

Product Name: ZX181 FMC VITA 57.1 breakout adapter - passive FPGA Mezzanine Card HPC

Product Description: FPGA Mezzanine card , FMC , passive breakout adapter, meeting VITA 57.1 standard bus interface. Includes 10 rows x 40 pins, totaling **400** pins, High Pin Count , HPC, housing SEAM connector. Fully compatible with Low Pin Count, LPC connector interface.

Provides prototype area as well as spacer for SMD 0402 type package for each signal at 50 Ohms trace impedance.

Samtec Molex HI-SPEED HI-DENSITY SEARRAY design connectors.

Fully compatible with 10 rows x 40 pins per row single ended or differential pairs design configuration

- Designed in **8 layer** PCBoard
- **All signals** are accessible via standard 0402 SMD footprint, see Access
- Improved signal integrity and crosstalk with **8 layers** PCB with each layers guarded by GROUND plane.
- Matching connector's **50Ω trace impedance on all traces** – Reference plane impedance 50Ω for DC to 10GHz bandwidth applications

GND test point for easy access as well as applying external ground reference

Application: FPGA Mezzanine Card , FMC , VITA 57.1 , FPGA Bringup, testing, emulation, Xilinx development Virtex 6 Virtex 7 interface testing daughter board to host, modular design evaluations

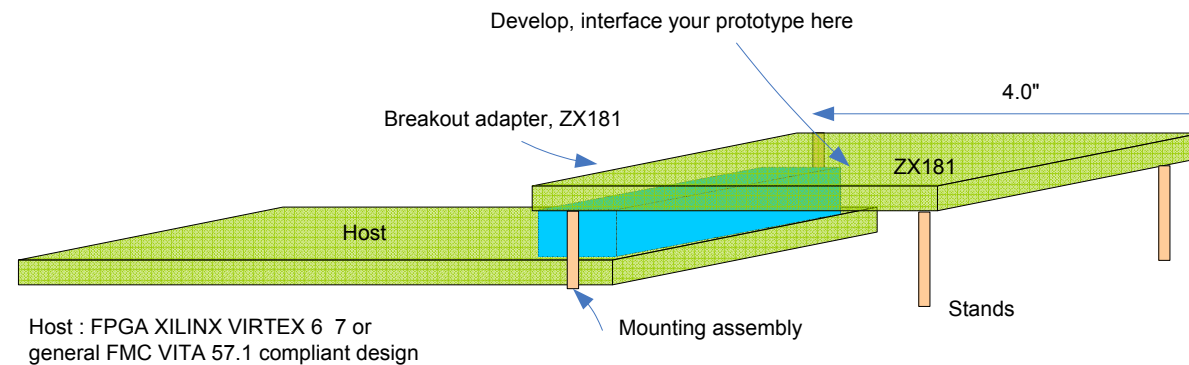
Mates with : Xilinx FPGA development systems Virtex 6 Virtex 7.
Any and all FMC VITA 57.1 compliant design.
SEAM SADL SEAMP SEAR SEAMI SEAC FMC HPC LCP
SEAMP-040 SEAMI-040 SEAR-040-10-10- SEAM-040

All listed Samtec Molex FMC connectors listed, table below:

