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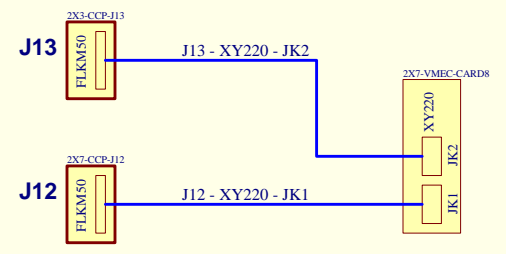
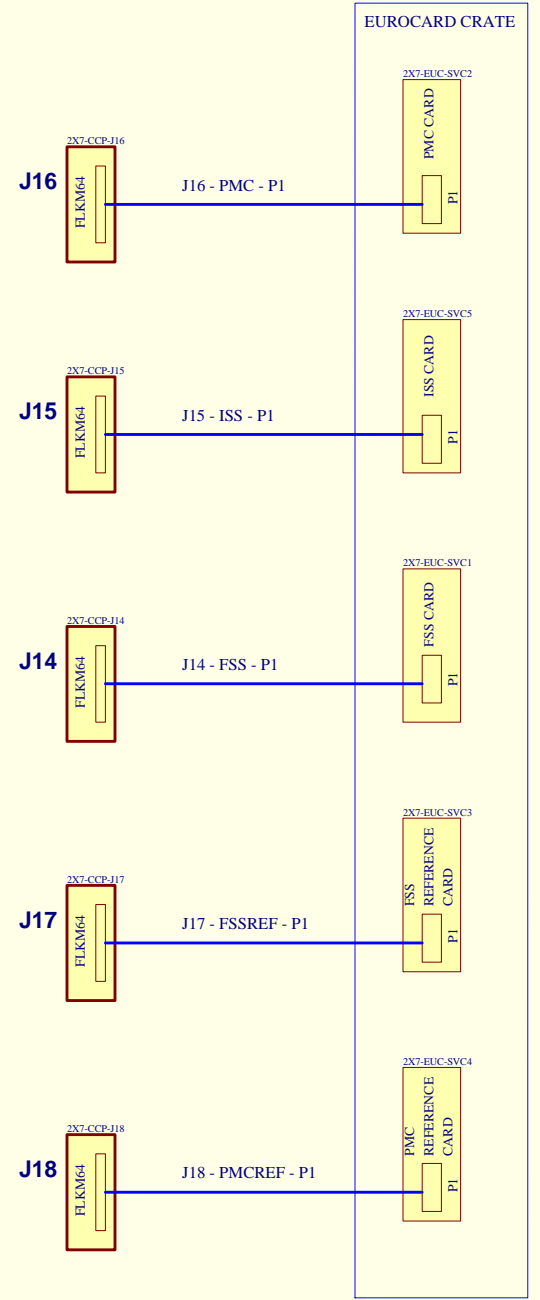
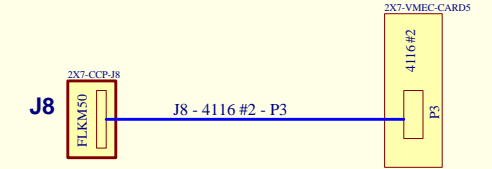
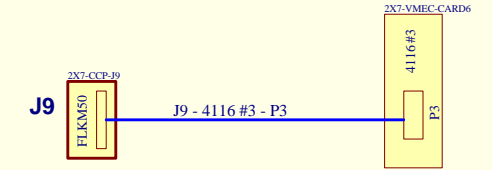
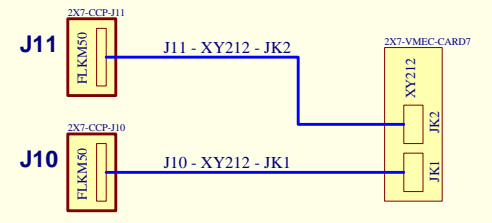
