

TEKTRONIX

TLA624-6S

The Tektronix TLA624-6S is a high-performance, 136-channel portable logic analyzer from the TLA600 Series. It features advanced MagniVu™ acquisition technology providing 2 GHz (500 ps) timing resolution, up to 200 MHz state acquisition speed, and up to 2 Mb per channel memory depth to help digital design and test engineers find and isolate elusive hardware faults.

SPECIFICATIONS

General

Interfaces	LAN (10/100 Base-T), GPIB (IEEE 488.2), RS-232, Centronics Parallel, PS/2 Keyboard, PS/2 Mouse, External SVGA (15-pin D-sub)
Display	10.4-inch active matrix color TFT LCD, 640 × 480 pixels

Physical

Power Supply	90 to 250 V AC, 45 to 66 Hz, 350 W maximum power consumption
Operating Temperature	+5 °C to +50 °C °C
Dimensions (W×H×D)	427 mm × 348 mm × 284 mm mm
Weight	12.7 kg kg
Cooling Clearance	51 mm (2 in) on sides and rear

Acquisition Specifications

Number of Channels	136 (132 data channels, 4 clock/data channels)
Maximum State Clock Rate	200 MHz
Maximum Timing Sample Rate (Full Channel)	500 MHz
Maximum Timing Sample Rate (Half Channel)	500 MHz
MagniVu Timing Resolution	500 ps (2 GHz)
Record Length (Half Channel)	1 Mb per channel
Record Length (MagniVu)	2 Kb per channel
Minimum Detectable Pulse Width	2.0 ns
Setup and Hold Window	2.0 ns
Setup and Hold Window Range	-14.5 ns to +14.5 ns
Setup and Hold Window Resolution	100 ps
Channel-to-Channel Skew	< 1.0 ns (typical)

Triggering System

Trigger State Sequences	16 states
Trigger Word Recognizers	16
Trigger Range Recognizers	4
Trigger Transition Recognizers	2
Trigger Counter/Timers	2 (32-bit)
Glitch/Violation Triggering	Glitch and Setup/Hold violation triggering on all channels
Trigger Position	Selectable from 0% to 100% of record length

Probing & Input Characteristics

Supported Probe Interfaces	P6417, P6418, P6434
Input Impedance (Resistance)	20 k Ω
Input Impedance (Capacitance)	2 pF
Threshold Range	-2.0 V to +4.5 V
Threshold Resolution	50 mV
Maximum Input Voltage (Probe)	± 15 V
Minimum Input Voltage Swing	500 mV p-p

System & Processing

Operating System	Windows 98 Second Edition
Processor Type	Intel Celeron / Pentium III
Removable Media	3.5-inch 1.44 MB Floppy Drive, CD-ROM Drive
Internal Storage	Hard Disk Drive (HDD)

External Connections & Ports

External Trigger Input	BNC
External Trigger Output	BNC

Software & Analysis Capabilities

Integrated View (iView) Support	Works with Tektronix TDS Digital Storage Oscilloscopes for analog/digital cross-domain analysis
Transitional Storage	Extends signal analysis capture time by storing only state transitions
Source Code Support	Universal Source Code Support for correlating high-level language source with real-time trace

Power & Physical Characteristics

Form Factor	Portable
Height	348 mm
Width	427 mm
Depth	381 mm

Environmental & Compliance

Storage Temperature	-20 °C to +60 °C
Operating Humidity	20% to 80% relative humidity (non-condensing)
Operating Altitude	Up to 3,000 m

Performance

Clock/Qualifier Channels	8
Internal Timebase Accuracy	±100 ppm
Threshold Accuracy	±(50 mV + 3% of setting)
Maximum State Data Rate	200 Mb/s
Glitch Detection Minimum Width	2.0 ns
Input Protection Voltage	±15 V
Preset Thresholds	TTL, ECL, CMOS, User-defined

Triggering

Trigger Machines	2
Maximum Trigger Event Rate	150 MHz
Timer Range	Up to 400 days
Timer Resolution	6.7 ns (150 MHz)

Environmental

Vibration (Operating)	0.31 g RMS (5 Hz to 500 Hz)
Vibration (Non-operating)	2.46 g RMS (5 Hz to 500 Hz)
Acoustic Noise	41 dBA (typical)

Compliance

Safety Standards	UL3111-1, CSA C22.2 No. 1010.1, EN61010-1, IEC61010-1
EMC Compliance	EN61326, FCC Part 15 Class A, VCCI Class A

Accessories

Compatible Probes	P6417, P6418, P6434
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Connectivity

External Monitor Port	15-pin D-sub (SVGA)
Parallel Port	1 DB25 female (Centronics)
Serial Port	1 9-pin D-sub male (RS-232-C)
Keyboard Port	PS/2
Mouse Port	PS/2

TECHNOLOGY

Logic Analysis

APPLICATIONS

Digital system debug, microprocessor and bus analysis, timing and state verification

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