

Stratix V PCIe FPGA Cards

FPGA accelerated computing with no compromises:

- Programmable
- Power Efficient
- Production Qualified

BittWare's FPGA accelerator cards are compatible with the Altera® Software Development Kit (SDK) for OpenCL™.

Tool Flow Flexibility for Softwareor Hardware-Based Development

orientated customers

· Push-button flow for FPGA

executable, driver, and API

· Add optimized HDL IP cores to

· OpenCL support for software-

· Abstration for faster development





- · Hand-code for ultimate performance
- High-Level Synthesis (HLS) available for rapid development
- FPGA card designed to support standard Intel IP cores for Stratix V

key features

Intel Stratix V GX FPGA Up to 4x SFP+ for **10Gbps** OpenCL BSP

Features & Benefits

Server proven hardware:

• BittWare accelerator cards have been through extensive testing in leading server platforms

OpenCL tool flow:

Open, royalty-free unified programming model

Network interfaces:

- Support for multiple line rates and protocols
- Clock/data recovery of SFP+ ports (395)

Application Optimization

BittWare design services:

• Expert design service resources are available to help port and benchmark your application on FPGA hardware

Value-add partners:

• BittWare's ecosystem of value-add partners can provide an optimized solution for a specific application

Additional Services

Take advantage of BittWare's range of design, integration, and support options



Customization

Additional specification options

or accessory boards to meet your exact needs.



Server Integration Available pre-integrated in our <u>TeraBox servers</u> in a range of configurations.

Application Benchmark Report	
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Application Optimization Ask about our services to help you

port, optimize, and benchmark your application.

395 Specifications

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Service and Support BittWare Developer Site provides online documentation and issue tracking.

385 Specifications

FPGA	 385-A7: Altera Stratix V GX A7 385-D5: Altera Stratix V GS D5
On-board memory	 8GB DDR3 SDRAM 2 independent banks of 4GB 72-bit data bus
Host interface	x8 Gen3 interface direct to FPGA*
SFP cages	2 SFP+ cages on front panel
Cooling	Standard: single-width active heatsinkOptional: single-width passive heatsink
Form factor	Half-height, half-length PCle single-slot board

FPGA	 395-AB: Altera Stratix V GX AB 395-D8: Altera Stratix V GS D8
On-board memory	 32GB DDR3 SDRAM 4 independent banks of 8GB 72-bit data bus Contact BittWare for details on QDRII options
Host interface	x8 Gen3 interface direct to FPGA*
SFP cages	4 SFP+ cages on front panel
Cooling	 Standard: double-width active heatsink Optional: single-width active heatsink Optional: single-width passive heatsink
Form factor	Standard-height, 3/4-length PCle dual-slot board

*BittWare 385 and 395 cards feature Stratix V devices, and are tested at PCleGen3 speeds. However, when using the Altera OpenCL SDK and BittWare BSP, the interface is PCleGen2. Contact BittWare if your application requires PCleGen3 bandwidth.

To learn more, visit www.BittWare.com

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