

ACQ-FIBER-HBA Product Specification



High Performance Simultaneous Data Acquisition

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1 Product Description

1. **ACQ-FIBER-HBA** is a PCI Express Host Bus Adapter.
2. Provides 2x SFP Transceiver ports at up to 2.5Gbps.
3. Standard PCIe x1 Gen 1.0 card.
4. 256MB DDR3 onboard for debug/customer use.

1.1 Applications

- High speed control and diagnostics.

1.2 Overview

ACQ-FIBER-HBA provides a high-speed data transfer method to a host PC over fiber-optic SFP transceivers.

ACQ-FIBER-HBA includes a standard PCIe x1 Gen 1.0 card-edge connector for interfacing with a host computer.

The ACQ-FIBER-HBA is compatible with D-TACQ standard products including:

- D-TACQ **ACQ2106** : D-TACQ 6 slot *ELF* carrier, Z7030
- D-TACQ **RTM-T** : CPCI Compatible Rear Transition Module

The *FMC/ELF* module standard adds user IO to carrier modules fitted with *FPGA* resource. D-TACQ recommends modules based on the *Xilinx ZYNQ* system on chip, combining *FPGA* resource with a dual-core ARM Cortex A9 and gigabit Ethernet.

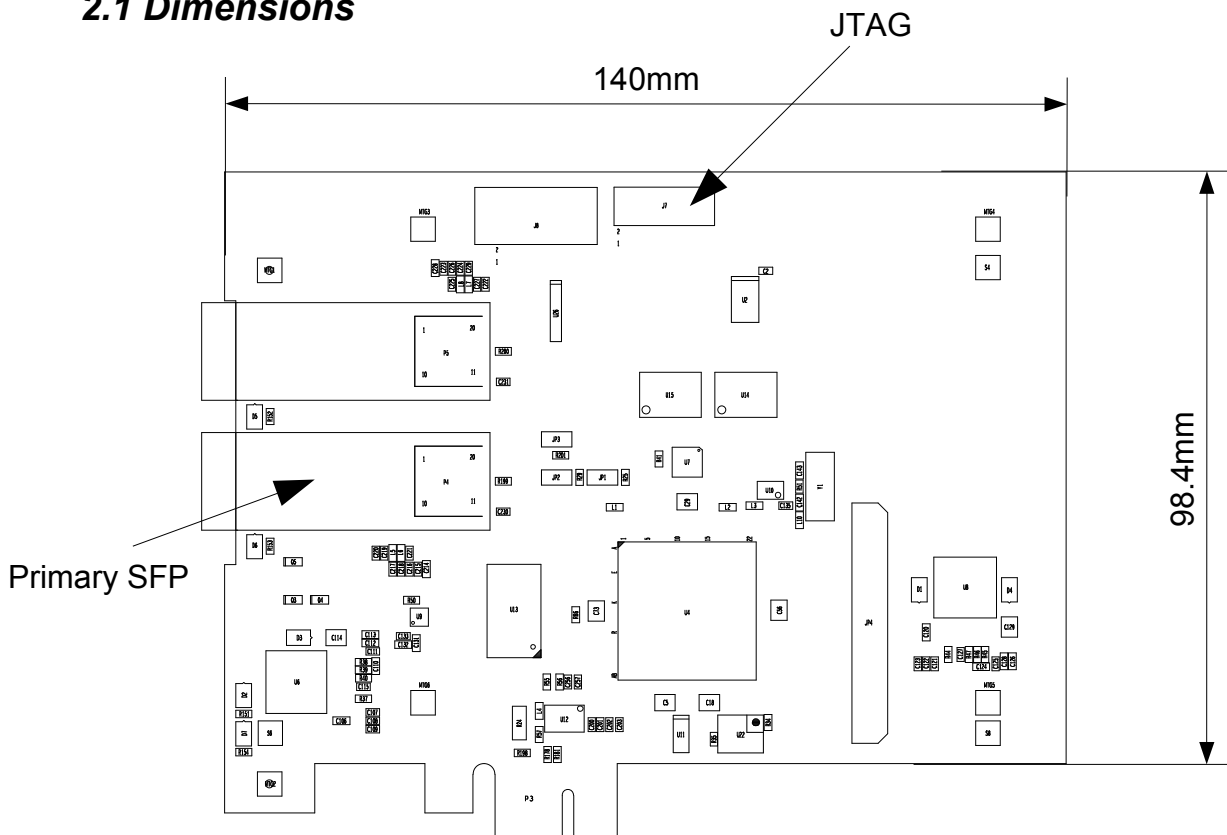
D-TACQ supplies a complete working Intelligent Digitizer appliance including programmable logic and microprocessor system running Linux.

