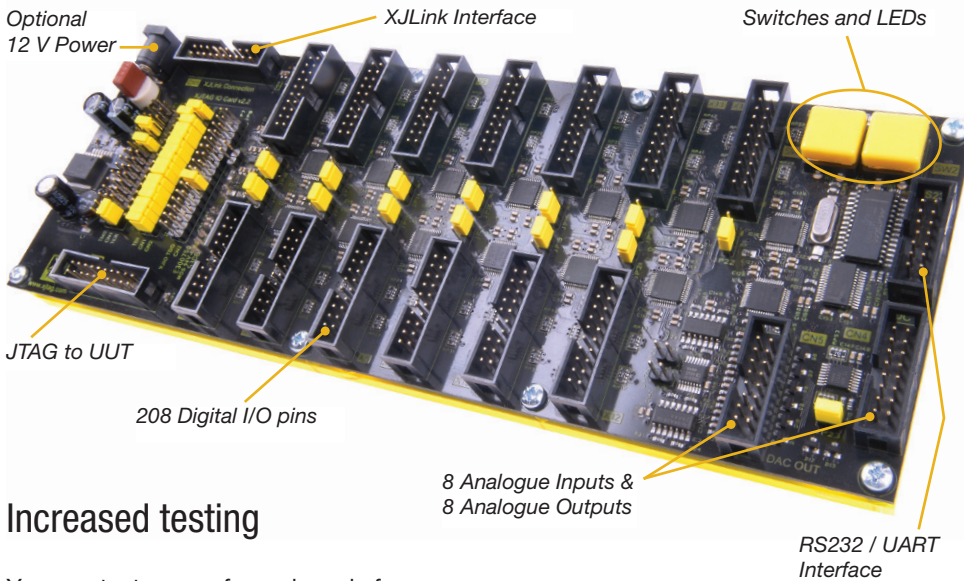


## Overview

The XJIO board is an expansion unit that will integrate with your XJTAG test system to provide access to otherwise inaccessible areas of your circuit.

With a range of digital and analogue I/O on the XJIO board, you can increase test coverage and improve fault isolation.



## Increased testing

You can test more of your boards for opens and shorts by connecting signals from your Unit Under Test (UUT) to the XJIO board.

Although often overlooked in test, connectors are a common source of manufacturing faults, especially with the increased use of high density connectors. By adding an XJIO board to your test system, XJTAG can drive signals through your connectors and identify the nature and location of any faults.

With onboard DAC and ADC the XJIO board provides a mechanism for analogue as well as digital testing. Using this functionality, even boards with no JTAG components can be “black box” tested with XJTAG.

## Digital interface

With 208 bidirectional digital I/O pins, the XJIO board has been designed for maximum connectivity. The I/O pins are all 5 V tolerant. The default logic level is 3.3 V, or you can re-configure the I/O pins, in blocks of 16, to use any user-defined voltage between 3.3 V and 1.8 V.

## Analogue interface

The XJIO board has 8 analogue inputs and 8 analogue outputs, controllable via the JTAG interface. The on-board ADC enables analogue measurement — e.g. testing a power rail is within limits. The DAC allows analogue inputs on the UUT to be stimulated, improving test coverage of the target board.

## RS232 interface

This interface can be used to further improve test coverage. There is a UART capable of communication up to 230 kbit/s and a RS232 transceiver that can be driven directly from the JTAG chain.

## Power supplies

For quick and portable test setup the XJIO board can be powered from USB. Alternatively, if you need more than 80 mA of current, there is a connector for a standard 12 V power supply.

## Key Benefits

- Improve reliability of your boards by increasing analogue and digital test coverage
- Reduce your debug time by enhanced fault isolation
- XJTAG can reduce the cost and complexity of your custom test jigs
- Reach devices on your non-JTAG boards with “black box” testing

## Features

- Configure the voltage of the 208 digital I/O pins – 1.8 V to 3.3 V (5 V tolerant)
- On-board 8 channel ADC and DAC
- Fully expandable to meet your needs
- Switches and LEDs for user interaction
- ‘Black box’ testing for non-JTAG boards
- Reusable, replacing multiple custom test jigs
- Standard IDC connectors
- USB or 12 V power supply
- RS232 / UART

## User interaction

The switches and LEDs give further flexibility by providing you with a way to interact with your test system.

## Expandable

If more I/O pins are required, XJIO boards can be daisy-chained together via the reconfigurable external JTAG connector to reach the required capacity. All the connectors on the XJIO board are standard IDC, for economical and efficient cable assemblies.

## Integration

You can use the XJIO board with any JTAG controller.