

REV v7 Changes  
 HAM3-4 SUS/4WLV Controls Wiring - REV v7  
 7 of the system wiring includes HAM3 and HAM4 Op Lev signal channels signal path.  
 (See page 18)

MC2-TOP

MC2 RIGHT

MC2 SIDE

PR2 TOP1

PR2 TOP2

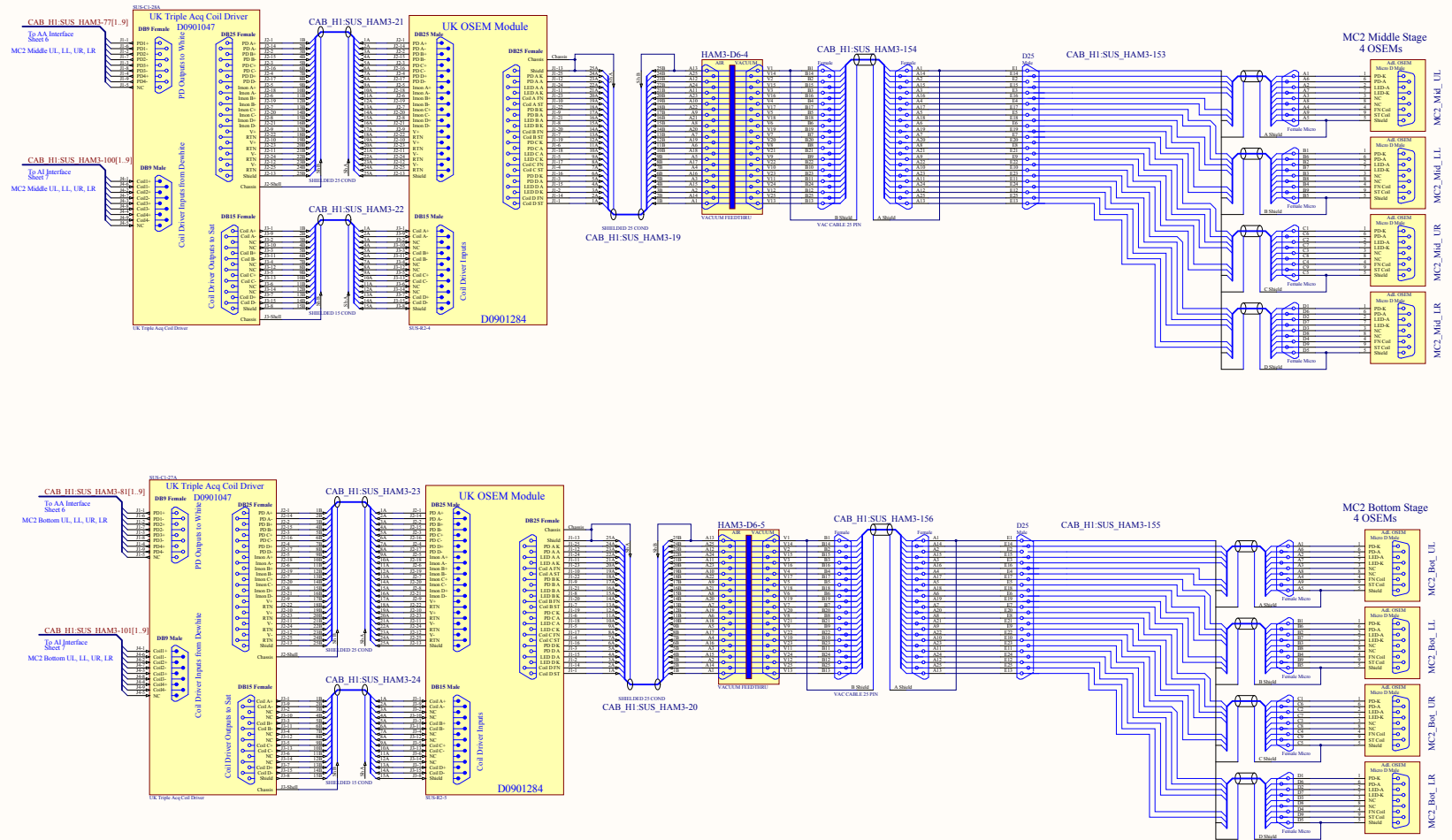
PR2 TOP3

PR2 LEFT

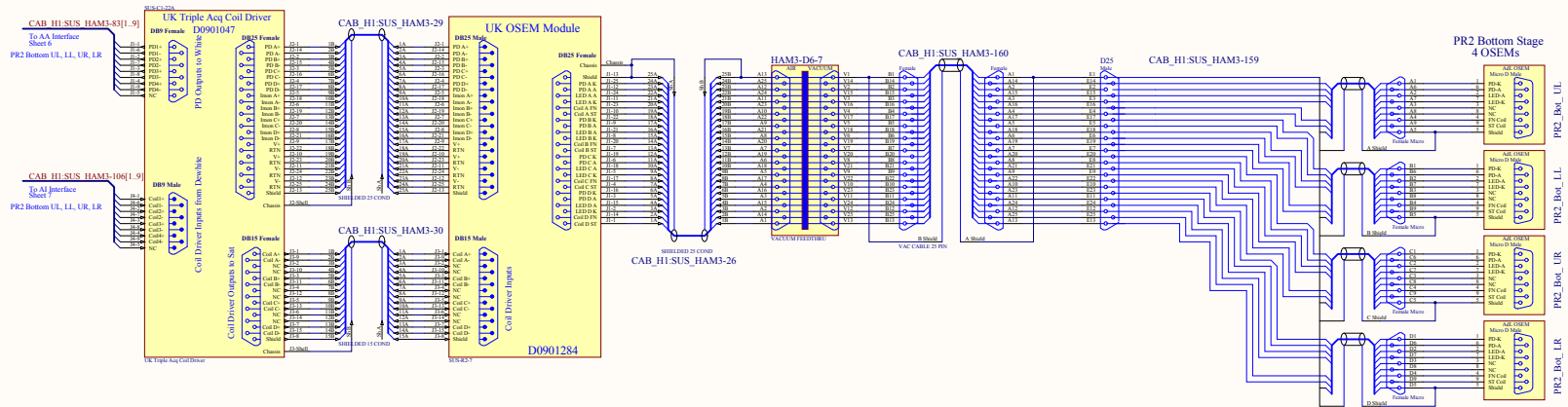
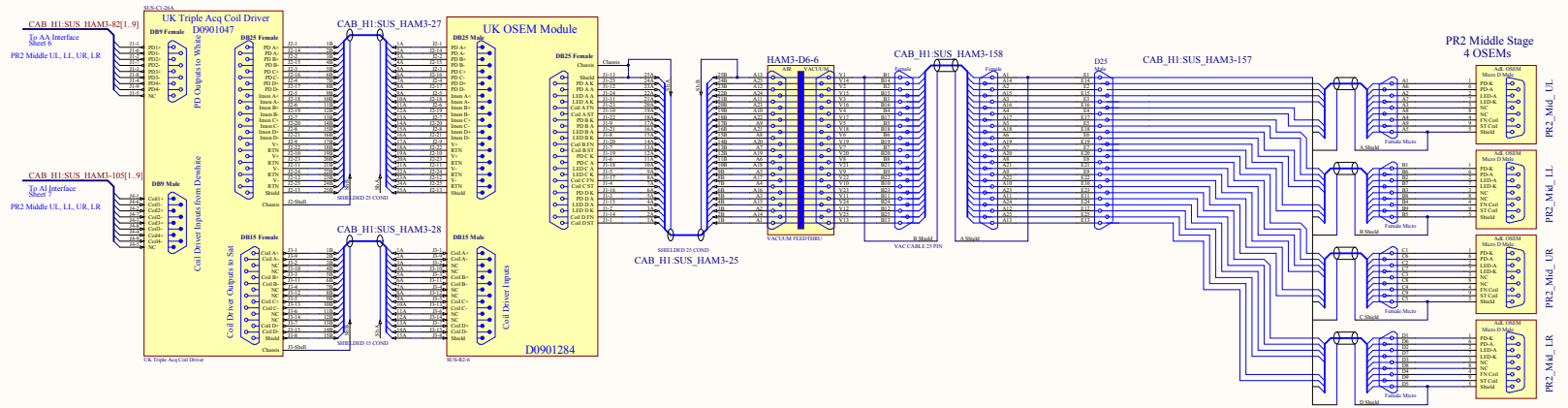
PR2 RIGHT

