FB2CG@A10T11 FPGA Programmable Acceleration Card
Programmable PCI Express Server Adapter Intel® FPGA based

Product Description

Silicom FB2CG@A10T11 is a highly customizable platform which enables high-throughput, lower latency, and high-bandwidth applications. It allows the optimization of data plane performance to achieve lower costs while maintaining a high degree of flexibility. End-to-end industry-standard and open-source tool support allow users to quickly adapt to evolving workloads and industry standards.

Silicom is accelerating 5G and network functions virtualization (NFV) adoption for ecosystem partners, such as telecommunications equipment manufacturers (TEMs), virtual network functions (VNF) vendors, system integrators, and telcos, to bring scalable and high-performance solutions to market.

Targeted Workloads

- Virtual Broadband Networking Gateway (vBNG): H-QoS, Classification, Policing, Scheduling and Shaping
- Virtualized Evolved Packet Core (vEPC), 5G Next-Generation Core Network (NGCN)
- Internet Protocol Security (IPSec)
- Segment Routing for IPv6 (SRv6) Vector Packet Processing (VPP)
- Virtual Radio Access Network (vRAN)
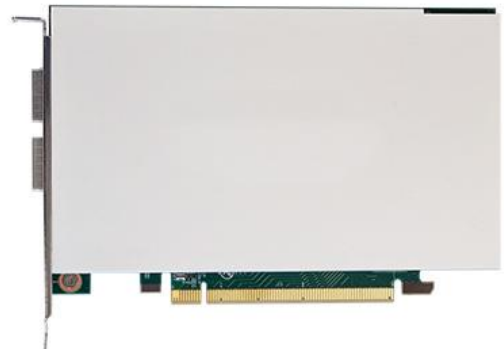
Key Features

- Intel Arria 10 FPGA

- High-speed network interface support

- 10 Gbps

- 25 Gbps

- High-bandwidth, low-latency memory support
    - 9 GB DDR4
    - 144 Mb QDR-IV

- High-speed host interface: PCIe Gen 3×16

- Dual Intel Ethernet Converged Network Adapter XL710
    - Built on more than 35 years of continuous Ethernet innovations, the Intel Ethernet 700 Series delivers networking performance across a wide range of network port speeds through intelligent offloads, sophisticated packet processing, and quality open source drivers.

Technical Specifications

General Technical Specifications Adapters:	
Silicom-provided intellectual property (IP) cores for NFV acceleration functions	• vBNG: H-QoS, Classification, Policing, Scheduling and Shaping • vFPC and 5G NGCN • IPSec • SRv6 VPP • vRAN
Development Tools	Data Plane Developer Kit (DPDK) Open Programmable Acceleration Engine (OPAE)

Board Management	• Intel MAX 10 FPGA Baseboard Management Controller (BMC)
	   o Temperature and voltage readout
	   o Platform Level Data Model (PLDM)
	   o Remote update of FPGA flash memory and BMC

Form Factor	Full height, half length
Power Management	• Intel Enpirion Power Solutions o Low-noise and high-efficiency voltage regulators

Order Information

P/N	Description	Notes:
FB2CG@A10T11-11P810G	Oxford, 2xQSFP28 for **8x10GE**, Intel A10 1150, Speed grade 1, DDR4 8GB, QDR-IV 144Mb, PCIe x16, Passive heat-sink, 2x Intel Fortville, Full height, ½ length	8x10G Intel FPGA A10 GT1150/ 10AT115S1F45E1SG Passive Heat-sink
FB2CG@A10T11-11P225G	Oxford, 2xQSFP28 for **2x 2x25GE**, Intel A10 1150, Speed grade 1, DDR4 8GB, QDR-IV 144Mb, PCIe x16, Passive heat-sink, 2x Intel Fortville, Full height, ½ length	2x2x25G Intel FPGA A10 GT1150/ 10AT115S1F45E1SG Passive Heat-sink
FB2CG@A10T11-11P425G	Oxford, 2xQSFP28 for **4x25GE**, Intel A10 1150, Speed grade 1, DDR4 8GB, QDR-IV 144Mb, PCIe x16, Passive heat-sink, 2x Intel Fortville, Full height, ½ length	4x25G Intel FPGA A10 GT1150/ 10AT115S1F45E1SG Passive Heat-sink

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