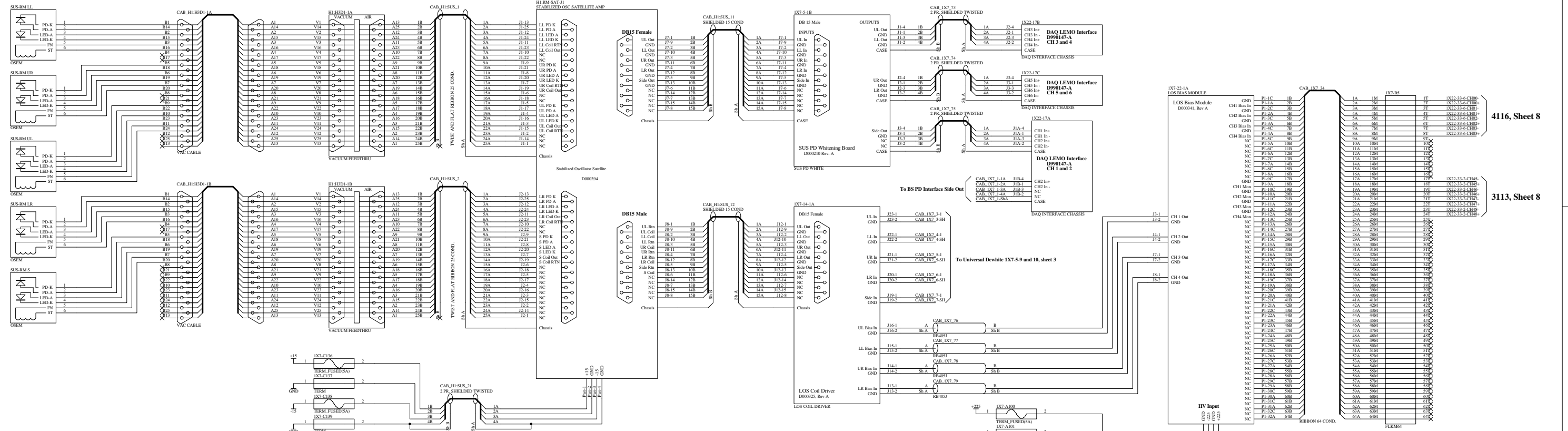


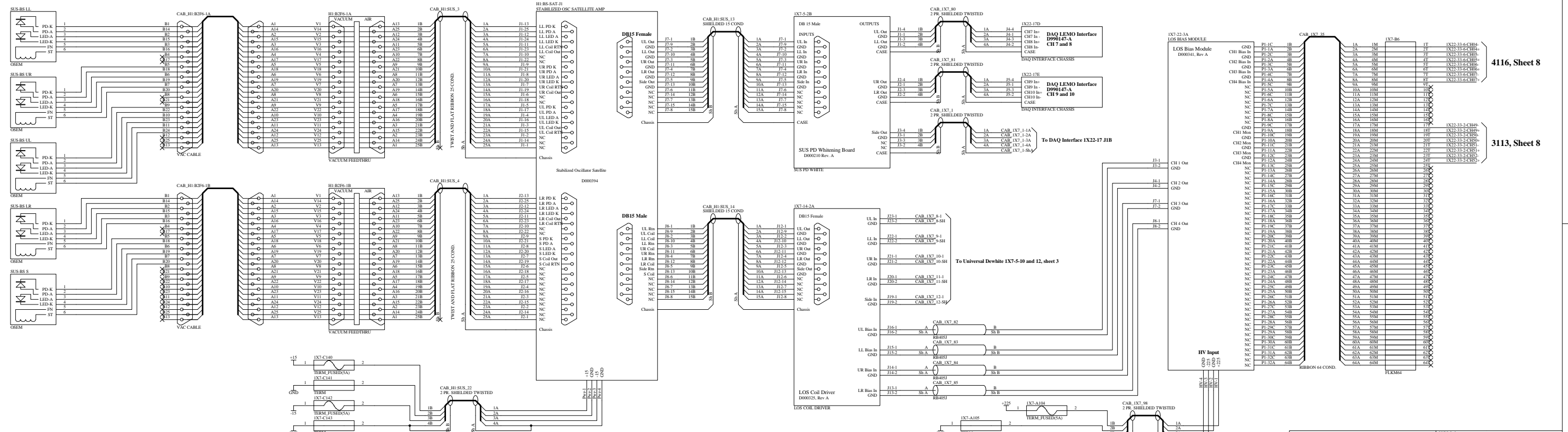
RM



4116, Sheet 8

3113, Sheet 8

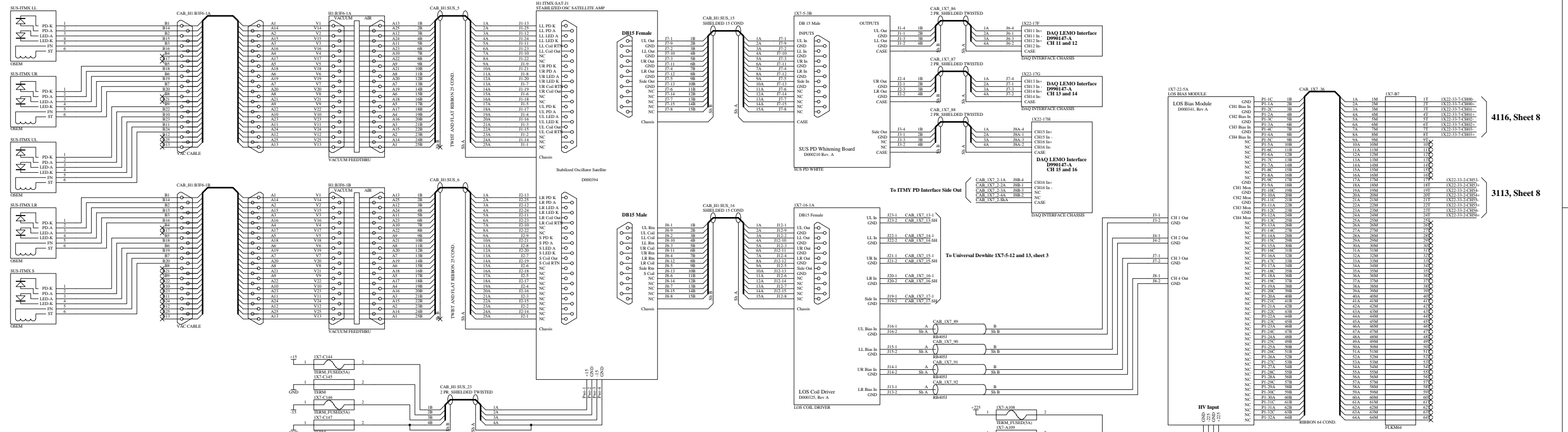
BS



4116, Sheet 8

3113, Sheet 8

