

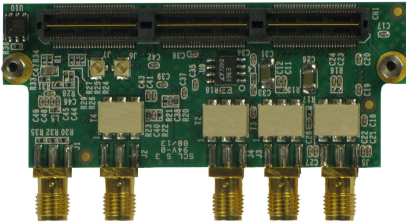
AD01153

## Prime Application

IF/Baseband Signal Sampling

## Board Features

- Dual 8-bit 1.5Gspcs ADCs
- External Clock Input
- Thermal monitoring of the ADCs



## Summary

The **XRM2-ADC-D3/1G5** is an XRM2 I/O Module, providing two Analog to Digital converters with 8-bit resolution and sampling rates up to 1.5Gspcs.

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 signaling. An additional two ports are available for use as high-speed interconnect between boards for synchronisation. The XRM2-ADC-D3/1G5 is based around the ADC08D1500 by National Semiconductors. A 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-D3/1G5 Board  
One Year Warranty  
One Year Technical Support

## Input/Output Interfaces

### ADC

Dual Analog to Digital Converters

Resolution: 8-bit

Max Sample Freq: 1.5Gspcs

Bandwidth: 30MHz to 1700MHz

Impedance: 50Ω

Connector: SMA

### External clock input

External clock input

### External clock output

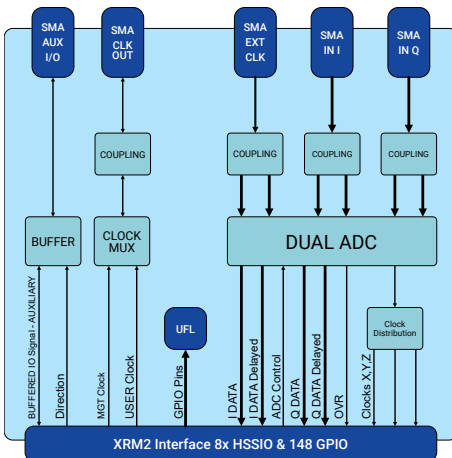
External clock out

### 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

**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
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-D3/1G5(h)(v)**

Option	Code	Description of Options
Heatsink	h	blank = No Heatsink, /HTSK-XRM-ADC-HS-1 = Heatsink Fitted
I/O Voltage	v	blank = +3.3V - LVTTTL I/O levels, /5V = +5V - TTL I/O Levels