### Log file for this test: /afs/hep.wisc.edu/cms/RCTlog/daffodil/EIC_2004-07-29.log ###

Location of log file

******************************************************************************
# EIC Test 6 - Backplane data paths ##########################################
# Test run on 2004-07-29_17:45:51
# HOST computer is: daffodil
# Run in vmedia kumac: eiso_data_paths.txt
Please fill in the backplane data paths CHECKLIST.
******************************************************************************

Device to open: /dev/btp96
Device to open: /dev/btp160
Device to open: /dev/btp64
Could not clear errors from the device: BT_ESTATUS: NanoBus hardware status error..
Enter command (help for usage)>

RCT boot succeeded with 9 cards. The CCC, 7 RCs and the EIC to be tested should be plugged in
Enter command (help for usage)>
Enter command (help for usage)>
Enter command (help for usage)>
Zero memories first.
Device to open: /dev/btp96
Device to open: /dev/btp160
Device to open: /dev/btp64
RCTCrate::initialize() : vmeReset() successful
RCTCrate::initialize() : Defined RCTClockControlCard 10000000
RCTCrate::initialize() : Defined RCTReceiverCard with address 12000000
RCTCrate::initialize() : Defined RCTReceiverCard with address 14000000
RCTCrate::initialize() : Defined RCTReceiverCard with address 16000000
RCTCrate::initialize() : Defined RCTReceiverCard with address 18000000
RCTCrate::initialize() : Defined RCTReceiverCard with address 1b000000
RCTCrate::initialize() : Defined RCTReceiverCard with address 1d000000
RCTCrate::initialize() : Defined RCTReceiverCard with address 1f000000
RCTCrate::initialize() : Defined RCTElectronIsolationCard with address 15000000
rcrCrateTest: initialize() succeeded
Cards in the crate are: 54ba
RCTCrate::doZeroPatternTest() : Loading RC (f500, 12000000)
RCTCrate::doZeroPatternTest() : Verifying RC (f500, 12000000)
RCTCrate::doZeroPatternTest() : Loading RC (fa00, 14000000)
RCTCrate::doZeroPatternTest() : Verifying RC (fa00, 14000000)
RCTCrate::doZeroPatternTest() : Loading RC (f900, 16000000)
RCTCrate::doZeroPatternTest() : Verifying RC (f900, 16000000)
RCTCrate::doZeroPatternTest() : Loading RC (f600, 18000000)
RCTCrate::doZeroPatternTest() : Verifying RC (f600, 18000000)
RCTCrate::doZeroPatternTest() : Loading RC (f700, 1b000000)
RCTCrate::doZeroPatternTest() : Verifying RC (f700, 1b000000)
RCTCrate::doZeroPatternTest() : Loading RC (fe00, 1d000000)
RCTCrate::doZeroPatternTest() : Verifying RC (fe00, 1d000000)
RCTCrate::doZeroPatternTest() : Loading RC (f800, 1f000000)
RCTCrate::doZeroPatternTest() : Verifying RC (f800, 1f000000)
RCTCrate::doZeroPatternTest() : Loading EIC (f800, 15000000)
RCTCrate::doZeroPatternTest() : Verifying EIC (f800, 15000000)

rcrCrateTest: All tests successful

Now start vmedia script

*****************************************************************************************
** this is vmedia script eiso_data_paths.txt **
*****************************************************************************************

for this test, the eic has to be in slot 2 **Important**

Continue <return> ? Exit <Ctrl-D> ?

type <return> here

this eic has barcode
Device to open: /dev/btp96
Device to open: /dev/btp160
Device to open: /dev/btp64

Continue <return> ? Exit <Ctrl-D> ? type <return> here

for this test, the crate has to be loaded with all seven rc’s

These values should be read back

initial setup done.

start direct paths.

7f in $440000 -- next?
Continue <return> ? Exit <Ctrl-D> ?
ff in $440000 -- next?
Continue <return> ? Exit <Ctrl-D> ?
7f in $4c0000 -- next?
Continue <return> ? Exit <Ctrl-D> ?
ff in $4c0000 -- next?
Continue <return> ? Exit <Ctrl-D> ?
7f in $540000 -- next?
Continue <return> ? Exit <Ctrl-D> ?
ff in $540000 -- next?
Continue <return> ? Exit <Ctrl-D> ?
7f in $5c0000 -- next?
Continue <return> ? Exit <Ctrl-D> ?
ff in $5c0000 -- next?
Continue <return> ? Exit <Ctrl-D> ?
7f in $640000 -- next?
Continue <return> ? Exit <Ctrl-D> ?
ff in $640000 -- next?
Continue <return> ? Exit <Ctrl-D> ?
7f in $6c0000 -- next?
Continue <return> ? Exit <Ctrl-D> ?
ff in $6c0000 -- next?
Continue <return> ? Exit <Ctrl-D> ?
7f in $740000 -- next?
Continue <return> ? Exit <Ctrl-D> ?
ff in $740000 -- next?
Continue <return> ? Exit <Ctrl-D> ?
7f in $7c0000 -- next?
Continue <return> ? Exit <Ctrl-D> ?
ff in $7c0000 -- next?
Continue <return> ? Exit <Ctrl-D> ?
direct paths done. start paths for shared data.

this part tests all top and bottom routes on the card

put a 68-pin cable from rc 0 j4 to rc 1 j4
put a 68-pin cable from rc 2 j4 to rc 3 j4
put a 68-pin cable from rc 4 j4 to rc 5 j4
Continue <return> ? Exit <Ctrl-D> ? type <return> here
backplane r0, should see 7f -- next?
Continue <return> ? Exit <Ctrl-D> ?
backplane r0, should see 00 -- next?
Continue <return> ? Exit <Ctrl-D> ?
backplane r0, should see double pulse. -- next?

