



## Instant-DevKit Stratix® 10 GX FMC+ IDK



The Stratix® 10 GX FMC+ Instant-Development Kit provides to developers the best Out-Of-The box experience, combining the Best-In Class compact hardware platform and the most efficient intuitive software environment.

### DevKitInvasion



**ALARIC**  
Arria 10 SoC FMC IDK



**ACHILLES**  
Arria 10 SoC SoM IDK

#### Target markets:

High Performance Computing  
IP & Asic Prototyping

**Contact :**

Europe Sales Office  
sales@reflexces.com

www.reflexces.com

North America Sales Office  
salesusa@reflexces.com





### Full specifications

### Stratix® 10 GX 2800 KLEs

#### FPGA configuration

- Intel® Stratix® 10 GX 2800 KLEs
- PCIe Gen3 x16
- Max10 USB Blaster on board, UART over USB interface
- 1x Nor Flash 1GB quad SPI FPGA AS configuration
- 1x Nor Flash 1GB for configuration mode ST8
- Board Management Controller (BMC) for monitoring, NOR Flash and clock programming
- 1x FMC+ (VITA57.4) with 24 XCVR, 20 XCVR up to 28Gb/s, 4 XCVR up to 17.4Gb/s, 2x Hard IP 100G transceivers blocks capable
- 2x banks DDR4 vertical RDIMM, 16GBytes each (32GBytes capable), x72bit, up to 2400MT/s. The RDIMM are not provided.
- 1x bank DDR4 soldered on PCB, bus x72, 8GBytes up to 2400MT/s (HPS bank mutual with FPGA)

Power : Max 240W including FMC board, delivered with active heat-sink

Operating Range : 0°C to 40°C

Storage Temp Range : 0°C to 70°C

#### Communication Interfaces

- 2x FireFly™ Samtec quad connector (28Gb/s each XCVR)
  - 1 FireFly™ connected to 100G IP
- MiniSAS quad connector (1 HD SAS, 4 SATA HDD, NVMe interface capable)
- GPIO extension connector : 9 LVDS usable as 18 LVCMOS
- XCVR extension connector : 10 XCVR, 8 LVDS, Clock In&Out
- 48 dedicated HPS IO connector (daughter board for SX)
- 1x Ethernet SGMII interface (to FPGA), Marvel PHY 88E11

#### Clock Circuitry

- Programmable PLL oscillator (Si5341), output clocks frequency between 0.0001 MHz to 750 MHz
- High precision oscillator, clock accuracy 20MHz- 0.01ppm for Precision Time Protocol (PTP) IEEE 1588
- One coax connector for PPS (pulse per second)

Board dimensions : 254mm x 111.5mm , Dual slot PCIe

#### Standards and compliance

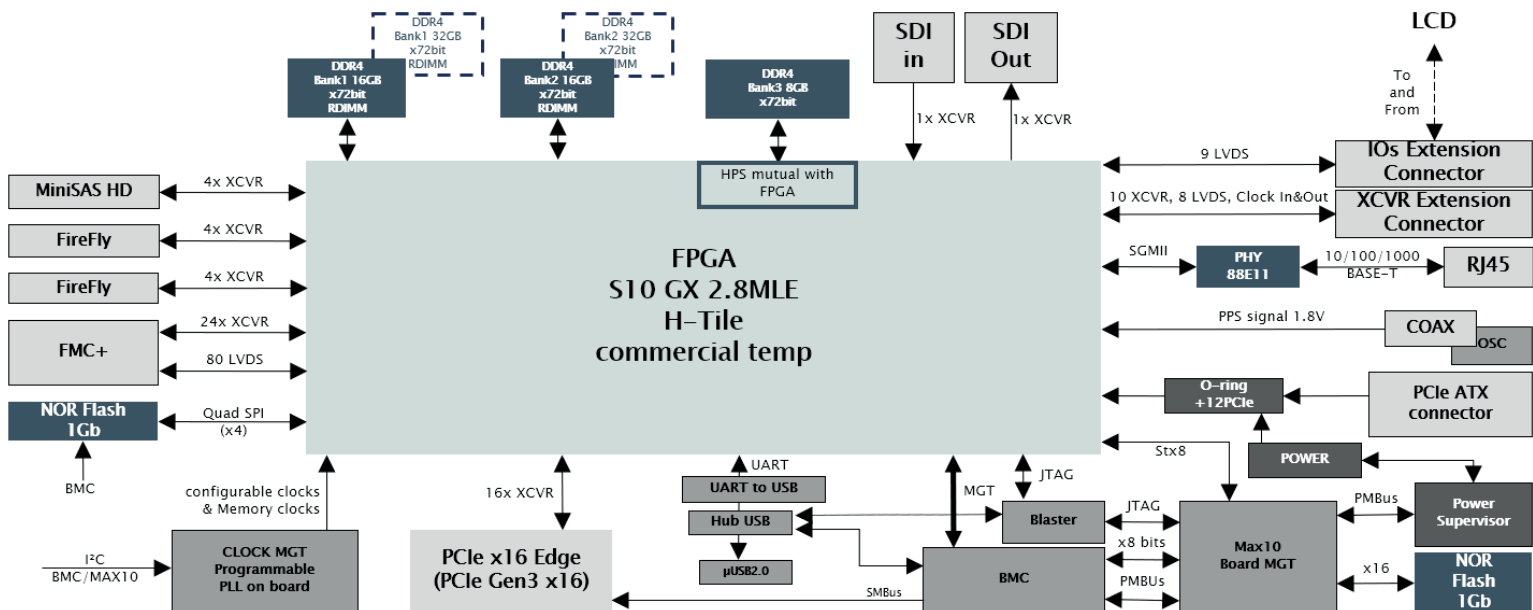
- RoHS/REACH compliant
- UL certified
- ISO9001 Facility

