

CPM Specification

Status: PDR in March

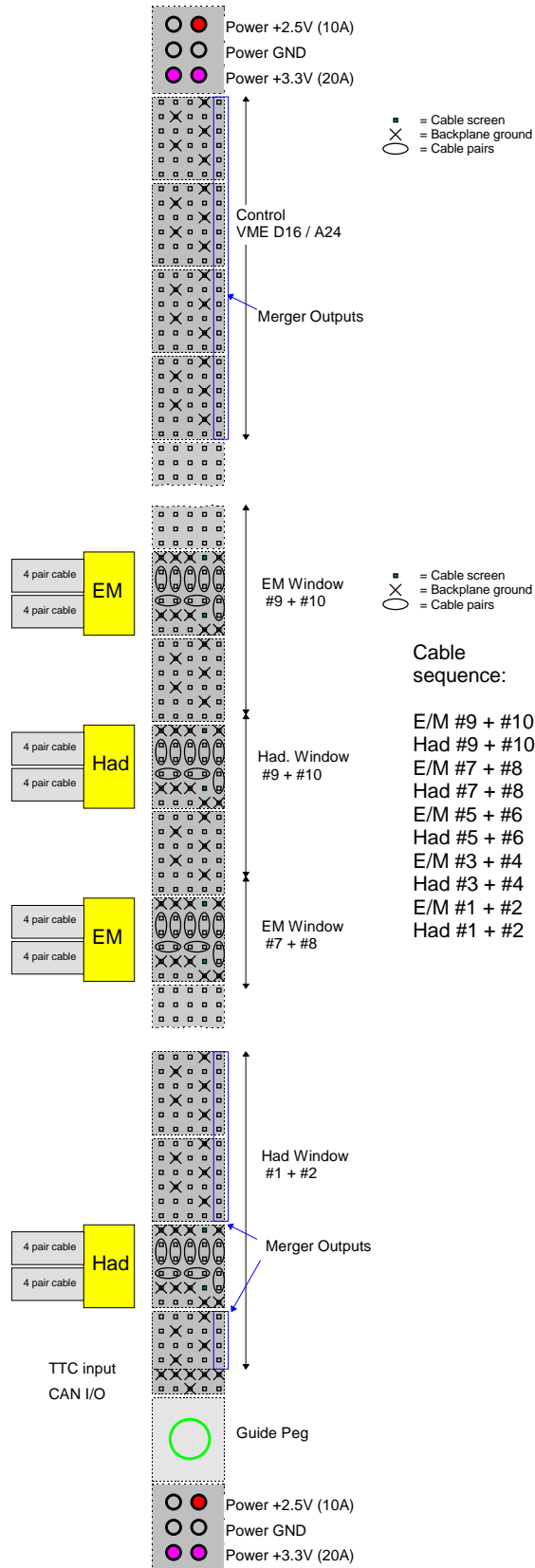
Recent Work:

- Backplane Connector
BERG METRAL now common between JEP and CP
Layout acceptable to JEP and CP systems ->
- Readout Controller
- LVDS links
Requirement for Quiet supply isolated from Logic supply.
- Control bus
Reduced VME interface, D16/A24. ->

CPM Project Specification at:

http://www.ep.ph.bham.ac.uk/user/staley/cpm_spec.ps

CPM Backplane connector



Suggestions for using a subset of the VME A24/D16 control bus.

The 9U CP Backplane will not mechanically accept VME modules, but will connect to a 6U VME cage via PCB bridge.

The CPM is a VME slave , and so does not need the Bus Request signals.

CAN bus can indicate the SYSFAIL and ACFAIL states (and replace interrupts?)

The following VME signals could be omitted:

Signal Group	Number	Comments
BREQ , BGNT.etc...	14	9U backplane does not carry a master
AS	1	Only needed for block transfers
SERCLK/SERDAT	2	Never used
SYSCLK (16MHz)	1	Can use 40MHz RefClk for State Machines etc
BERR	1	Not necessary (and needs handlers)
SYSFAIL/ACFAIL	2	Signalled over CAN
+12V/5VSTBY	3	Not used
Interupts IRQ1..7 , IACK etc	10	Do we need all these?
Total Pruned	34	