1 FPDR Parallel Interface

V1.02 12 Jul 96. Written by T. Hankins.

Purpose The Fast Pulsar Data Recorder parallel interface accepts data and clocking information from the Fast ADCs and passes them to a set of ring buffers in a general purpose computer via Direct Memory Access. The computer then queues the data for direct, raw writes to disk via four independent Ultra Wide SCSI controllers. When the disks are filled, data acquisition is stopped and the data are written to archival tape.

The parallel interface consists of four PCI CD-60 cards built by Engineering Design Team, Inc. Each card accepts 16-bit data words, clocking signals and handshaking signals. The cards can also be used for output. The electrical interface is based on the LVDS standard, and it uses an 80-pin connector.