### Kit Content

- Sargon Stratix® 10 GX FMC+ DevKit
- Power adapter (US, UK, EU, JP) and Micro USB2.0 cable
- PDF Documentation (Starter Guide, Hardware Reference Manual)
- FMC Interface Control Excel sheet
- Board test design files available under FTP after the creation of a user account (Quartus Prime Pro software required)
- Under request on the online support [support.reflexces.com](http://support.reflexces.com) :
  - Quartus Prime Pro DKE
  - Mechanical files (DWF/STEP models and 2D drawing)

### Ordering information

- RXCS10X280HPF50-IDK10A = Development Kit, Intel® Stratix® 10 GX, H-Tile version (15G280HU1F50E2VG)
- RXC16GB-RDIM10A = 1x 16GB DDR4 VLP RDIMM - to purchase separately



## X-ON Electronics

Largest Supplier of Electrical and Electronic Components

*Click to view similar products for [Programmable Logic IC Development Tools](#) category:*

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

Other Similar products are found below :

[DK-DEV-5SGXEA7N](#) [88980182](#) [DEV-17526](#) [DEV-17514](#) [LCMXO3L-SMA-EVN](#) [471-014](#) [80-001005](#) [iCE40UP5K-MDP-EVN](#)  
[ALTNITROC5GX](#) [471-015](#) [Hinj](#) [SnoMakrR10](#) [DK-DEV-1SDX-P-A](#) [DK-DEV-1SDX-P-0ES](#) [DK-DEV-1SGX-L-A](#) [DK-DEV-1SMC-H-A](#)  
[DK-DEV-1SMX-H-0ES](#) [DK-DEV-1SMX-H-A](#) [DK-DEV-4CGX150N](#) [DK-DEV-5CGTD9N](#) [DK-DEV-5CSXC6N](#) [DK-MAXII-1270N](#) [DK-](#)  
[SI-1SGX-H-A](#) [DK-SI-1STX-E-0ES](#) [DK-SI-1STX-E-A](#) [DK-SI-5SGXEA7N](#) [EK-10M08E144](#) [ATF15XX-DK3-U](#) [SLG46824V-DIP](#)  
[SLG46826V-DIP](#) [240-114-1](#) [6003-410-017](#) [ICE40UP5K-B-EVN](#) [DK-SOC-1SSX-L-D](#) [ICE5LP4K-WDEV-EVN](#) [L-ASC-BRIDGE-EVN](#)  
[LC4256ZE-B-EVN](#) [LCMXO2-7000HE-B-EVN](#) [LCMXO3D-9400HC-B-EVN](#) [LCMXO3L-6900C-S-EVN](#) [LF-81AGG-EVN](#) [LFE3-MEZZ-](#)  
[EVN](#) [LIF-MD6000-ML-EVN](#) [LPTM-ASC-B-EVN](#) [M2S-HELLO-FPGA-KIT](#) [VIDEO-DC-USXGMII](#) [12GSDIFMCCD](#) [SFP+X4FMCCD](#)  
[NAE-CW305-04-7A100-0.10-X](#) [NOVPEK CVLite](#)