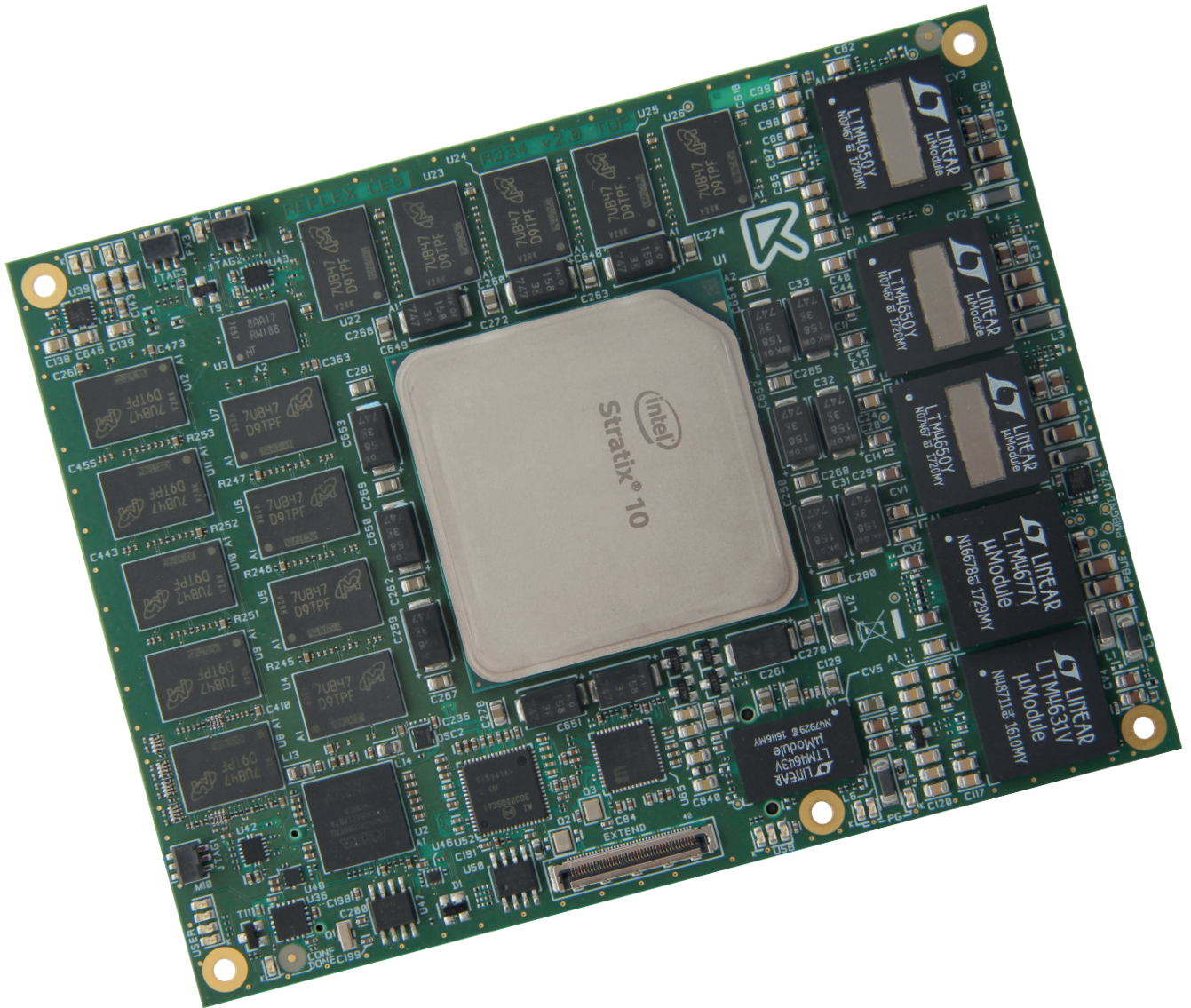




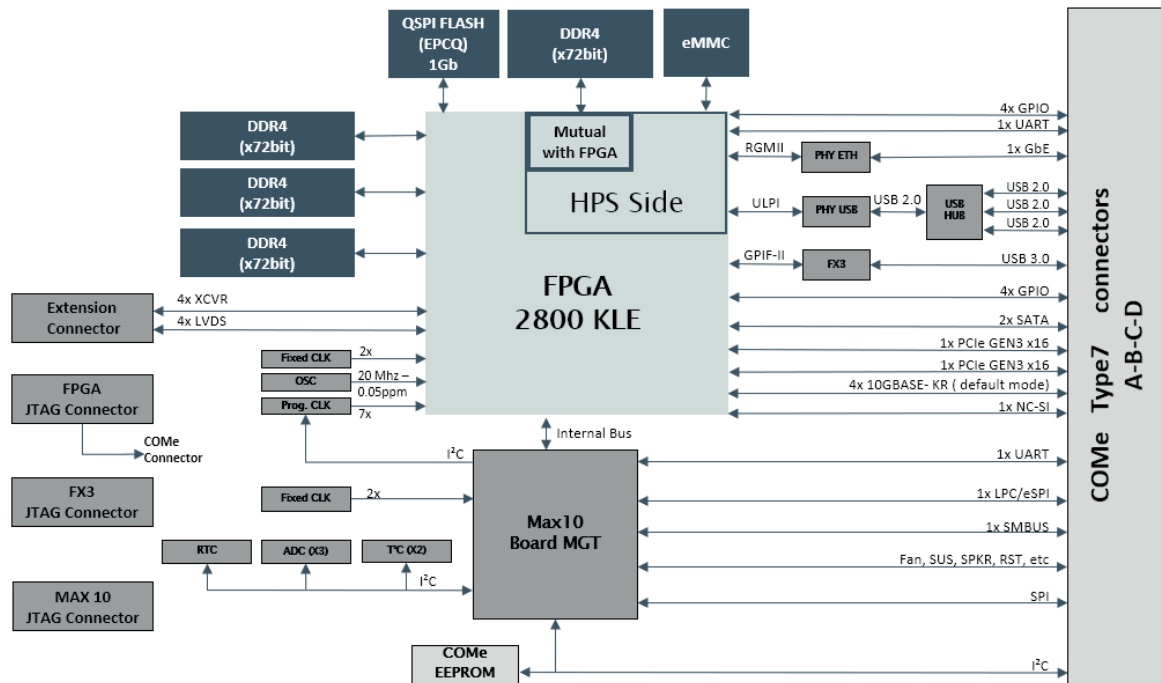
COMXpress Stratix® 10 SoC



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

- 32 PCI Express lanes
- 4x DDR4 up to 56GBytes total
- IO and Transceiver extension connector

- Artificial Intelligence
- High Performance Computing



Full Specifications

FPGA Configuration

- Stratix® 10 SX 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

Memory

- 4 memory banks on board DDR4:
 - Total 56GB + EC

Power

- +12V primary power supply input, 120W max
- +5V standby and 3.3V RTC power supply inputs

Operating Range

0°C to 40°C

Storage Temp Range

0°C to 70°C

Board Dimensions

- Length : 125mm (4.92inches) Width : 95mm (3.74 inches)
- Height (without heatsink) :
 - 11.91mm (with 5mm Standoffs)
 - 14.91mm (with 8mm Standoffs)

Board Management Controller

- FPGA monitoring
- NOR Flash and clock programming

Communication Interfaces

- Ethernet 10/100/1000 Base-T (HPS)
- 4x 10GbE base KR (default)
- 2x Serial SATA revision 3.0, 6Gb/s
- 4x XCVR lane connected to extension connector (Display Port/SDI capable)
- 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)

Other Resources

- Extension connector : Interfaces (4x transceivers Rx/Tx and 4x LVDS interface)
- 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

SDK & Toolkit

The REFLEX CES Toolkit is provided with every board purchased, to be a link between the REFLEX CES board and the host system. It is a suite of software development tools, including drivers, libraries, utilities and example projects.

Standards and Compliance

