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### Log file for this test: /afs/hep.wisc.edu/cms/RCTlog/daffodil/EIC_2004-07-29.log ### Location of log file
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#####  
##### 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 SBS successfully booted and talked to the cards in the crate  
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  
rctCrateTest: 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)
```

Check that the verification doesn't fail. When it does, leave the script (Ctrl-D) and vmedia (exit) and redo >run_EIC_test6

```
rctCrateTest: 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/btn64

15000002 -> F8F8 **Compare this number with the EIC bar code**

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

for this test, the crate has to be loaded with all seven rc's **Important**

12000006 -> F565

14000006 -> FA05

16000006 -> F960

18000006 -> F600

1B000006 -> F760

1D000006 -> FE00

1F000006 -> F820

12000000 -> 0202

14000000 -> 0202

16000000 -> 0202

18000000 -> 0202

1B000000 -> 0202

1D000000 -> 0202

1F000000 -> 0202

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 i4

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 ?

These values should be read back

Repeat:

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

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

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

```

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> ?
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> ?
shared data paths done, start with paths for corner sharing.
put a 68-pin cable from rc 0 j4 to rc 1 i4
Continue <return> ? Exit <Ctrl-D> ?
sw corner -- next ?
Continue <return> ? Exit <Ctrl-D> ?
nw corner -- next ?
put a 68-pin cable from rc 4 j4 to rc 5 j4
Continue <return> ? Exit <Ctrl-D> ?

```

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

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

```
se corner -- next ?
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Should see a "1" on U128, pins 24, 28, 4, 6

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Continue <return> ? Exit <Ctrl-D> ?
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```
ne corner -- hit return to zero the memory and exit. Should see a "1" on U128, pins 23, 27, 3, 5
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```
Continue <return> ? Exit <Ctrl-D> ?
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```
all paths checked, test finished.
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```
VMEDia>
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```
VMEDia>
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```
VMEDia> exit type 'exit' here
```

```
Bye
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##### EIC Test 6 End #####
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