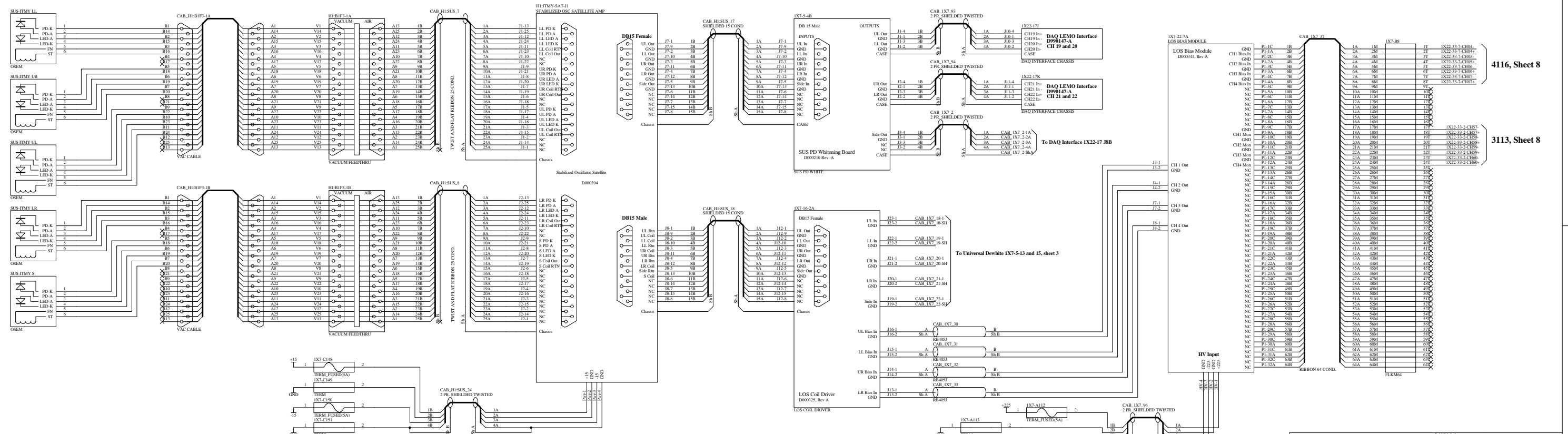
ITMX



4116, Sheet 8

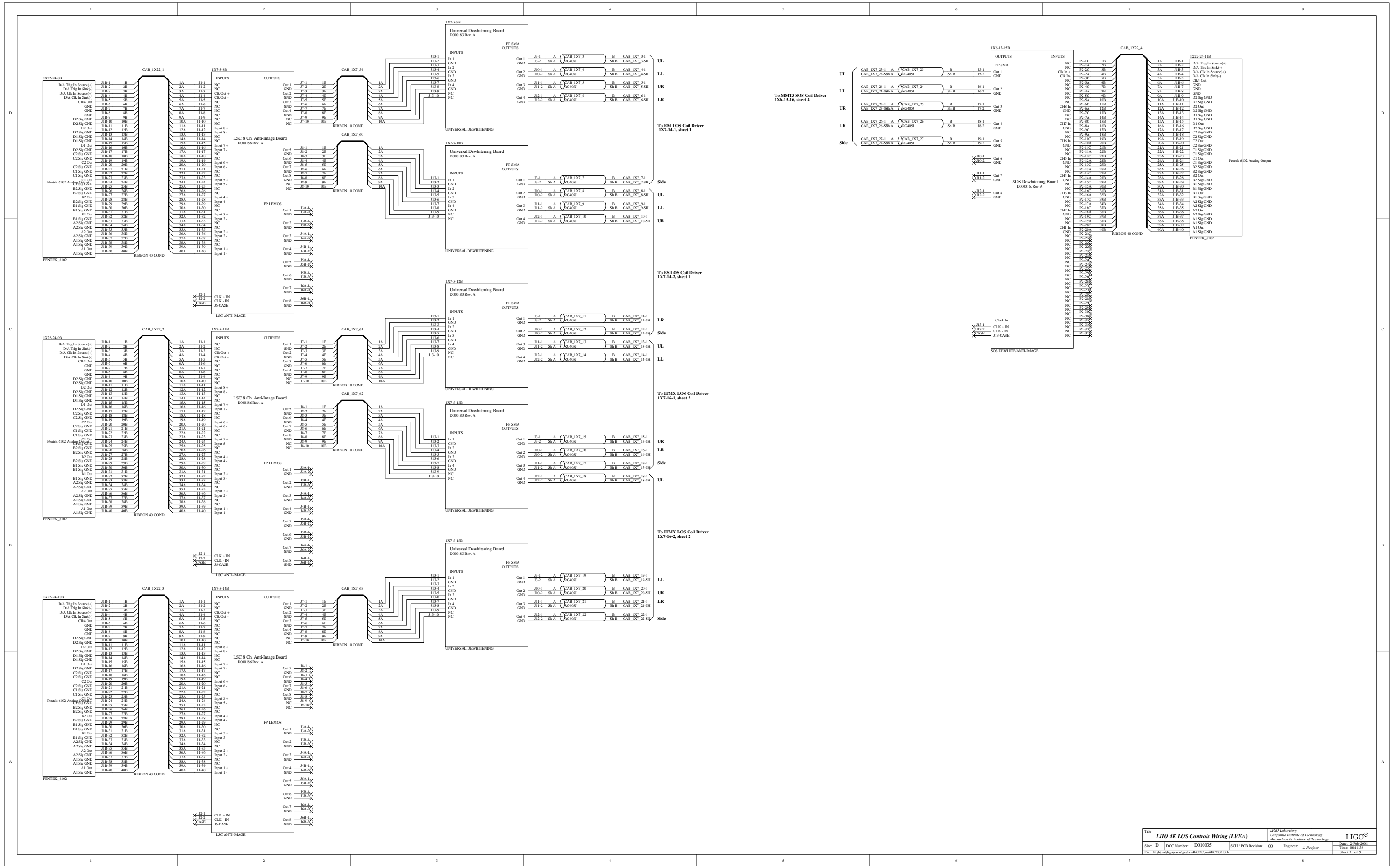
3113, Sheet 8

ITMY

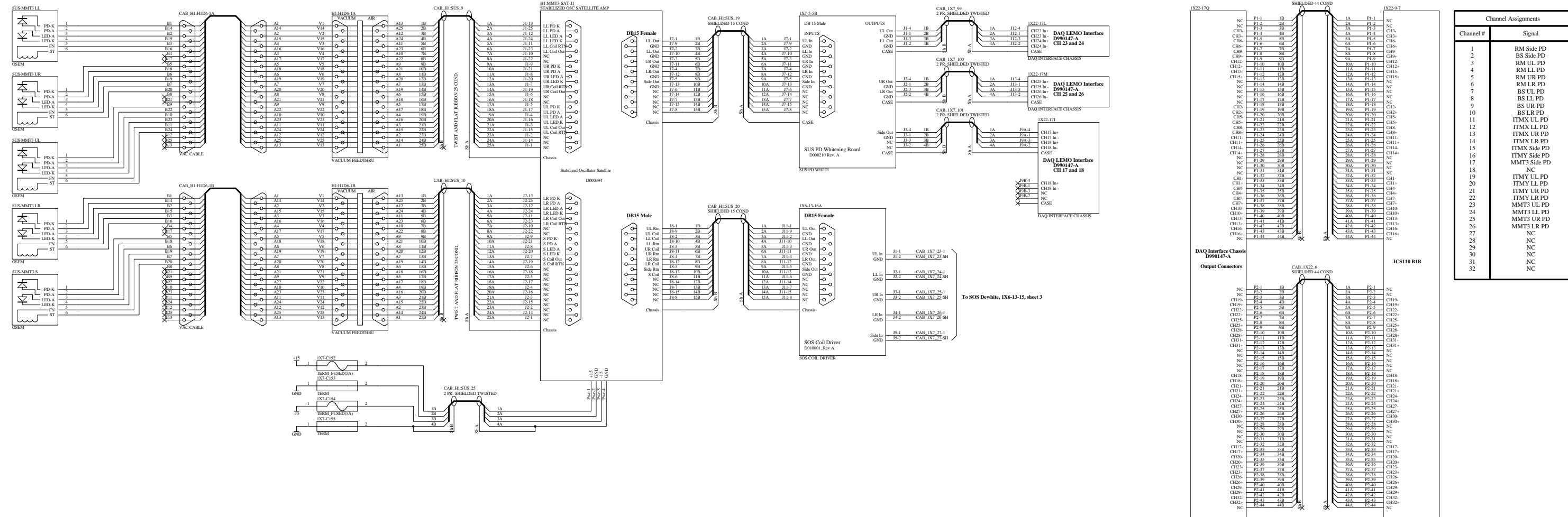


4116, Sheet 8