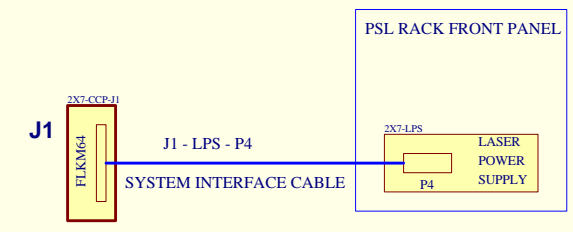
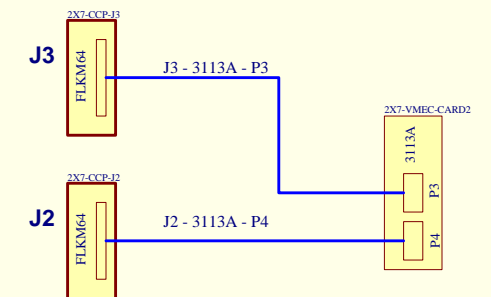
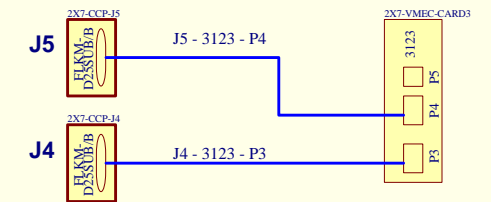
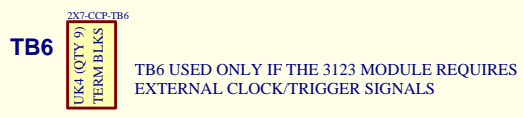
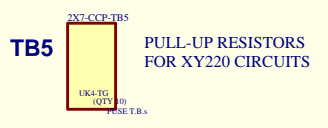
