



CANbus: Overview and Status

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CANbus: A quick overview

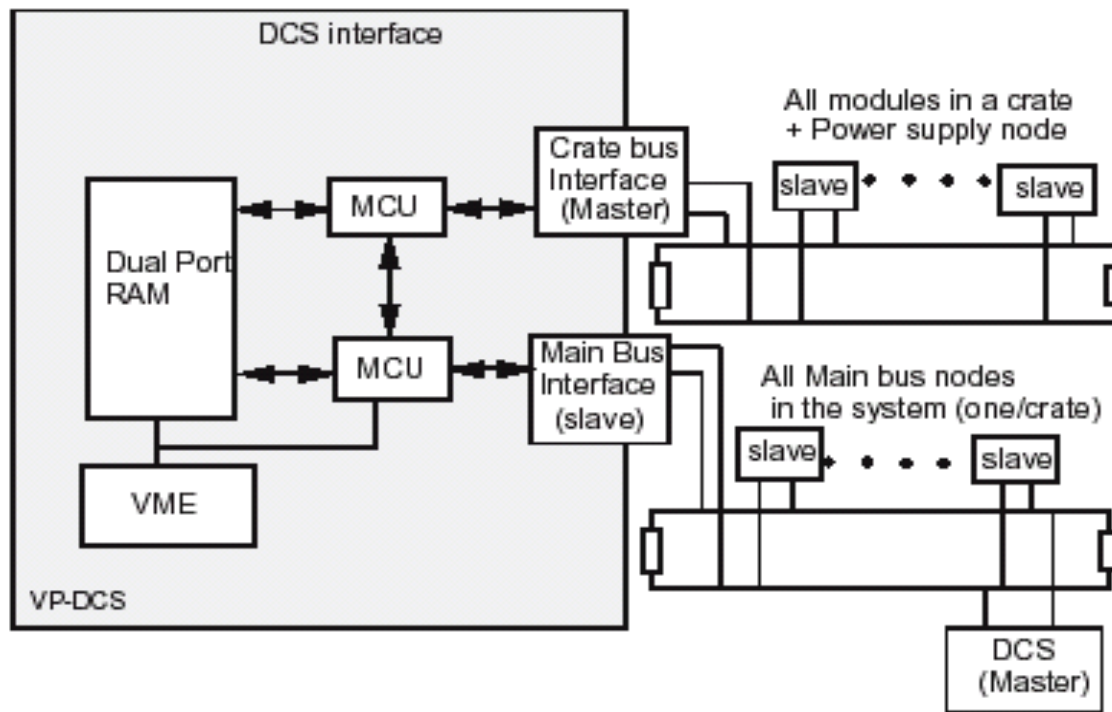
- √ CAN is a low speed error tolerant serial bus.
- √ Data is sent over CAN in 8 byte packets known as 'frames'
- √ To be compatible with ATLAS DCS we need to 'speak' CANOpen.
- √ CANOpen is a higher level protocol that specifies exactly what types of messages are permitted in the network.



CAN: Hardware

- √ It is currently hoped to use the Fujitsu MB90F594A Microcontroller to perform all DCS related functions on the various boards that make up the LVL1 trigger.
- √ The TCM will be responsible for controlling the internal network of the crate and for communication with the outside world.

Crate Connections





Status so far...

- √ I can generate valid CAN frames and read them into a PC using the CAN4USB device.
- √ I'm so far unable to receive CAN frames in the Fujitsu Micro.
- √ We can now access VME from the Micro on the TCM and I hope to be able to try the same on the CPM.



Status Cont.

- √ On Friday (10-05-2002) I received an updated package of tools from Fujitsu. This includes tools to set the various registers in the Micro correctly.
- √ The CD also contains an updated version of the C compiler as well as C profiling tools.