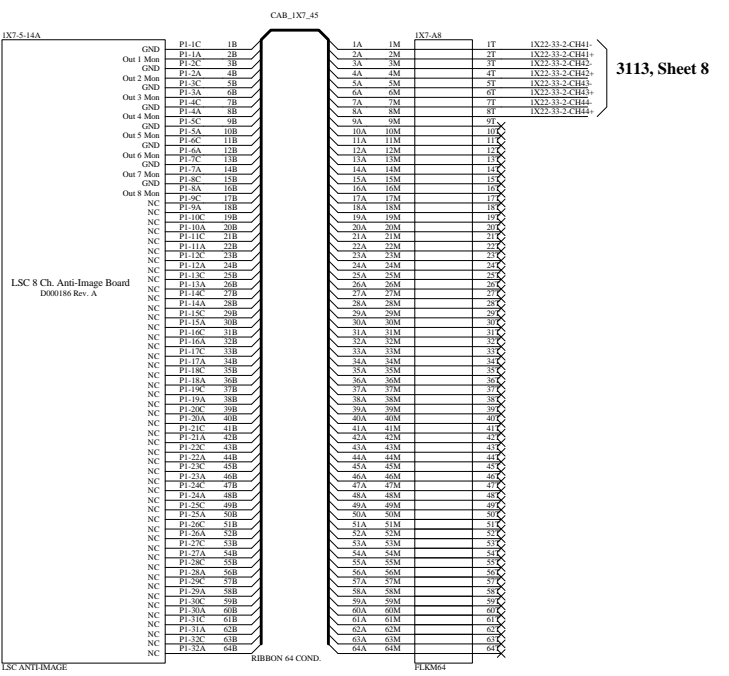
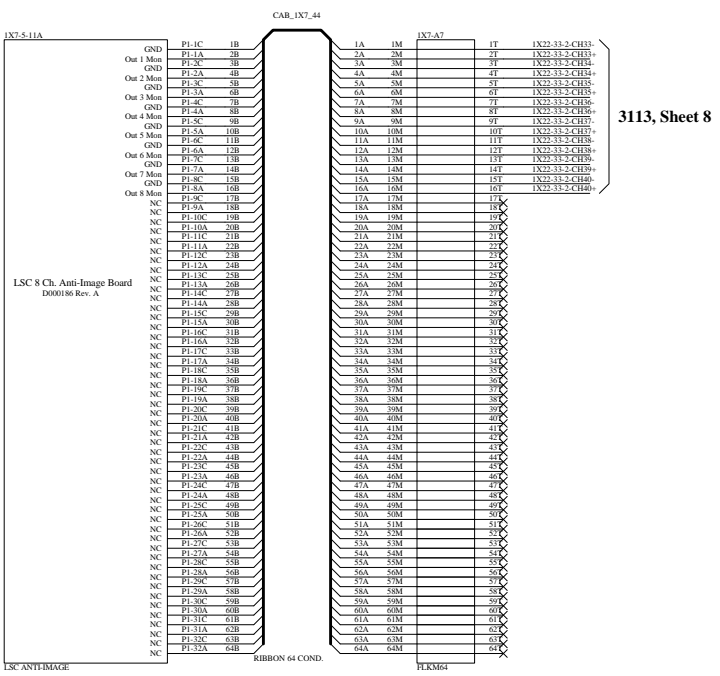
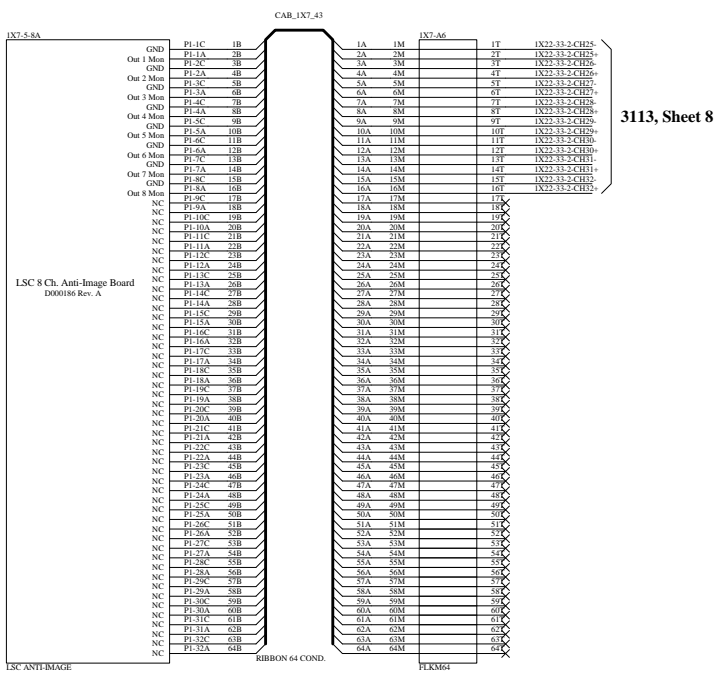
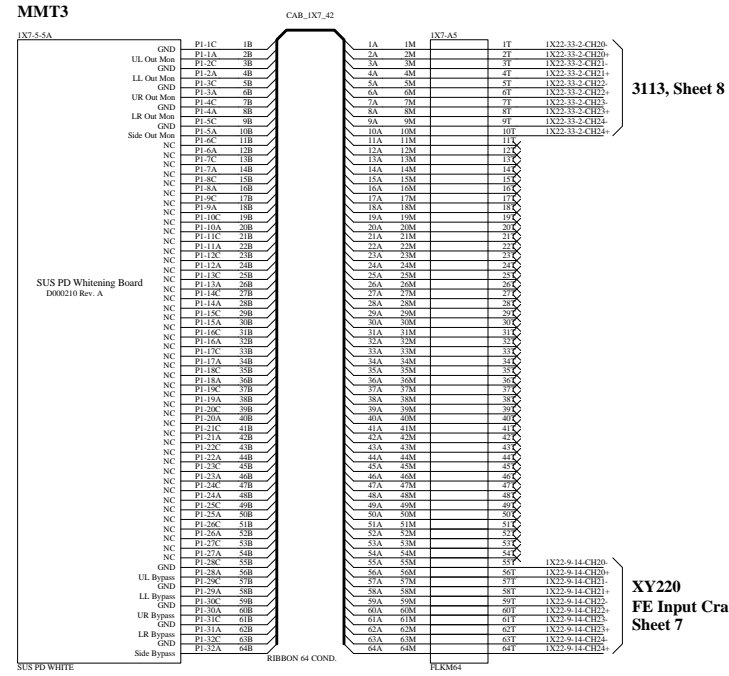
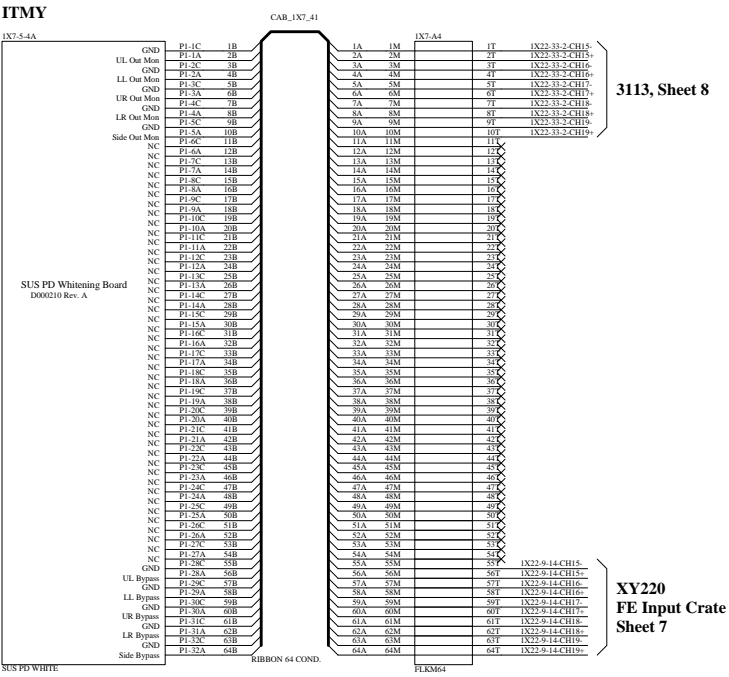