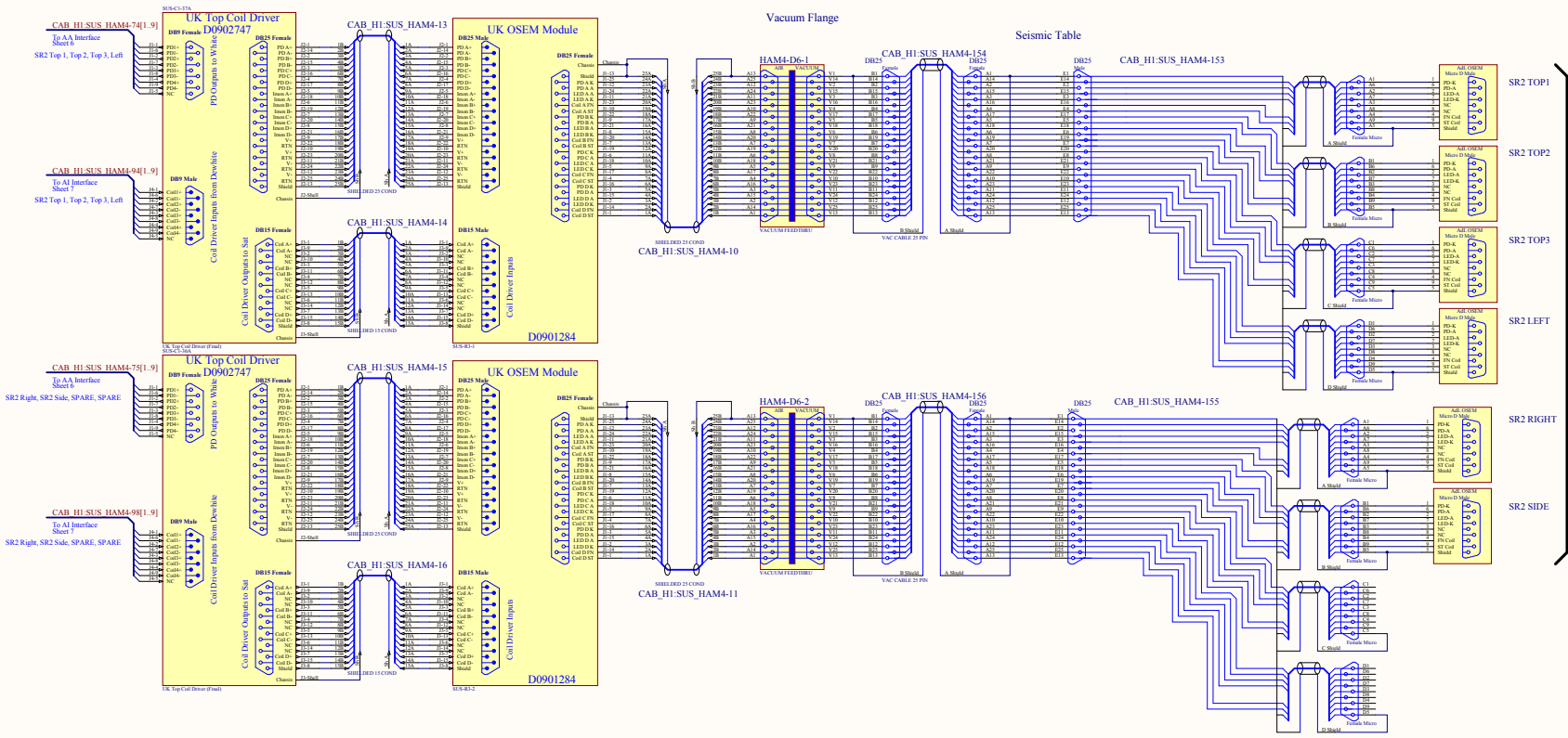
PR2 SIDE

## MC2 Middle and Bottom Stages



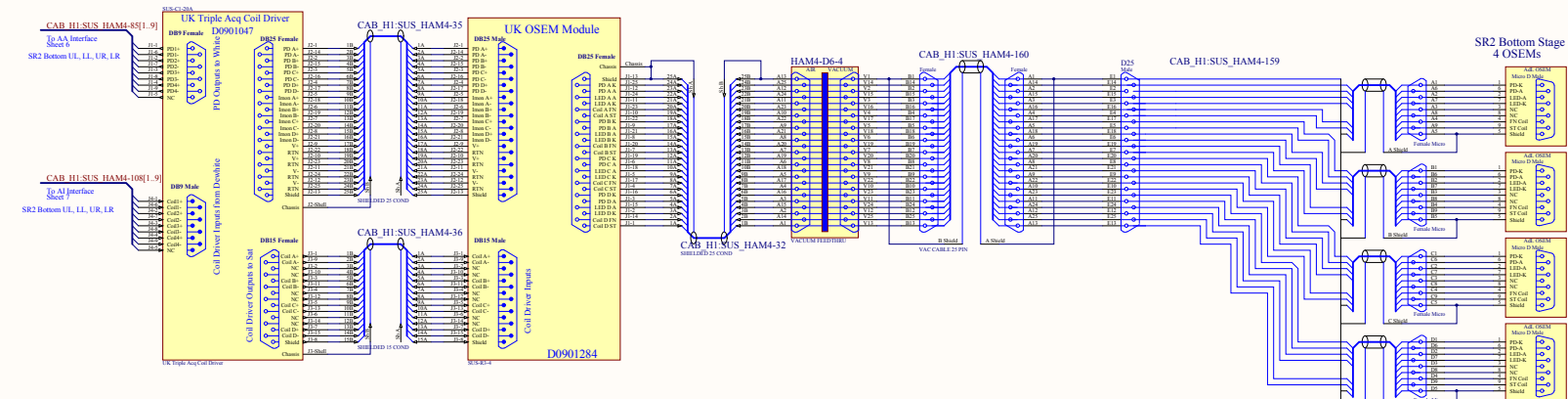
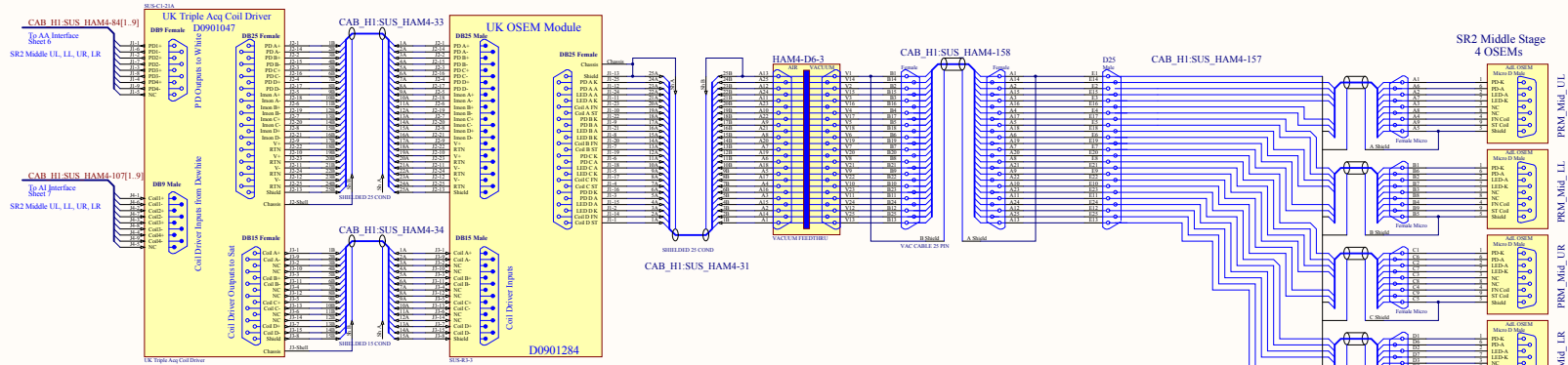
## PR2 Middle and Bottom Stages



