

AD01289

Prime Application

RF Signal Sampling/Generation

Board Features

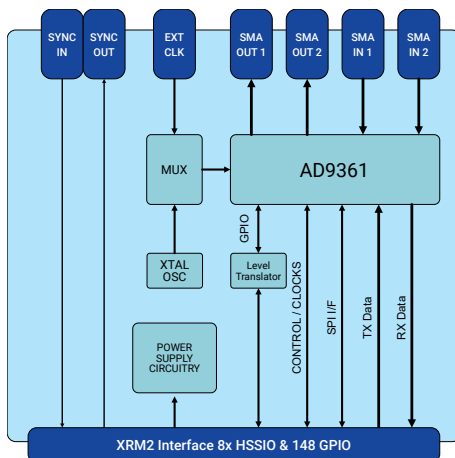
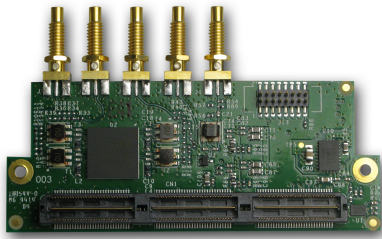
- Dual 12-bit 61.44Msps ADCs
- Dual 12-bit 61.44Msps DACs
- External Clock Input

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

ADC

Dual Analog to Digital Converters

Resolution: 12-bit
Max Sample Freq: 61.44Msps (per channel with 56MHz Channel Bandwidth)
Bandwidth: 70MHz to 6000MHz nominal
Impedance: 50Ω
Connector: SSMC

DAC

Dual Digital to Analog Converters

Resolution: 12-bit
Max Sample Freq: 61.44Msps (per channel with 56MHz Channel Bandwidth)
Bandwidth: 70MHz to 6000MHz nominal
Impedance: 50Ω
Connector: SSMC

External clock input

External clock input

Support

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

Board Format

Alpha Data XRM2 I/O Module

Environmental Specification

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.	