

ARTISAN®
TECHNOLOGY GROUP

Your **definitive** source for quality pre-owned equipment.

Artisan Technology Group
(217) 352-9330 | sales@artisantg.com | artisantg.com

Full-service, independent repair center
with experienced engineers and technicians on staff.

We buy your excess, underutilized, and idle equipment
along with credit for buybacks and trade-ins.

Custom engineering
so your equipment works exactly as you specify.

- Critical and expedited services
- In stock / Ready-to-ship
- Leasing / Rentals / Demos
- ITAR-certified secure asset solutions

Expert team | Trust guarantee | 100% satisfaction

All trademarks, brand names, and brands appearing herein are the property of their respective owners.

Visit our website - *Click HERE*

IXI1242 Mezzanine

Dual 41 MHz, 12-bit A/D Converters

View Photo of IXI1242

Board Photo

View Architectural Diagram of IXI1242

Architectural Diagram

Features

- Dual 12-bit ADC
  - 2 channels of input @ 41MHz
  - 67 dB dynamic range typical
- +/- 0.5V input range
- 4k deep FIFO for both channels
- Flexible acquisition control
- Simultaneous Sampling
- Options:
  - 3-pole input lowpass filter
  - dither injection for narrow-band signals

General Description

The IXI1242 is a standard IXI interface mezzanine designed for use with compatible IXZ baseboards for digital signal processing. It has two channels of analog-to-digital converters. The analog-to-digital conversion is done with a 12-bit converter at 41MHz. Each channel has a 4k deep FIFO. The IXI1242 is optimized for high-speed data acquisition.

The two channel conversions are synchronous for simultaneous conversions. The IXI1242 can generate two programmable IXI interrupts (IOINT and TIMINT1) and two programmable IXI flags (IOFLAG0 and IOFLAG1). The board has a programmable (watermark) flag for notifying the host after a specified number of samples are collected.

The IXI1242 contains a 4k deep FIFO that is 24 bits wide. Two data samples are packed into each 32-bit word. Bits 31 (MSB) through 20 (LSB) contain the data for channel 1, and bits 15 through 4 contain the data for channel 2; both are in 2's complement format.

The digitized data may be read from the IXI1242 at 40MHz, (0 wait-states for an IXZ baseboard), allowing up to 160MB data transfers.

The optional input filter is a 3-pole lowpass Bessel filter with a 3dB cut off frequency at 25MHz. The optional dither circuitry inserts wideband noise below 1MHz to increase the effective SFDR for high frequency, narrowband signals. Inputs are AC coupled with a high pass at 7kHz.

External clock and trigger inputs allow for synchronization of data sampling with external stimuli.

It should be noted that the ADC architecture has a 3-clock cycle pipeline delay. This may be important for some control applications.

The IXI family of interface mezzanines complies with the IXI Design Specifications published by Ixthos. The electrical interface to an IXI mezzanine consists of 73 signals: 32 data lines, 24 address lines, 11 control lines, digital power and ground, three analog powers (+5, +12, -12) and analog ground. These connections to the IXZ baseboard are made via an elastomeric connector that provides a high density, low resistance, zero insertion force connection. Standard board separations of 0.125" to 0.375" are low enough to ensure a single-slot solution for most applications while providing enough room for double-sided population.

Copyright © 2001, Ixthos, Inc.
e-mail: sales@ixthos.com

Artisan Technology Group is an independent supplier of quality pre-owned equipment

Gold-standard solutions

Extend the life of your critical industrial, commercial, and military systems with our superior service and support.

We buy equipment

Planning to upgrade your current equipment? Have surplus equipment taking up shelf space? We'll give it a new home.

Learn more!

Visit us at **artisantg.com** for more info on price quotes, drivers, technical specifications, manuals, and documentation.

Artisan Scientific Corporation dba Artisan Technology Group is not an affiliate, representative, or authorized distributor for any manufacturer listed herein.

We're here to make your life easier. How can we help you today?

(217) 352-9330 | sales@artisantg.com | artisantg.com

ARTISAN® TECHNOLOGY GROUP