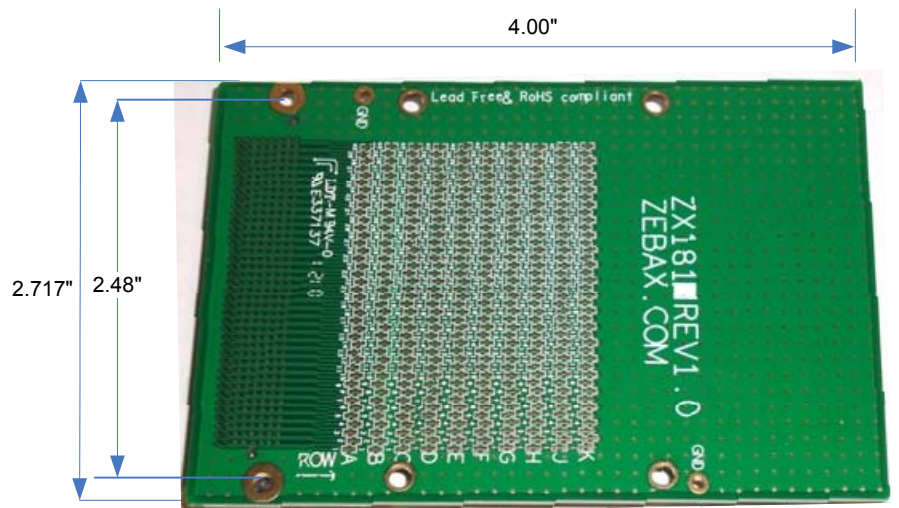
ZX181 HPC FMC breakout adapter mates with the following Samtec Molex SEARRAY™ VITA 57 Connectors			
Molex PN	Samtec PN	VITA PN	Description
45971-4307	ASP-127796-01	CC-LPC-10L	female
45971-4317	ASP-134485-01	CC-HPC-10L	female
45971-4315	ASP-134486-01	CC-HPC-10	female
45971-4305	ASP-134603-01	CC-LPC-10	female

Pitch: 1.27mm (0.05") High Speed connector

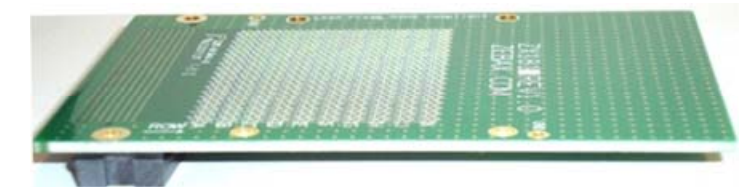
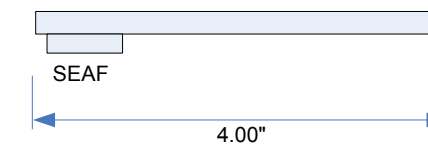
Access: SMD 0402 Package footprint.
Default : All conductors are enabled



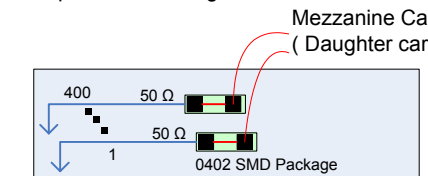
Host : FPGA XILINX VIRTEX 6 7 or general FMC VITA 57.1 compliant design



Breakout adapter, ZX181



Simplified Block diagram

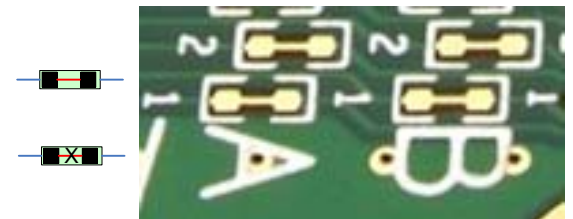


Host

Note: Prototype (Daughter card) can be wired to ZX181 passive breakout adapter

Typical signal connection: 0402 SMD Package

Break signal path:



Note
ALL ZEBAX products are RoHS compliant and Lead Free unless otherwise indicated.

ZEBAX TECHNOLOGIES SANTA CRUZ, CA U.S.A (831) 2 2 2 - 0717 WWW.ZEBAX.COM		
SPECIFIED DIMENSIONS ARE INCHES (MM). ROHS COMPLIANT		ASSEMBLY DRAWING ITEM: ZX181-HPC
DESCRIPTION: ZX181 FMC VITA 57.1 breakout adapter – passive FPGA Mezzanine Card HPC		
CHECKED: M. MARINA	DRAWN: SLAVIK	REVISION: 1.0 SHEET: 1 OF 1

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