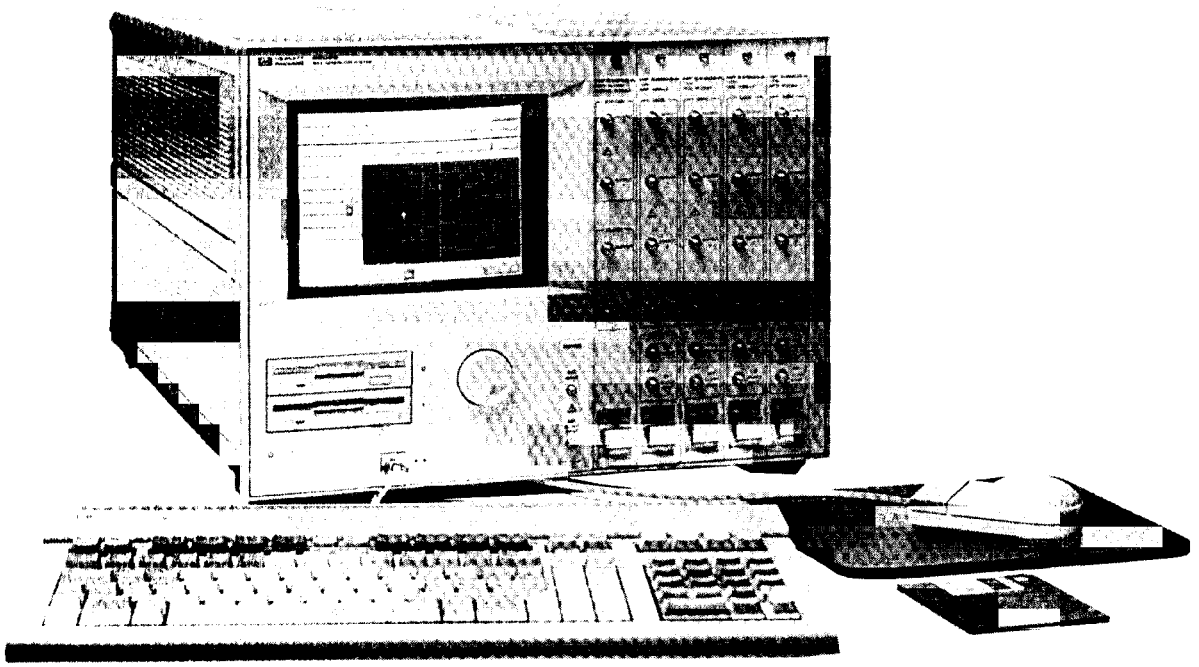
DIGITAL VERIFICATION TOOLS

Data Generator System

HP 80000

- Clock or data rate up to 1 GHz
- 16 or 128 Kb memory per channel
- Delay range ±2 ns, 2 ps resolution
- Amplitude up to 2.5 V or 3.0 V in −2 V to 3 V level window
- Color touchscreen, mouse, keyboard, and knob
- 4 to 80 channels



HP 80000 Data Generator System with two strobe and 16 data channels. With the expansion frames, up to 80 channels can be configured.

HP 80000 Data Generator System

When you need multiple lines of real data to characterize your device, the HP 80000 system delivers everything needed to make the test complete, accurate and reliable because it offers the kind of edge-placement precision that is usually only found in high-performance pulse generators—but at up to 1 GHz and over 80 channels.

These features—plus affordability, PRBS and conformance to national and international electromagnetic regulations—have made the HP 80000 system a preferred choice when characterizing fast ICs, modules, or components such as:

- MUX, DAC, memories
- ATM, SONET/SDH, switches

as well as passive devices like HF connectors and computer backplanes.

Rapid performance verification can be carried out with the HP 80000's PRBS and the help of the HP 54750A series oscilloscope—using the eye-pattern technique—or the HP 71600 series BERT, where the HP 80000's unique 2^{23}–1 pseudo-random word sequence allows even MUXs to be BER tested. The memory is segmentable so that preamble/data or initialize/data sequences can be set up.

The HP 80000 system consists of a mainframe, an expansion frame, and a choice of modules so that systems with up to 80 channels can be factory-configured or retrofitted. The mainframe includes an internal clock plus synchronous start/stop logic. It has a friendly HP 16500-type user interface and supports a keyboard, a mouse, two internal disk drives, HP DeskJet RS-232 printer and HP-IB. The mainframe, like the extender, has room for five modules.

The four-channel, 1 GHz data modules provide RZ (50% duty cycle) and NRZ formats. Edges can be positioned with 2 ps resolution in a ±2 ns window, independent of clock rate. There is a choice of 16 or 128 Kb per channel.

The clock/strobe modules process the mainframe clock to provide normal and complement clock outputs. They also have two channels which can be used as strobes, as clock dividers for multi-phase signals, or for data patterns. 16/128 Kb modules are available.

Specifications

For more information, please consult the *HP 80000 Data Generator System* Brochure, p/n 5091-9396E and the *HP 80000 Data Generator System* Technical Data Sheet, p/n 5091-9397E

Ordering Information	Price
HP 80000 Data Generator System Components	
HP E2900A 5-slot Mainframe with internal clock	$19,800
HP E2901A 5-slot Expansion Frame	$12,000
HP E2902A 1 GHz Clock/Strobe Module	$11,300
HP E2903A 1 GHz Data Module	$14,700
HP E2905A 128 Kb 1 GHz Clock/Strobe Module	$13,200
HP E2906A 128 Kb 1 GHz Data Module	$17,400
Accessories	
HP A1099C Opt 0B0 ABA Keyboard and Mouse	$195
HP 15432B 250 ps Transition Time Converter	$325
See page 405 for other transition time converters.	
HP 1250-1462 Adapter SMA(m) to SMA(f)	$24.50
HP 8120-4948 50Ω Cable, SMA (m-m)	$390
HP 8710-1582 Torque Wrench 5 in/lb	$235
HP 1182A/1181A Testmobile Carts for Instruments	$490/950
HP 13242G RS-232C Cable for HP DeskJet	$49
Special Options	
HP E2902A/3A/5A/6A Opt H01* Additional Frequency Window at 1.25 GHz ±50 MHz	
HP E2903A/6A Opt H02* 2.5 Gbit/s Operation	

*Options H01, H02 require an external clock source, e.g. HP 8648C.
Factory recalibration only.
Subject to availability.
Price on request.