

**THE MOVING PIXEL COMPANY**

4905 SW Griffith Drive, Suite 106  
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## PG3A Series Digital Pattern Generators



- Features and Benefits
  - Data rates up to 300 Mbps on all channels with option to 600 Mbps on half the channels
  - Probe logic levels cover all modern logic standards plus analog
  - Familiar, easy to use pattern generator application software
  
- Applications
  - Functional test
  - Subsystem or ASIC emulation
  - Setup and hold time verification
  - Stimulus/response testing when used with a logic analyzer

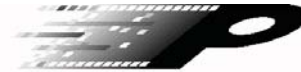
### Digital Pattern Generator Overview

The PG3A Series Digital Pattern Generators are general purpose and powerful tools for both engineering and production. The pattern generators can be used for peripheral/ASIC emulation and stimulation, setup/hold verification, production test, small-scale ATE, and general digital stimulus. When coupled with a Tektronix Logic Analyzer and/or a Tektronix Digital Oscilloscope, a complete test system is realized

### Characteristics

	PG3A Series	
	PG3AMOD	PG3ACAB
Maximum data rate	300 Mbps with 300 MHz clock (DDR option for half-channels to 600 Mbps with 300 MHz clock)	
Number of Channels	64 (merge-able to 256 channels)	
Memory Depth	32M Vectors	
Data Skew	+/- 200pS (typical)	
Data models	Flat or block based	
Delay Adjustment	17.25 nS in 20 pS steps for each 8 bit group <sup>1</sup>	
Output voltage levels	Probe dependent	
Form factor	Plug-in module for Tektronix TLA7000 or TLA700 series mainframes	External cabinet suitable for use with any logic analyzer
External Inputs and Outputs	4 clock and 4 strobe outputs (one per probe) 8 byte lane inhibits (two per probe) 10 MHz reference I/O 1 trigger 8 events	
PGApp – Microsoft® Windows XP/Vista compatible application	Interactive GUI pattern generator interface Convenient pattern entry with multiple pattern fills Import or Export data to/from SynaptiCAD .VCD or Tek TLA Data Exchange Format	

<sup>1</sup> Valid for clock frequencies of 30 MHz and above. Below 30 MHz: adjustment = 500 nS in 20pS steps



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**Logic Probe Specifications**

	<b><u>P373</u></b>	<b><u>P370</u></b>	<b><u>P370LV</u></b>	<b><u>P370LV2</u></b>
Application	LVDS	TTL	CMOS	CMOS
Maximum clock rate	300 MHz.	150 MHz	200 MHz	200 MHz
Output voltages				
(High) adjustment range	N/A	4.50 to 5.50 V	1.65 to 3.60V	0.80 to 2.50V
Differential	400mV (typ.)	N/A		
Common mode	1.25V (typ.)	N/A		
Probe connector	AMP Mictor connector	Square pin sockets (flying lead set included)		
Output termination	Differentially terminated in 100 ohms	All probe outputs run through a 100 ohm series termination before the output connector		
Additional features	Small, quiet, convection cooled pods Color-coded probe outputs Probes have built-in loopback connections for use with Tektronix Logic Analyzers			

**Other Probe Specifications**

	<b><u>P375</u></b>	<b><u>P311</u></b>
Application	Universal - All logic families	Analog, 2 channels
Maximum clock rate	300 MHz.	300 MHz
Output voltages		
Voh (high) adjustment range	-2.000 to +6.500 volts	N/A
Vol (low) adjustment range	-2.000 to +6.500 volts	N/A
Analog range	N/A	1.0 Vpp unipolar or bipolar
Probe connector	AMP Mictor connector and square pins	SMA
Output termination	Series 50 ohms	Series 50 ohms
Additional Features	Variable bit timing in 10 pS steps, 2100 pS total range. External power supply, fan-cooled but very quiet	4 user-selectable output low pass filters. Convection-cooled. Configurable as two 8-bit DACs or one 14-bit DAC

**Order Info**

PG3AMOD	Digital Pattern Generator Module for Tektronix TLA7000 and TLA700 series mainframes
PG3ACAB	Digital Pattern Generator in a separate chassis suitable for use with the other logic analyzers and oscilloscopes
P311	
P370	16 Channel, TTL (5.5V) Probe with 150 MHz maximum data rate
P370LV	16 Channel, CMOS (3.6V) Probe with 200 MHz maximum data rate
P370LV2	16 Channel, CMOS (2.5V) Probe with 200 MHz maximum data rate
P373	16 Channel, LVDS Probe with 300 MHz maximum data rate
P375	16 Channel, variable Vol, Voh, variable bit timing, 300 MHz data rate
P390	Hydra Cable for merging modules
-P3R3	Option for 3 year extended warranty
-P3DDR	Option for DDR output operation (600Mbps/pin, 32 channels, 300 MHz clock)

Note: These products are available for order directly from **The Moving Pixel Co.** They are also distributed worldwide by Tektronix, Inc. Contact your local Tektronix representative for more details.

The PG3ACAB product requires an AC power cord. Orders for the PG3ACAB should include the appropriate power cord for the user's local power system.

Contact The Moving Pixel Co:  
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