



#### Applications

- RF/IF Signal Sampling
- High-speed Analog signal Sampling

#### Summary

The **XRM2-ADC-S11** is an XRM2 I/O Module, providing one Analog to Digital converter with 12-bit resolution and sampling rates up to 2000Mps (2500Mps with order code option /25).

Aimed at IF/RF Signal Sampling, the sampling clock can be sourced from either an external clock source or from a clock generated within the attached FPGA board. A programmable input attenuator can be used to vary the full scale input level over a 15 dB range. An Auxiliary I/O port is provided for use as a trigger input and general purpose signaling. The XRM2 communicates to the FPGA via a JESD204B high speed interface.

#### Deliverables

XRM2-ADC-S11 Board  
 One Year Warranty  
 One Year Technical Support

#### Board Features

- Single 12-bit 2000/2500Mps ADC
- External Clock Input



#### Board Format

Alpha Data XRM2 I/O Module

#### Input/Output Interfaces

##### 1x Single Analog to Digital Converter

Resolution: 12-bit  
 Max Sample Freq: 2000Mps (2500Mps with ordering option)  
 Bandwidth: (3dB) 10MHz to 3000MHz  
 Impedance: 50Ω  
 Connector: SMA

##Note:## exceeding the maximum signal limit may result in permanent degradation of converter performance.

##### 1x External clock input

Impedance: 50Ω  
 Levels: 0 dBm nominal  
 Connector: SMA

##Note:## Exceeding the maximum voltage limit may result in permanent degradation of converter

##### 1x Auxiliary I/O

Impedance: 4k7Ω (DC Coupled)  
 Levels: +3V3 LVTTTL (DC coupled)  
 Connector: SMA

User configurable as inputs or outputs

**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

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

**EMC Standards**

FCC 47CFR Part 2

EN55022:2010 Equipment ClassB

**Ordering Information****Order Code: XRM2-ADC-S11(sp)**

Option	Code	Description of Options
Sampling Speed	sp	blank = 2000Mps, /25 = 2500Mps

Address: 160 Dundee Street, Suite 4A,  
Edinburgh, EH11 1DQ, UK  
Telephone: +44 131 558 2600  
Fax: +44 131 558 2700  
email: [sales@alpha-data.com](mailto:sales@alpha-data.com)  
website: <http://www.alpha-data.com>

Address: 611 Corporate Circle Suite H  
Golden, CO 80401  
Telephone: (303) 954 8768  
Fax: (866) 820 9956 - toll free  
email: [sales@alpha-data.com](mailto:sales@alpha-data.com)  
website: <http://www.alpha-data.com>