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- Two-chip keyboard makes intelligence a movable choice. . N&T, Feb. 1, p. 30
- Two-chip thermal sensor/switch provides control, warning, and shutdown. . .IFD, Sept. 27, p. 150
- Use two drivers with one 7-segment display to get 'custom' nonstandard characters. . .IFD, Feb. 1, p. 94

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- Analog peripheral manages inputs without CPU waste. . . . PF, Sept. 13, p. 160
- CMOS memory board packs 16 kbytes of onboard RAM. . .PF, Nov. 8, p. 217
- CMOS RAM card holds over 16 kbytes for 2 years. . .PF, Sept. 13, p. 159
  Compatibility—the key to board computers. . .
- Compatibility—the key to board computers.

  N&T, June 7, p. 32
- Controller board sets 7 drives to work. . .NP, Oct. 25, p. 182
- Controller for hard disks handles four drives at once. . N&T, Oct. 25, p. 111

  Data-acquisition board works with Q-bus. . .PF,
- Nov. 22, p. 318
- Display chip and Basic keep graphics costs down. . .D, Oct. 25, p. 135 Error-correcting memory works with LSI-11
- bus. . .PF, Sept. 1, p. 228
  EXORciser boards show versatility. . .PF, Sept.
- p. 90
   Formatters and radial bus unravel interface problems. . .D, Dec. 20, p. 73
- Intelligence comes on one-board  $\mu$ C. . .PF, Sept. 1, p. 232
- $\mu C$  boards expand use of EXORcisor bus. . .PF, Oct. 11, p. 262
- μC boards pack the CPUs and the support for every system—but how much is enough?... SR, March 15, p. 85
- 1980 microcomputer data manual. . .D, March 15, p. 97
- One-board data-acquisition system off-loads host computer. . . PF, Nov. 22, p. 307
- Plug-in module upgrades 8080 systems to 8086 . . .N&T, Oct. 25, p. 36
- Powerful  $\mu C$  packs it all on one board. . .PF, May 10, p. 99
- S-100-compatible board displays  $48\times80$  characters. . .PF, Nov. 22, p. 358
- Single-board approaches to floppy-disk control . . .N&T, Sept. 13, p. 37
- Single-board computer operates with dual clock. . . PF, June 21, p. 188
- Single-board computers integrate easily...N&T, July 19, p. 39
- Single-board μC profits from one-chip microcomputer. . .PF, March 15, p. 320

- 64-k RAM boards detect and correct errors...PF, Sept. 27, p. 167

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- All-CMOS components build a μC system that checks power loss, eases regulation. . .D, April 12, p. 141
- Apples do word processing or information analysis. . . PF, June 7, p. 274
- Army sets new standards for battlefield computers, software. . .N&T, April 26, p. 35
- Big-system protocol boosts small-system performance. . .D, May 10, p. 187
- Chassis packs 2 disk drives and 6 boards. . . PF, Dec. 6, p. 166
- Computer commands data logger and powerful software. . .N&T, Nov. 8, p. 35
- Computer systems acquire both RAM and E2PROM from one chip with two memories. . .D, Feb. 15, p. 91
- Computers do more than compatible IBMs. . . PF, May 10, p. 104
- Computers prompt a switch to SPS...N&T, June 21, p. 38
- Controller links GPIB-compatible computers to hard disk. . N&T, Sept. 27, p. 36
- Data-flow analyzer allocates memory efficien-
- cy. . .D, Nov. 22, p. 275

  Data-flow machines threaten the program coun-
- ter. . D, Nov. 22, p. 255

  Data-processing power: choosing watts for bits. . .D, July 5, p. 85
- Design considerations for data integrity. . . N&T,
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  Desktop computer clarifies graphics with vivid color. . D, May 10, p. 161
- color. . .D, May 10, p. 161