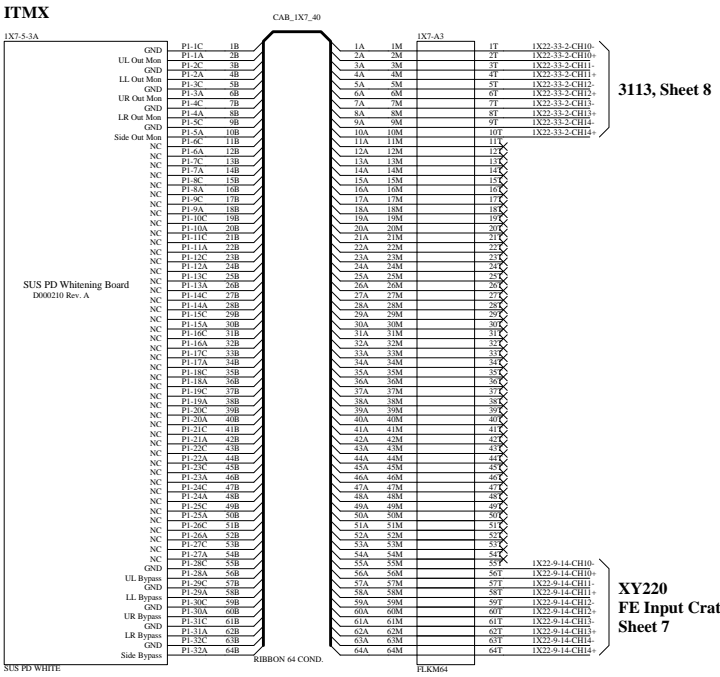
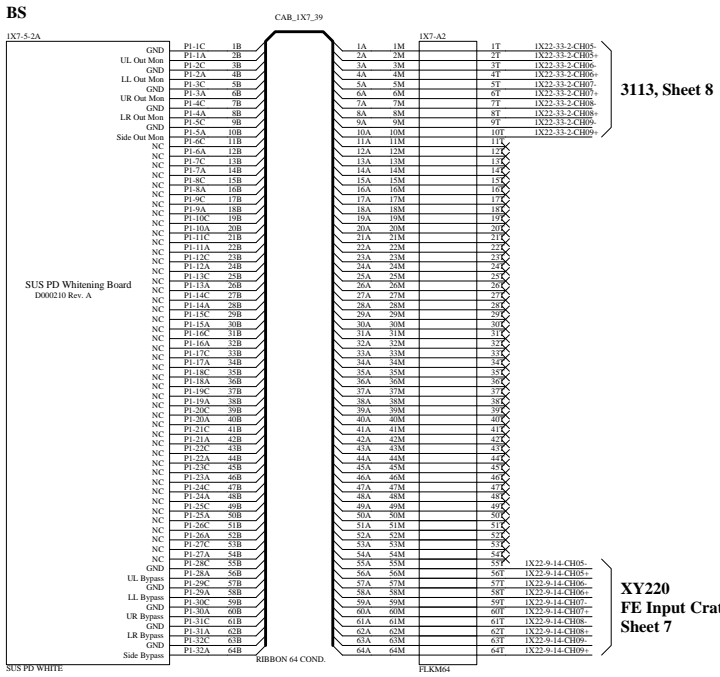
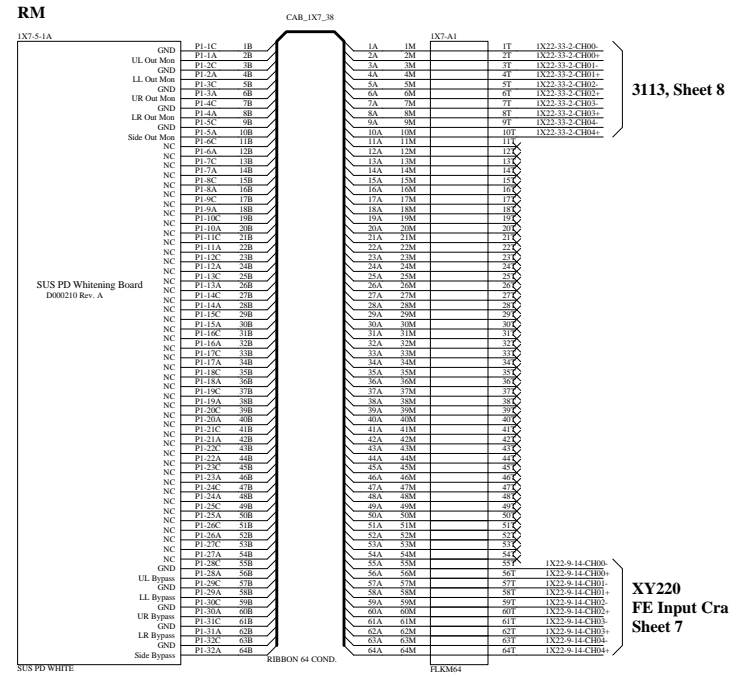
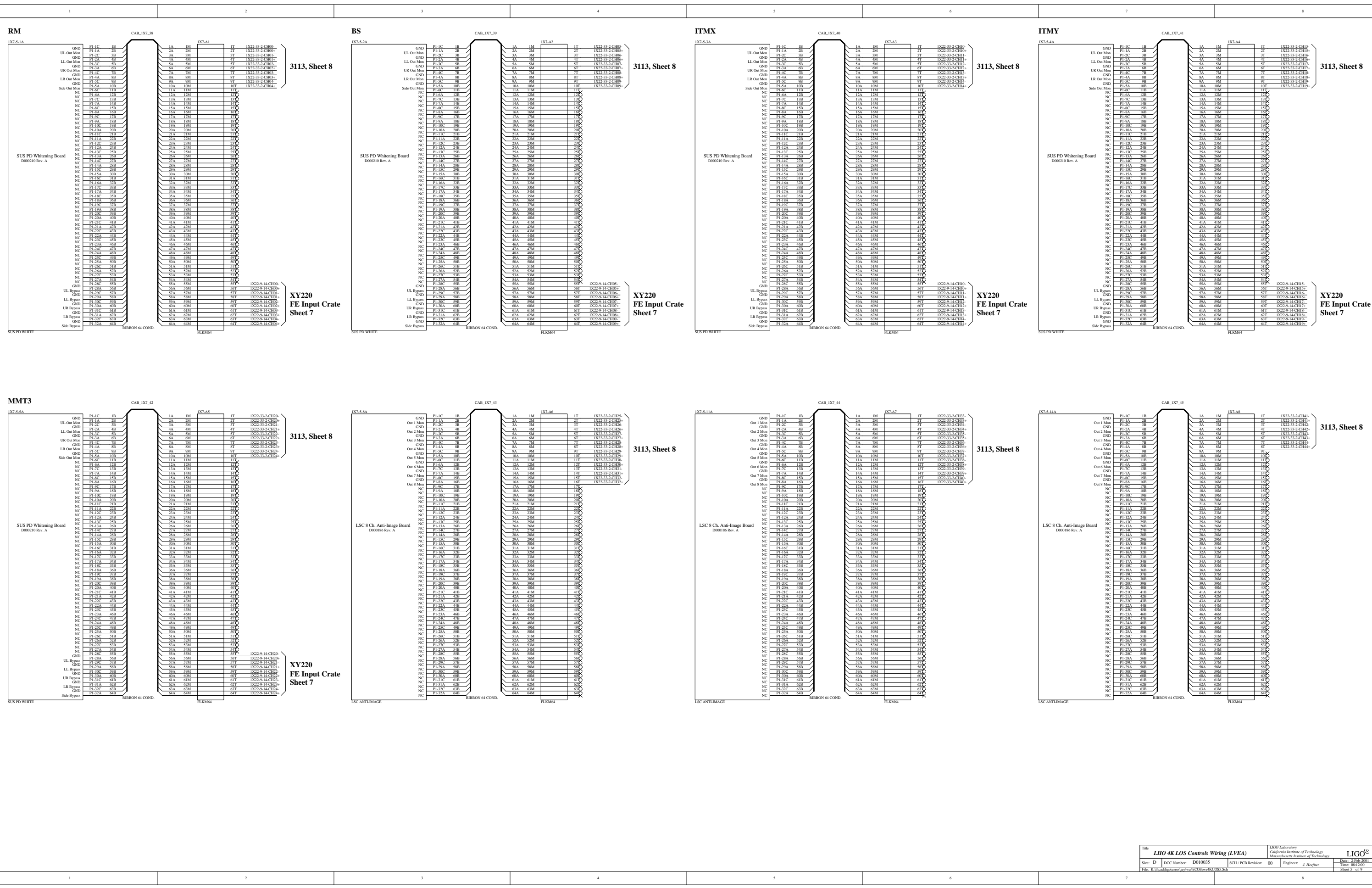
3113, Sheet 8

