

quad A10 GX1150 Prototyping System

Product Summary

The proFPGA quad A10 GX1150 system is a complete and modular multi-FPGA solution, which meets highest requirements in the area of FPGA based Prototyping. It addresses customers who need a scalable and flexible high speed ASIC Prototyping solution for early software development and real time system verification. The innovative system concept offers highest flexibility and reusability reconfigurability for several projects, which guarantees the best return on investment.

Highest Flexibility

The system architecture is based on a modular and scalable single-chip concept. The FPGAs are assembled on dedicated FPGA modules, which will be plugged on the proFPGA uno, duo or quad motherboard. This offers the highest flexibility to use for example different FPGA types in one system or to scale a system in increments of one FPGA. The user has access to almost all I/Os of the FPGA, which gives him maximum freedom regarding the FPGA interconnection structure. This way the prototyping system can be adapted in the best way to any user design. Furthermore the system offers a total of 24 extension sites on the top and bottom site for standard or user specific extension boards like DDR4 memory, PCIe gen1/2/3, Gigabit Ethernet, USB 3.0 or other high speed interfaces and interconnect boards.

Maximum Performance

The well designed boards of the proFPGA system are optimized and trimmed to guarantee best signal integrity and to achieve highest performance. The high speed boards together with specific high speed connectors allow a maximum point-to-point speed of up to 1.0 Gbps single ended over the standard FPGA I/Os and up to 17.4 Gbps differential over the high speed serial transceivers of the FPGA. This performance combined with the high interconnection flexibility allows the designer to run his design at the highest possible speed on the proFPGA system.

Biggest Capacity

Equipped with up to four Intel® Arria® 10 FPGA modules, the proFPGA quad system can handle up to 32 M ASIC gates on only one board. Due to the fact, that multiple proFPGA quad or duo systems can be connected to even larger systems, there is an unlimited scalability and no theoretical maximum in capacity.

Very User Friendly

The proFPGA prototyping system provides an extensive set of features and tools, like remote system configuration, integrated self and performance test, automatic board detection, automatic I/O voltage programming, system scan and safety mechanism, which simplifies the usage of the FPGA based system tremendously.



Key Features

- ❖ 32 M ASIC gates capacity on one board
- ❖ 2584 user I/Os
- ❖ 192 dedicated high speed serial transceivers
- ❖ 24 individually adjustable voltage regions
- ❖ Up to 1.0 Gbps single ended point-to-point speed
- ❖ proFPGA FPGA Mixing Technology (FMT)
- ❖ Smart Stacking Technology (SST)
- ❖ High performance host interface (DMBI)
- ❖ Advanced Clock Management (ACM)

