

ABSTRACT

Secondary storage systems for single board microcomputers are important in two respects. Firstly, for the retrieval of data of any form and secondly for reducing the time required for software generation in a microcomputing environment.

In this thesis, a Disk-based Operating System is presented for the storage of assembly language programs on a floppy disk using Modified Frequency Modulation encoding. A hardware interface using minimal hardware is also designed and constructed.

In the final analysis, the operating system, which is totally menu driven, allows for a maximum storage capacity of 156k bytes of data on one side of a 5 $\frac{1}{4}$ " floppy disk. File names stored are limited to a maximum of 240 files on a diskette's directory.

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