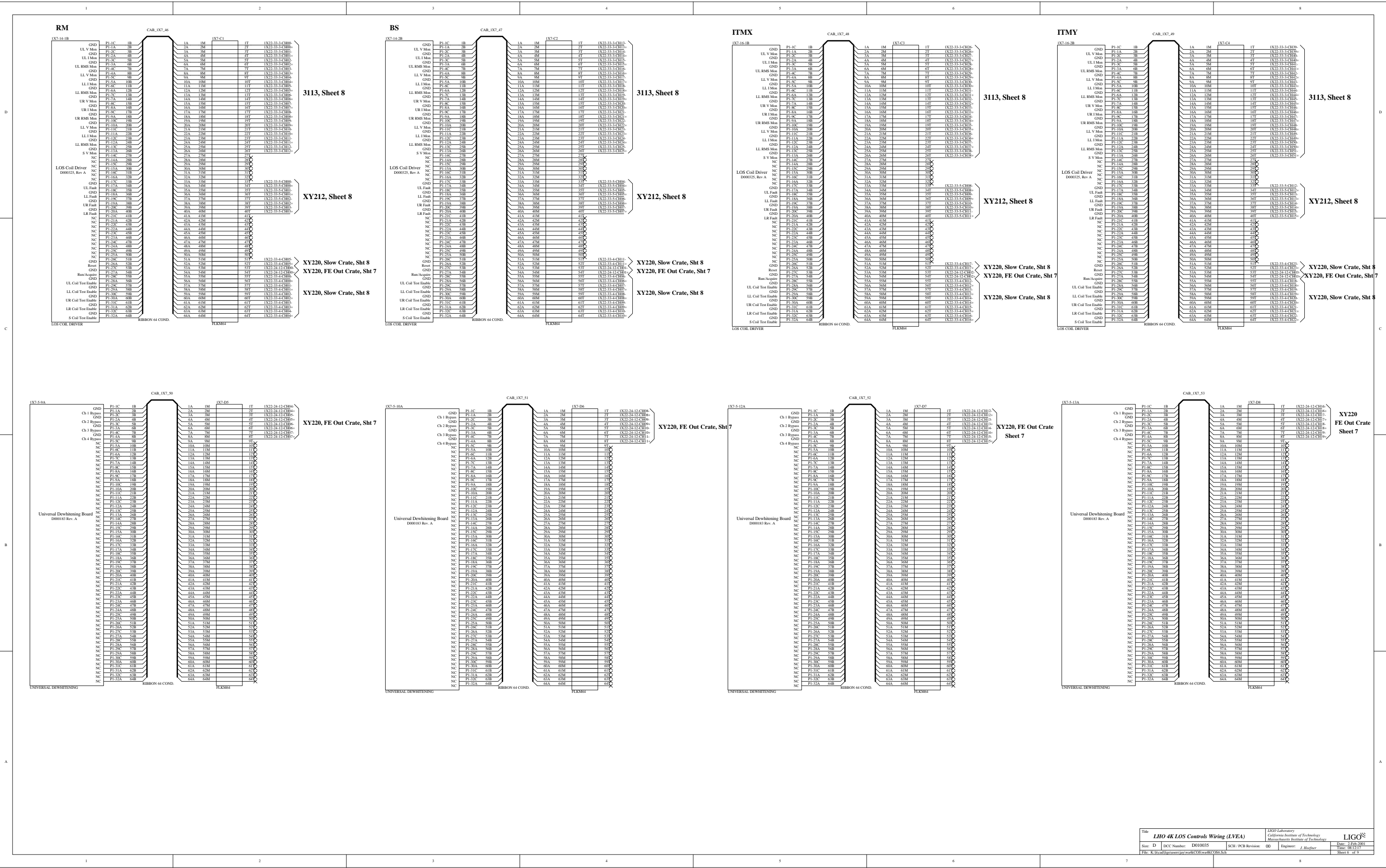


MMT3



| Channel Assignments | |
|---------------------|--------------|
| Channel # | Signal |
| 1 | RM Side PD |
| 2 | BS Side PD |
| 3 | RM UL PD |
| 4 | RM LL PD |
| 5 | RM UR PD |
| 6 | RM LR PD |
| 7 | BS UL PD |
| 8 | BS LL PD |
| 9 | BS UR PD |
| 10 | BS LR PD |
| 11 | ITMX UL PD |
| 12 | ITMX LL PD |
| 13 | ITMX UR PD |
| 14 | ITMX LR PD |
| 15 | ITMX Side PD |
| 16 | ITMY Side PD |
| 17 | MMT3 Side PD |
| 18 | NC |
| 19 | ITMY UL PD |
| 20 | ITMY LL PD |
| 21 | ITMY UR PD |
| 22 | ITMY LR PD |
| 23 | MMT3 UL PD |
| 24 | MMT3 LL PD |
| 25 | MMT3 UR PD |
| 26 | MMT3 LR PD |
| 27 | NC |
| 28 | NC |
| 29 | NC |
| 30 | NC |
| 31 | NC |
| 32 | NC |





3113, Sheet 8

3113, Sheet 8

3113, Sheet 8

3113, Sheet 8

XY212, Sheet 8

XY212, Sheet 8

XY212, Sheet 8

XY212, Sheet 8

XY220, Slow Crate, Sht 8

XY220, Slow Crate, Sht 8

XY220, Slow Crate, Sht 8

XY220, Slow Crate, Sht 8

XY220, FE Out Crate, Sht 7

XY220, FE Out Crate, Sht 7

XY220, FE Out Crate, Sht 7

XY220, FE Out Crate, Sht 7

XY220, Slow Crate, Sht 8

XY220, Slow Crate, Sht 8

XY220, Slow Crate, Sht 8

XY220, Slow Crate, Sht 8

XY220, FE Out Crate, Sht 7

XY220, FE Out Crate, Sht 7

XY220, FE Out Crate, Sheet 7

XY220, FE Out Crate, Sheet 7

XY220 in FE Input Crate 1X22-9-14

Table with columns for component labels (e.g., FI-1C, FI-1A) and values, representing the XY220 FE Out Crate wiring.

XY220 FE Out Crate Sheet 7

RM PD Int Sheet 5

BS PD Int Sheet 5

ITMX PD Int Sheet 5

ITMY PD Int Sheet 5

Table with columns for component labels (e.g., IM, IA, IM, IA) and values, representing the XY220 In FE Input Crate wiring.

ITMY PD Int Sheet 5

MMT3 PD Int Sheet 5

XY220_1

Table with columns for component labels (e.g., IM, IA, IM, IA) and values, representing the XY220 In FE Input Crate wiring.

XY220 In FE LOS Output Crate 1X22-12

RM Coil Driver, Sheet 6

BS Coil Driver, Sheet 6

ITMX Coil Driver, Sheet 6

ITMY Coil Driver, Sheet 6

Univ Dewhite, Sheet 7

Univ Dewhite, Sheet 7

Univ Dewhite, Sheet 7

Univ Dewhite, Sheet 7

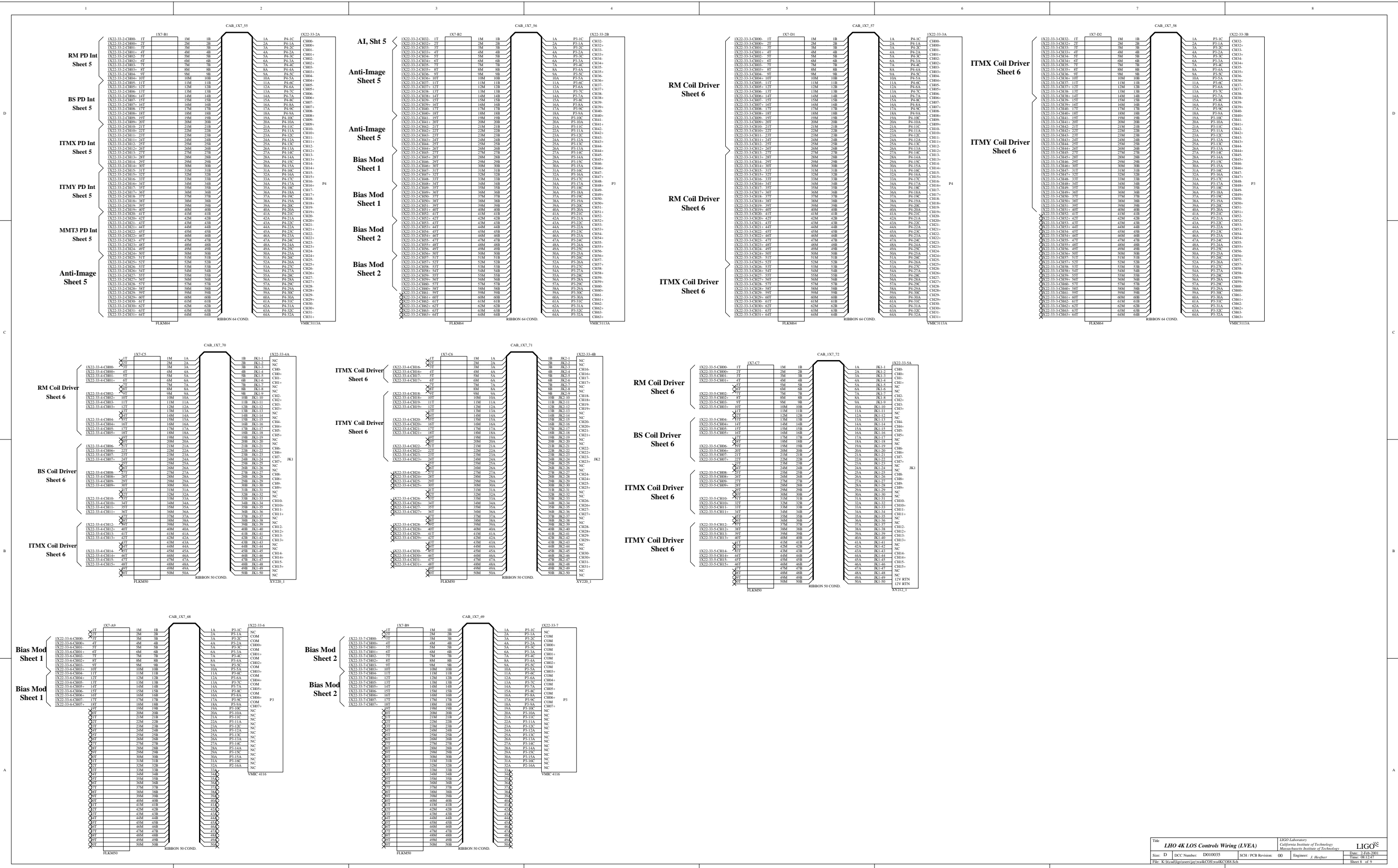
Table with columns for component labels (e.g., IM, IA, IM, IA) and values, representing the XY220 In FE LOS Output Crate wiring.