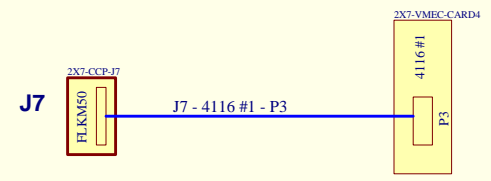
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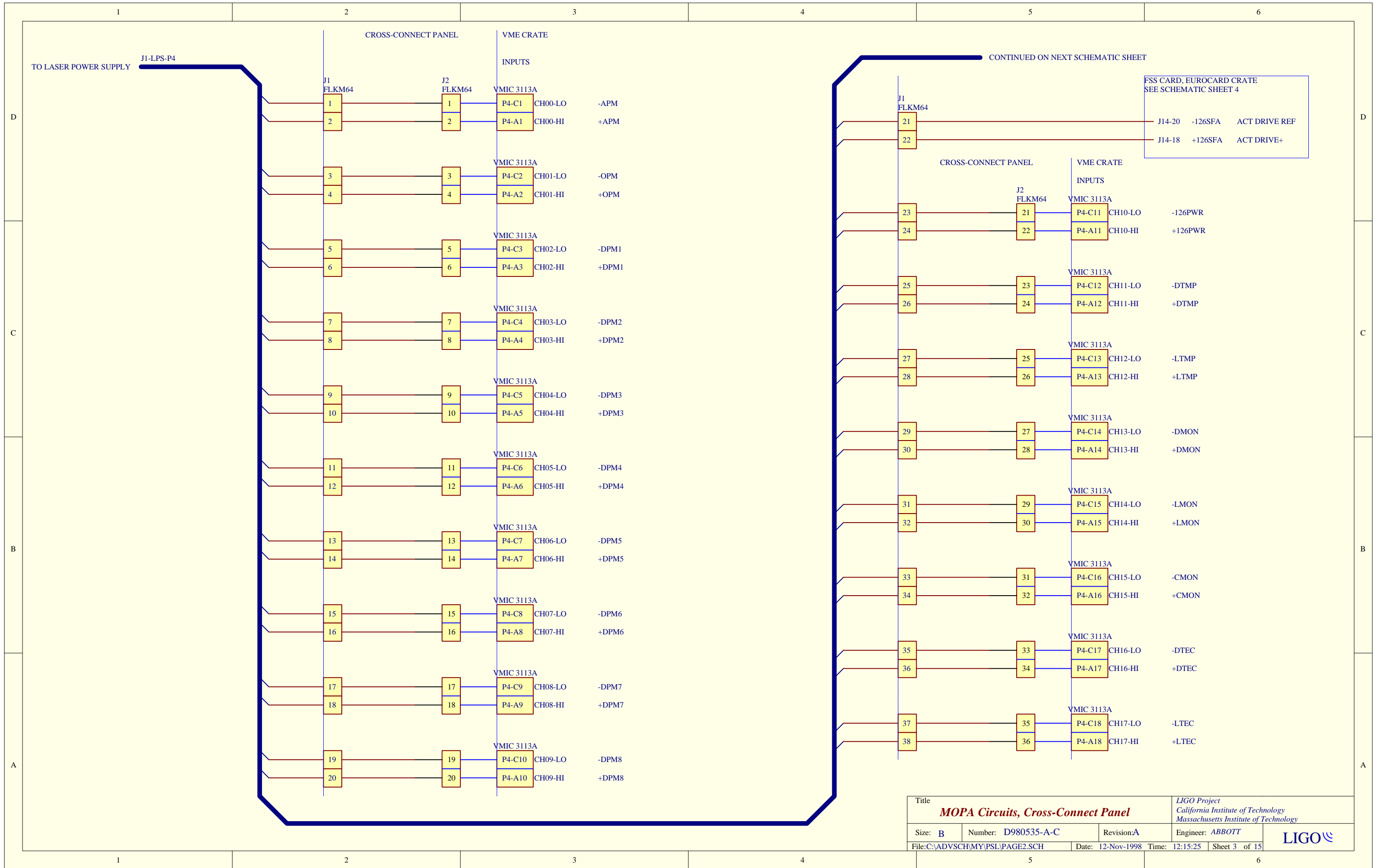
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RACK1
RACK1.SCH

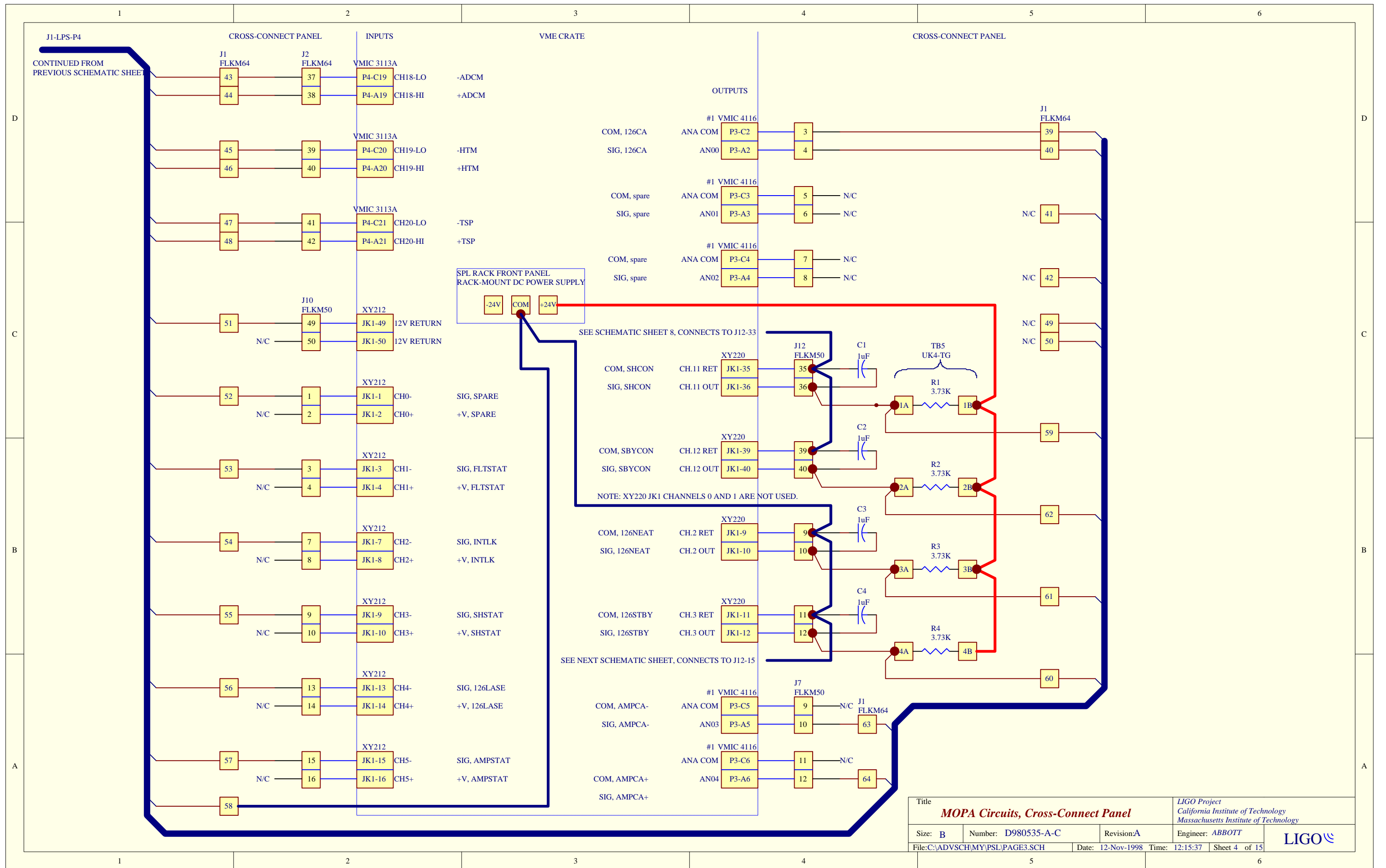