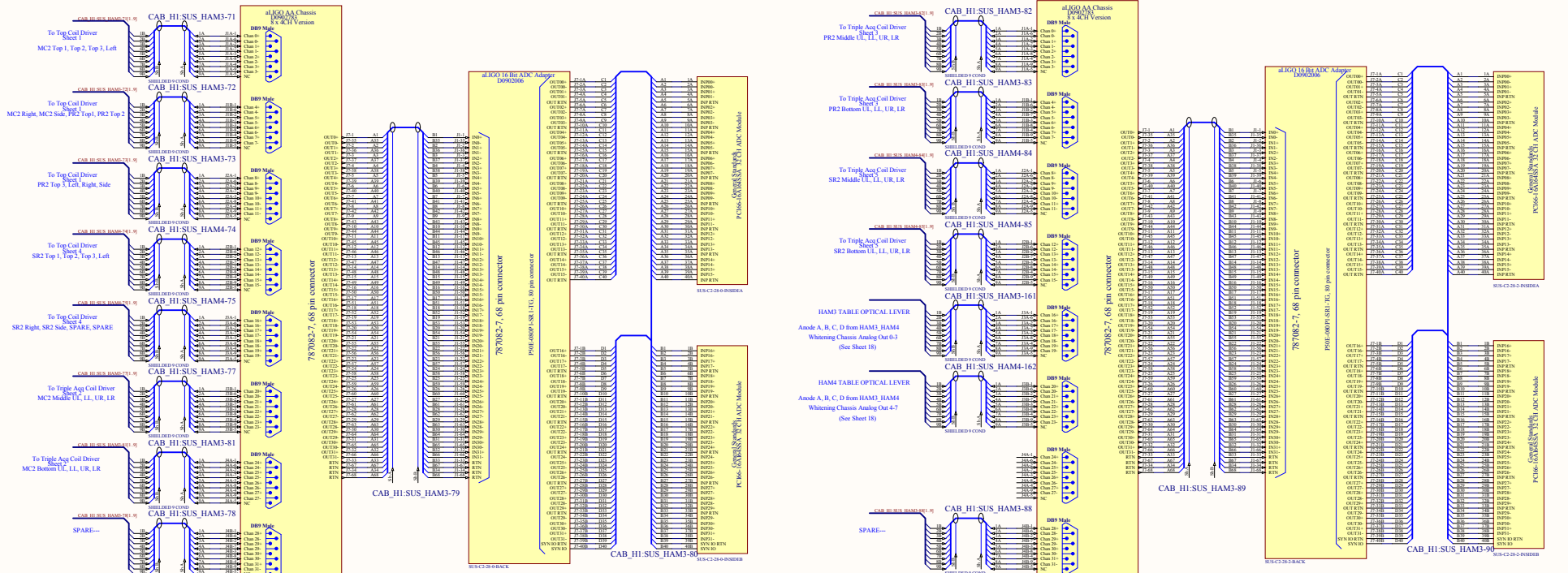


SR2-TOP

## SR2 Middle and Bottom Stages



# HAM3-4 SUS Front End CPU ADC Connections



**ADC Channel Index  
HAM3-4 SUS Front End**

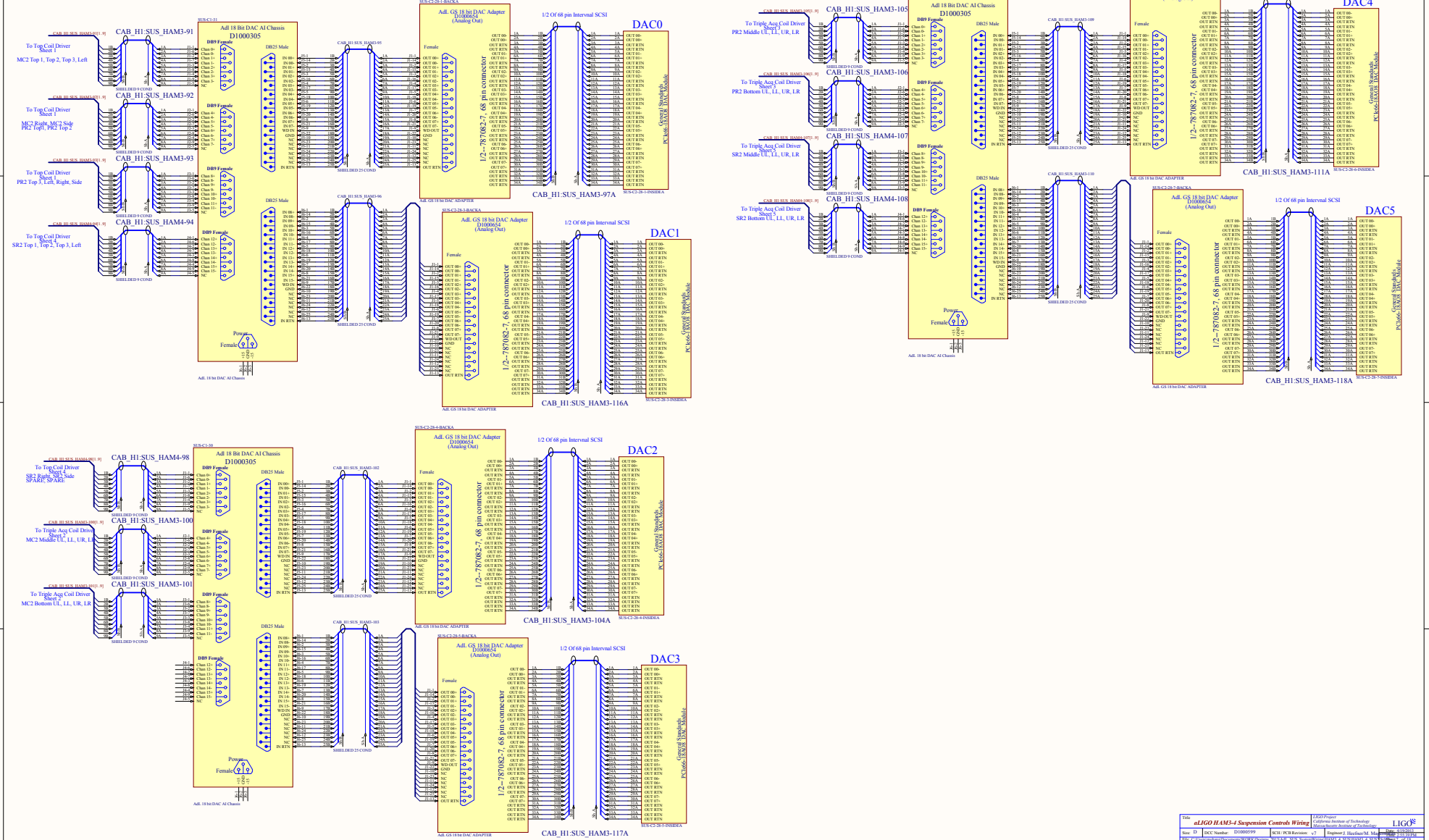
|                        |
|------------------------|
| E101-MC2 TOP1          |
| E111-MC2 TOP2          |
| E121-MC2 TOP3          |
| E131-MC2 TOP4          |
| E141-MC2 RIGHT         |
| E151-MC2 S200          |
| E161-PR2 TOP1          |
| E171-PR2 TOP2          |
| E181-PR2 TOP3          |
| E191-PR2 TOP4          |
| E201-PR2 RIGHT         |
| E211-PR2 S200          |
| E221-SR2 TOP1          |
| E231-SR2 TOP2          |
| E241-SR2 TOP3          |
| E251-SR2 TOP4          |
| E261-SR2 RIGHT         |
| E271-SR2 S200          |
| E281-Spare             |
| E291-MC2 MID L         |
| E301-MC2 MID R         |
| E311-MC2 MID L         |
| E321-MC2 MID R         |
| E331-MC2 BOT L         |
| E341-MC2 BOT R         |
| E351-MC2 BOT L         |
| E361-MC2 BOT R         |
| E371-Spare             |
| E381-Spare             |
| E391-Spare             |
| E401-Spare             |
| E411-LP9 (Darkroom ??) |

