6 Guest Editors' Introduction: Microcomputing to Aid the Handicapped—Part I

James H. Aylor and Everett L. Johnson

The microcomputer makes it possible to design flexible, inexpensive, and intelligent aids for the handicapped.

8 An Integrated Workstation for the Visually Handicapped

Clifford P. Grossner, T. Radhakrishnan, and Andy Pospiech

Because this workstation’s device drivers are integrated into its resident CP/M operating system, it can run any CP/M-compatible program and produce output in synthesized speech or braille.

17 Applying Anticipatory Text Selection in a Writing Aid for People with Severe Motor Impairment

Craig W. Heckathorne and Dudley S. Childress

By anticipating the next letter or word a disabled user is likely to choose, this system enables that user to more efficiently generate text when employing a scanning method.

24 Virtual Memory and the MC68010

Douglas MacGregor and David S. Mothersole

The designers of this microprocessor used the continuation method to provide an elegant general solution to the problem of virtual memory support.

40 Byte-wise CRC Calculations

Aram Perez

A cyclic redundancy code can be calculated on bytes instead of bits. One byte-oriented method reduces calculation time by a factor of almost four.

51 Wire-OR Logic on Transmission Lines

David B. Gustavson and John Theus

In modern high-speed systems, avoid wire-OR logic in transmission lines whenever possible or make allowances for its foibles.

DEPARTMENTS

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