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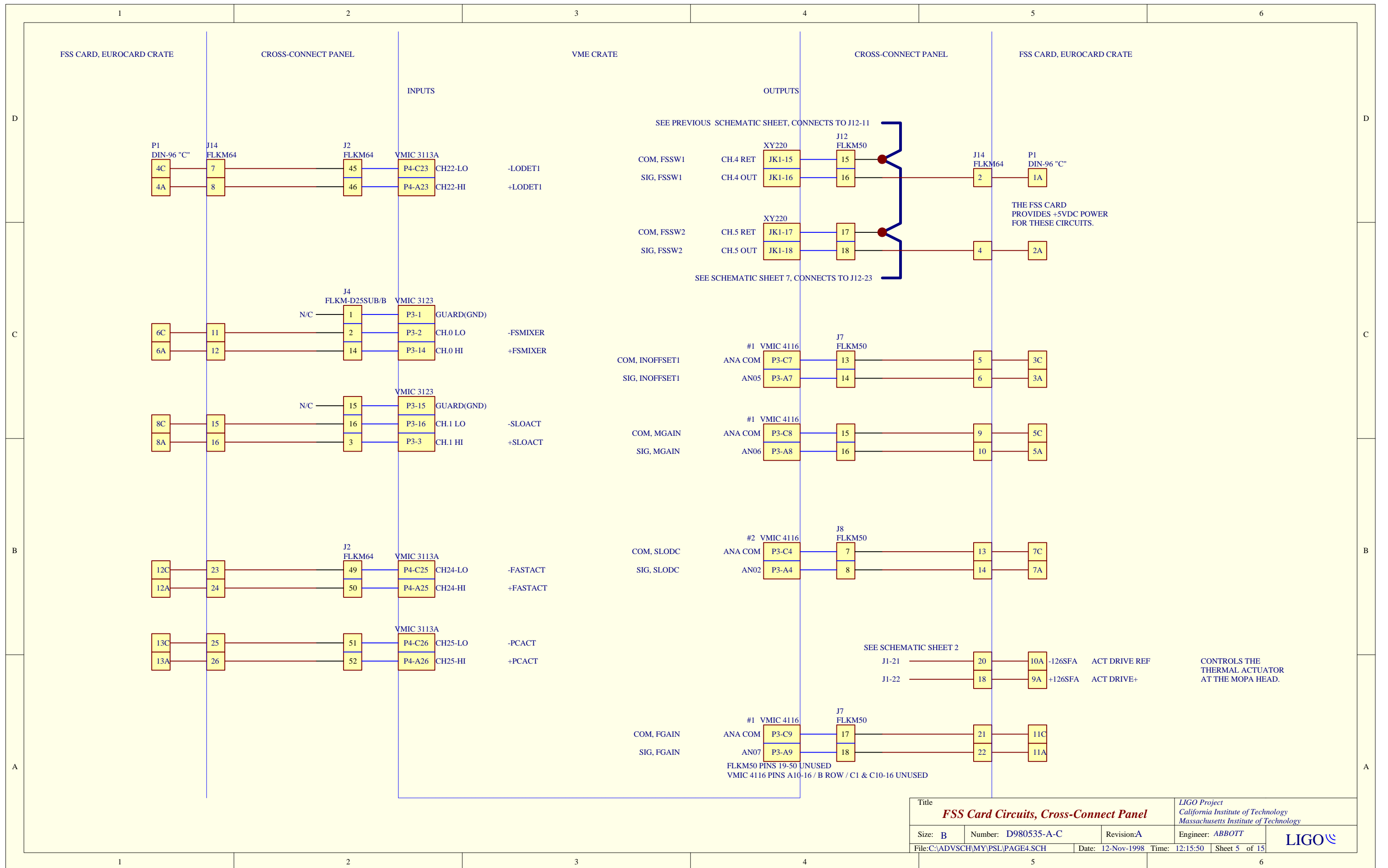
- NOTES:
- 1) THE LAYOUT OF THE CROSS-CONNECT PANEL CORRESPONDS TO THE LOCATION OF PHOENIX BLOCKS J1-J5 AND J7-J18 AND TERMINAL BLOCKS TB1-TB6 ON THIS PAGE.