**ADC Channel Index  
HAM3-4 SUS Front End**

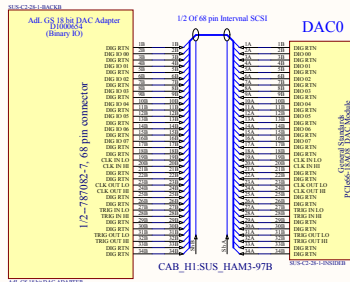
|                           |
|---------------------------|
| E421-PR2 MID L            |
| E431-PR2 MID R            |
| E441-PR2 MID L            |
| E451-PR2 MID R            |
| E461-PR2 BOT L            |
| E471-PR2 BOT R            |
| E481-SR2 MID L            |
| E491-SR2 MID R            |
| E501-SR2 BOT L            |
| E511-SR2 BOT R            |
| E521-SR2 BOT L            |
| E531-SR2 BOT R            |
| E541-SR2 BOT L            |
| E551-SR2 BOT R            |
| E561-HAM3 Opt Lev Anode A |
| E571-HAM3 Opt Lev Anode B |
| E581-HAM3 Opt Lev Anode C |
| E591-HAM3 Opt Lev Anode D |
| E601-HAM3 Opt Lev Anode A |
| E611-HAM3 Opt Lev Anode B |
| E621-HAM3 Opt Lev Anode C |
| E631-HAM3 Opt Lev Anode D |
| E641-Spare                |
| E651-Spare                |
| E661-Spare                |
| E671-Spare                |
| E681-Spare                |
| E691-Spare                |
| E701-Spare                |

