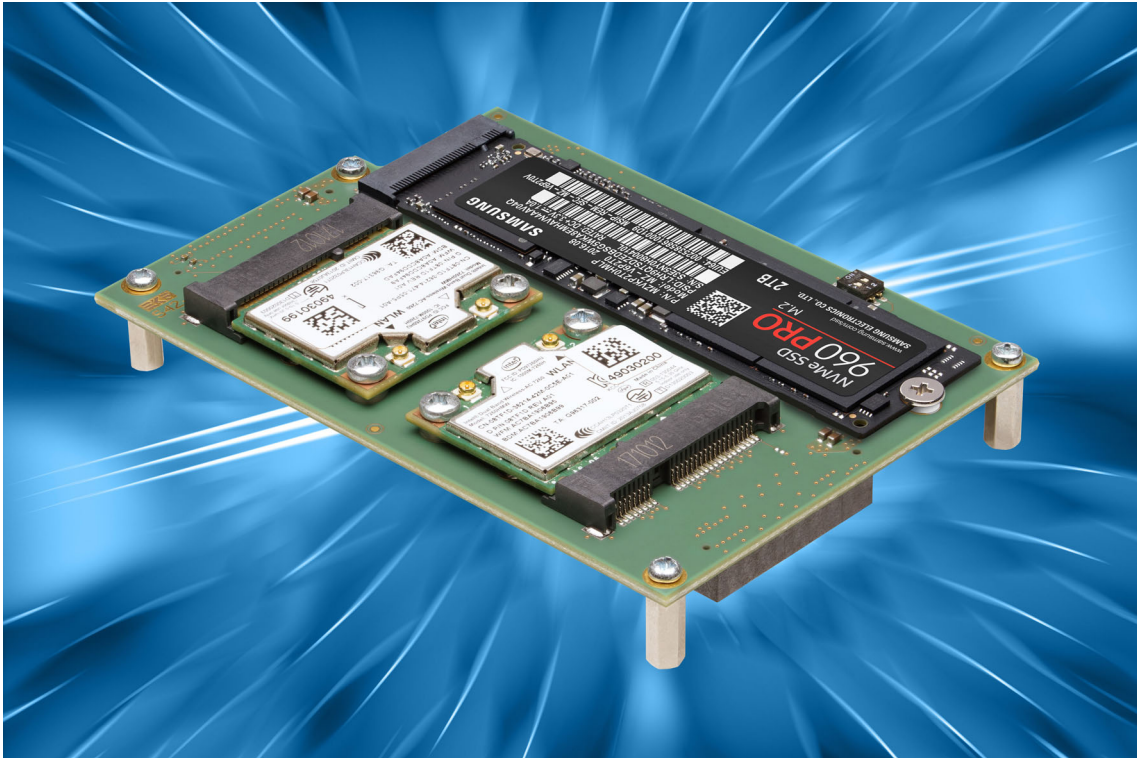
For popular SC5-FESTIVAL SKUs please refer to www.ekf.com/liste/liste_21.html#SC5

For new mezzanine connector based low profile modules please refer to
www.ekf.com/liste/liste_21.html#S20

For SATA based low profile mezzanine modules please refer to
www.ekf.com/liste/liste_20.html#C40

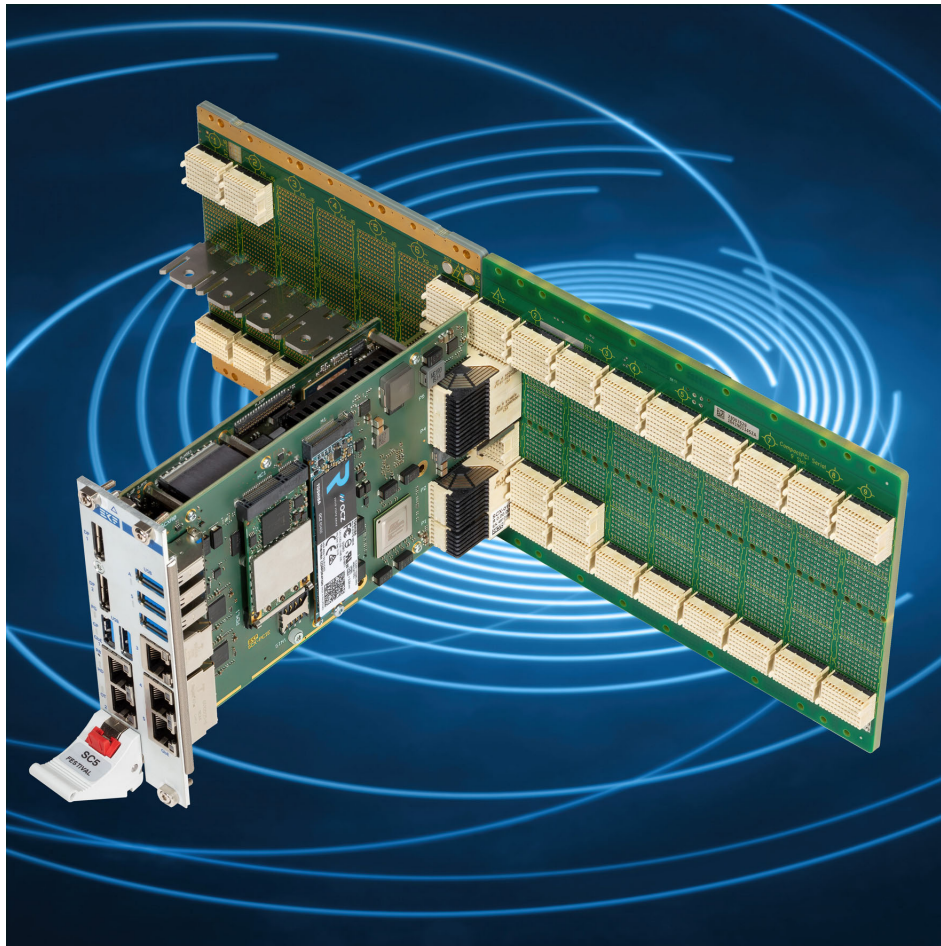


3D Clamshell Available for Cooling & Rugged Environments



S42-MC Low Profile Mezzanine Module





SC5 w. SCX - Backplane Doubling





SC5 w. ECX - Bus coupler CompactPCI® Serial to CompactPCI® Express

Beyond All Limits:
EKF High Performance Embedded

Industrial Computers Made in Germany
boards. systems. solutions.

EKF Elektronik GmbH
Philipp-Reis-Str. 4 (Haus 1)
Lilienthalstr. 2 (Haus 2)
59065 HAMM
Germany



Phone +49 (0)2381/6890-0
Fax +49 (0)2381/6890-90
Internet www.ekf.com
E-Mail sales@ekf.com