

TEKTRONIX

TDS694C

The Tektronix TDS694C is a high-performance 4-channel digital storage oscilloscope (DSO) featuring a 3 GHz analog bandwidth and a real-time sample rate of 10 GS/s simultaneously on all channels. Engineered for fast digital designs, it incorporates advanced trigger systems, wave analysis math, FastFrame segmented memory, and a high-resolution color liquid crystal shutter display.

SPECIFICATIONS

General

Display	7-inch (178 mm) color NuColor liquid crystal shutter display (640 × 480)
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Vertical System

Number of Channels	4
Analog Bandwidth (-3 dB)	3 GHz
Calculated Rise Time (10% to 90%)	120 ps
Hardware Vertical Resolution	8 bits
Position Range	±5 divisions
Vertical Sensitivity Range	10 mV/div to 1 V/div

Horizontal System & Acquisition

Real-Time Sample Rate (Single Channel)	10 GS/s
Real-Time Sample Rate (All Channels)	10 GS/s per channel (simultaneously)

Acquisition Modes

Sample Mode	Yes, standard
Average Mode	Yes, standard (2 to 10,000 waveforms)
Single-Shot Mode	Yes
Segmented Memory Mode	Yes (FastFrame™ standard)

Trigger System

Trigger Sources	CH1, CH2, CH3, CH4, AC Line, Aux (External)
Trigger Modes	Auto, Normal, Single
Trigger Coupling	DC, AC, HF Reject, LF Reject, Noise Reject
Trigger Level Range (Internal)	±12 divisions from center of screen
Edge Triggering	Yes, standard
Pulse Width / Glitch Triggering	Yes, standard
Pattern / State Logic Triggering	Yes, standard
Video Triggering	Available as Option 05

Display & User Interface

Display Type	7-inch (178 mm) NuColor™ liquid crystal shutter color display
Display Size (Diagonal)	7 inches (178 mm)
Waveform Display Formats	YT and XY
Graticule Options	Full, Grid, Crosshair, Frame

Connectivity & I/O Interfaces

GPIB (IEEE-488) Interface	Yes, IEEE-488.2 standard
Internal Floppy Disk Drive	Yes, 3.5-inch 1.44 MB DOS-compatible

Acquisition System

Non-volatile Waveform Storage	4 full waveforms
Digitizers	Four 8-bit digitizers, operating simultaneously
Maximum Waveform Capture Rate	400,000 wfms/s (in InstaVu mode)

Options

Option 2C	Telecom Mask Testing (ANSI T1.102, ITU-T G.703, CCITT)
Option 2F	Advanced DSP Math (Integration, Differentiation)
Option 05	Video Triggering (NTSC, PAL, SECAM, HDTV)
Option 1R	Rackmount Kit
Option 2D	Delete standard active probes
Option 1K	K420 Scope Cart
Option HD	Internal hard disk drive

Maintenance

Calibration Interval	1 year
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Storage

Floppy Disk Format	3.5 inch, 1.44 MB or 720 KB (MS-DOS compatible)
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Interfaces

VGA Output Connector	15-pin D-sub (VGA) female
GPIB Compliance	IEEE-488.2

Environmental

Random Vibration (Operating)	0.31 g RMS (5 Hz to 500 Hz)
Random Vibration (Non-Operating)	2.46 g RMS (5 Hz to 500 Hz)

Standard Accessories

Standard Probe Model	P6249 active voltage probe (four included)
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TECHNOLOGY

Digital Storage Oscilloscope (DSO)

APPLICATIONS

High-Speed Digital Design and Testing

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