# HAM3-4 SUS Front End CPU DAC Connections

See Sheet 8 for DAC Binary Connections and Channel Lists



## HAM3-4 SUS Front End CPU DAC BIO Connections and Channel Assignments



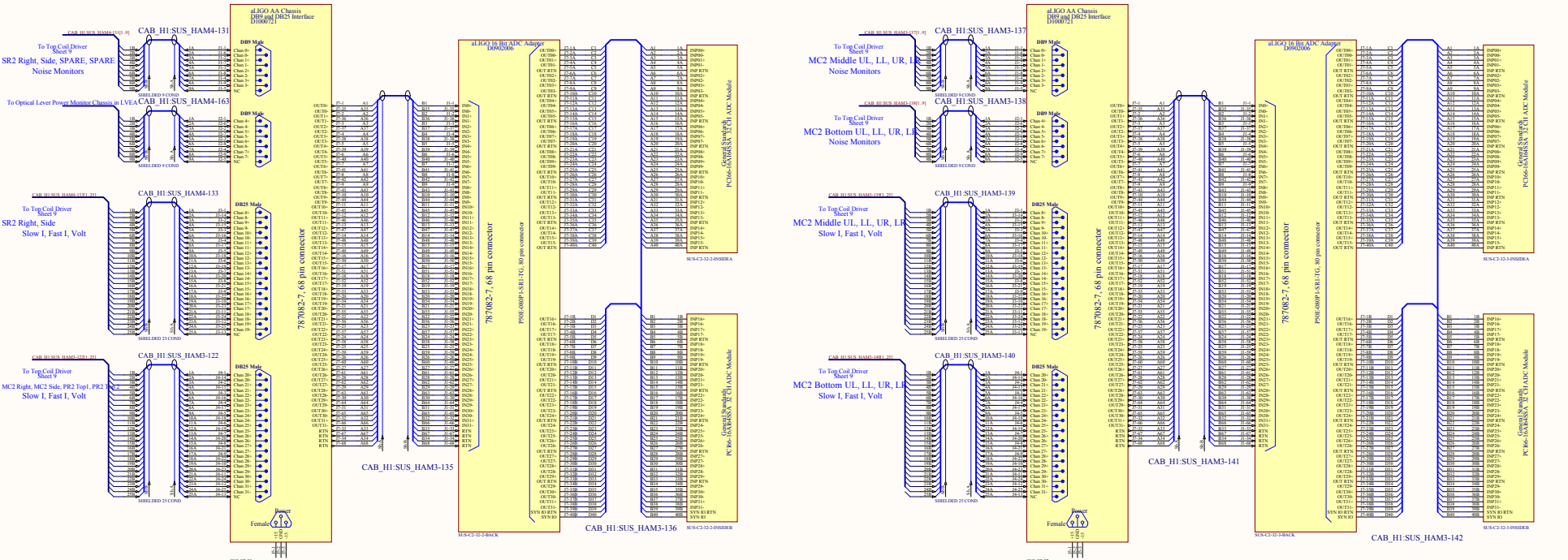


# Coil Driver Monitor Connections





# HAM3-4 SUS Monitor CPU ADC 2 & 3 Connections



**ADC2 Channel Index**  
HAM3-4 SUS Monitor

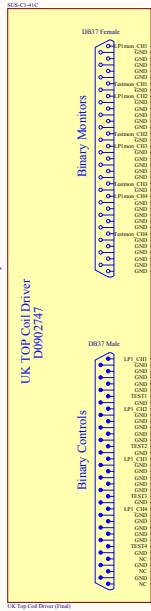
|                           |
|---------------------------|
| CH0- SR2 RIGHT NM         |
| CH1- SR2 SIDE NM          |
| CH2- SPARE                |
| CH3- SPARE                |
| CH4- HAM3-OPT LEV PWR MON |
| CH5- HAM3-OPT LEV PWR MON |
| CH6- SPARE                |
| CH7- SPARE                |
| CH8- SR2 RIGHT SLOW I     |
| CH9- SR2 RIGHT FAST I     |
| CH10- SR2 RIGHT VOLT      |
| CH11- SR2 SIDE SLOW I     |
| CH12- SR2 SIDE FAST I     |
| CH13- SR2 SIDE VOLT       |
| CH14- SPARE               |
| CH15- SPARE               |
| CH16- SPARE               |
| CH17- SPARE               |
| CH18- SPARE               |
| CH19- SPARE               |
| CH20- SPARE               |
| CH21- MC2 RIGHT SLOW I    |
| CH22- MC2 RIGHT FAST I    |
| CH23- MC2 RIGHT VOLT MON  |
| CH24- MC2 SIDE SLOW I     |
| CH25- MC2 SIDE FAST I     |
| CH26- MC2 SIDE VOLT MON   |
| CH27- PR2 TOP SLOW I      |
| CH28- PR2 TOP FAST I      |
| CH29- PR2 TOP VOLT MON    |
| CH30- PR2 TOP SLOW I      |
| CH31- PR2 TOP FAST I      |
| CH32- PR2 TOP VOLT MON    |

**ADC3 Channel Index**  
HAM3-4 SUS Monitor

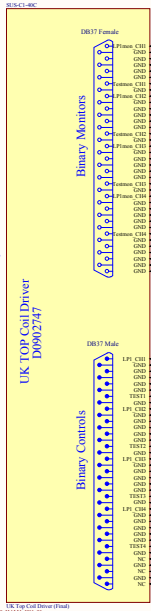
|                         |
|-------------------------|
| CH0- MC2 MIDDLE NM      |
| CH1- MC2 MIDDLE NM      |
| CH2- MC2 MIDDLE NM      |
| CH3- MC2 MIDDLE NM      |
| CH4- MC2 BOTTOM UL NM   |
| CH5- MC2 BOTTOM UL NM   |
| CH6- MC2 BOTTOM UL NM   |
| CH7- MC2 BOTTOM UL NM   |
| CH8- MC2 MIDDLE SLOW I  |
| CH9- MC2 MIDDLE SLOW I  |
| CH10- MC2 MIDDLE SLOW I |
| CH11- MC2 MIDDLE SLOW I |
| CH12- MC2 MIDDLE SLOW I |
| CH13- MC2 MIDDLE SLOW I |
| CH14- MC2 MIDDLE SLOW I |
| CH15- MC2 MIDDLE SLOW I |
| CH16- MC2 MIDDLE SLOW I |
| CH17- MC2 MIDDLE SLOW I |
| CH18- MC2 MIDDLE SLOW I |
| CH19- MC2 MIDDLE SLOW I |
| CH20- MC2 MIDDLE SLOW I |
| CH21- MC2 MIDDLE SLOW I |
| CH22- MC2 MIDDLE SLOW I |
| CH23- MC2 MIDDLE SLOW I |
| CH24- MC2 MIDDLE SLOW I |
| CH25- MC2 MIDDLE SLOW I |
| CH26- MC2 MIDDLE SLOW I |
| CH27- MC2 MIDDLE SLOW I |
| CH28- MC2 MIDDLE SLOW I |
| CH29- MC2 MIDDLE SLOW I |
| CH30- MC2 MIDDLE SLOW I |
| CH31- MC2 MIDDLE SLOW I |