  Desktop computer is easily customized. . .PF,
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  Facile support chips free up the host CPU...SR,
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- HP's technology sparkles in personal computer. . .PF, Jan. 4, p. 206
- Medium-scale computers carry mainframe power to low-end users. . .PF, March 15, p. 363
- $\mu C$  system brings together modules covering wide application range. ..PF, April 12, p. 258
- Microfunctions distribute VLSI advantages
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- $\mu P$ -based product design starts with  $\mu P$  selection. . .D, Sept. 1, p. 119
- Minicomputer tackles maxi loads with failsafe reliability. . . N&T, March 29, p. 28
- Minis look ahead: longer words, more powerful instructions. . .SR, Jan. 4, p. 98
- Module lets CAD system respond to designer's voice. . N&T, Nov. 22, p. 35

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Connector-emitter-detector package pushes coupling losses below 1 dB. . . N&T, April 12, p. 29

Connectors speed up terminations of fiber-optic cables with low loss. . . PF. April 12, p. 201 Double-window fiber handles both 850 and 1300 nm. . . PF. April 12, p. 188

Emitters and detectors—4 perspectives. . .SR, Jan. 18, p. 58

Emitters, detectors sport 10-in. fiber-optic pigtail. . . PF, April 26, p. 117

Fiber-optic buses will carry data fast and far
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Fiber-optic links transmit power. . .N&T, April 12, p. 23

Fiber-optic semis carve out wider infrared territory. . .SR, Jan. 18, p. 52

Fiber optics debuts in telecomm, but lags in data comm. . N&T, Sept. 1, p. 40

Hybrid optoreceiver gives broad bandwidth, low noise. . . PF, April 12, p. 185

Kevlar stretching gives fiber-optic cables more strength at reduced size. . .PF, Feb. 1, p. 101

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. N&T, Dec. 6, p. 33

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. . . D, Aug. 16, p. 171

Straight-pull tool breaks fibers better. . .PF, May 24, p. 140

Test results help match emitters to fiber-optic cables. . .N&T, Jan. 18, p. 34

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ATE brings speedy, complete testing via signature analysis to LSI-board production . . D,

ture analysis to LSI-board production. . .D. Feb.1, p. 75

ATE packs new weapons as LSI invades components and boards. . SR, Feb. 1, p. 41 ATE system finds dynamic faults in real time

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. . .N&T, July 19, p. 34

Audio-distortion analyzer works with IEEE-488

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Automatic test equipment attacks LSI problems. . N&T, Oct. 11, p. 49

Automatic test system checks PC-board LSI devices at 5 MHz., .PF, Jan. 4, p. 172

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Capture fast waveforms accurately with a 2channel programmable digitizer. . .D, Feb. 1, p. 50

Computer program discloses the best board-test sequence. . .D, Oct. 11, p. 169

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Counter/timers raise handshake speed and add auto-triggering. . .PF, March 1, p. 138

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DMMs, switch elements improve wafer testing . . . N&T, March 29, p. 23

DPM keeps digits high, power low. . . PF, Sept. 13, p. 179

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Differential 3½-digit module cuts DPM costs . . . N&T, Sept. 1, p. 88

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50-MHz portable oscilloscope gives 'brilliant' high-cost performance. . PF, March 29, p. 124

First benchtop ADC tester will be a hard act to follow. . .PF, March 1, p. 140

Focus on microwave and rf instruments: Highquality readings come easy. . .PF, June 21, p. 141

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Glitch-stretcher probe resolves invisible pulses
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Higher math, automatic functions come easy to  $\mu P$ -based counters. . N&T, April 26, p. 71

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IC testers turn complex semis to good account . . .N&T, Oct. 11, p. 95

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Logic analyzer offers most channels, memory for \$2000. . . PF, Jan. 18, p.144

Logic analyzer premiers with 32-channel timing . . . . PF, June 7, p. 218

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Logic analyzer runs to 100 and 400 MHz. . . N&T, Sept. 1, p. 81