Check the signals as specified in the checklist -
when done type <return> for next signal

Repeat:

Check 4 bits on U125
and 3 bits on U126;
pattern 7F should result in 111 1111;
pattern FF should result in 000 0000

Important

Repeat:

Check the signals as specified in the checklist -
when done type <return> for next signal

Follow these directions, no need to first power down

Repeat:

Check the signals as specified in the checklist -
when done type <return> for next signal

Compare this number with the EIC bar code

Type <return> here

These values should be read back

Importat
Check 4 bits on U125 and 3 bits on U126; pattern 7F should result in 111 1111, i.e. a "1" on each of the 7 pins; pattern 00 should result in 000 0000, i.e. a "0" on each of the 7 pins; double pulse means seeing 1010 on EACH of the 8 pins.

Continue <return> ? Exit <Ctrl-D> ?
repeating backplane r0, should see 7f -- next ?
Continue <return> ? Exit <Ctrl-D> ?
repeating backplane r0, should see 00 -- next ?
Continue <return> ? Exit <Ctrl-D> ?
repeating backplane r0, should see double pulse. -- next ?
Continue <return> ? Exit <Ctrl-D> ?
cable r0, should see 7f. -- next ?
Continue <return> ? Exit <Ctrl-D> ?
cable r0, should see 00. -- next ?
Continue <return> ? Exit <Ctrl-D> ?
cable r0, should see double pulse. -- next ?
Continue <return> ? Exit <Ctrl-D> ?
repeating cable r0, should see 7f. -- next ?
Continue <return> ? Exit <Ctrl-D> ?
repeating cable r0, should see 00. -- next ?
Continue <return> ? Exit <Ctrl-D> ?
repeating cable r0, should see double pulse. -- next ?
Continue <return> ? Exit <Ctrl-D> ?
backplane r1, should see 7f. -- next ?
Continue <return> ? Exit <Ctrl-D> ?
backplane r1, should see 00. -- next ?
Continue <return> ? Exit <Ctrl-D> ?
backplane r1, should see double pulse. -- next ?
Continue <return> ? Exit <Ctrl-D> ?
repeating backplane r1, should see 7f. -- next ?
Continue <return> ? Exit <Ctrl-D> ?
repeating backplane r1, should see 00. -- next ?
Continue <return> ? Exit <Ctrl-D> ?
repeating backplane r1, should see double pulse. -- next ?
Continue <return> ? Exit <Ctrl-D> ?
cable r1, should see 7f. -- next ?
Continue <return> ? Exit <Ctrl-D> ?
cable r1, should see 00. -- next ?
Continue <return> ? Exit <Ctrl-D> ?
cable r1, should see double pulse. -- next ?
Continue <return> ? Exit <Ctrl-D> ?
repeating cable r1, should see 7f. -- next ?
Continue <return> ? Exit <Ctrl-D> ?
repeating cable r1, should see 00. -- next ?
Continue <return> ? Exit <Ctrl-D> ?
repeating cable r1, should see double pulse. -- next ?
Continue <return> ? Exit <Ctrl-D> ?
repeating backplane r1, should see double pulse. -- next ?
Continue <return> ? Exit <Ctrl-D> ?
cable r1, should see 7f. -- next ?
Continue <return> ? Exit <Ctrl-D> ?
cable r1, should see 00. -- next ?
Continue <return> ? Exit <Ctrl-D> ?
cable r1, should see double pulse. -- next ?
Continue <return> ? Exit <Ctrl-D> ?
ext, should see 7f. -- next ?
Continue <return> ? Exit <Ctrl-D> ?
ext, should see 00. -- next ?
Continue <return> ? Exit <Ctrl-D> ?
ext, should see double pulse. -- next ?
Continue <return> ? Exit <Ctrl-D> ?
shared data paths done, start with paths for corner sharing.
put a 68-pin cable from rc 0 j4 to rc 1 j4
Continue <return> ? Exit <Ctrl-D> ?
west, should see 7f. -- next ?
Continue <return> ? Exit <Ctrl-D> ?
west, should see 00. -- next ?
Continue <return> ? Exit <Ctrl-D> ?
west, should see double pulse. -- next ?
Continue <return> ? Exit <Ctrl-D> ?
east, should see 7f. -- next ?
Continue <return> ? Exit <Ctrl-D> ?
east, should see 00. -- next ?
Continue <return> ? Exit <Ctrl-D> ?
east, should see double pulse. -- next ?
Continue <return> ? Exit <Ctrl-D> ?
type <return> here

Should see a "1" on U66, pins 24, 28, 4, 6
Should see a "1" on U66, pins 23, 27, 3, 5

Put a 68-pin cable from rc 4 j4 to rc 5 j4
Continue <return> ? Exit <Ctrl-D> ?

Continue <return> ? Exit <Ctrl-D> ?
should see a "1" on U128, pins 24, 28, 4, 6

should see a "1" on U128, pins 23, 27, 3, 5

type 'exit' here

Bye

######################## EIC Test 6 End #################################