TCM - GIO - CAN - Ejectors - TTCRx

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TCM

- Display Visualisers have been re-designed.
  - Displays VME data.
  - Extended memory for CAN.
  - Document produced for up-date.
  - Refers to modification in PR 02 and talk on the Friday 9th November 2001.

TCM

New Address Map:

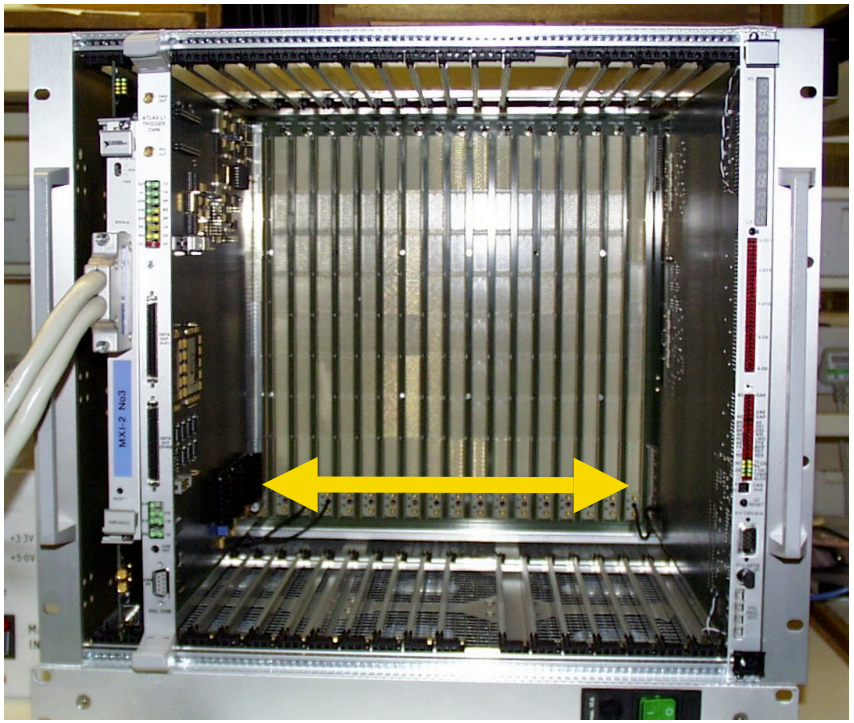
Register Name	Address	Expected data	Description
Module ID	0x00	0x3195	TCM ID Code
TTC Status	0x02	0x0001	Link Status (1 = no TTC)
DBID	0x04	0x0000	ALC ID Code
DBSNo	0x06	0x0000	ALC Serial No
MBSNo	0x08	0x0000	TCM serial No
Can_reset	0x0A	N/A	Can buss reset
Firmware Version	0x0C	0x0272	Version No, month, year
Spare Register	0x0E	0xFFFF	None
RAM	0x10	N/A	Memory space
	N/A	|	
RAM	0xFE	N/A	Memory Space

GIO

- Adapter cards manufactured..
- DSS Loop back test ok..
- More tests planned..
- Being used to test CMM..
- Will order 4 more after cct modifications..

