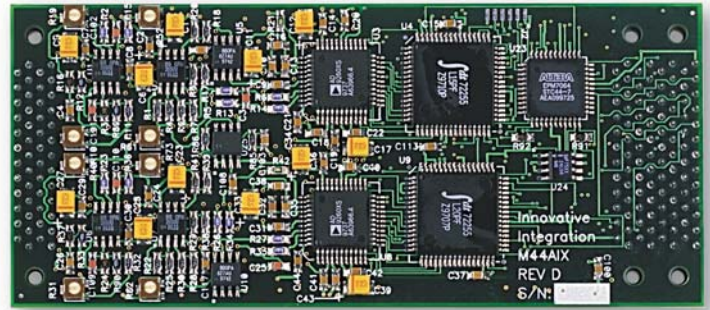


Interface	Compatible with all OMNIBUS host products Consumes one interrupt to host
Physicals	OMNIBUS mezzanine card; 2.000" X 4.600"
A/D Converters	4 Analog Devices AD9260 converters
Resolution	16-bit
Update Rate	125 Hz - 2.5 MHz
External Clock	N/A
Settling Time	15 us max to 0.0007% (no external filtering)
Analog Input Range	± 2 V, custom ranges may be special ordered
S/N Ratio	80 dB @ 2.5 MHz
THD	-80 dB
Dynamic Range	95 dB
Gain Error	Trimmable on each channel – factory calibrated
Differential Linearity Error	0.5 LSB typical
Offset Error	Trimmable on each channel – factory calibrated
Aperture Jitter	2 ps
Input Type	single-ended
Input Impedance	50 Ohms 390 pF
Analog Filter	Single pole filter; -3 dB set at 30 MHz
Characteristics	Passband Ripple 0.004 dB; Passband Attenuation; 85.5 dB;
Digital Filter	Passband 1.01 x (fclock/20 MHz) MHz; -0.1 dB transition; 1.074
Characteristics	x (fclock/20 MHz) MHz; -3 dB transition; 1.2 x (fclock/20 MHz) MHz; Stopband; 1.49 x (fclock/20 MHz) MHz min; 18.51 x (fclock/20 MHz) MHz max
Group Delay	
Conversion	384/Fclock or 48/Fsamp
Trigger Sources	Host timers @ 8x sample rate
Sample FIFO	8 K samples/ch.; Memory-mapped to host; A/Ds are paired on bus as 32-bit numbers –each 16-bit half is one A/D



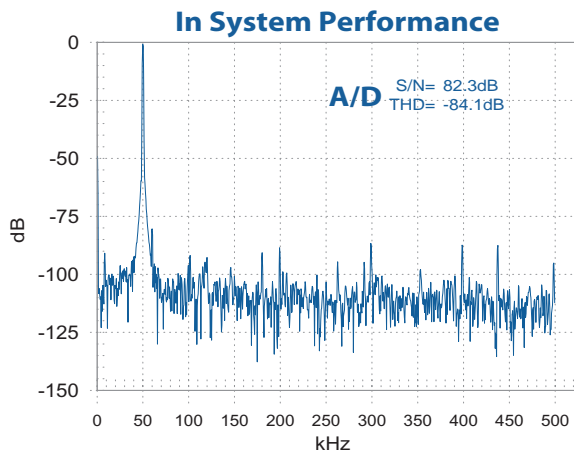
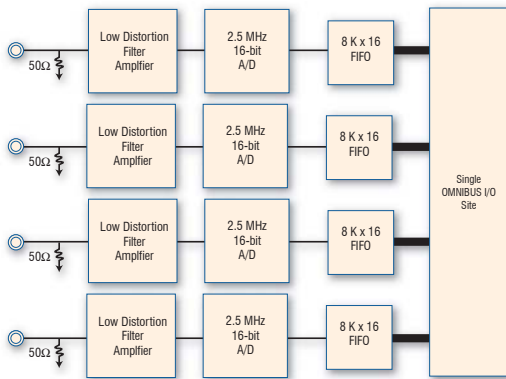
AIX - High Speed / High Resolution Analog Input Module

The AIX module delivers four channels of 2.5 MHz, 16 bit A/D conversion, making it ideal for high-speed precision data acquisition and transient capture. The AIX uses the revolutionary AD9260 from Analog Devices, delivering high performance 16-bit precision at an affordable price. The A/D uses a unique pipelined architecture that samples the input at up to 20 MHz and digitally filters the output for accurate results. The A/D delivers 2.5 MHz data from a 48-sample filter pipeline, resulting in lower data latency than standard sigma-delta converters while still providing digital anti-alias filtering.

Each A/D channel has an 8K-sample FIFO to allow efficient data collection and transport to the host card. This allows data collection as single points, or as a data set of up to 8K samples, reducing the interrupt rate to the host. Full speed, continuous data acquisition is supported.

The AIX has been used in a variety of applications including disk drive testing, CCD camera digitizing for process control, and transient capture for aerodynamic testing.

Software examples demonstrating module operation and communication are included in the Zuma/Armada Toolsets. A full calibration report ships with every module.



Ordering Information

AIX

80020-4