

μPD72061 CMOS Hard-Disk Controller

Description

The μ PD72061 is a hard-disk controller featuring low power consumption and high-speed data transfers. Based on the μ PD7261A/B, it provides control signals for interfacing SMD/SMD-E and ST506/412 type drives. The sophisticated instruction set minimizes the software overhead for the host microprocessor and gives the user flexibility in selecting operating parameters.

The DMA interface signals of the μ PD72061 facilitate multisector and multitrack data transfers. Extensive error reporting, verify commands, and CRC/ECC data error checking assure reliable controller operation.

An 8-byte FIFO is used for loading command parameters and obtaining command results. This makes structuring of drivers a simple task. The FIFO also buffers data during DMA read/write operations.

Features

- □ Flexible interface supports SMD/SMD-E and ST506/412 type drives
- □ Programmable track format
- Controls up to eight drives in SMD-type mode, four drives in ST506-type mode

- Parallel seek operation
- Multisector and multitrack transfer
- Data scan and data verify
- □ High-level commands, including:
 - Read Data, Write Data, Scan Data, Verify Data
 - Read ID, Verify ID
 - Check, Seek (normal or buffered), Specify
 - Read Diagnostic (SMD only), Detect Error
 - Format
- NRZ or MFM format
- □ Read/write clock frequency: 24 MHz max
- □ Error detection and correction
- □ CMOS
- □ μPD7261A/B compatible
- □ Single +5-volt power supply
- 40-pin plastic DIP, 52-pin plastic miniflat, 52-pin PLCC

Ordering Information

Part Number	Package
μPD72061C	40-pin plastic DIP
μPD72061GC-3B6	52-pin plastic miniflat
μPD72061L	52-pin PLCC



μPD72061 Block Diagram

