

XRM2-ADC-Q8/250

12th February 2019

Datasheet Revision: 1.1



IF/Baseband Signal Sampling

Board Features

- · Quad 14-bit 250Msps ADCs
- External Clock Input

. Thermal monitoring of the ADCs

The XRM-ADC-Q8/250 is an XRM I/O Module, providing four Analog to Digital converters with 14-bit resolution at sampling rates up to 250Msps.

The XRM is 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. The Trigger I/O port is provided for use as a trigger input and general purpose signaling. 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-Q8/250 Board One Year Warranty One Year Technical Support

Input/Output Interfaces Quad Analog to Digital Converters

Resolution: 14-bit Max Sample Freq: 250Msps Bandwidth: 4.5MHz to 700MHz Impedance: 500 Connector: SSMC

External Clock Input Impedance: 500 Levels: +3V3 LVTTL Connector: SSMC

Trigger VO

Impedance: 4k70 (DC Coupled) Levels: +3V3 LVTTL Connector: SSMC





Support

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

Environmental Specification

Temperature Ranges

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

EMC Standards

FCC 47CFR Part 2

EN55022:2010 Equipment ClassB

Order Code: XRM2-ADC-Q8/250

Address: 4 West Silvermills Lane Edinburgh, EH3 5BD, UK Telephone: +44 131 558 2600 Fax: +44 131 558 2700 email: 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 website: http://www.alpha-data.com Fax: email: