

```
# Configuration Report for System ID=chiron
# sysConfig Version 1.05 of Wednesday 20111102:1228
#
# System Description Last Saved 20111207:1239
#
# Responsible Engineer: Peter Moore
# System User: CTIO
#
# Report Printed: 20111216:0842
#
#####
The chiron system documentation number is 209
  Transition Module Number: ???
  Controller Module Number: ???

#####
#
#   chiron Focal Plane Description
#
#   chiron built using fclplnDesc Version 1.03 of Wednesday 20110713.1315
#   Date last saved: 20111207:1239
#
The chiron focal plane contains 1 detector
  The Detector is a e2v231-84 with 4096 columns by 4112 rows: ID = ccd1

#####
#
#   chiron Dewar Description
#
#   chiron built using dewarDesc Version 1.04 of Wednesday 20110713.1655:46
#   Date last saved: 20111130:0857
#
The chiron Dewar has 2 connectors
  Connector 1 is P3: a MILCIRC_I with 41 pins
  Connector 2 is P4: a MILCIRC_I with 41 pins

#####
#
#   generic2AFE Torrent DHE Description
#
#   generic2AFE built using TRNT dheDesc Version 1.05 of Thursday 20110714.1010
#   Date last Saved: 20111207:1239
#
The NONE DHE contains 7 Boards:
  LCB Board LCB Serial Number:9243 Last Test:20100301
  PSB Board PSB Serial Number:9234 Last Test:20091202
  AFE Board AFE1 Serial Number:9357 Last Test:20091202
  AFE Board AFE2 Serial Number:9358 Last Test:20091202
  MEZ Board MEZZ Serial Number:9914 Last Test:20110712
  PAMP Board PreAmp Serial Number:9123 Last Test:20110712
  TSMU Board TSMUtil Serial Number:9910 Last Test:20110712

Torrent DHE adjustable voltage settings:      HV volts select = +30v to -5v
vHV+  = 30.000      vHV-  = -5.000
vCB+   = 17.500      vCB-   = -17.500
vAna+  = 11.000      vAna-  = -11.000
vBb    = 0.000
```

# Configuration Document: TRNT-EL-05-0209\_WireList for System chiron  
# sysConfig Version 1.05 of Wednesday 20111102:1228

#  
# System Description Last Saved 20111207:1239

#  
# WireList for system chiron  
# Report Printed 20111216:0842

#  
# Responsible Engineer: Peter Moore  
# System User: CTIO

#  
# Use 24 gauge Teflon wires in standard Torrent colors  
# Clocks - white, Clock Rtns - white/black  
# LV Biases - yellow LV Bias Rtns - black  
# HV biases - orange HV Bias Rtns - black  
# Video signals - violet Video Rtns - white/violet  
# Aux signals - grey, Aux Rtns - white/grey  
# Heater - blue, Heater Rtn - white/blue  
# TC+ - blue copper, TC- - red constantin

| #CNCT | Det     | Sgnl -                   | Array Pins => | Dewar Pins => | Dhe Pins        | :Dhe Function Name |
|-------|---------|--------------------------|---------------|---------------|-----------------|--------------------|
| CNCT  |         | SUB0 -                   | ccd1:C1P01 => | P3:s =>       | Video2:CH3-A    | :afe2Vid03Rtn      |
| CNCT  |         | OS-E -                   | ccd1:C1P03 => | P3:n =>       | Video2:CH1+A    | :afe2vChnl01       |
| CNCT  |         | OG-E -                   | ccd1:C1P04 => | P3:R =>       | J5:01           | :afe2LVBias00      |
| CNCT  |         | DG-A -                   | ccd1:C1P05 => | P3:T =>       | J3:16           | :afe2Clk10         |
| CNCT  |         | RG-E -                   | ccd1:C1P06 => | P3:i =>       | J3:36           | :afe2Clk00         |
| CNCT  |         | SW-E -                   | ccd1:C1P07 => | P3:X =>       | J3:32           | :afe2Clk02         |
| CNCT  |         | E1 -                     | ccd1:C1P08 => | P3:V =>       | J3:28           | :afe2Clk04         |
| CNCT  |         | E2 -                     | ccd1:C1P09 => | P3:W =>       | J3:24           | :afe2Clk06         |
| CNCT  | E3-F3 - | ccd1:C1P10 =>            | P3:A =>       | J3:20         | :afe2Clk08      |                    |
| CNCT  |         | F1 -                     | ccd1:C1P11 => | P3:B =>       | J3:26           | :afe2Clk05         |
| CNCT  |         | F2 -                     | ccd1:C1P12 => | P3:C =>       | J3:22           | :afe2Clk07         |
| CNCT  |         | SW-F -                   | ccd1:C1P13 => | P3:Y =>       | J3:30           | :afe2Clk03         |
| CNCT  |         | RG-F -                   | ccd1:C1P14 => | P3:j =>       | J3:34           | :afe2Clk01         |
| CNCT  |         | TG-A -                   | ccd1:C1P15 => | P3:Z =>       | J3:18           | :afe2Clk09         |
| CNCT  |         | OG-F -                   | ccd1:C1P16 => | P3:S =>       | J5:05           | :afe2LVBias02      |
| CNCT  |         | OS-F -                   | ccd1:C1P17 => | P3:r =>       | Video2:CH3+A    | :afe2vChnl03       |
| CNCT  |         | SUB1 -                   | ccd1:C1P19 => | P3:m =>       | Video2:CH1-A    | :afe2Vid01Rtn      |
| CNCT  |         | RD-E -                   | ccd1:C1P21 => | P3:N =>       | J4:13           | :afe2HVBias04      |
| CNCT  |         | OD-E -                   | ccd1:C1P22 => | P3:p =>       | J4:01           | :afe2HVBias00      |
| CNCT  | SUB2 -  | ccd1:C1P23,ccd1:C1P34 => | P3:t =>       | J3:40         | :afe2ClkRtn0A   |                    |
| CNCT  | A4 -    | ccd1:C1P24,ccd1:C1P26 => | P3:G =>       | J3:06         | :afe2Clk15      |                    |
| CNCT  | A3 -    | ccd1:C1P25,ccd1:C1P27 => | P3:F =>       | J3:08         | :afe2Clk14      |                    |
| CNCT  | SUB3 -  | ccd1:C1P28 =>            | P3:k =>       | J4:03         | :afe2HVBiasRtn0 |                    |
| CNCT  | DD-A -  | ccd1:C1P29 =>            | P3:U =>       | J4:22         | :afe2HVBias07   |                    |
| CNCT  | B1 -    | ccd1:C1P30,ccd1:C1P32 => | P3:D =>       | J3:12         | :afe2Clk12      |                    |
| CNCT  | A2 -    | ccd1:C1P33,ccd1:C1P31 => | P3:E =>       | J3:10         | :afe2Clk13      |                    |
| CNCT  | OD-F -  | ccd1:C1P35 =>            | P3:q =>       | J4:07         | :afe2HVBias02   |                    |
| CNCT  | RD-F -  | ccd1:C1P36 =>            | P3:P =>       | J4:19         | :afe2HVBias06   |                    |
| CNCT  | SUB5 -  | ccd1:C2P01 =>            | P4:s =>       | Video1:CH3-A  | :afe1Vid03Rtn   |                    |
| CNCT  | OS-G -  | ccd1:C2P03 =>            | P4:r =>       | Video1:CH3+A  | :afe1vChnl03    |                    |
| CNCT  | OG-G -  | ccd1:C2P04 =>            | P4:S =>       | J8:05         | :afe1LVBias02   |                    |
| CNCT  | DG-D -  | ccd1:C2P05 =>            | P4:T =>       | J6:16         | :afe1Clk10      |                    |
| CNCT  | RG-G -  | ccd1:C2P06 =>            | P4:j =>       | J6:34         | :afe1Clk01      |                    |
| CNCT  | SW-G -  | ccd1:C2P07 =>            | P4:Y =>       | J6:30         | :afe1Clk03      |                    |
| CNCT  | G1 -    | ccd1:C2P08 =>            | P4:B =>       | J6:26         | :afe1Clk05      |                    |
| CNCT  | G2 -    | ccd1:C2P09 =>            | P4:C =>       | J6:22         | :afe1Clk07      |                    |
| CNCT  | G3-H3 - | ccd1:C2P10 =>            | P4:A =>       | J6:20         | :afe1Clk08      |                    |
| CNCT  | H1 -    | ccd1:C2P11 =>            | P4:V =>       | J6:28         | :afe1Clk04      |                    |
| CNCT  | H2 -    | ccd1:C2P12 =>            | P4:W =>       | J6:24         | :afe1Clk06      |                    |
| CNCT  | SW-H -  | ccd1:C2P13 =>            | P4:X =>       | J6:32         | :afe1Clk02      |                    |
| CNCT  | RG-H -  | ccd1:C2P14 =>            | P4:i =>       | J6:36         | :afe1Clk00      |                    |

```
# Configuration Document: TRNT-EL-05-0209_WireList for System chiron
# sysConfig Version 1.05 of Wednesday 20111102:1228
#
# System Description Last Saved 201111207:1239
#
# WireList for system chiron (continued)
#
# Report Printed 20111216:0842
#
# Responsible Engineer: Peter Moore
# System User: CTIO
#
# Use 24 gauge Teflon wires in standard Torrent colors
# Clocks - white,          Clock Rtns - white/black
# LV Biases - yellow       LV Bias Rtns - black
# HV biases - orange       HV Bias Rtns - black
# Video signals - violet   Video Rtns - white/violet
# Aux signals - grey,      Aux Rtns - white/grey
# Heater - blue,          Heater Rtn - white/blue
# TC+ - blue copper,      TC- - red constantin
#
#CNCT      Det Sgnl -   Array Pins => Dewar Pins =>      Dhe Pins      :Dhe Function Name
CNCT      TG-D -      ccd1:C2P15 =>      P4:Z =>          J6:18          :afelClk09
CNCT      OG-H -      ccd1:C2P16 =>      P4:R =>          J8:01          :afelLVBias00
CNCT      OS-H -      ccd1:C2P17 =>      P4:n => Video1:CH1+A :afelvChnl01
CNCT      SUB6 -      ccd1:C2P19 =>      P4:m => Video1:CH1-A :afelVid01Rtn
CNCT      RD-G -      ccd1:C2P21 =>      P4:P =>          J7:19          :afelHVBias06
CNCT      OD-G -      ccd1:C2P22 =>      P4:q =>          J7:07          :afelHVBias02
CNCT      SUB7 -      ccd1:C2P23,ccd1:C2P34 =>      P4:t =>          J6:40          :afelClkRtn0
CNCT      C1 -      ccd1:C2P26,ccd1:C2P24 =>      P4:D =>          J6:12          :afelClk12
CNCT      C2 -      ccd1:C2P27,ccd1:C2P25 =>      P4:E =>          J6:10          :afelClk13
CNCT      SUB8 -      ccd1:C2P28 =>      P4:k =>          J7:03          :afelHVBiasRtn0
CNCT      DD-D -      ccd1:C2P29 =>      P4:U =>          J7:22          :afelHVBias07
CNCT      C4 -      ccd1:C2P30,ccd1:C2P32 =>      P4:G =>          J6:06          :afelClk15
CNCT      C3 -      ccd1:C2P31,ccd1:C2P33 =>      P4:F =>          J6:08          :afelClk14
CNCT      OD-H -      ccd1:C2P35 =>      P4:p =>          J7:01          :afelHVBias00
CNCT      RD-H -      ccd1:C2P36 =>      P4:N =>          J7:13          :afelHVBias04
CNCT      vHtrl+ -      dfCnct:11 =>      P4:K => Util-E:E12 :VHTR_P
CNCT      vHtrlRtn -      dfCnct:12 =>      P4:L => Util-E:E14 :VHTR_N
CNCT      TS1_v+ -      dfCnct:2 =>      P4:H => Util-E:E3 :TEMPSNS1-
CNCT      TS1_v- -      dfCnct:4 =>      P4:J => Util-E:E4 :TEMPSNS1+
CNCT      CableShld1 -      dfCnct:5 =>      P4:M => Util-E:E8 :INPWR_SHIELD
CNCT      TS2_v+ -      dfCnct:7 =>      P4:d => Util-E:E1 :TEMPSNS2-
CNCT      TS2_v- -      dfCnct:9 =>      P4:e => Util-E:E2 :TEMPSNS2+
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#####
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```
# grounding for unused video channels
Add jumper from Video1*CH2+A: to Video1*CH2-A
Add jumper from Video1*CH4+A: to Video1*CH4-A
Add jumper from Video2*CH2+A: to Video2*CH2-A
Add jumper from Video2*CH4+A: to Video2*CH4-A
```

```
# Configuration Document: TRNT-EL-19-0209_TSM_Config for System chiron
# sysConfig Version 1.05 of Wednesday 20111102:1228
#
# System Description Last Saved 20111207:1239
#
# Responsible Engineer: Peter Moore
# System User: CTIO
#
# Report Printed 20111216:0842
#
# TSM Configuration for system chiron
#
# TSM PreAmp Configuration information
#
# High voltage Bias protection Diodes for Unspecified detector type
Install Diode D1 with unknown orientation
Install Diode D2 with unknown orientation
Install Diode D3 with unknown orientation
Install Diode D4 with unknown orientation
Install Diode D5 with unknown orientation
Install Diode D6 with unknown orientation

# Ground connections on PreAmp.
Preamp Shield-1 (near AFE1 CH4-) connect = none
Preamp Shield-2 (near AFE2 CH4-) connect = none
Preamp CH Gnd (near SW1) connect = none

# TSM Utility Bd Configuration information
#
# Temperature Sensor configuration
Use temperature Sensor 2 for Focalplane temperature control

Temperature Sensor One is a Two Wire Diode configure as follows:
Install size 0805 resistor R44 (0 ohms)
Install size 0805 resistor R42 (0 ohms)

Temperature Sensor Two is a Two Wire Diode configure as follows:
Install size 0805 resistor R40 (0 ohms)
Install size 0805 resistor R38 (0 ohms)

# Dewar heater configuration
Using a 25.0 Ohm internal Dewar heater resistor
Connect J1:E to Util-E:E12 and Connect J1:G Util-E:E13
or Connect J1:H to Util-E:E12 and Connect J1:K Util-E:E13

Configure heater current to 0.239 Amps by installing jumper JP3

# TSM Utility Cables configuration
No Backside bias usage specified
Connect Preflash/Shutter cable between Utility board and Lemo connector
Build external Preflash/Shutter cable to drawing:

# TSM Grounding configuration
Utility Bd Shield (E8) connect none
Utility Bd Chassis Grnd (CHS_GND) connect none
```

```
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#
# System Description Last Saved 20111207:1239
#
# Responsible Engineer: Peter Moore
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#
# Report Printed: 20111216:0842
#
# Defaults from chiron.ini file

## Defaults from chiron_SetVoltages.mod file

## Defaults for chiron_DefaultSetup.mod file
```