 - 2) THE FOLLOWING VME CARDS ARE IN THE VME CRATE: XY212, XY220, 4116, 3123, 3113A



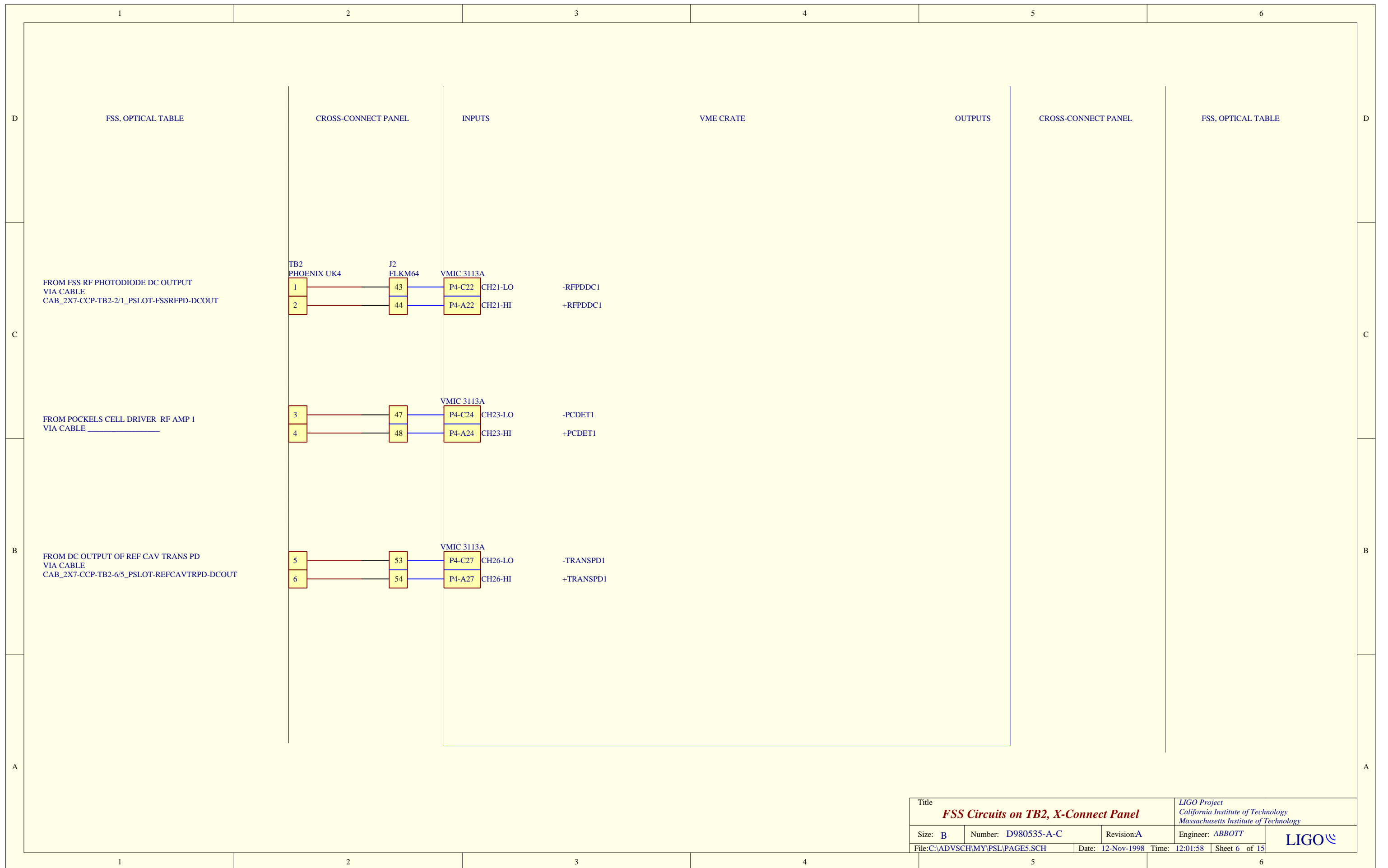
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| MOPA Circuits, Cross-Connect Panel | | California Institute of Technology | |
| Size: B | | Number: D980535-A-C | Revision: A |
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| | | Sheet 3 | of 15 |
| | | LIGO | |