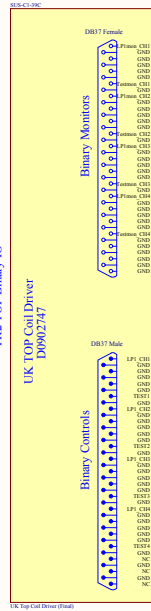
MC2 TOP Binary IO



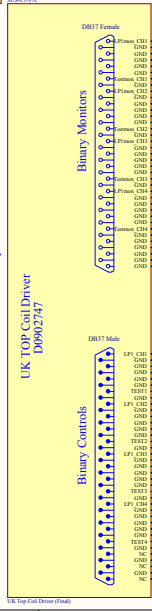
MC2-PR2 TOP Binary IO



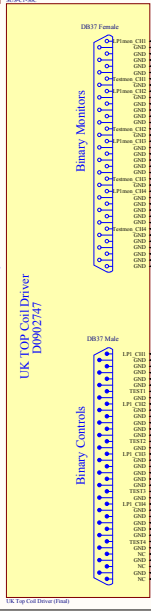
PR2 TOP Binary IO



SR2 TOP Binary IO



SR2 TOP Binary IO

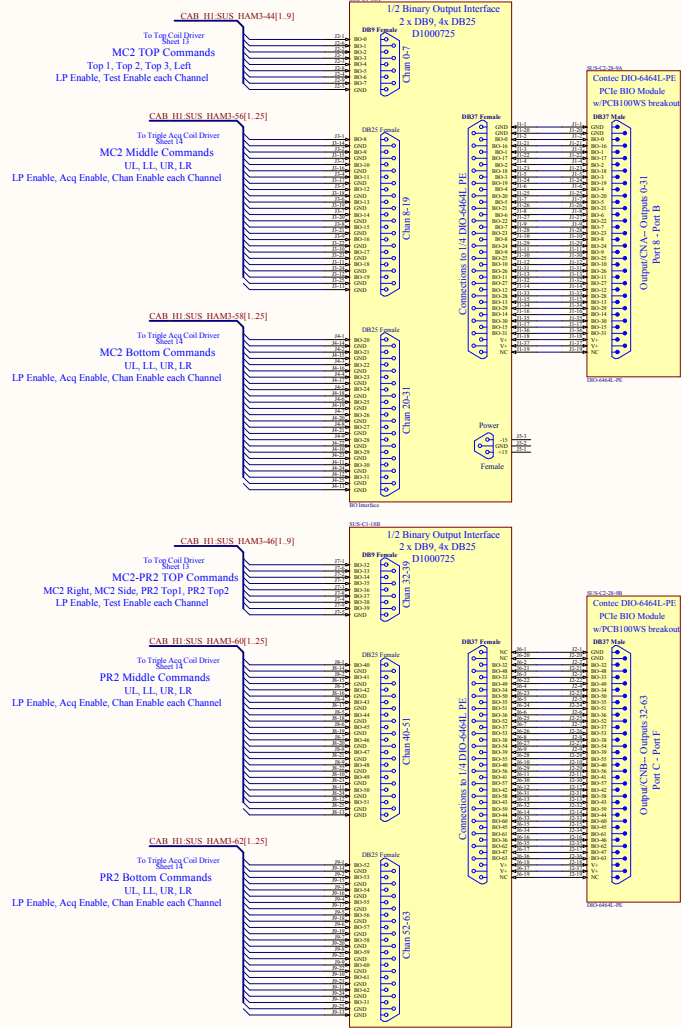


Maybe make a different special cable to get the SR2 BIO (8 chan) on this module into the 25 pin Dsub on sheet 16