Univ Dewhite Sheet 6

Univ Dewhite Sheet 7

XY220_1

Table with columns for component labels (e.g., IM, IA, IM, IA) and values, representing the XY220 In FE LOS Output Crate wiring.



| Sheet | Component | IM | IB | IA | P4-1C |
|---------------------|----------------|----|----|----|-------|
| RM PD Int Sheet 5 | IX22-33-4-CH00 | 2T | 3M | 4A | P4-1C |
| BS PD Int Sheet 5 | IX22-33-4-CH00 | 2T | 3M | 4A | P4-1C |
| ITMX PD Int Sheet 5 | IX22-33-4-CH00 | 2T | 3M | 4A | P4-1C |
| ITMY PD Int Sheet 5 | IX22-33-4-CH00 | 2T | 3M | 4A | P4-1C |
| MMT3 PD Int Sheet 5 | IX22-33-4-CH00 | 2T | 3M | 4A | P4-1C |
| Anti-Image Sheet 5 | IX22-33-4-CH00 | 2T | 3M | 4A | P4-1C |

| Sheet | Component | IM | IB | IA | P4-1C |
|--------------------|----------------|----|----|----|-------|
| AI, Sht 5 | IX22-33-2-CH02 | 1T | 2M | 3A | P4-1C |
| Anti-Image Sheet 5 | IX22-33-2-CH02 | 1T | 2M | 3A | P4-1C |
| Anti-Image Sheet 5 | IX22-33-2-CH02 | 1T | 2M | 3A | P4-1C |
| Bias Mod Sheet 1 | IX22-33-2-CH02 | 1T | 2M | 3A | P4-1C |
| Bias Mod Sheet 2 | IX22-33-2-CH02 | 1T | 2M | 3A | P4-1C |
| Bias Mod Sheet 2 | IX22-33-2-CH02 | 1T | 2M | 3A | P4-1C |

| Sheet | Component | IM | IB | IA | P4-1C |
|--------------------------|----------------|----|----|----|-------|
| RM Coil Driver Sheet 6 | IX22-33-3-CH03 | 2T | 3M | 4A | P4-1C |
| RM Coil Driver Sheet 6 | IX22-33-3-CH03 | 2T | 3M | 4A | P4-1C |
| RM Coil Driver Sheet 6 | IX22-33-3-CH03 | 2T | 3M | 4A | P4-1C |
| ITMX Coil Driver Sheet 6 | IX22-33-3-CH03 | 2T | 3M | 4A | P4-1C |
| ITMX Coil Driver Sheet 6 | IX22-33-3-CH03 | 2T | 3M | 4A | P4-1C |

| Sheet | Component | IM | IB | IA | P4-1C |
|--------------------------|----------------|----|----|----|-------|
| ITMX Coil Driver Sheet 6 | IX22-33-3-CH03 | 2T | 3M | 4A | P4-1C |
| ITMX Coil Driver Sheet 6 | IX22-33-3-CH03 | 2T | 3M | 4A | P4-1C |
| ITMX Coil Driver Sheet 6 | IX22-33-3-CH03 | 2T | 3M | 4A | P4-1C |
| ITMX Coil Driver Sheet 6 | IX22-33-3-CH03 | 2T | 3M | 4A | P4-1C |
| ITMX Coil Driver Sheet 6 | IX22-33-3-CH03 | 2T | 3M | 4A | P4-1C |

| Sheet | Component | IM | IB | IA | P4-1C |
|--------------------------|----------------|----|----|----|-------|
| ITMX Coil Driver Sheet 6 | IX22-33-3-CH03 | 2T | 3M | 4A | P4-1C |
| ITMX Coil Driver Sheet 6 | IX22-33-3-CH03 | 2T | 3M | 4A | P4-1C |
| ITMX Coil Driver Sheet 6 | IX22-33-3-CH03 | 2T | 3M | 4A | P4-1C |
| ITMX Coil Driver Sheet 6 | IX22-33-3-CH03 | 2T | 3M | 4A | P4-1C |
| ITMX Coil Driver Sheet 6 | IX22-33-3-CH03 | 2T | 3M | 4A | P4-1C |

| Sheet | Component | IM | IB | IA | JK1-1 |
|--------------------------|----------------|----|----|----|-------|
| RM Coil Driver Sheet 6 | IX22-33-4-CH06 | 2T | 3M | 4A | JK1-1 |
| BS Coil Driver Sheet 6 | IX22-33-4-CH06 | 2T | 3M | 4A | JK1-1 |
| ITMX Coil Driver Sheet 6 | IX22-33-4-CH06 | 2T | 3M | 4A | JK1-1 |
| ITMX Coil Driver Sheet 6 | IX22-33-4-CH06 | 2T | 3M | 4A | JK1-1 |
| ITMX Coil Driver Sheet 6 | IX22-33-4-CH06 | 2T | 3M | 4A | JK1-1 |

| Sheet | Component | IM | IB | IA | JK1-1 |
|--------------------------|----------------|----|----|----|-------|
| ITMX Coil Driver Sheet 6 | IX22-33-4-CH06 | 2T | 3M | 4A | JK1-1 |
| ITMX Coil Driver Sheet 6 | IX22-33-4-CH06 | 2T | 3M | 4A | JK1-1 |
| ITMX Coil Driver Sheet 6 | IX22-33-4-CH06 | 2T | 3M | 4A | JK1-1 |
| ITMX Coil Driver Sheet 6 | IX22-33-4-CH06 | 2T | 3M | 4A | JK1-1 |
| ITMX Coil Driver Sheet 6 | IX22-33-4-CH06 | 2T | 3M | 4A | JK1-1 |

| Sheet | Component | IM | IB | IA | JK1-1 |
|--------------------------|----------------|----|----|----|-------|
| RM Coil Driver Sheet 6 | IX22-33-5-CH00 | 2T | 3M | 4A | JK1-1 |
| BS Coil Driver Sheet 6 | IX22-33-5-CH00 | 2T | 3M | 4A | JK1-1 |
| ITMX Coil Driver Sheet 6 | IX22-33-5-CH00 | 2T | 3M | 4A | JK1-1 |
| ITMX Coil Driver Sheet 6 | IX22-33-5-CH00 | 2T | 3M | 4A | JK1-1 |
| ITMX Coil Driver Sheet 6 | IX22-33-5-CH00 | 2T | 3M | 4A | JK1-1 |