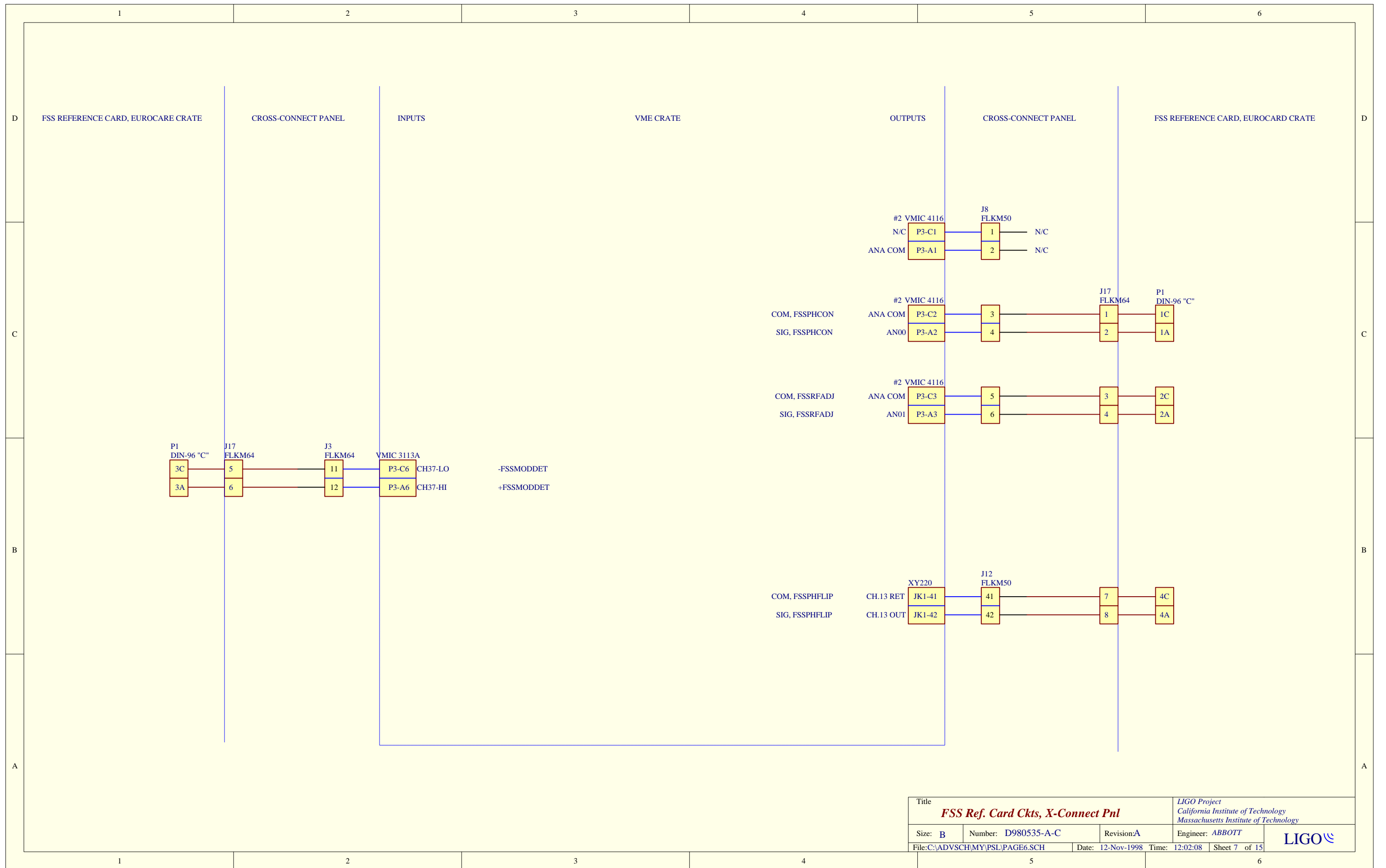
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| Size: B | | Massachusetts Institute of Technology | |
| Number: D980535-A-C | Revision: A | Engineer: ABBOTT | LIGO |
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| Sheet 4 of 15 | | | |



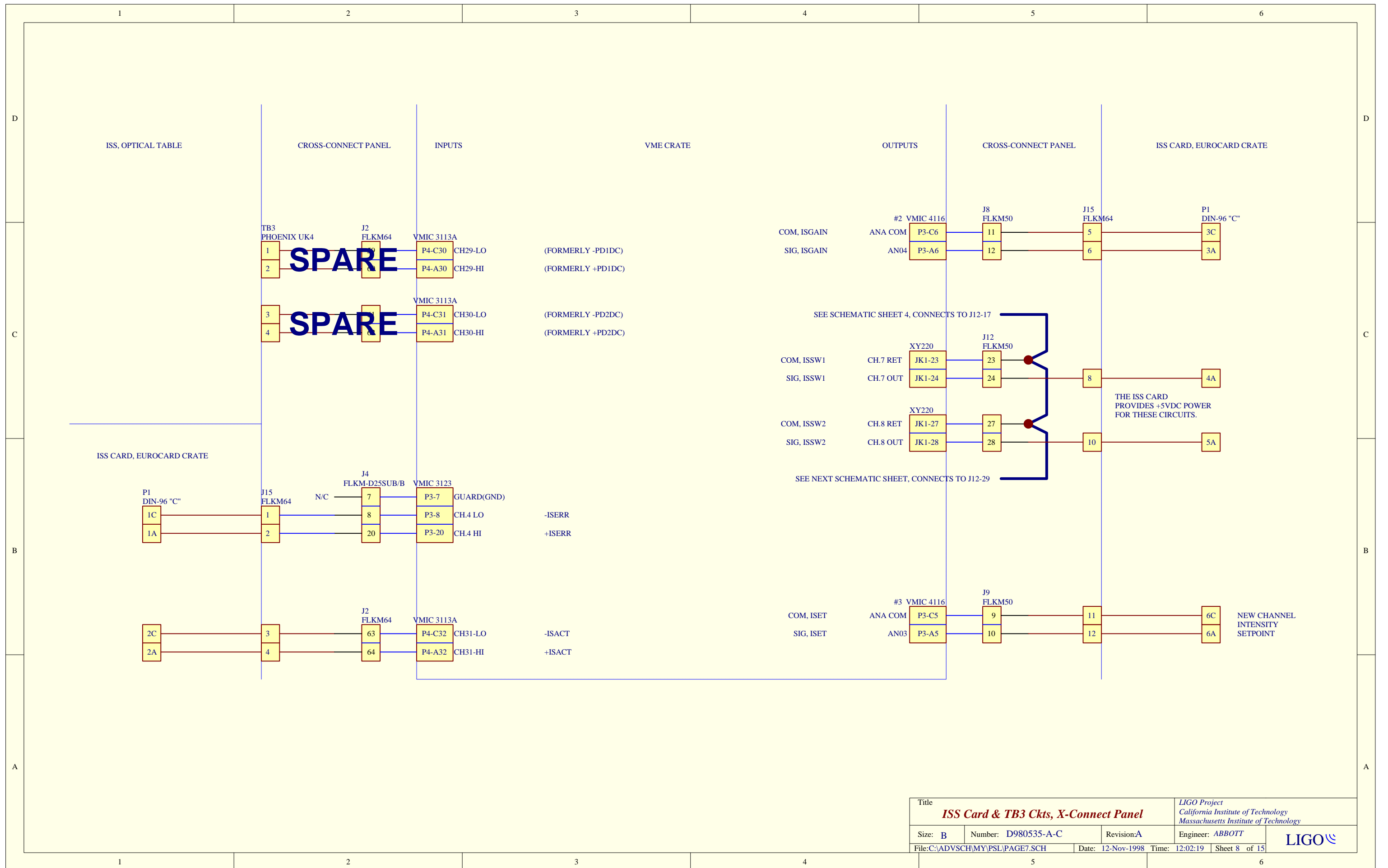
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| Title FSS Circuits on