1.3 Glossary

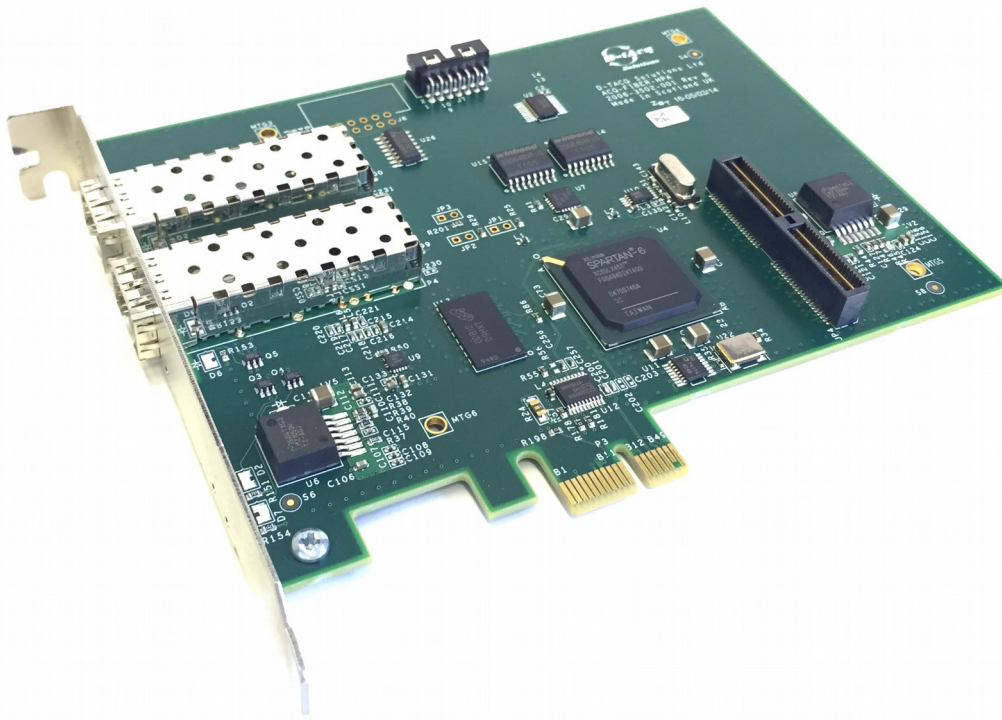
- *SFP* : Small Form-factor Pluggable
- *PCIe* : Peripheral Component Interconnect Express
- *FMC* : [VITA57 FPGA Mezzanine Card](#).
- [Xilinx ZYNQ Soc](#)
- *FPGA* : Field Programmable Gate Array.
- *LPC* : *FMC* Low pin count wiring standard.
- *ULPC* : *FMC* Ultra low pin count (D-TACQ).
- *ULPC+* : D-TACQ Ultra low pin count with LVDS
- Extended, *ELF* : *FMC* Extended size module (D-TACQ).
- *CPCI*: Compact PCI

2 Physical

2.1 Dimensions



2.2 Appearance



2.3 Mating Connectors

ACQ-FIBER-HBA is compatible with standard SFP modules such as the Avago AFBR-57R5APZ.

3 Specification

#	Parameter	Value
1	Form Factor	Standard PCIe x1 Card
2	Power source	PCIe DC 3.3V, 1.5A
3	Environmental	0°C-50°C Operational -10°C-85°C Non-Operational

4 Changelog

<i>Date</i>	<i>Rev</i>	<i>Section</i>	<i>Changes</i>	<i>Author</i>
July 7, 2015	2		Initial release.	Peter Johnston
July 15, 2015	3	2.1	Added notes to connectors.	Peter Johnston