

# Status Reports: Common Merger Module, DSS-GIO & RTM cards

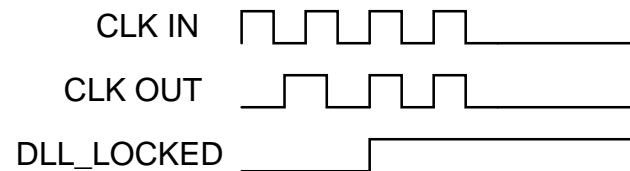
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- CMM progress, status & test plans
- DSS GIO status
- RTM status



# CMM: Progress

- VME interface OK so far...
  - Address decoding works
  - Can't test all control and status bits yet, but those tested are OK
  - Read & write access to FPGA RAM space OK.
- DLLs in FPGAs lock successfully to 40 MHz clock.
  - some initial DLL Problems:
    - RST\_DLL upside down
    - DLL\_LOCKED behaves in a fashion that is unexpected (but within specification):



- Found Missing connection from system FPGA to test socket (pin 4).



## CMM: GeoAdd Problems 4-6

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- CMM uses 4 Geographical address bits: GeoAdd (6:4) & GeoAdd (0)
- GeoAdd (6:4) :
  - identifies crate number and hence determines CMM type
  - set by dials on VMM *and* backplane ( grounded or floating )  
+ weak pull up on CPM, CMM, JEM
- CMM *sometimes* pulls GeoAdd(6:4) low:
  - appears to be due to start-up condition of CAN controller.
  - Can solve problem by pressing CAN RST button.



## CMM: GeoAdd Problem 0

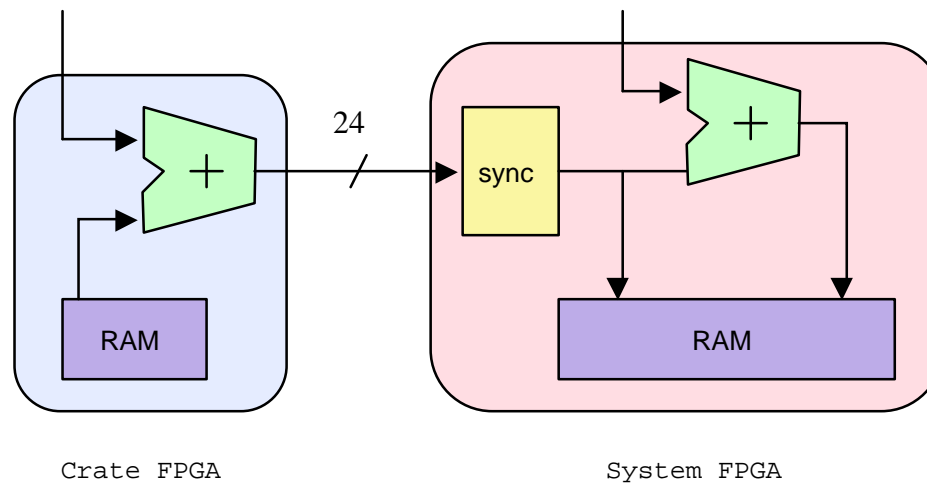
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- GeoAdd(0):
  - identifies CMM slot 0/1,
  - determines CMM type & VME base address
  - Should be ground for slot 0, floating for slot 1
- Due to backplane error, grounded for both CMM slots.
  - We can overwrite GeoAdd(0) via VME to re-assign the CMM type.
  - However, cannot re-assign VME base address in this manner.
- Can we cut the track on the backplane? Remove pin?
- Do we need to 'firmcode' a higher VME base address into some modules?



# CMM: Immediate Test Plans

- Next goal is to transfer data from Crate FPGA to system FPGA via real-time data path:



- Aim to transfer CMM to PPD at beginning of June.



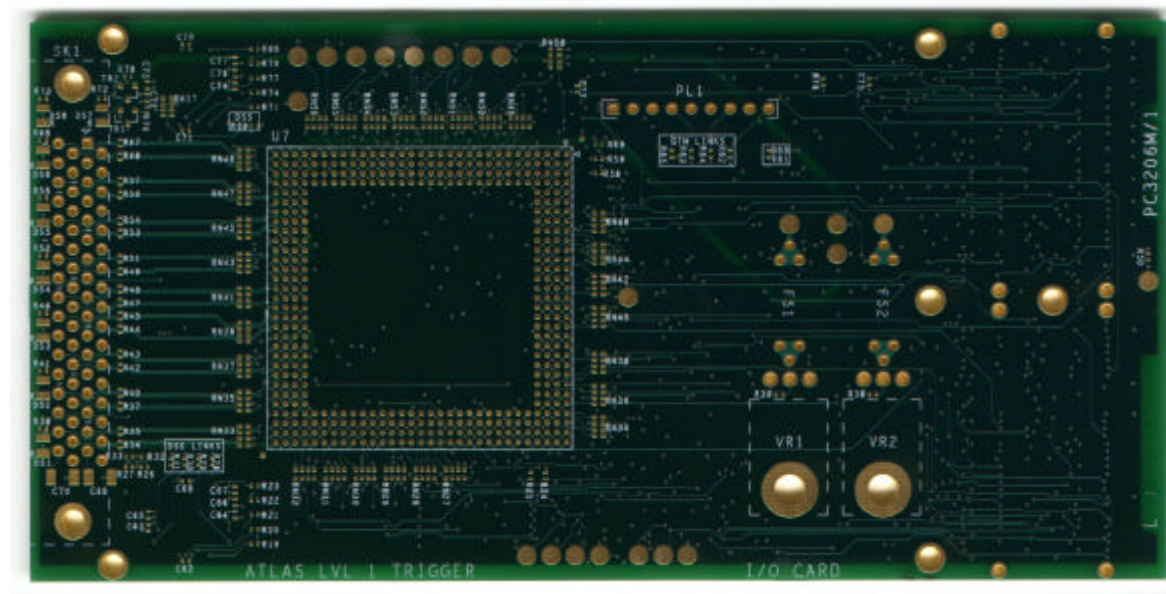
## DSS GIO & RTM status

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- GIO status
  - board has been manufactured
  - currently being assembled
- RTM status
  - mechanics for attaching RTM to back of crate decided upon:
    - 2 horizontal supporting bars with card slots carved into them
  - required dimensions of RTM established
  - Panagiotis working on RTM lay out.
  - To be checked by drawing office.



# GIO



# Summary

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- CMM tests progressing well
- Hand over to PPD in June whilst we do other things.
- Require GIO & RTM for tests of real-time path
  - available in few weeks.