| Sheet | Component | IM | IB | IA | JK1-1 |
|------------------------|----------------|----|----|----|-------|
| RM Coil Driver Sheet 6 | IX22-33-5-CH00 | 2T | 3M | 4A | JK1-1 |
| RM Coil Driver Sheet 6 | IX22-33-5-CH00 | 2T | 3M | 4A | JK1-1 |
| RM Coil Driver Sheet 6 | IX22-33-5-CH00 | 2T | 3M | 4A | JK1-1 |
| RM Coil Driver Sheet 6 | IX22-33-5-CH00 | 2T | 3M | 4A | JK1-1 |
| RM Coil Driver Sheet 6 | IX22-33-5-CH00 | 2T | 3M | 4A | JK1-1 |

| Sheet | Component | IM | IB | IA | JK1-1 |
|------------------------|----------------|----|----|----|-------|
| RM Coil Driver Sheet 6 | IX22-33-5-CH00 | 2T | 3M | 4A | JK1-1 |
| RM Coil Driver Sheet 6 | IX22-33-5-CH00 | 2T | 3M | 4A | JK1-1 |
| RM Coil Driver Sheet 6 | IX22-33-5-CH00 | 2T | 3M | 4A | JK1-1 |
| RM Coil Driver Sheet 6 | IX22-33-5-CH00 | 2T | 3M | 4A | JK1-1 |
| RM Coil Driver Sheet 6 | IX22-33-5-CH00 | 2T | 3M | 4A | JK1-1 |

| Sheet | Component | IM | IB | IA | P5-1A |
|------------------|----------------|----|----|----|-------|
| Bias Mod Sheet 1 | IX22-33-6-CH00 | 2T | 3M | 4A | P5-1A |
| Bias Mod Sheet 1 | IX22-33-6-CH00 | 2T | 3M | 4A | P5-1A |
| Bias Mod Sheet 2 | IX22-33-6-CH00 | 2T | 3M | 4A | P5-1A |
| Bias Mod Sheet 2 | IX22-33-6-CH00 | 2T | 3M | 4A | P5-1A |
| Bias Mod Sheet 2 | IX22-33-6-CH00 | 2T | 3M | 4A | P5-1A |

| Sheet | Component | IM | IB | IA | P5-1A |
|------------------|----------------|----|----|----|-------|
| Bias Mod Sheet 2 | IX22-33-7-CH00 | 2T | 3M | 4A | P5-1A |
| Bias Mod Sheet 2 | IX22-33-7-CH00 | 2T | 3M | 4A | P5-1A |
| Bias Mod Sheet 2 | IX22-33-7-CH00 | 2T | 3M | 4A | P5-1A |
| Bias Mod Sheet 2 | IX22-33-7-CH00 | 2T | 3M | 4A | P5-1A |
| Bias Mod Sheet 2 | IX22-33-7-CH00 | 2T | 3M | 4A | P5-1A |

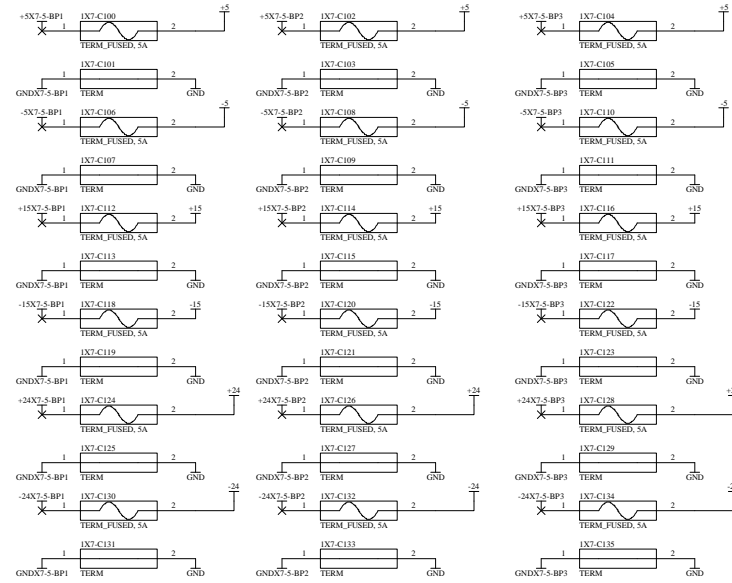
| Sheet | Component | IM | IB | IA | P5-1A |
|------------------|----------------|----|----|----|-------|
| Bias Mod Sheet 2 | IX22-33-7-CH00 | 2T | 3M | 4A | P5-1A |
| Bias Mod Sheet 2 | IX22-33-7-CH00 | 2T | 3M | 4A | P5-1A |
| Bias Mod Sheet 2 | IX22-33-7-CH00 | 2T | 3M | 4A | P5-1A |
| Bias Mod Sheet 2 | IX22-33-7-CH00 | 2T | 3M | 4A | P5-1A |
| Bias Mod Sheet 2 | IX22-33-7-CH00 | 2T | 3M | 4A | P5-1A |

| Sheet | Component | IM | IB | IA | P5-1A |
|------------------|----------------|----|----|----|-------|
| Bias Mod Sheet 2 | IX22-33-7-CH00 | 2T | 3M | 4A | P5-1A |
| Bias Mod Sheet 2 | IX22-33-7-CH00 | 2T | 3M | 4A | P5-1A |
| Bias Mod Sheet 2 | IX22-33-7-CH00 | 2T | 3M | 4A | P5-1A |
| Bias Mod Sheet 2 | IX22-33-7-CH00 | 2T | 3M | 4A | P5-1A |
| Bias Mod Sheet 2 | IX22-33-7-CH00 | 2T | 3M | 4A | P5-1A |

| Sheet | Component | IM | IB | IA | P5-1A |
|------------------|----------------|----|----|----|-------|
| Bias Mod Sheet 2 | IX22-33-7-CH00 | 2T | 3M | 4A | P5-1A |
| Bias Mod Sheet 2 | IX22-33-7-CH00 | 2T | 3M | 4A | P5-1A |
| Bias Mod Sheet 2 | IX22-33-7-CH00 | 2T | 3M | 4A | P5-1A |
| Bias Mod Sheet 2 | IX22-33-7-CH00 | 2T | 3M | 4A | P5-1A |
| Bias Mod Sheet 2 | IX22-33-7-CH00 | 2T | 3M | 4A | P5-1A |

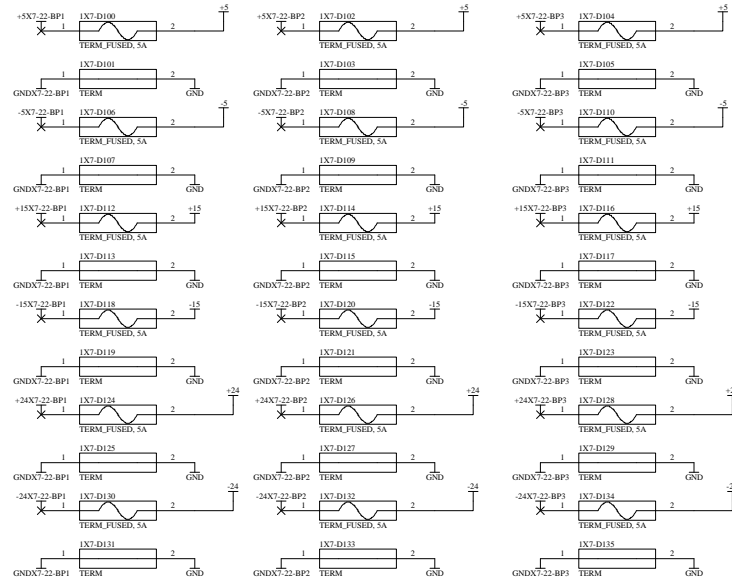
Eurocard Crate Power Connections for Crate 1X20-5

Note:
Power Connections for Eurocard modules are made through the backplane and are designated as VX7-5-BP1. Bulk power supply connections to the eurocard backplane lugs are designated V in Rack 1X7-5.

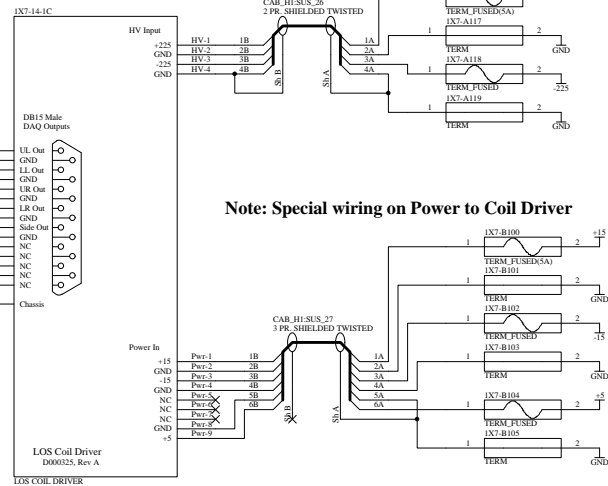


Eurocard Crate Power Connections for Crate 1X20-22

Note:
Power Connections for Eurocard modules are made through the backplane and are designated as VX7-22-BP1. Bulk power supply connections to the eurocard backplane lugs are designated V in Rack 1X7-22.