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μP-based millivoltmeter spans 1.2 GHz. . . PF, Sept. 1, p. 85

Microprocessors push spectrum analyzers to finer accuracy, broader bandwidths. . . N&T, Jan. 4, p. 34

Mini-based development system builds software in easy pieces. . N&T, March 29, p. 32

Modular DMM harnesses μC power. . . PF, Sept. 27, p. 196

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Multimeter IC-low on power, high on accuracy . . .PF, Nov. 8, p. 182

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'Ordinary' oscilloscope stores waveforms. . . N&T, March 15, p. 35

Pods join logic analyzer to RS-232C or GPIB . . .PF, April 26, p. 122

Portable DMM packs µPs, takes calculator to add measuring smarts and programmability . . .D, April 26, p. 143

Process monitor balances complexity and cost . . .PF, June 7, p. 212

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Real-time emulator doubles as logic analyzer . .N&T, Sept 13, p. 29

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Signatures take a circuit's pulse by transi-tion counting or PRBS-but watch those loops. . .D, Feb. 1, p. 65

Simulator brings mini capability to µC-develop-

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Single potentiometer controls triangular-pulse generator. . .IFD, Sept. 13, p. 143

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and A. . . PF, March 15, p. 334 Ultrasonics detect, locate, and predict valve leaks. . . PF, Feb. 15, p. 178

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Universal development system emulates to 30 MHz. . . N&T, June 21, p. 31

Unravel multiplexed µP data with three-clock logic analyzer. . .D, March 29, p. 89

Vertical beltbed plotter works like a flatbed, but costs less. . .PF, April 26, p. 268

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- Bubble-memory boards provide 2 Mbits of storage. . . PF, Aug. 2, p. 132
- Bubble-memory cards store 128 kbytes. . .PF, Aug. 2, p. 129
- Bubbles pack storage, speed in cassettes. . .PF, May 10, p. 315
- Circuit techniques tune up for production of 64k RAMs. . .N&T, Oct. 25, p. 31
- CMOS ROMs set density records. . .PF, Sept. 27, p. 177
- Dynamic-memory support chips detect/correct errors. . N&T, March 29, p. 23
- EEPROM eclipses other reprogrammable memories. . .D, Nov. 22, p. 247
- EEPROM, SLIC, data-converter advances light up ISSCC nights. . N&T, March 15, p. 39
- EPROM and faster 8086 urge 50% more speed from 16-bit  $\mu C$  systems. . N&T, Jan. 4, p. 42
- Faster memory speeds PROM emulator. . . PF, May 10, p. 295
- Fully static CMOS UV EPROM keeps power, parts count low. . . PF, Jan. 18, p. 142
- Implement a complete bubble-memory subsystem with board-level products. . .D, Jan. 4, p. 130
- ISSCC: Super chips spur super memory designs . . . N&T, Feb. 15, p. 43
- Japanese designs bring together high-performance technologies. . .N&T, March 1, p. 23
- Memory and μP ICs pack more, consume less . . .N&T, June 7, p. 75
- Memory chips tackle problem systems. . .N&T, Sept. 1, p. 72
- Memory, GaAs technologies keep improving
  . . .N&T, Nov. 8, p. 70
- Memory, LSI failures—and solutions—abound at international symposium. . . N&T, Feb. 15, p. 23
- Memory management rescues 16-bit  $\mu$ Ps from demands of multiple users, tasks. . .D, Jan. 4, p. 112
- Modular memories master X, Y, Z's of easy bubble-system expansion. . D, March 1, p. 103
- Nonvolatile RAM needs just two supplies. . . PF, June 7, p. 249
- One PROM-programmer pack takes 11 different families. . . PF, March 15, p. 337

