PIVC, L.L.C.

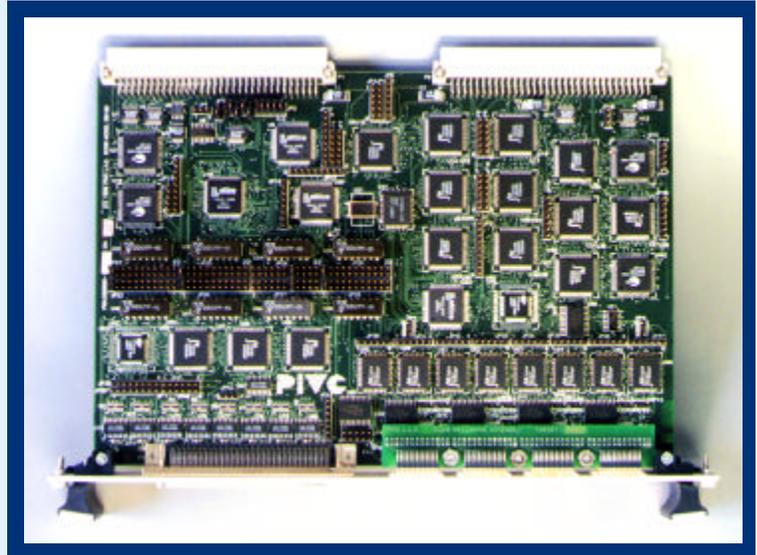## Data Capture & Distribution Board   DB100

Features

- 4 P2 Input Channels with 2Kx32 FIFOs

- 2 Auxiliary Data Input FIFOs 2Kx32

- Eight TI C40 Communication Port Outputs

- EDSFB Interface to Storage Concepts C814-FC RAID

- Single Slot 6U VME Card

- 80 MB/s Sustained Transfer Rate

Description

Model DB100

The DB100 is a data collection board designed to distribute from 1 to 4 channels of input data to both a Storage Concepts C814-FC RAID and 8 TI C40 communication ports. The input data is received from 1 to 4 AD200/AD201 Dual A/D boards through a custom P2 sub-backplane BP008. Each A/D board is mounted with a PIM100 mezzanine module which interfaces the A/D board with one channel of the DB100. Each channel receives all data from both A/Ds on the Dual A/D board. The data is then routed to the communication ports and RAID simultaneously. Each channel's data is routed to two communication ports with each communication port transmitting data from one A/D of the Dual A/D board. Along with all the channel data, an Auxillary (Aux) buffer is stored to the RAID with each frame of channel data. Aux data is written over the VME interface to the DB100. The Aux data does not travel through the communication ports.

The Playback mode allows RAID data to be retrieved and sent through the communication ports with the Aux data accessible through the VME interface. Data can also be written to and read from the RAID solely from the VME interface.
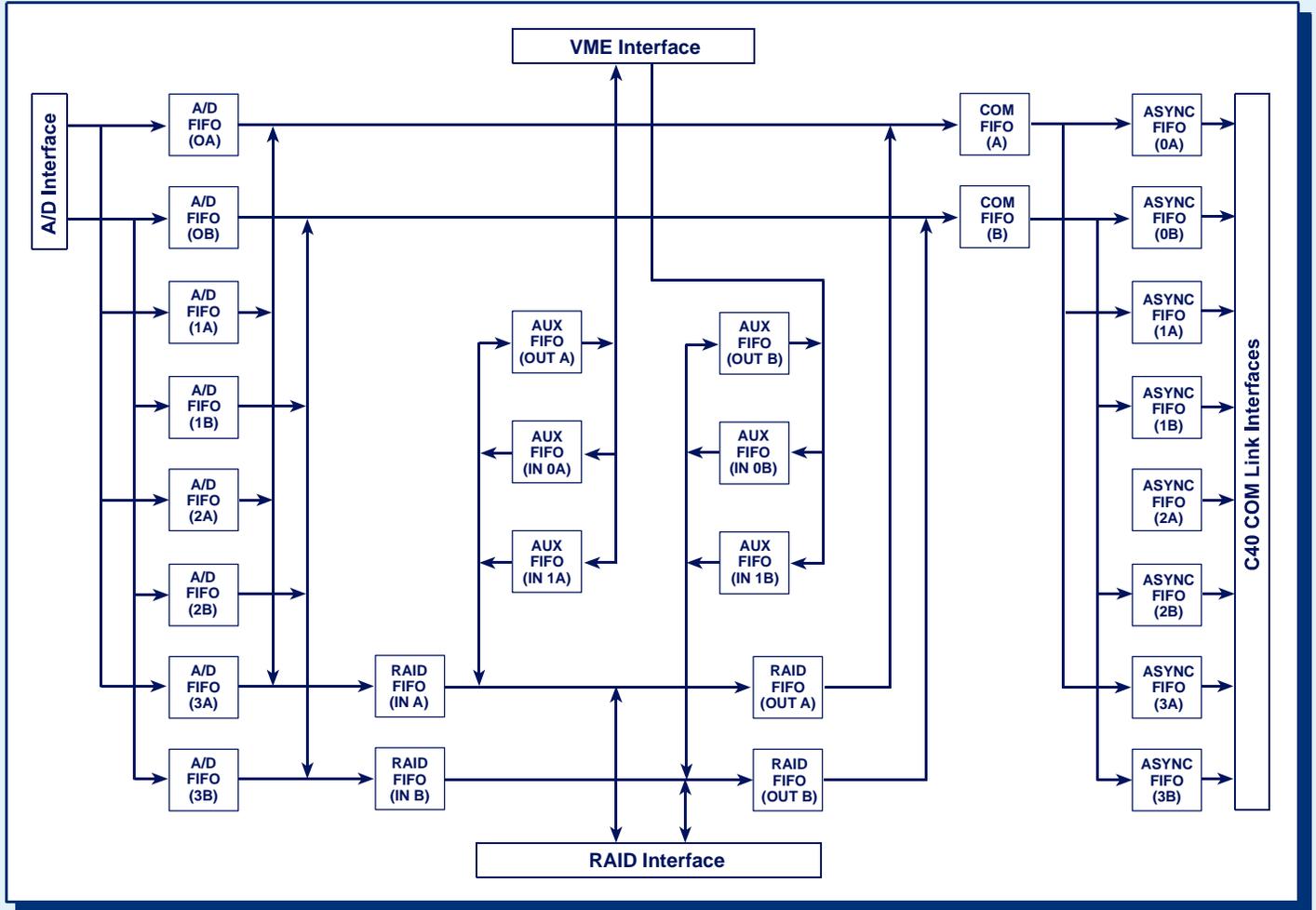
DB100 Block Diagram

Data Capture & Distribution Board (DB100) Specifications	
Sustained Throughput	80 MB/s
Bus Size	16 Bits x 2
A/D FIFO Size	2K to 16 K
Aux FIFO Size	2K
COM/RAID FIFO Size	32K
VME Addressing Mode	A24
VME Data Mode	D32
COM Port Transfer Rate	10 MB/s