

TEKTRONIX

DPO7104

Tektronix DPO7104 is a 1 GHz, 4-channel real-time Digital Phosphor Oscilloscope (DPO) in the DPO7000 Series. It combines very deep record length, very high waveform capture rate, a 12.1-inch XGA touch display, and advanced Pinpoint triggering with protocol and compliance application options.

SPECIFICATIONS

General

Interfaces	USB host, USB device, LAN (Ethernet), GPIB; VGA output; Ext Trig In, Aux/Trig Out; 10 MHz Ref In/Out; PS/2
Display	12.1-inch XGA touch screen display (1024 × 768)

Performance Summary

Analog Channels	4
Analog Bandwidth (-3 dB)	1 GHz
Vertical Resolution (ADC)	8 bits
Bandwidth Limit Filters	User-selectable
Acquisition Modes	Sample, Peak Detect, High Resolution, Average, Envelope, Roll

Vertical (Analog) System

Input Coupling	AC, DC, GND
Input Impedance	1 M Ω or 50 Ω selectable
Probe Interface Type	TekVPI smart probe interface
Automatic Probe Recognition	Supported (TekVPI)
User-Selectable Bandwidth Limit	On/Off per channel
Deskew Support	Probe/signal deskew supported

Acquisition System

Digital Phosphor (FastAcq)	Color-graded intensity, fast acquisition
Event Search and Mark	Yes (automatic find/mark)
MultiView Zoom	Pan/zoom across long records
Segmented Memory	Supported (FastFrame)

Horizontal (Timebase) System

XY Mode	Supported
Clock Recovery	Not supported

Trigger System

Trigger System	Pinpoint triggering (>1400 combinations)
Trigger Sources	CH1–CH4, External, Line (typical)
Edge Trigger	Rising/Falling/Both
Pulse Width Trigger	Less/Greater/Within/Out of Range
Runt Trigger	Supported
Glitch Trigger	Supported
Timeout (Idle) Trigger	Supported
Rise/Fall Time Qualified Trigger	Supported
Setup and Hold Trigger	Supported
Video/TV Trigger	Supported
Low-Speed Serial Protocol Triggering	Not supported
NRZ Serial Pattern Trigger	Not supported
Communications Mask Testing	Not supported

Waveform Measurements and Analysis

Automatic Measurements	Extensive set with statistics
Measurement Statistics	Mean/Min/Max/StdDev/Count
Search and Mark Events	Supported
Histogram Analysis	Supported
Measurement: Amplitude	Yes
Measurement: Peak-to-Peak	Yes
Measurement: RMS	Yes
Measurement: Mean	Yes
Measurement: Max/Min	Yes
Measurement: Top/Base	Yes
Measurement: Overshoot/Undershoot	Yes
Measurement: Rise/Fall Time	Yes
Measurement: Slew Rate	Yes
Measurement: Duty Cycle (+/-)	Yes
Measurement: Period/Frequency	Yes
Measurement: Positive/Negative Width	Yes
Measurement: Delay/Phase	Yes
Measurement: Skew	Yes

Math and Advanced Analysis

Math Operators	Add, Subtract, Multiply, Divide
Advanced Math	Arbitrary expressions, filters
FFT Window Functions	Rectangular, Hanning, Hamming, Blackman-Harris (typical)
Reference Waveforms	Store/recall references
Zoom Controls	Pan/zoom, MultiView

Serial Bus Triggering and Decode (Options)

Serial Decode Options	I2C, SPI, RS-232/UART, CAN, LIN
Event Table/Export	Supported by serial options

Jitter, Eye, and Timing Analysis (Options)

Jitter/Timing Analysis	Option
Eye Diagram Analysis	Option
Clock Recovery Modes	Software clock recovery supported

Power Analysis (Options)

Power Analysis	Option
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Display and User Interface

Display Size	10.4 in
Display Resolution	1024 × 768 (XGA)
Display Type	Color TFT LCD with touch
Intensity Grading/Persistence	Digital phosphor, color-graded
MyScope Custom Windows	Yes
Right-Click Menus	Yes

Data Storage and File Formats

Internal Storage	Windows XP PC hard drive
Removable Storage	USB mass storage devices
Save/Recall	Waveforms and setups

Connectivity and I/O

USB Host Ports	Present
USB Device Port	Present
Ethernet/LAN	Present
GPIO (IEEE-488)	Present
External Trigger In	Present
Aux/Trigger Out	Present

Remote Control and Programming

OpenChoice Software	Included (Windows XP)
Remote Control	SCPI via TekVISA over USB/GPIB/LAN

Embedded PC / Operating System

Embedded Operating System	Microsoft Windows XP
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Probing

Probe Compatibility	TekVPI passive/active/differential/current probes
Automatic Scaling/Units	Via probe readout (TekVPI)
Adapter Support	TekVPI-to-BNC adapter available
Probe Deskew/Compensation	Supported

Physical Characteristics

Form Factor	Benchtop oscilloscope
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TECHNOLOGY

Real-time Digital Phosphor Oscilloscope (DPO) architecture

APPLICATIONS

Signal integrity/debug, serial bus trigger/decode (I2C, SPI, RS-232, CAN, LIN), communications mask testing, USB 2.0/Ethernet compliance, jitter/timing/eye, DDR memory, and power analysis (options).

Generated by SpecAtlasHub (specatlashub.com). Specifications are compiled from available sources and are subject to change — verify critical values against the manufacturer before purchase.