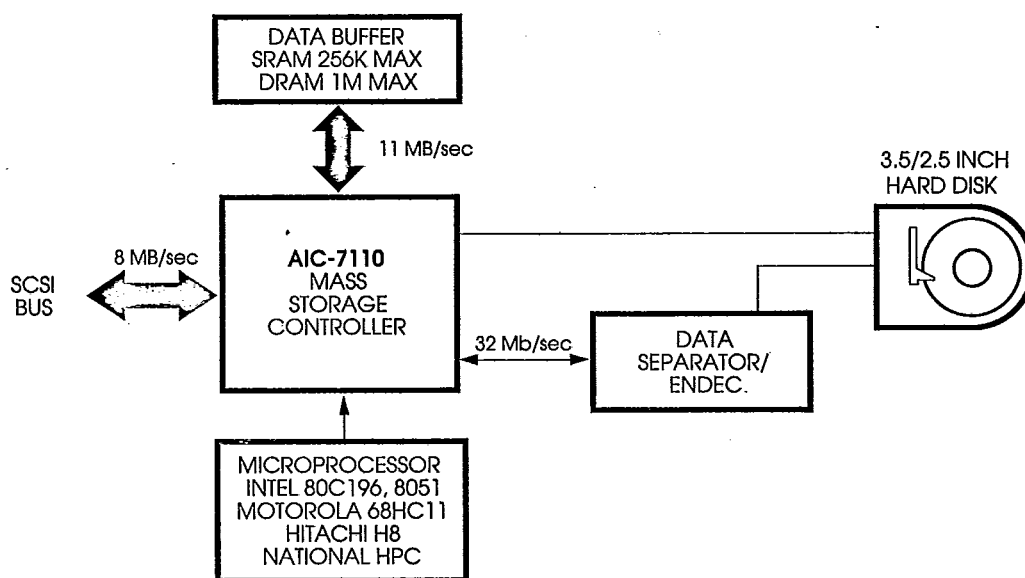


AIC-7110

High-Performance Single-Chip SCSI Mass Storage Controller

T-52-33-27



AIC-7110 Typical Application

FEATURES

SCSI Interface

- 8 MHz synchronous transfers with up to 15 bytes of offset
- Differential SCSI support
- Direct microprocessor access to the 16-byte SCSI FIFO
- Automatic arbitration, selection and reselection phases
- On-chip 48 mA drivers
- Optional tri-state drivers

Microprocessor Interface

- Multiplexed and non-multiplexed bus compatible
- Support for microprocessor wait states
- Separate host and disk interrupts

Disk Interface

- Constant Density Recording (CDR) support: multiple sector splits
- Error correction
 - 88-bit Reed-Solomon on-the-fly auto-correcting
 - 56-bit on-the-fly auto-correcting
 - 32-bit ECC
- 32 MHz NRZ rate
- Unattended full track read
- Automatic time out on sync field

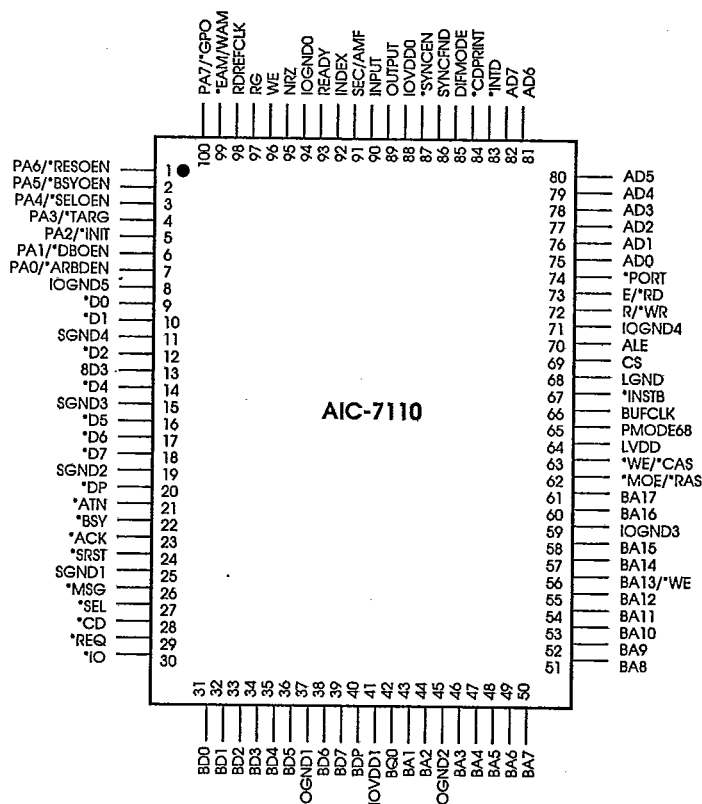
Data Buffer Interface

- 11 MBytes/sec buffer bandwidth with SRAM or DRAM (page mode)
- Segmentable buffer: 8 KByte to 1 MByte segments
- Buffer microprocessor scratch pad: 0 to 4 KBytes
- Direct addressing
 - 256 KByte SRAM
 - 1 MByte DRAM
- Dedicated host and disk pointers or read and write pointers

Other

- Complete power-down and wake-up mode

AIC-7110



AIC-7110 Quad PLCC Package

Overview

The AIC-7110 is a single-chip controller solution focusing on the emerging generation of SCSI and SCSI-2 embedded controller drives. Features of the AIC-7110 allow increases in drive capacity, performance and reliability while decreasing system cost, size and power requirements.

As an evolution of the popular AIC-6110, the AIC-7110 provides a low risk and quick time-to-market solution for the highest performance single-chip embedded controller to date. The AIC-7110 provides an enhanced 88-bit Reed-Solomon error correction capability (ECC) scheme, a greater data rate capability (SCSI - 8 MHz, NRZ- 32 MHz), and support for Constant Density Recording.

The companion chip, the AIC-7160, combines the identical buffer and disk controller interface with an XT/AT host interface. These two new products collectively called the 7100 series controller chips, provide a common solution for your SCSI and XT/AT embedded controller needs.