TECHNICAL DATA SHEET

VXI Instruments
the test solutions provider

PXTe5401
PXIe Trigger Module



PXI
VXI
LAN
cPCI
PXIe
GPIB
USB
RS232 485
external PCIe

Features

- 8 front trigger I/Os
- Easy linkage of various external modules to the PXIe trigger bus
- High configurable trigger matrix
- Available with PXI Express interface
- Inputs/Outputs compatible with 5 V TTL standard
- Software controlled triggering of any target device

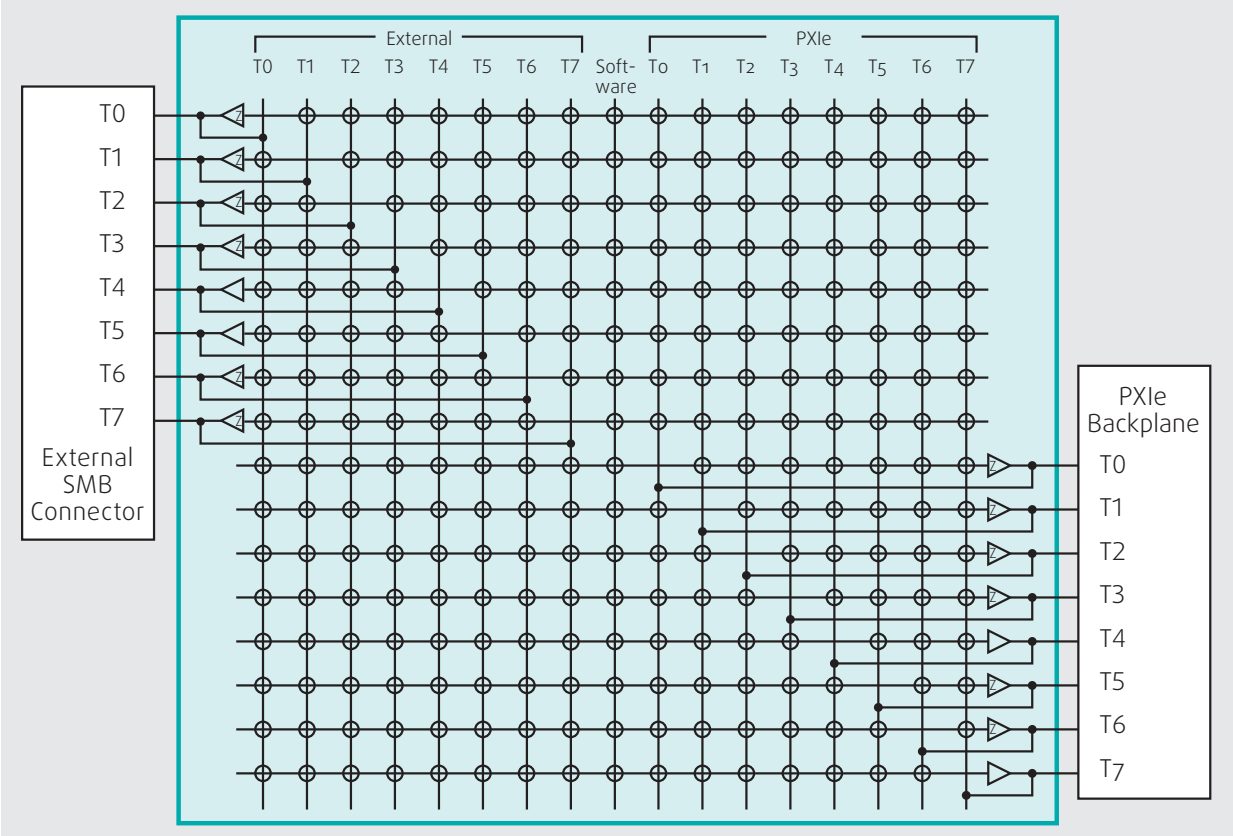
Product Information

Easy linkage of various external modules
The PXTe5401 8 Ch Trigger Controller is designed to build up a connection between trigger signals from/to any external trigger source/sink (5 V TTL standard) and the PXI trigger bus. Therefore, the device is equipped with eight SMB male front connectors (T0 to T7).

Complex concatenation of various trigger sources
Each trigger output signal can be a combination of all available trigger sources except the trigger line itself.

Independent configurable trigger lines
The Trigger Controller provides 16 independent configurable trigger lines, where each of them can be used as trigger source or trigger output and two additional trigger sources (PXI Star trigger and Software trigger).

Software controlled triggering
With the additional software trigger, the PXTe5401 8 Ch Trigger Controller can also be used as a trigger source be itself.



General Specification

General	Specification
Module size	1 slot, 3U
Module weight	<0.3 kg
Front connector type	SMB male
Operating temperature	0 ... 40°C
Operating altitude	<2 000 m
Relative humidity	Up to 85% at 35°C
Storage temperature range	-25 ... 70°C
Electrical safety	According EN61010-1

Trigger Specification

Trigger	Specification	Comment
Front trigger I/Os	8	
PXIe trigger lines	8	PXIe trigger line 0 ... 7
I/O voltage level	5 V TTL	
Output current	20 mA	
Trigger sources	16 configurable trigger lines, 1 PXIe star trigger, software trigger	
Trigger Pulse Width	10 ns ... 42 s	Resolution: 10 ns
Trigger Pulse Delay	Asynchronous mode: 30 ns (for PXI trigger lines) 60 ns (for external trigger lines) Synchronous mode: 70 ns ... 42 s (for PXI trigger lines) 100 ns ... 42 s (for external trigger lines)	@100MHz Resolution: 10 ns
External trigger lines channel to channel skew	max. 5 ns	