- RoHS/REACH compliant
- UL certified
- ISO9001 certified

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
Turbo version	COMXpressSXS10L-2800T	Intel® Stratix® 10 SoC (1SX280LN3F43E2VG) / 2800 KLE FPGA On-board 56GB DDR4 + ECC [3x banks 16GB + ECC, x72bit @2400MT/s (FPGA) + 1x bank 8GB + ECC, x72bit @2133MT/s (used by HPS), @2400MT/s (used by FPGA)]

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for [System-On-Modules - SOM category](#):

Click to view products by [ReFLEX CES manufacturer](#):

Other Similar products are found below :

[COMX-CORE-310](#) [PICOIMX6U10R1GBNI4G](#) [PICOIMX6U10R1GBNI4GBW](#) [MC27561-TIGER](#) [MC27561-LION](#) [CC-WMX6UL-SMPL](#)
[BD63725BEFV-EVK-002](#) [A00150](#) [BKCM11EBV58W](#) [BKCM11EBV716W](#) [BKCM11EBI716W](#) [BKCM11EBC4W](#)
[Nit8M_Plus_SOM_2r16eWB](#) [A20-SOM-EVB](#) [A13-SOM-256](#) [RK3188-SOM](#) [RK3188-SOM-4GB](#) [RXCA10S027PF34-SOM00L](#)
[RXCA10S066PF34-SOM00T](#) [A20-SOM-N8GB](#) [PER-TAICX-A10-001](#) [PER-TAIX2-A10-2280](#) [EDL-mPCIe-MA2485](#) [SOM-5897C7-U0A1E](#)
[SOM-6872VC-U9A1](#) [SOM-6883C7-S8A1](#) [SOM-6883C3-U2A1](#) [SOM-6883CR-S8A1](#) [SOM-6896C7-U2A1E](#) [SOM-7567CM8CB-U0A1](#)
[SOM-7583C7-S8A1](#) [SOM-7583CR-S8A1](#) [SOM-7583C3-U2A1](#) [SCM180-Dual-2G_Industrial](#) [3354-HX-X38-RC](#) [5728-PJ-4AA-RC](#) [5728-PJ-](#)
[4AA-RI](#) [6455-JE-3X5-RC](#) [20-101-0405](#) [20-101-0446](#) [20-101-0454](#) [CC-WMX-FS7D-NN](#) [G400D-SM-400](#) [G400S-SM-480](#) [IFC6502-00-P1](#)
[IFC67A1-00-P1](#) [IFC6701-00-P1](#) [BKCM11EBI38W](#) [BKCM11EBI58W](#) [iW-G24M-CU2F-4E001G-S008G-LIG](#)