

## GENERAL

The ISAS DS2500™ PCMCIA Digital Oscilloscope card offers capabilities previously unobtainable in a PCMCIA type II form factor. The ISAS DS2500 is a dual Channel high-speed digitizer for use as a data acquisition system in computers with a PCMCIA type II slot. Its internal memory allows the capture of a large number of samples for further analysis by the host computer. Both channels have 12-bit vertical resolution.

## ANALOG INPUT

The analog input channels are differential in nature, and have a 50 MHz input bandwidth. The analog signals are conditioned with a software-controlled programmable gain attenuation stage before being passed into the digitizer itself. The user through software can also select AC or DC coupling further increasing the functionality of the card.

## TRIGGERING

The DS2500™ flexible triggering system gives the user a number of options. In addition to the standard programmable threshold and rising or falling edge detection, the user can specify via software the number of samples before or after the trigger event that is of interest. The trigger source can be either acquisition channel or a dedicated trigger signal.

# ISAS DS2500 SCOPE CARD

2 Channel, 50 MS/s, 12 bit,  
PCMCIA Type II High Speed  
Digitizing Acquisition Card

## Features

- Two isolated digitizing channels with individual triggers, deep storage, range and rate settings
- Sample buffer of 512K or optional 1024K readings per channel
- Internal or external triggering
- Pre and post triggering
- Programmable sampling rates from 1 KHz to 50 MHz
- Vertical ranges  $\pm 250\text{mV}$ ,  $\pm 500\text{mV}$ ,  $\pm 1.25\text{V}$ ,  $\pm 2.5\text{V}$ ,  $\pm 5\text{V}$ ,  $\pm 10\text{V}$ ,  $\pm 25\text{V}$ ,  $\pm 50\text{V}$ ,  $\pm 500\text{V}$  (with 10x probe)



## CALIBRATION

The DS2500™ stores calibration values in nonvolatile onboard RAM. The card stores not only the calibration values, but also the date of calibration. A 64 character alphanumeric field is use to store the identification of who and where the calibration was performed, as well as any other maintenance data.

The card can store the last 50 calibration events chronologically to allow the user to provide logistic information as to how often the device should be calibrated and to support trending analysis.

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*continued page 2*

## Technical Specifications (@ 25°C)

### ACQUISITION SYSTEM

Analog Bandwidth	50 MHz
Resolution	12 Bits
Maximum Sample Rate	50 MS/s Single Shot
Sample Memory	512 K, Optional 1024K per Channel

Verticle Ranges	+/- 250 mV
	+/- 500 mV
	+/- 1.25 V
	+/- 2.5 V
	+/- 5V
	+/- 10V
	+/- 25 V
	+/- 50 V
	+/- 500 V (with 10x probe)

Sampling Rates	50 MHz
	20 MHz
	5 MHz
	2 MHz
	1 MHz
	100KHz
	10 KHz
	1 KHz

DC Accuracy	+/- 2.5% of full scale
Crosstalk	-60 dB typical
Input Capacitance	< 20 pF
Input Coupling	AC or DC
Input Impedance	> 1 Mohm
Input Protection	+/- 500 V
Form Factor	PCMCIA Type II

### TRIGGERING SYSTEM

Sources	Ch1/Ch2 or Trig
Modes	Edge, Pos or Neg
Coupling	DC
Sensitivity	12 Bits
Impedance	> 1 Mohm
Capacitance	< 20 pF
Timebase Options	Software Controlled

## CONTACT INFORMATION

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