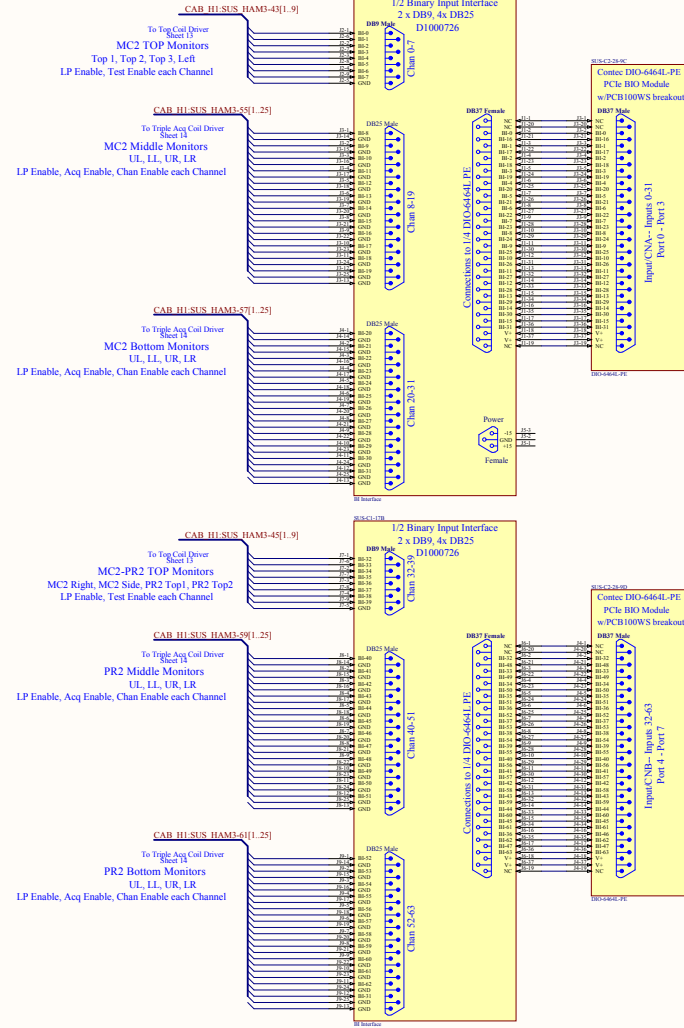


## Binary IO Connections for Contec DIO-6464L-PE Module 0

### Commands--- Binary Outs



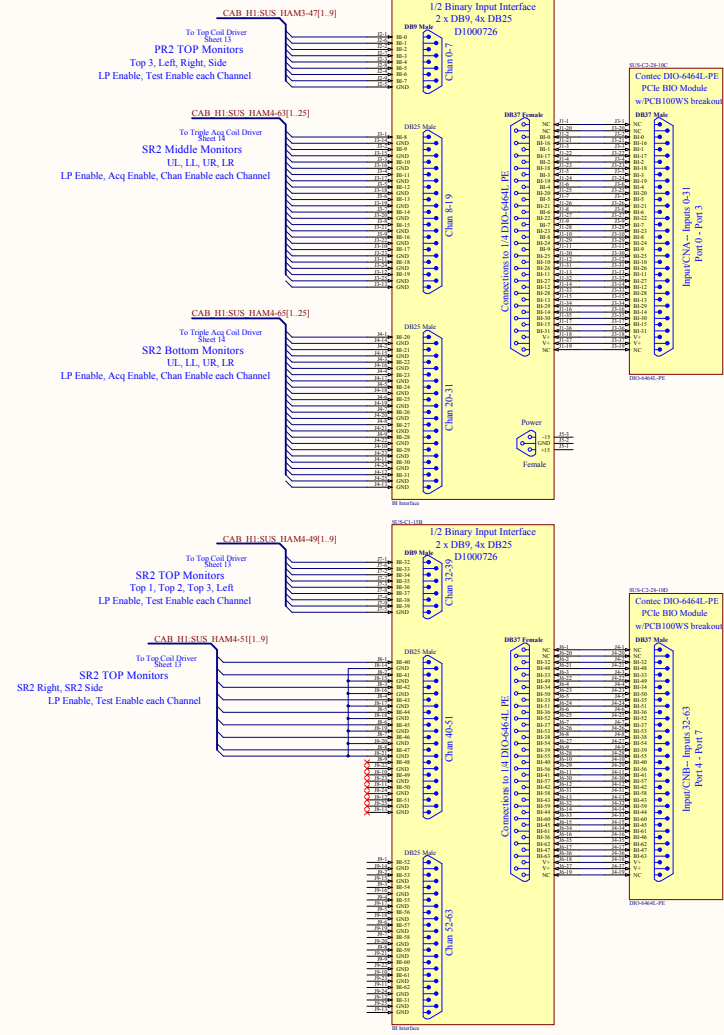
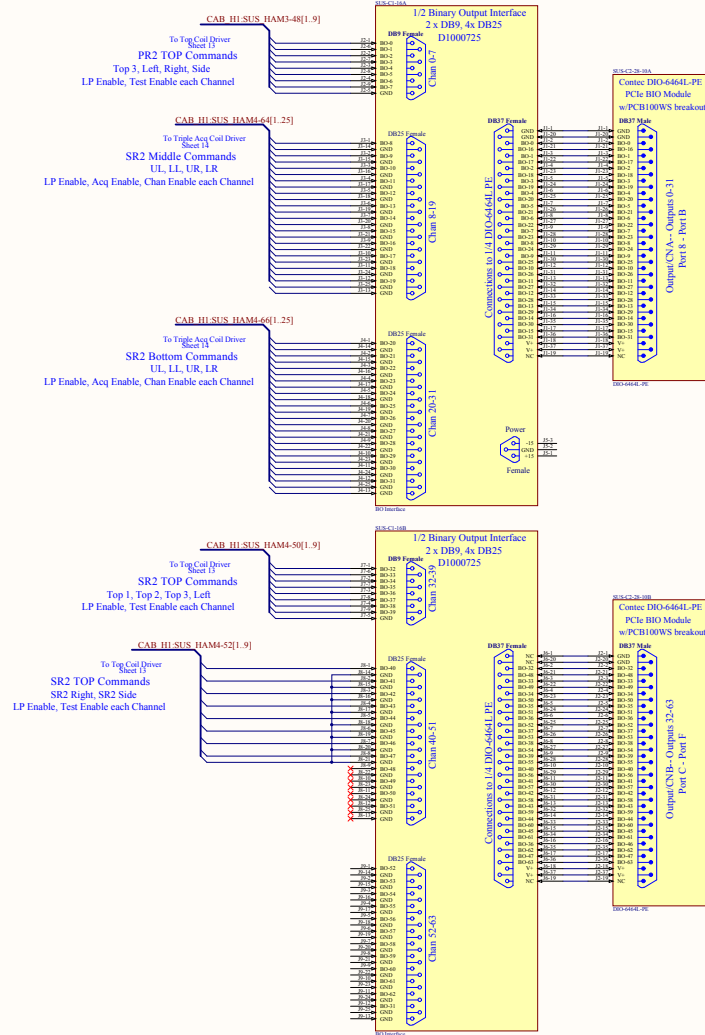
### Monitors--- Binary Ins



## Binary IO Connections for Contec DIO-6464L-PE Module 1

### Commands--- Binary Outs

### Monitors--- Binary Ins

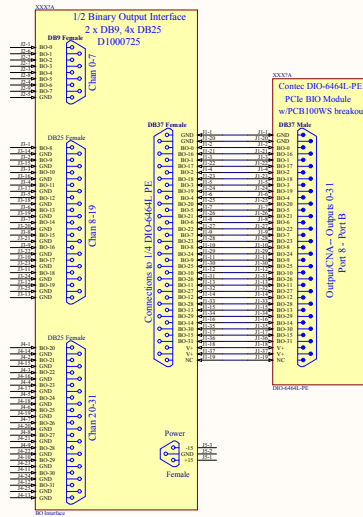


