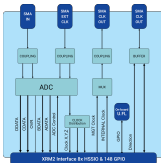


AD01153



### Prime Application

**IF/Baseband Signal Sampling**

### Summary

The **XRM2-ADC-S4/3G** is an XRM2 I/O Module, providing one Analog to Digital converter with 8-bit resolution and sampling rates up to 3Gbps.

Aimed at IF/Baseband Signal Sampling, the sampling clock can be sourced from either an external clock source or from a clock generated within the attached FPGA board. An Auxiliary I/O port is provided for use as a trigger control or for general purpose signalling. An additional two ports are available for use as high-speed interconnect between boards for synchronisation. The built-in thermal monitor allows the user to check the operating temperature of the ADC.

Provided as part of the sample design is the functionality to read the temperature of the device, and software to monitor this and recalibrate the ADC if the thermal drift is sufficient. The software will also shut the ADC down if the device starts to go over the maximum operating temperature.

### Deliverables

XRM2-ADC-S4/3G Board  
One Year Warranty  
One Year Technical Support

### Input/Output Interfaces

#### ADC

Single Analog to Digital Converter

Resolution: 8-bit  
Max Sample Freq: 3Gbps  
Bandwidth: 30MHz to 1700MHz nominal  
Impedance: 50Ω  
Connector: SMA

#### External clock input

External clock input

#### External clock output

External clock output

#### Auxiliary I/O

Auxiliary I/O

#### Synchronisation I/O

Synchronisation I/O

#### UK Office

Address: Suite L4A, 160 Dundee Street,  
Edinburgh, EH11 1DQ, UK  
Telephone: +44 131 558 2600  
Fax: +44 131 558 2700  
email: sales@alpha-data.com

#### USA Office

611 Corporate Circle, Suite H  
Golden, CO 80401  
(303) 954 8768  
(866) 820 9956 - toll free  
sales@alpha-data.com

**Support**

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

**Board Format**

Alpha Data XRM2 I/O Module	ERROR	ERROR	ERROR	ERROR
----------------------------	-------	-------	-------	-------

**Environmental Specification**

Cooling Option	Operating Temperatures		Storage Temperatures	
	Min	Max	Min	Max
AC0	0°C	55°C	-40°C	85°C

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

**EMC Standards**

FCC 47CFR Part 2  
EN55022-2010 Equipment ClassB

**Ordering Information**

**Order Code: XRM2-ADC-S4/3G(h)**

Option	Code	Description of Options
Heatsink	h	blank = No Heatsink, /HTSK-XRM-ADC-HS-1 = Heatsink Fitted

**UK Office**

Address: Suite L4A, 160 Dundee Street,  
Edinburgh, EH11 1DQ, UK  
Telephone: +44 131 558 2600  
Fax: +44 131 558 2700  
email: sales@alpha-data.com

**USA Office**

611 Corporate Circle, Suite H  
Golden, CO 80401  
(303) 954 8768  
(866) 820 9956 - toll free  
sales@alpha-data.com