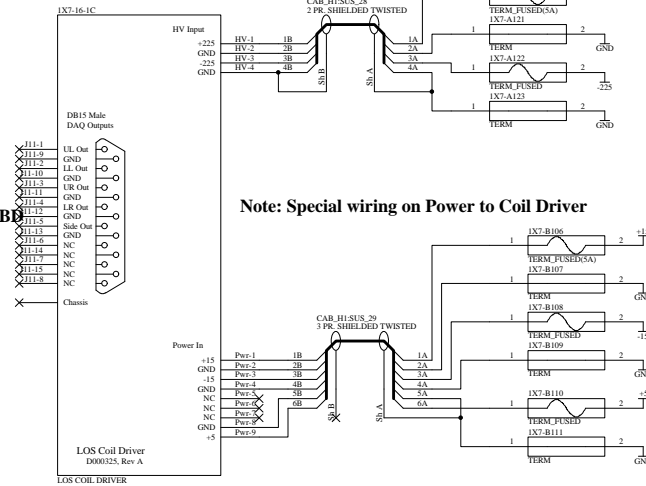


RM Coil Driver



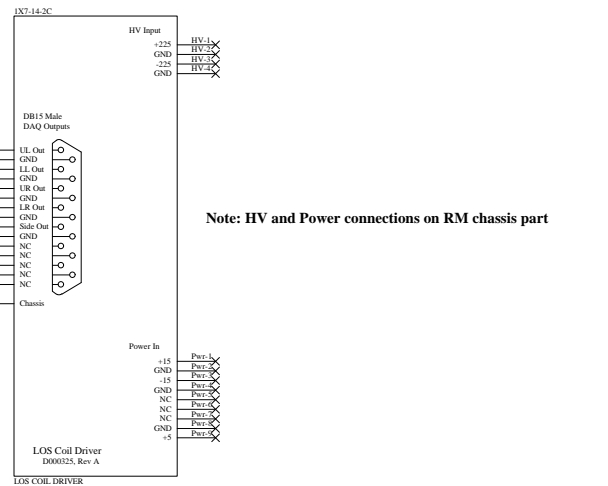
DAQ Connects TB

ITMX Coil Driver



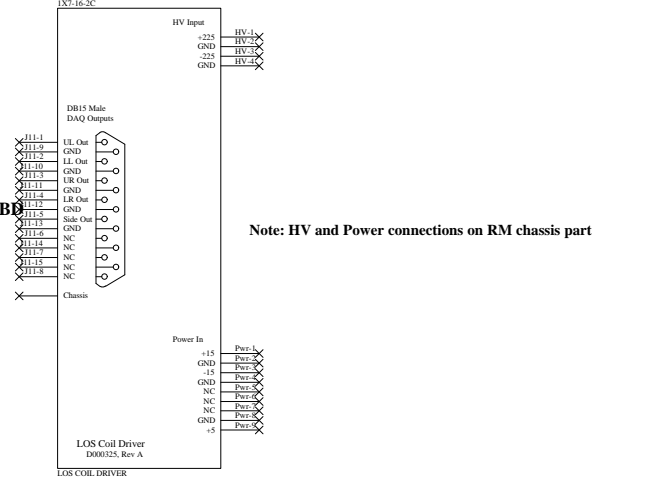
DAQ Connects TB

BS Coil Driver

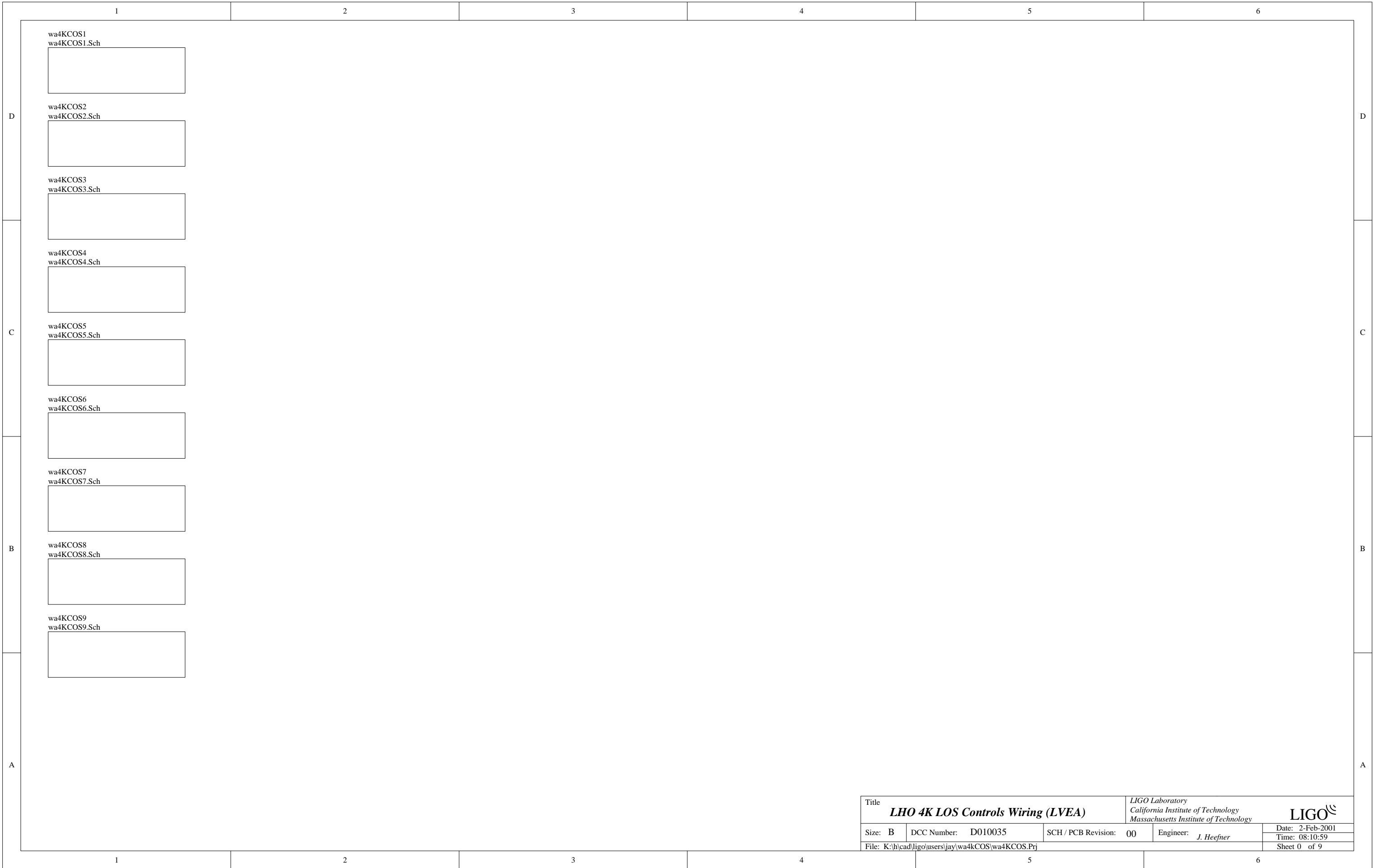


DAQ Connects TB

ITMY Coil Driver



DAQ Connects TB



| | | | | | | | |
|--|---------------------|--|----------------------|--|--|----------------|--|
| Title | | <i>LHO 4K LOS Controls Wiring (LVEA)</i> | | LIGO Laboratory California Institute of Technology Massachusetts Institute of Technology | | LIGO | |
| Size: B | DCC Number: D010035 | SCH / PCB Revision: 00 | Engineer: J. Heefner | Date: 2-Feb-2001 | | Time: 08:10:59 | |
| File: K:\hcad\ligo\users\jay\wa4kCOS\wa4kCOS.Prj | | | | Sheet 0 of 9 | | | |