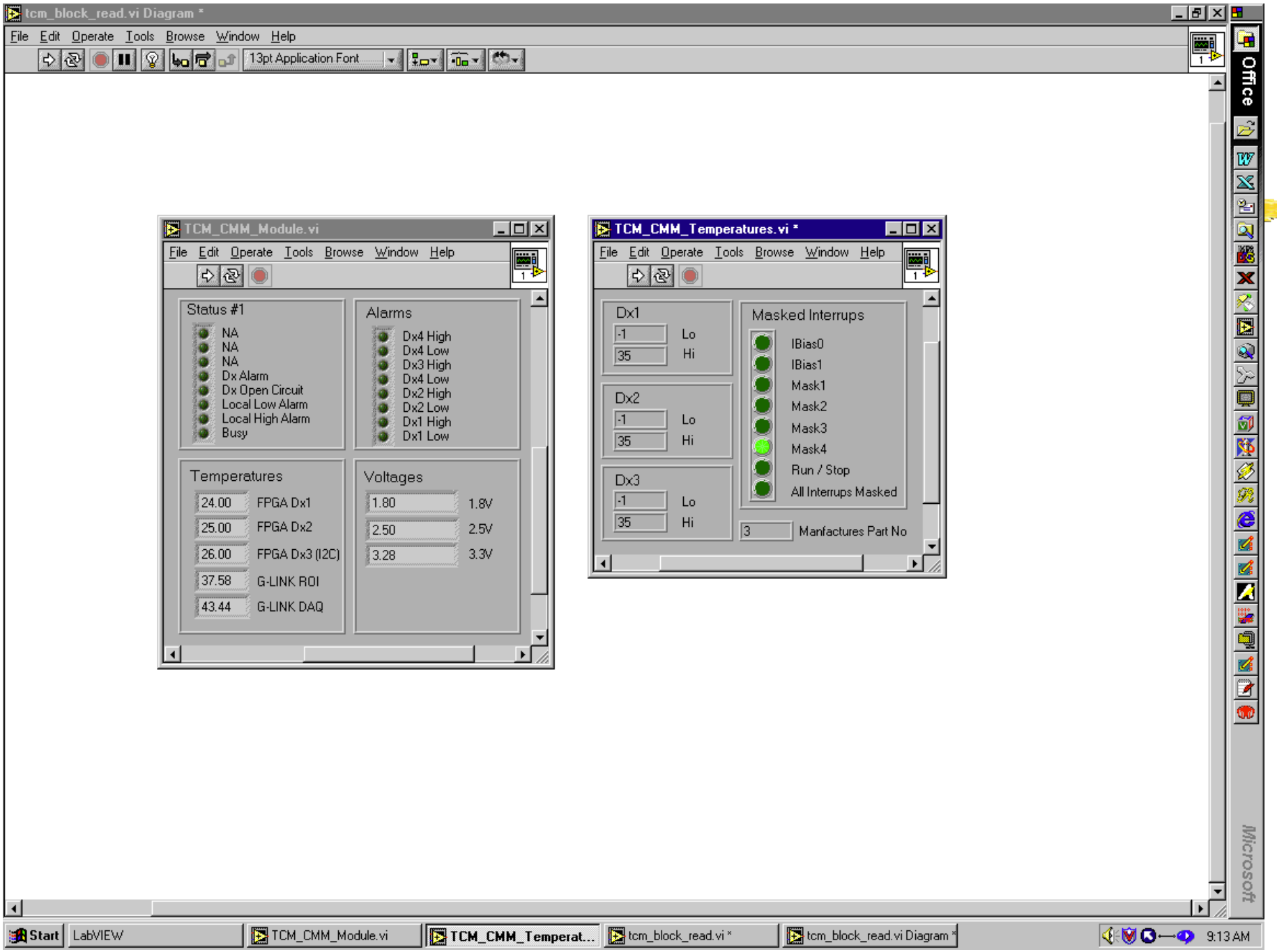
CAN

- Established CAN communication between CMM and TCM in processor crate.
- TCM Requests FPGA temperature and voltage data.



CAN

- TCM requests temperature and voltage readings from CMM via the CAN Buss.
- CMM obtains FPGA temperatures via SMBuss protocol, voltages using AtoD converters.
- CMM alerts TCM that over-temperature alarm has been set.