May want to rethink the bio interface for this page so that we can get second SR2 TOP BIO into modules

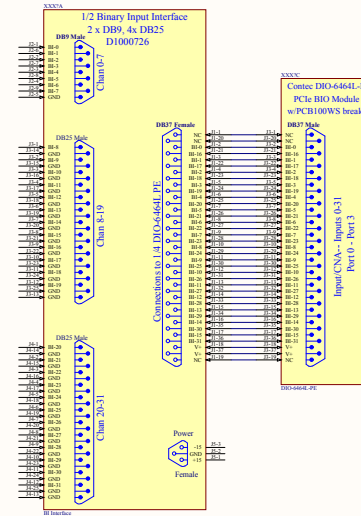


## Binary IO Connections for Contec DIO-6464L-PE Module 2

### Commands--- Binary Outs

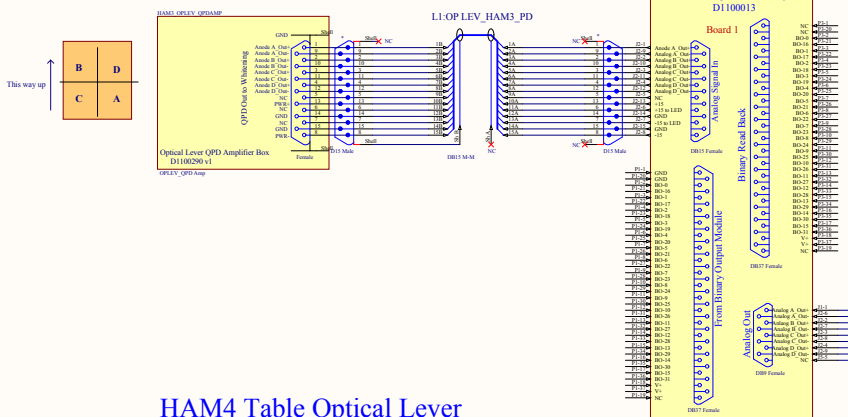


### Monitors--- Binary Ins



Don't need this if BIO is reworked on page 16 to handle SR2 TOP

### HAM3 Table Optical Lever



### HAM4 Table Optical Lever

