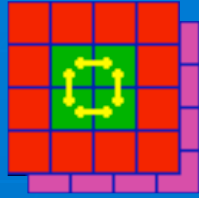


ROD Update

hardware v 0.1

hardware, firmware and testing status

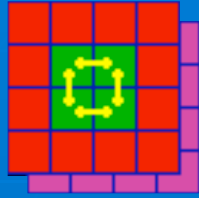
*These high wild hills and rough uneven ways
Draws out our miles, and makes them wearisome ...*



Overview



- Firmware(3)
- Hardware
- Stand Alone Tests
- CPM & JEM Integration Tests
- Planning Needs



Firmware (1/3)



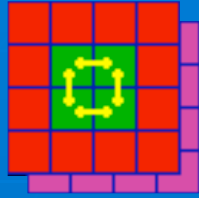
- CP Data : **Stable**
 - CP-Slice-16: Bit 23 set in hit data words. f/w awaits test
 - CP-Slice-17: Treatment of PP->CPM statusBits (S-link trailer and hit words). f/w specification and implementation

- CP Rol : **Under re-evaluation** testing

- JEM Data: **Stalled**
 - Jem-Slice-1: Multi-slice operation fails no new f/w

- JEM Rol: **Stalled**
 - Jem-Rol-1: Zero suppression fails. PE (bit 11) set in S-Link record on zero data no new f/w

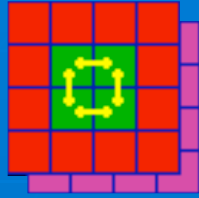
- Cmm Cp Data: **Stalled**
 - CpCmm-Slice-1: Various Bit field errors no new f/w



Firmware (2/3)



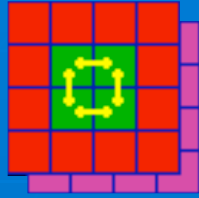
- New Designs:
 - Engineer awaits specification:
 - JET CMM Data
 - Energy Summing CMM (Data & RoI)
 - Jet E_T CMM RoI
 - PProc Data
- Old Designs:
 - Specification Errors
 - JEM Data Specification specifies bits not present in the data.



Firmware (3/3)



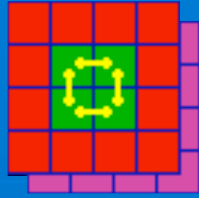
- Conclusion:
 - **No Great Progress**, either in ID or R1 Lab.
 - Need Strategy & Review meeting with:
 - S. Hillier, N. Gee, V. Perera, T. Gillman, J. Edwards, B. Barnett
 - To set some priorities and target dates.
 - Loose ends.
 - Specifications.
 - Functionality.



Hardware



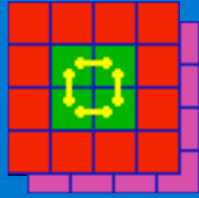
- Heavy Duty Lab Tests:
 - LabView test bench (Niel Falconer)
 - Should provide pre tested complete h/w.
 - Uses same kit (now with ODIN s-links) as in R1 Lab
 - Eventually with TTCvi-vx functionality...
 - New G-Link cards soon available -
 - So RODS anticipated soon.



Stand Alone Tests



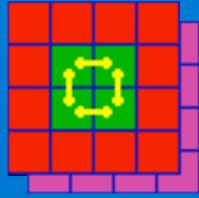
- New Software:
 - error counting / display within run control environment.
- Should next incorporate:
 - DSS/GIO based triggering.
 - Removal of readout functionality to ROS.
 - Wrapping of data from “readOut()” moduleService
 - Use of “allModules”



CPM and JEM Integration Tests



- Paradigm:
 - Replace one channel of DSS-ROD test with a real Module - CPM or JEM. Use “kicker” to generate and analyse events.
- Tests:
 - CPM:
 - One Slice: Most frames present.
 - More from Gilles ...
 - JEM:
 - One Slice: Frames present with correct length
 - Data not understood.
 - (single step) ... then h/w problems



Planning Needs



- CPM and JEM - ROD Tests
 - In Both cases, soon ready for tighter coupling with simulation and event stream.
- ROD
 - Should be tested with only one input.
 - JEM Rol and data multi-slice functionality soon necessary. **i.e. Critical Path.**
CpCmm firmware should follow.
- DSS
 - Need to decouple event generation from “kicker”
 - GIO setup is soon on the **critical** path.