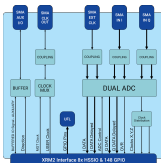


AD01153



Prime Application

IF/Baseband Signal Sampling

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 1.5Gps.

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

Board Features

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

Input/Output Interfaces

ADC
Dual Analog to Digital Converters

Resolution: 8-bit
Max Sample Freq: 1.5Gps
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

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-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 |

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