TB2, X-Connect Panel | | | LIGO Project California Institute of Technology Massachusetts Institute of Technology | | |
| Size: B | Number: D980535-A-C | Revision: A | Engineer: ABBOTT | LIGO | |
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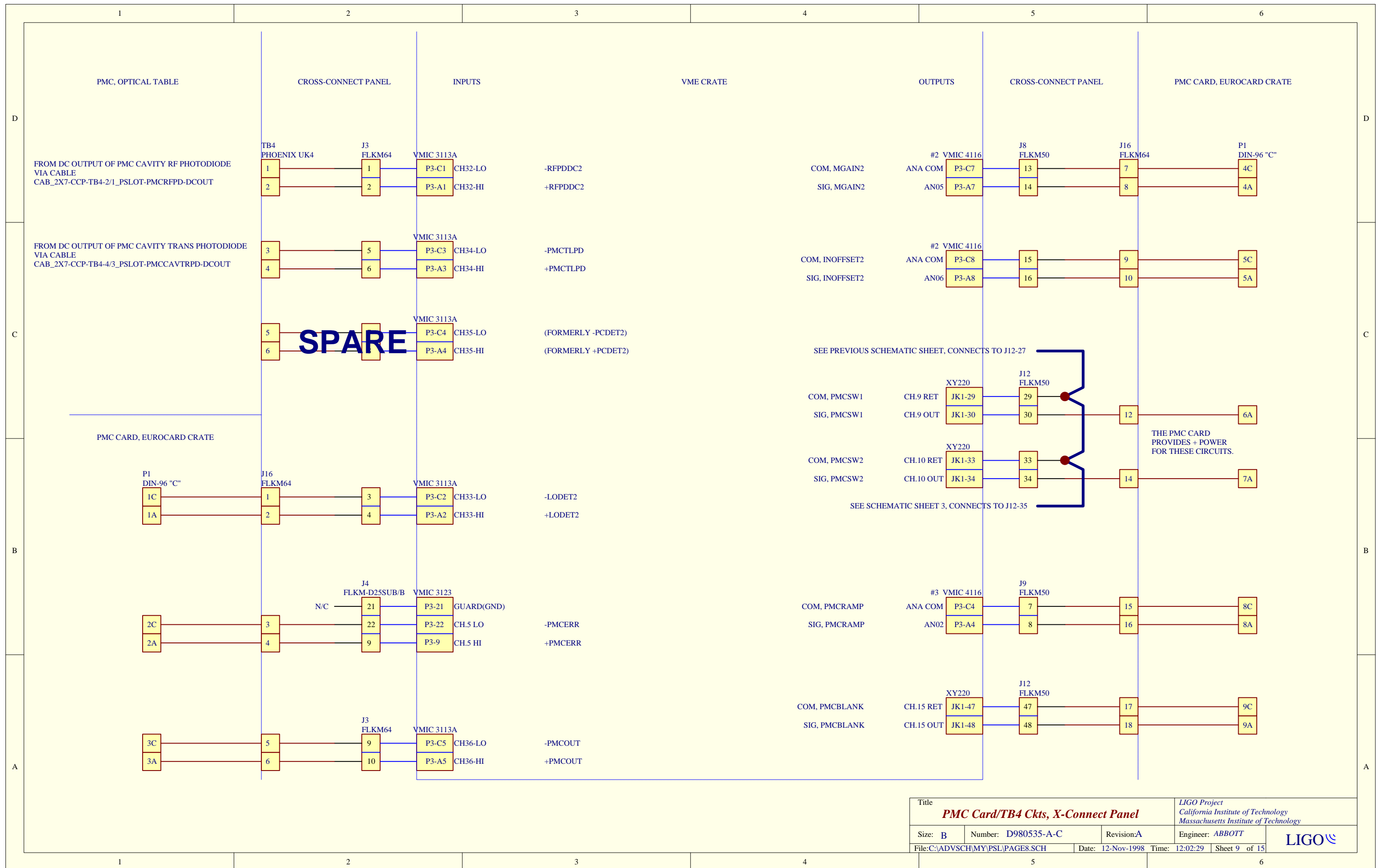


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| Title FSS Ref. Card Ckts, X-Connect Pnl | | | LIGO Project California