tcm_block_read.vi Diagram *
File Edit Operate Tools Browse Window Help
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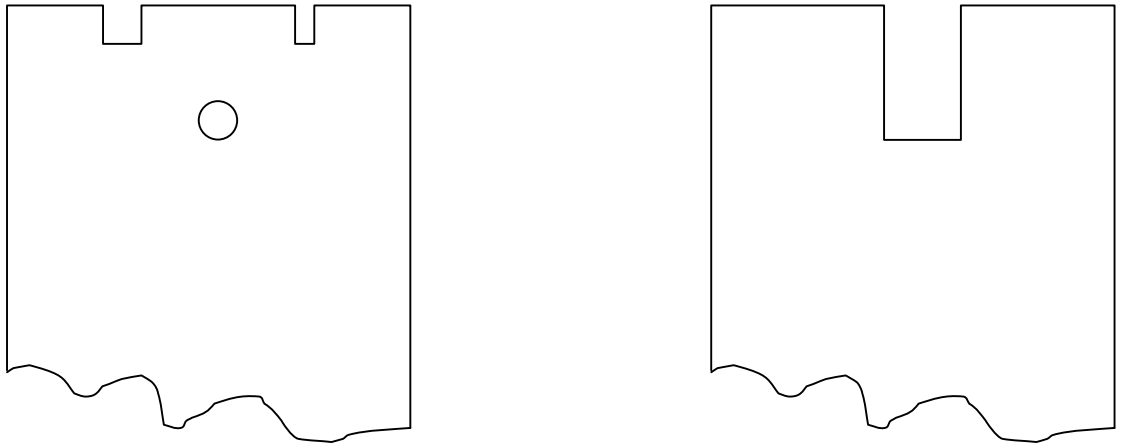
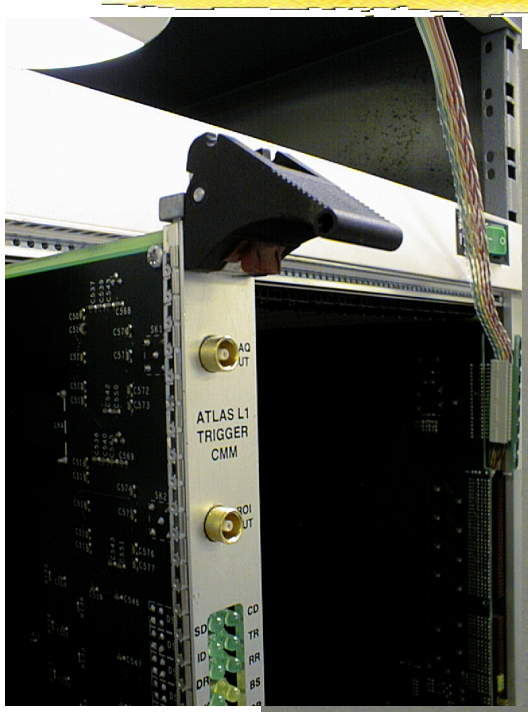
TCM_CMM_Module.vi
File Edit Operate Tools Browse Window Help
Status #1
NA
NA
NA
Dx Alarm
Dx Open Circuit
Local Low Alarm
Local High Alarm
Busy
Alarms
Dx4 High
Dx4 Low
Dx3 High
Dx4 Low
Dx2 High
Dx2 Low
Dx1 High
Dx1 Low
Temperatures
24.00 FPGA Dx1
25.00 FPGA Dx2
26.00 FPGA Dx3 (I2C)
37.58 G-LINK ROI
43.44 G-LINK DAQ
Voltages
1.80 1.8V
2.50 2.5V
3.28 3.3V
TCM_CMM_Temperatures.vi *
File Edit Operate Tools Browse Window Help
Dx1
-1 Lo
35 Hi
Dx2
-1 Lo
35 Hi
Dx3
-1 Lo
35 Hi
Masked Interrups
IBias0
IBias1
Mask1
Mask2
Mask3
Mask4
Run / Stop
All Interrups Masked
3 Manfactures Part No
Start
LabVIEW
TCM_CMM_Module.vi
TCM_CMM_Temperat...
tcm_block_read.vi *
tcm_block_read.vi Diagram *
9:13 AM