- Pinout simplifies variable-density memory...D, Dec. 6, p. 74
- Plug-in module automates on-site EPROM loading. . .IFD, Aug. 2, p. 100 PROMs and RAMs remember in many ways and
- styles. . .SR, July 19, p. 86
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  stretch from 16 to 256 k. . .N&T, Jan. 18,
- p. 35
  Semi memories will push past 64k, slowly but surely. . N&T, Aug. 16, p. 35
- Simple power-sequencing control prevents dynamic-memory damage. . .IFD, May 10,
- Single-supply 16-k, 64-k RAMs simplify upgrading. . D, May 24, p. 85
- 16-kbyte RAM board retains data for 7 days . . . PF, May 24, p. 133
- Special Report: Memories pace systems growth . . . SR, Sept. 27, p. 63
- UV EPROMs and EEPROMs crash speed and density limits. . . SR, Nov. 22, p. 55

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- Architecture of 16-bit micro underpins VLSI computing. . . D, June 7, p. 171
- At last: a low-cost, 1-chip clock for low-end computers. . . PF, March 15, p. 348
- Bilingual, 16-bit μP summons large-scale computer power. . .D, Jan. 18, p. 66
- Binary counter unlatches multistage, pseudorandom noise generator. . IFD, Oct. 11, p.
- Bipolar circuits divide—and conquer—support functions. . PF, April 12, p. 207
- CMOS arrays will perform like Schottkys . . . N&T, Sept. 13, p. 31
- CMOS clock chip keeps system time. . .PF, Oct. 11, p. 286
- CMOS octal circuits more than equal bipolar . . . PF, June 21, p. 168
- Coprocessor cooperates with 8 or 16-bit μPs . . .N&T, March 1, p. 19 Coprocessor implements floating-point math
- . . .N&T, May 10, p. 35 Debugging fine-tunes  $\mu P$ -based product design
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- $8086\,\mu\text{P}$  has the architecture to handle high-level languages efficiently. . .D, March 1, p. 97
- Family of 4-bit µCs varies in power, size. . . N&T, Aug. 2, p. 27
- FIFO buffer interfaces Z-bus, non-Z-bus CPUs
  . . .PF, Sept. 27, p. 185
  4-bit microcomputer family offers on-chip LCD
- mux. . N&T, Jan. 4, p. 21 4000-gate I<sup>3</sup>L array ready for sampling. . N&T,
- Aug. 16, p. 35 GaAs ICs will handle the data crunch of 1980 —and 1990. . N&T, April 12, p. 27
- GaAs takes stronger hold in FETs, ICs. . . N&T, Oct. 11, p. 36
- Intel to extend µP family to 32 bits. . . N&T, June 21. p. 41

- Intelligent processors transmit asynchronous data without errors. . .D, Jan. 18, p. 104
- ISSCC: Dedicated LSI chips come out as costs drop. . .N&T, Feb. 15, p. 63
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  LSI and memory processes make big push in size and speed at ISSCC. . N&T, Feb. 1, p. 24
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- μC eases debugging with Tiny Basic. . N&T, Sept. 27, p. 32
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- Microprocessors—4 to 32-bit—push back performance limits. . SR, Nov. 22, p. 109
- Micros climb higher on performance scale. . . SR, Sept. 1, p. 64
- Monolithic  $\mu$ Cs—part of the system solution or the whole thing. . .SR, April 26, p. 96
- MOSAIC boosts ECL speed, not power. . N&T, July 19, p. 38
- Multiport counter chip supports μPs. . . PF, Sept. 1. 1980. p. 91
- 1980 microprocessor data manual. . .D, Nov. 22, p. 150
- NOR gate unlatches pseudorandom noise gener-
- ator. . .IFD, June 7, p. 200 One-chip controller handles 8 sync protocols
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- Support chips bring out the MC68000's best . . . N&T, June 7, p. 31

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... PF, April 26, p. 120 Floppy-disk recorder handles 54, 8-in. formats . .PF, Nov. 8, p. 201

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μC system can drop floppy for hard disk, extra RAM. . . PF, April 26, p. 264

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Process advances boost designs in power, precision, optics. . .SR, Nov. 8, p. 66

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