OpenATE PE32D

* Interface	3U PXI (V)
* 16 * 2 input / output channels, dynamically configurable	
* 33 MHz data rate	
* -1V ~ +7V VOH VOL VIH VIL per channel	
* 4 PMU per board	
* 32 M of on-board vector memory per channel	
* Supports 16 Timing Sets & 4 Format Sets change on the fly	
* Dynamic controlled sequencer uses micro-instructions including Match, Repeat, Loop FM / FC / FL / FE	
* 32K fail log memory	
* 100MHz 32bit TMU * 2	
* Operates as two 16 ch sites or one 32 ch site per board	
* API & Pattern Editor	

3U PXI

Description

The PE32D represents a new level of performance and capabilities for PXI-based digital instrumentation. Based on the proven architecture of the PE32, the PE32D offers high performance pin electronics and an enhanced timing generator in a compact, 3U PXI form factor. Each card can function as a 32ch digital subsystem or two 16 ch sites tester. The PE32D also supports deep pattern memory by offering 32 M of on-board vector memory with dynamic per pin direction control and with test rates up to 33 MHz.

Features

The PE32T supports -1 ~ +7 VOH VOL VIH VIL per channel and 4 PMU per board. The PE32D offers 16 timing sets, 2 driver TG Edges, 1 strobe TG Edges. 2 Format sets, change on the fly, and four drive data formats are supported: RTZ (Return To Zero), RTO (Return To One), NRZ (Non Return To Zero), SBC (Surround By Complement) which can providing flexibility to create a variety of bus cycles and waveforms to test board and box level products. Two 100MHz 32bit TMU for frequency and time measurement.

On-Board Memory

The PE32D offers 32 M of vector memory per channel. Programmable pattern cycle times up to 2^{32} or infinite. There are pattern symbols including 0, 1, L, H, X, Z, J, Q.

Compatibility

All OpenATE Interfaces PXI cards comply with the PXI Specification 2.0 (issued Aug. 2000)

Software

The PE32D is supplied with API and Pattern Editor. Pattern Editor is a software tool that edits test patterns.

Application

- Automatic Test Equipment(ATE)
- Consumer Digital Functional Test
- Digital Pattern Generation
- Power Management Device Testing
- Hybrid and Digital IC Testing

OpenATE PE32D

Specifications

● Pin Electronics	
I/O Channels	32, per board resource
Test rate	33MHz
Input Level (Vih/ Vil)	-1V ~ +7V per channel
Output Level (Voh/Vol)	-1V ~ +7V per channel
Output Impedance	50 Ohm
● Timing	
Period Resolution	10nS
Pin TG Edge Resolution	10nS
Driver Skew Resolution	500pS
Minimum Pulse Width	10nS
Timing Sets	16, Change on the fly
Driver TG Edges	2, per pin resource
Strobe TG Edges	1, per pin resource
● Formatter	
Format Sets	4, Change on the fly
	RTZ, Return To Zero
	RTO, Return To One
	NRZ, Non Return To Zero
	SBC, Surround By Complement
● PMU	
Number of PMU	4
PMU Accuracy	MI: ±20nA±0.5%FS V: 30mV
Number of IRange x 8	I1: ±2uA / I2: ±8uA
	I3: ±32uA / I4: ±128uA
	I5: ±512uA / I6: ±2mA
	I7: ±8mA / I8: ±32mA
Number of VRange x 1	E1: -1V ~ +7V
● Logic Sequencer	
Micro-Instructions	MATCH; REPEAT; LOOP ;FC / FM / ”FL / FE
Pattern Symbols	0, 1, L, H, X, Z, J, Q
LMSYNC to PXI Trigger Bus	For Sync with other Instruments
Ignore Fail By LM Address	YES
Vector Memory	32M (length) × 32 (channels)
Log Memory	32K for failure log
Programmable pattern cycle times	2^{32} or infinite
● Trigger	PXI_TRIG Bus : 8

OpenATE PE32D

● Physical Properties	
Bus Interface	PXI
Dimensions	3U
Power Requirements	3.3V@3A, 5V@3A 12V@0.5A
System Clock	100MHz
Bus & Signals	8 PXI Trigger bus lines for parallel test
● Environmental	
Operating Temperature	0 ~ 50℃
Storage Temperature	-20℃ ~ 70℃
● Software	API & Pattern Editor
● Maximum boards in one system	16
● One PMU is responsible to 8 I/O channels	
● PXI Compliance	All OpenATE Interfaces PXI cards comply with the PXI Specification 2.0 (issued Aug, 2000)

OpenATE Inc.

The Open Solution for IC Tester

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