XRM2-RF-ATD

RF Signal Sampling/Generation

Board Features

- Dual 12-bit 6Gsps ADCs
- Dual 12-bit 6Gsps DACs
- External Clock Input

Summary

The **XRM2-RF-ATD** is an XRM2 I/O module, providing two full duplex RF channels at center frequencies between 70 MHz and 6 GHz. Intended for use in FPGA-based general-purpose radio systems.

This board provides Frac-N based synthesis of local oscillator signals for up/down conversion, digital filtering and 12-bit quantization of baseband data.
Channel bandwidths are software selectable from 200 kHz to 56 MHz. Real-time monitor signals, control signals for manual and automatic gain control and base-band synchronization of multiple devices are supported. The application can use either the internal clock or an externally provided clock source.

Deliverables

XRM2-RF-ATD Board
One Year Warranty
One Year Technical Support

Input/Output Interfaces

2x Dual Analog to Digital Converters

Resolution: 12-bit
Max Sample Freq: 6Gsps
Bandwidth: 70MHz to 6000MHz nominal
Impedance: 50Ω
Connector: SSMC

2x Dual Digital to Analog Converters

Resolution: 12-bit
Max Sample Freq: 6Gsps
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1x External clock input

Impedance: 50Ω
Connector: SSMC

ALPHA DATA

Support

Example UCF, HDL files and Application software are provided with the board.

Environmental Specification

Temperature Ranges

Cooling Option	Operating Temperatures		Storage Temperatures	
	Min	Max	Min	Max
AC1	-40°C	70°C	-55°C	100°C
CC1	-40°C	70°C	-55°C	100°C

Operating Humidity : Up to 95% (non-condensing)

EMC Standards

FCC 47CFR Part 2
EN55022:2010 Equipment ClassB

Conformal Coating Options

Acrylic or Polyurethane
Contact sales for specification of coatings.

Ordering Information		

Order Code: XRM2-RF-ATD(a)		

Option	Code	Description of Options
Conformal Coating	a	blank = no conformal coating, /A = Acrylic, /P = Polyurethane
Note		No build options for AC or CC. Mode of cooling is dependent on the board the XRM2 is attached to.