



## Artisan Technology Group is your source for quality new and certified-used/pre-owned equipment

- FAST SHIPPING AND DELIVERY
- TENS OF THOUSANDS OF IN-STOCK ITEMS
- EQUIPMENT DEMOS
- HUNDREDS OF MANUFACTURERS SUPPORTED
- LEASING/MONTHLY RENTALS
- ITAR CERTIFIED SECURE ASSET SOLUTIONS

### SERVICE CENTER REPAIRS

Experienced engineers and technicians on staff at our full-service, in-house repair center

### *InstraView*<sup>SM</sup> REMOTE INSPECTION

Remotely inspect equipment before purchasing with our interactive website at [www.instraview.com](http://www.instraview.com) ↗

### WE BUY USED EQUIPMENT

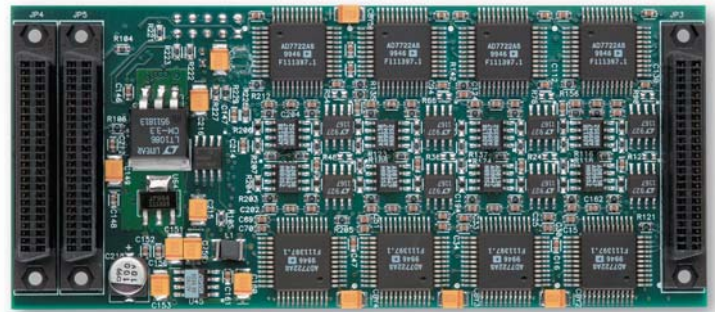
Sell your excess, underutilized, and idle used equipment. We also offer credit for buy-backs and trade-ins. [www.artisanng.com/WeBuyEquipment](http://www.artisanng.com/WeBuyEquipment) ↗

### LOOKING FOR MORE INFORMATION?

Visit us on the web at [www.artisanng.com](http://www.artisanng.com) ↗ for more information on price quotations, drivers, technical specifications, manuals, and documentation

**Contact us:** (888) 88-SOURCE | [sales@artisanng.com](mailto:sales@artisanng.com) | [www.artisanng.com](http://www.artisanng.com)

<b>Interface</b>	Compatible with all OMNIBUS host products Consumes one interrupt to host.
<b>Power Requirements</b>	5V@2.0A, +15V@25mA, +5V@25mA Forced air cooling may be required in certain conditions
<b>Physicals</b>	OMNIBUS mezzanine card; 2.000" X 4.600"
<b>A/D Converters</b>	Sixteen AD7722 Sigma Delta converters
<b>Resolution</b>	16-bit
<b>Sample Rate</b>	5 - 195 kHz
<b>Oversampling</b>	64x
<b>Step Response Settling</b>	
<b>Time</b>	425 $\mu$ sec (@ 195kHz)
<b>Group Delay</b>	216 $\mu$ sec (@ 195kHz)
<b>Analog Input Range</b>	$\pm$ 10V differential
<b>S/N Ratio</b>	90 dB
<b>SINAD</b>	81 dB
<b>ENOB</b>	13-bit
<b>SFDR</b>	88dB
<b>THD</b>	0.002%
<b>Dynamic Range</b>	96 dB
<b>Gain Error</b>	Trimmable $\pm$ 3 mV
<b>Offset Error</b>	Trimmable <0.01% FS
<b>Input Type</b>	Differential
<b>Input Impedance</b>	1 MOhm
<b>Digital Filter</b>	
<b>Characteristics</b>	
<b>Passband</b>	.496x Sample Rate
<b>Passband Ripple</b>	$\pm$ .005 dB
<b>Conversion Trigger</b>	
<b>Sources</b>	OMNIBUS DDS Timer only
<b>Interface to DSP</b>	Memory-mapped 32-bit result returned for each pair



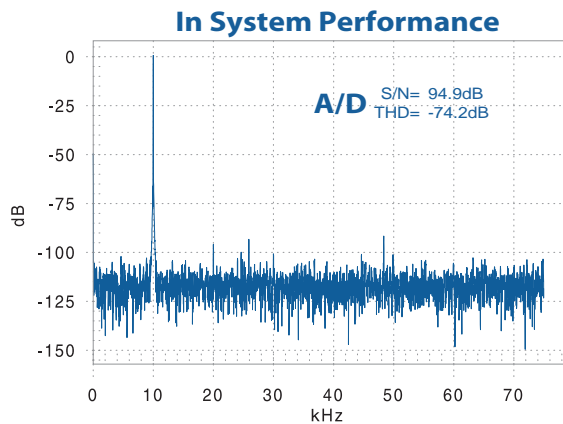
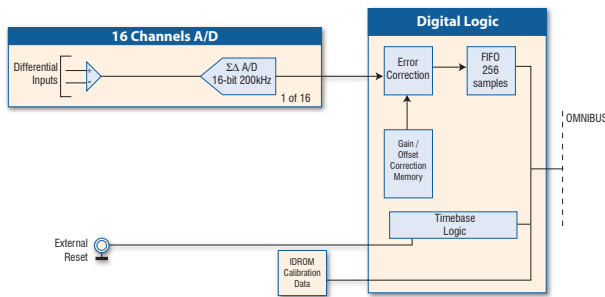
**AD16 - High Precision 16 Channel A/D Module**

The AD16 OMNIBUS module provides 16 simultaneous 16-bit channels of A/D conversion. There are actually 16 Analog Devices AD7722 converters, capable of 5-195kHz sampling. This high-channel density, high-accuracy, DC accurate analog front end is simply unprecedented in the industry.

Each channel employs a sigma-delta converter eliminating the need for expensive, bulky analog anti-alias filters. Each channel is a high impedance  $\pm$ 10v differential input with an independent high accuracy instrumentation amplifier. Additional features on each channel include software programmable digital offset and gain corrections, allowing software-controlled calibration (external references required). This module has 256 sample FIFOs.

The AD16 module is well suited for a variety of measurement, instrumentation, and multichannel data acquisition applications where high dynamic range, DC accuracy, and simultaneous channel sampling are required. Some typical applications may include vibration measurements, acoustic monitoring, SONAR, and audio, to name a few.

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



**Ordering Information**

AD16

80020-20



## Artisan Technology Group is your source for quality new and certified-used/pre-owned equipment

- FAST SHIPPING AND DELIVERY
- TENS OF THOUSANDS OF IN-STOCK ITEMS
- EQUIPMENT DEMOS
- HUNDREDS OF MANUFACTURERS SUPPORTED
- LEASING/MONTHLY RENTALS
- ITAR CERTIFIED SECURE ASSET SOLUTIONS

### SERVICE CENTER REPAIRS

Experienced engineers and technicians on staff at our full-service, in-house repair center

### *InstraView*<sup>SM</sup> REMOTE INSPECTION

Remotely inspect equipment before purchasing with our interactive website at [www.instraview.com](http://www.instraview.com) ↗

### WE BUY USED EQUIPMENT

Sell your excess, underutilized, and idle used equipment. We also offer credit for buy-backs and trade-ins. [www.artisanng.com/WeBuyEquipment](http://www.artisanng.com/WeBuyEquipment) ↗

### LOOKING FOR MORE INFORMATION?

Visit us on the web at [www.artisanng.com](http://www.artisanng.com) ↗ for more information on price quotations, drivers, technical specifications, manuals, and documentation

**Contact us:** (888) 88-SOURCE | [sales@artisanng.com](mailto:sales@artisanng.com) | [www.artisanng.com](http://www.artisanng.com)