

A SMALL MICROPROCESSOR BASED CAMAC MODULE FOR TESTING  
AND MONITORING PURPOSES

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A small microcomputer, using Motorola 6800 family, has been developed at the Laboratoire de l'Accélérateur Linéaire, Orsay, since 1976. Two printed-board versions are operating since 1979 in NA3 experiment, and about 30 others are used for test and small experiments in various laboratories. It consists of a 2/25 or 3/25 CAMAC unit, can be Crate Controller or Branch Driver (easy change by straps on the board). In normal use, it is connected to SA400 Floppy Disks and a terminal. Optionally, interfaces to a cassette unit, PROM programmer and three analog outputs can be operated on the same boards. Total memory size is 11 kbytes PROM (22 kbytes with 2716 memories) and 8 kbit RAM. Software on PROM consists of an input-output monitor, with disassembling facility, editor and local assembler, a fast and easy-to-use floppy disk monitor, and an histogram package, in 7 kbytes PROM. Some macro instructions are recognised in the assembler: message printing, CAMAC functions, initialisations and are then very easily performed.

Main uses of this system are monitoring of experiment (e. g. H.V. system with reference files on disk), CAMAC tests, computation in an X-ray imaging device, and various controls using CAMAC modules.

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