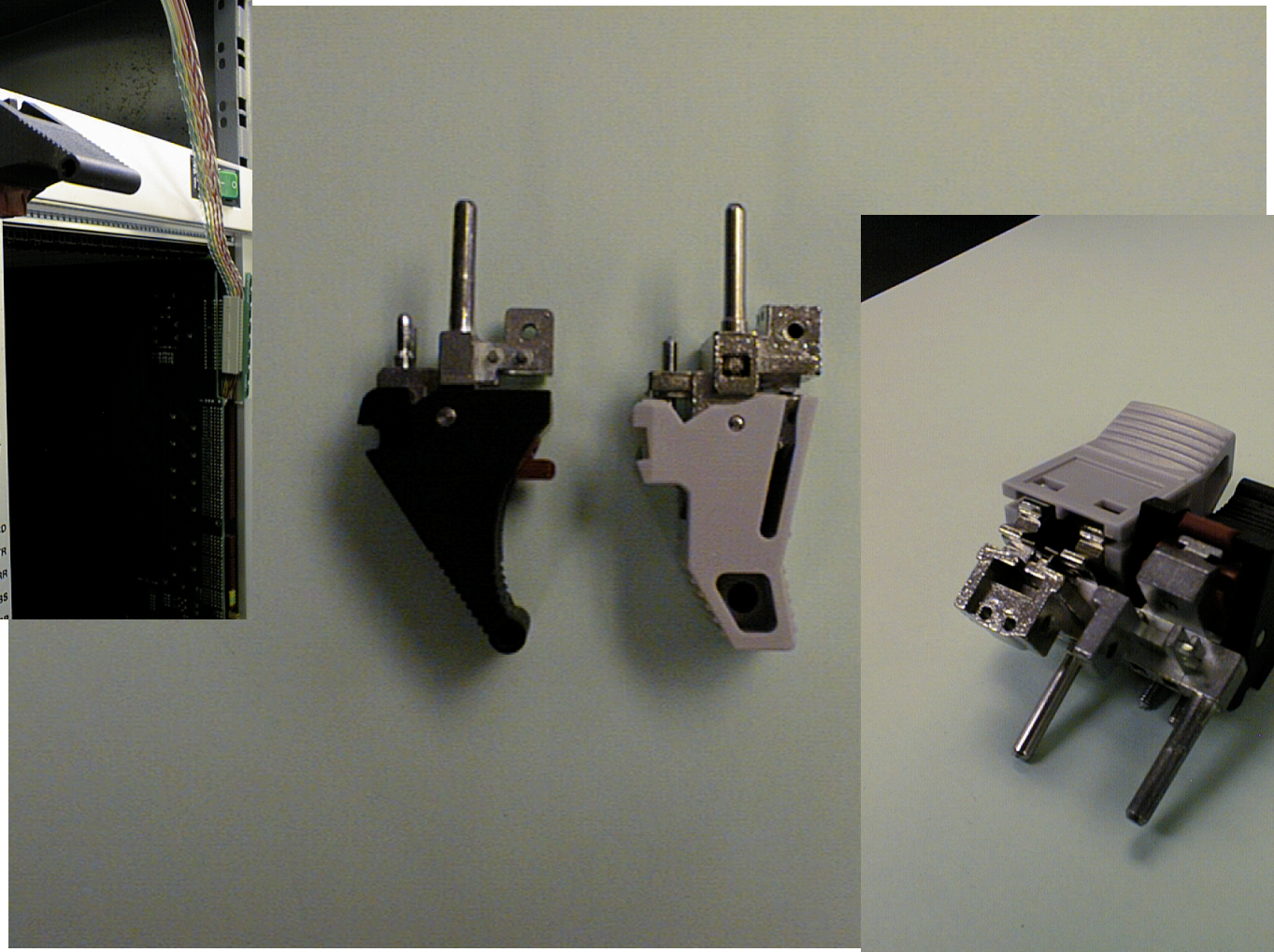
Ejectors

- Requires new cut-out.
- Fixes to front panel.



Ejectors





TTCRx

- Obtained verilog file.
- Compiled using ModelSim (with help from James)
- Generated mcs files for various addresses.
- Programmed prom.
- All cards configured for testing.

Summary

- TCM - Data Problem solved.
- GIO - Successfully being used with CMM..
- CAN - Fully functional..
- Ejectors - On trial with CMM..
- TTCRx - Ongoing..

Things to do

- Test TTCRx cards.
- Up-date TTCRx card schematics for new decoder chip.
- Develop CAN for CPM ready for slice.?
- Up-date GIO schematics ready for version II.
- Distribute TCM up-date document..