CF 360 FLOPPY DISK CONTROLLER

The iCOM Model CF360 Controller/Formatter is designed for use by OEM's in industrial, commercial, and development applications. It is the same controller used in the iCOM FD360 series Floppy Disk System.

The CF360 can accommodate from one to four floppy disk drives and includes a TTL compatible general purpose interface.

The CF360 offers many features which reduce computer service overhead. For example, the controller is fully IBM 3740 and 3540 compatible with all formatting and deformatting accomplished automatically within the controller. The controller also performs track seek/verify, and CRC (Cyclic Redundance Check) generation and verification automatically.

Independent 128 byte (full-sector) input and output buffers offer the possibility for DMA or programmed I/O operation. The ability to write-protect individual drives is also provided by the controller.

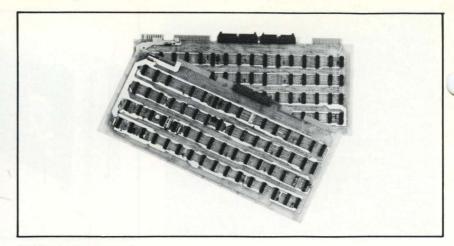
Interface signals to the CPU/MPU are TTL compatible and consist of independent input and output parallel data lines and an 8 bit parallel control port. Upon command, controller status data is presented to the CPU via the input data lines.

DISKETTE FORMAT SPECIFICATIONS

- 2,050,048 bits/diskette
- 256,256 bytes/diskette
- 77 tracks/diskette
- 26 sectors/track
- 128 bytes/sector
- Uses IBM 3740 initialized type media available from many sources including iCOM
- Fully IBM 3740 Format & Media compatible

CONTROLLER SPECIFICATIONS

- Housed on two 7.25 x 15 inch (18.4 x 38.1 cm) PCB's
- Interface connectors on one edge obviate need for card cage or back plane wiring
- Requires + 5 VDC ± 5% @ 6 amps and -12 VDC ± 5% @ 1 amp
- All signals are TTL, Grd True (Pos True optional)
- 16 Output Lines, 8 Input Lines



STATUS FUNCTIONS

- Busy
- Selected Unit (2 Bits)
- CRC Error (data error on Read or Seek)
- Deleted Data Address Mark (found on Read)
- Drive Fail (selected unit not ready, e.g. door open, no diskette, or not up to speed)
- Write Protect (selected unit Write-Protected)
- Done (2 usec pulse)

COMMAND FUNCTIONS

- SEEK AND VERIFY (Seeks selected track and verifies track address from ID field)
- SEEK TRACK 0 (Seeks Track 0)
- SECTOR AND UNIT SELECT (specifies sector and unit number for Read/Write operation)
- TRACK SELECT (specifies track to be used by next seek)
- WRITE (Writes contents of Write Buffer to selected unit and sector on existing track)
- READ (Reads contents of selected sector into Read Buffer)
- WRITE DELETED DATA ADDRESS MARK (Same as Write but uses header in Data Field which can later be detected in Read operation)
- READ CRC (Same as Read but no data is transferred to the Read Buffer. Used to verify integrity of data previously written)
- SHIFT WRITE BUFFER (Loads data into Write Buffer)
- SHIFT READ BUFFER (Inputs data from Read Buffer)
- GATE STATUS (Gates status or data onto Input Data lines)