



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

PX451S PXI Digital Input Event Detector

The PX451S is a 16 or 32 channel digital input module that samples and selectively stores up to 32 bits of digital data along with a 31-bit time stamp at a rate up to 5 MHz. The 31-bit time tag allows unique time tagged data. The module has the ability to store all data at the specified sample rate or selectively store input values based upon changes in state of one or more of the inputs.

Overview:

Number of Channels: 16 or 32

Sample Rate: up to 5MHz

Input Debounce: 0 to 128ms
Software selectable

Input Specifications:
Threshold Resolution 100mV
Threshold Range 0 – 25.6V
Threshold Accuracy ±0.5% of FS
Max. Input Voltage 28V
Input Hysteresis 25mV

Input Masking:
Any bit is pattern programmable

Local Memory:
32K x 48 (31-bit timestamp)

Sampling Strobe:
● Internal: To 5 MHz
● Front Panel: To 5 MHz
● Backplane Trigger: To 5 MHz
● (Source & prescaler software programmable)

Interrupts:

- Data Stored
- FIFO Half-Full
- FIFO Full
- Time-Stamp Rollover
- Preset Change of State
- Preset Level Transition
- Preset Bit Pattern

I/O Connectors:

- 44-pin DSUB
- 24-pin Peripheral Header

Power: (-0001/-0002)

+5V 800mA / 1.2A
+12V 0mA / 0mA
-12V 20mA / 40mA

Temperature

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

Ordering Information

Part Number
16-Channel 11029180-0001
32-Channel 11029180-0002

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
- Real-time data compression
- Logic analysis
- Event counting

Additional Information

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