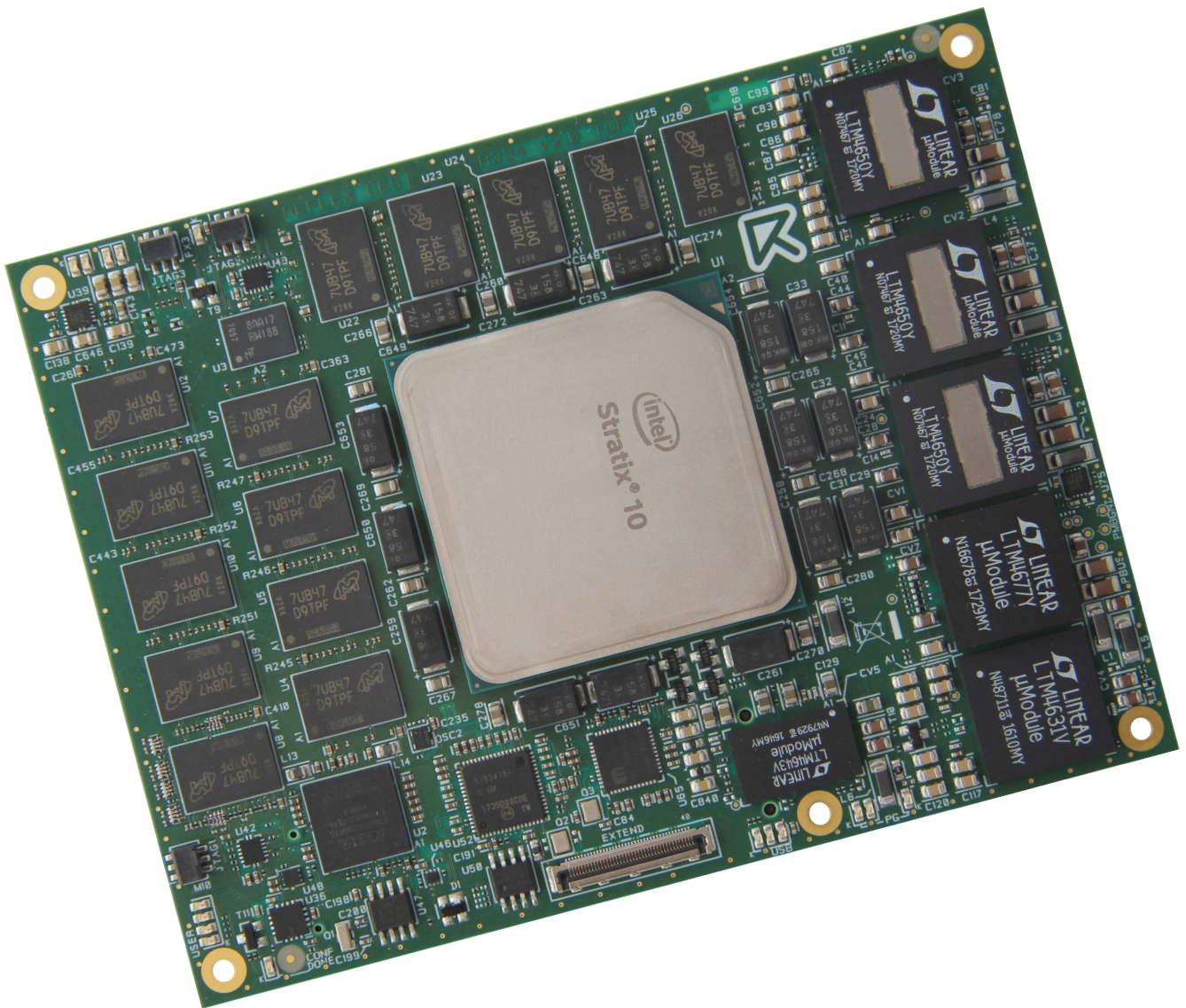


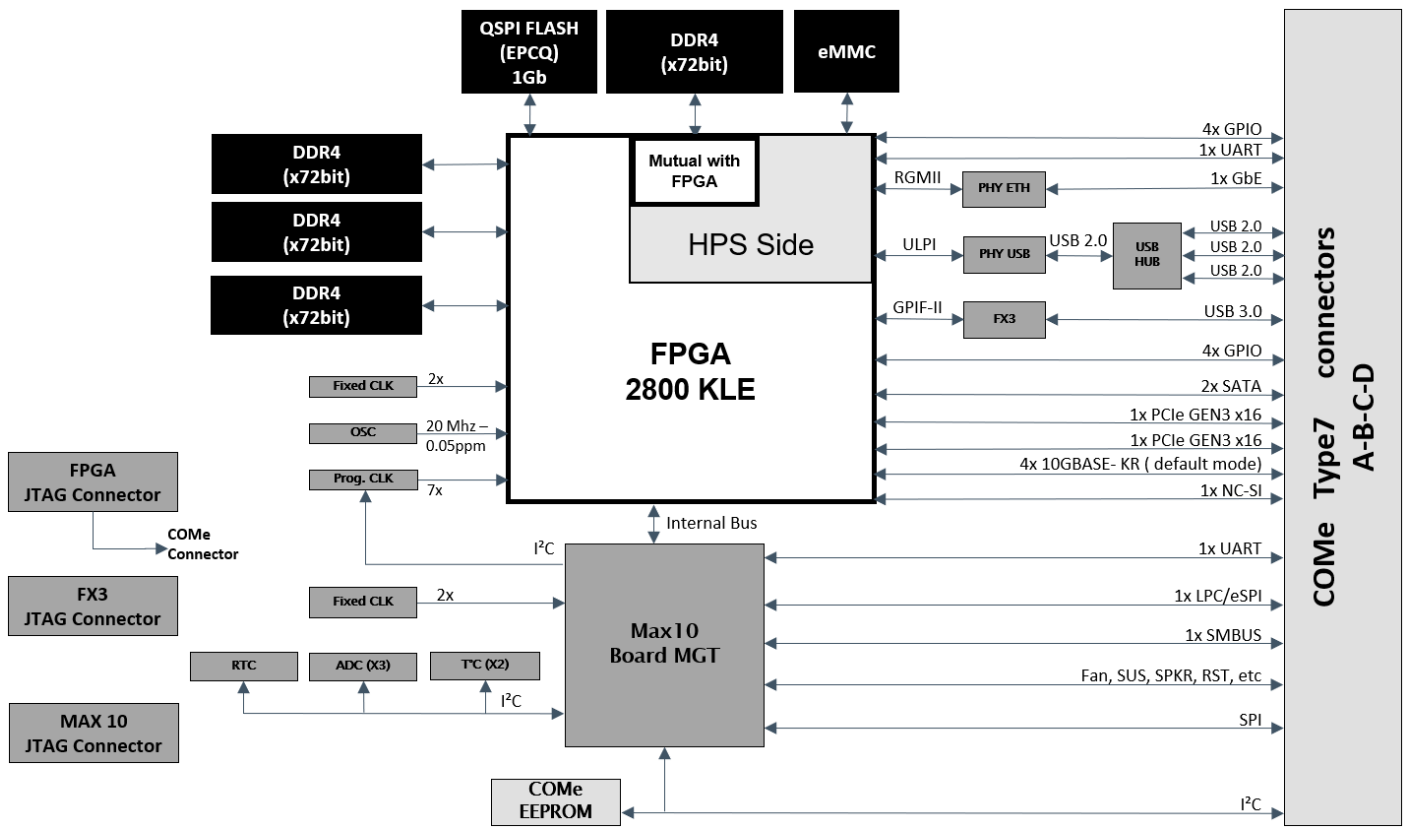
COMXpress Stratix® 10 SoC



Intel® Stratix® 10 SX
2800 KLE
COM Express Basic form
factor module, Type 7

- 32 PCI Express lanes
- 4x DDR4 up to 56GBytes total
- Board-to-board connection
- Industrial Temp grade

- Artificial Intelligence
- High Performance Computing



Full Specifications

FPGA Configuration	<ul style="list-style-type: none"> Stratix® 10 SX (1SX280LN3F43I2VG) with ARMV8 (Integrated quad-core 64 bit ARM CortexA53 hard processor system up to 1.5 GHz embedded) MAX® 10 CPLD with board management control JTAG connector for external USB cable eMMC 32GBytes (HPS) / with U-boot, Linux kernel & Rootfs Nor Flash for quad SPI (x4) FPGA configuration mode 	Communication Interfaces	<ul style="list-style-type: none"> Ethernet 10/100/1000 Base-T (HPS) 4x 10GbE base KR (default) 2x Serial SATA revision 3.0, 6Gb/s 3x USB2.0 HOST 1x USB3.0 1x SMB, I²C, UART 8 GPIOs (4 FPGA + 4 HPS) 2x PCI Express x16 (Gen 1, 2 or 3) end-point supported eSPI interface multiplexed over Intel Low Pin Count (LPC) Interface Network Controller Sideband Interface (NC-SI) supported (and optional)
Memory	<ul style="list-style-type: none"> 4 banks DDR4 up to 56GBytes + ECC total: <ul style="list-style-type: none"> 3x banks on FPGA, 16GB + ECC, x72bit, @2400MT/s 1x bank mutual HPS/ FPGA, 8GB + ECC, x72bit, @2400MT/s / @1866MT/s (if HPS is used) 	Other