

CAUTION
 This product requires a PXI/cPCI Chassis with replaceable card guides per the Eurocard mechanical specification



PX452S PXI Aperture A/D

The PX452S is a one or two channel 12-bit A/D converter that will sample and selectively store differential analog signals together with a 31-bit time stamp at a rate up to 100 kS/s. The 31-bit time tag allows almost six hours of uniquely time tagged data, at a resolution of 10 μ s, to be stored by the host. The module has the ability to convert and store all data at the specified sample rate or selectively store input values that exceed the range of the programmed aperture window. This technique provides extensive real-time data compression for transient type input signals.

Overview:

Number of Channels: 1 or 2
A/D Resolution: 12-Bit
Conversion Rate: 100KHz
Integral Nonlinearity: ± 1 LSB
Input Specifications:
 Full Scale Input ± 5 V or ± 10 V diff.
 Modes Unipolar/Bipolar
 OVP ± 40 V (min)
 Impedance 10M Ω
 Hysteresis 25mV
Input Common Mode:
 Voltage Range ± 13 V (min)
 Rejection Ratio 70dB (DC-1KHz)
Anti-Alias Filter:
 Programmable 160Hz to 48KHz
 Filter Type 6th order butterworth
 Attenuation rate 120dB/decade
Local Memory:
 32K x 48 (31-bit timestamp)

Sampling Strobe:
 ● Internal: 10KHz or 100KHz
 ● Front Panel: up to 100KHz
 ● Host carrier: up to 100KHz

Interrupts:
 ● Data Stored
 ● FIFO Half-Full
 ● FIFO Full

I/O Connector:
 ● 25-pin DSUB

Power: (-0001/-0002)
 +5V 500mA / 600mA
 +12V 20mA / 40mA
 -12V 20mA / 40mA

Temperature
 Operating 0° C to 50° C
 Storage -40° C to 70° C

Ordering Information

Part Number
 Single Channel 11029190-0001
 Dual Channel 11029190-0002

CPCI/PXI Compliance

Complies with PCI spec. 2.0 R3.0 and PCI spec 2.2
 5V and 3.3V signaling voltage (VIO) supported
 5V only power supply
 33MHz PCI data bus
 Five trigger lines compliant with PXI Specification 2.1
 Form Factor: Size 3U

Applications

- Acquisition of transient signals
- Realtime data compression
- General A/D Conversion

Additional Information

User Manuals and drivers for C&H modules can be found on our website at www.chtech.com.