9 The VLSI Control Structure of a CMOS Microcomputer
Hideo Maejima, Koyo Katsura, Hideo Nakamura, and Toshimasa Kihara
By implementing novel microprogram control structures in CMOS, the designers of the 8-bit HD-6301 achieved high performance and low power consumption.

17 Floppy Disk Data Transfer Techniques
Trevor G. Marshall and John A. Attikiouzel
Many microcomputer systems use a DMA controller between the floppy disk controller and the CPU. This additional hardware may not always be necessary.

24 Binary-Decision-Based Programmable Controllers—Part III
Paul J.A. Zsombor-Murray, Louis J. Vroomen, Robert D. Hudson, Tho Le-Ngoc, and Peter H. Holek
In certain applications, a microcomputer system employing one or more peripheral binary-decision-based controllers can react more quickly than a system using conventional microprocessor-based controllers.

40 A Fast Entry Path into User Microcode on the VAX-11/780
David M. Abrahamson
Entry time into the extended writable control store on the VAX-11/780 can be reduced to 200 nanoseconds by means of this simple hardware modification.

44 The MC68881 Floating-point Coprocessor
Clayton Huntsman and Duane Cawthron
This device, a hardware implementation of the proposed IEEE floating-point standard, can operate as a coprocessor on a 32-bit bus or as a peripheral on an 8- or 16-bit bus.

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