Resources	<ul style="list-style-type: none"> Programmable PLL (Si5341), output clocks frequency 0.0001MHz to 750MHz High precision on board oscillator, clock accuracy 20MHz-0.05ppm for Precision Time Protocol (PTP) IEEE 1588
Power	<ul style="list-style-type: none"> +12V primary power supply input, 120W max +5V standby and 3.3V RTC power supply inputs 	Board Management Controller	<ul style="list-style-type: none"> FPGA monitoring NOR Flash and clock programming
Operating Range	0°C to 40°C	Standards and Compliance	<ul style="list-style-type: none"> RoHS/REACH compliant UL certified ISO9001 certified
Storage Temp Range	0°C to 70°C		
Board Dimensions	<ul style="list-style-type: none"> Length : 125mm (4.92inches) Width : 95mm (3.74 inches) Height (without heatsink) : 11.91mm (with 5mm Standoffs) 14.91mm (with 8mm Standoffs) 		

Deliverables

- Stratix® 10 SX COMe Basic module type 7
- Delivered with a custom heatsink
- Board Support Package (Reference Manual, Design Carrier Guideline, HDL reference designs, Connectors to FPGA pin assignments)
- 3D Mechanical files (under request)
- Kernel Linux support, U-boot bootloader and comprehensive user documentation
- JTAG adapter cable for external USB blaster probe.
- Evaluation PCIe Carrier Board available (upon request)
- Online support at support.reflexces.com

Ordering information

Version	Part number	Comments
Indus version	COMXpressSXS10L-28011	Industrial temp grade