Institute of Technology Massachusetts Institute of Technology | |
| Size: B | Number: D980535-A-C | Revision: A | Engineer: ABBOTT | LIGO |
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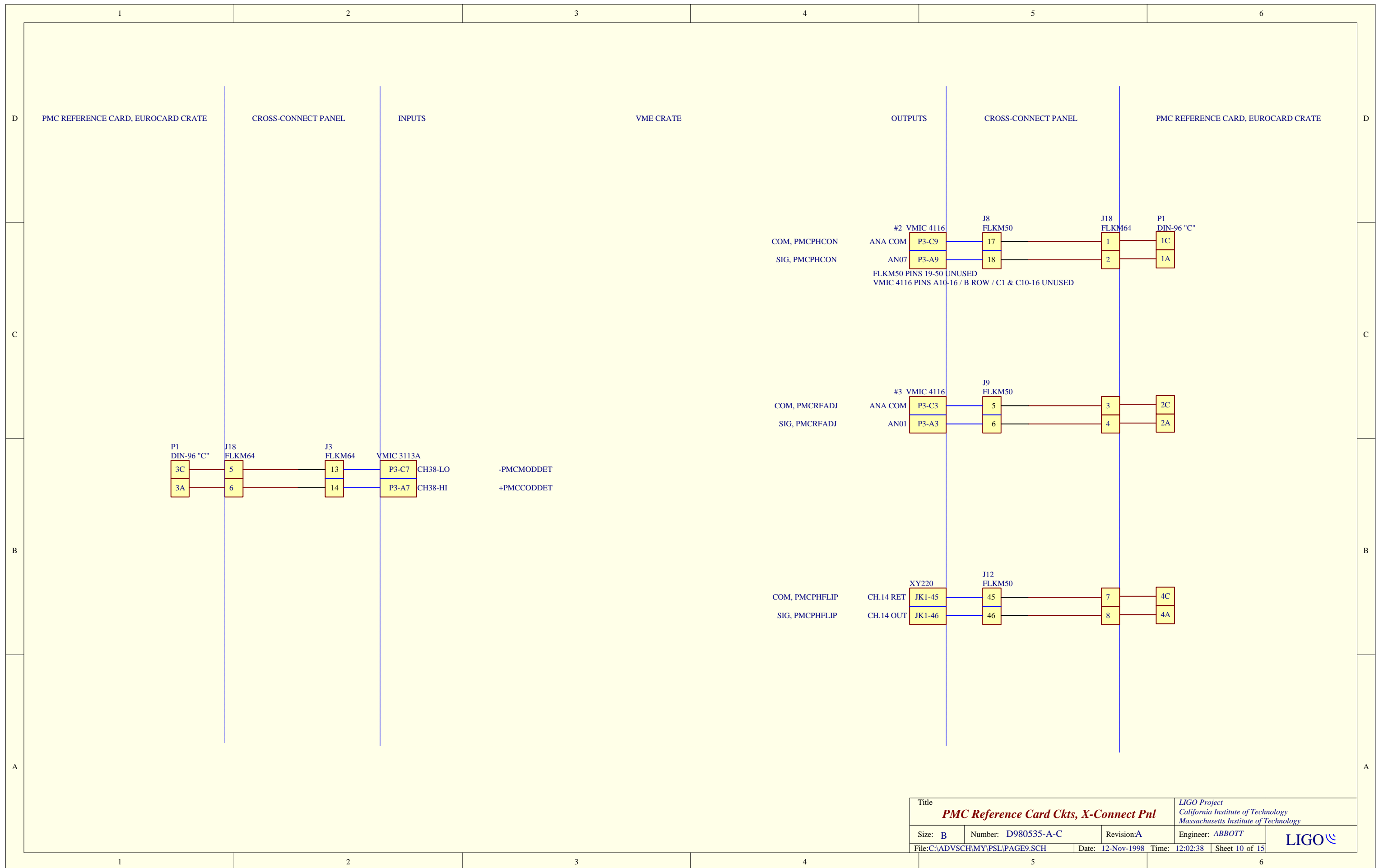
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| Size: B | Number: D980535-A-C | Revision: A | Engineer: ABBOTT |
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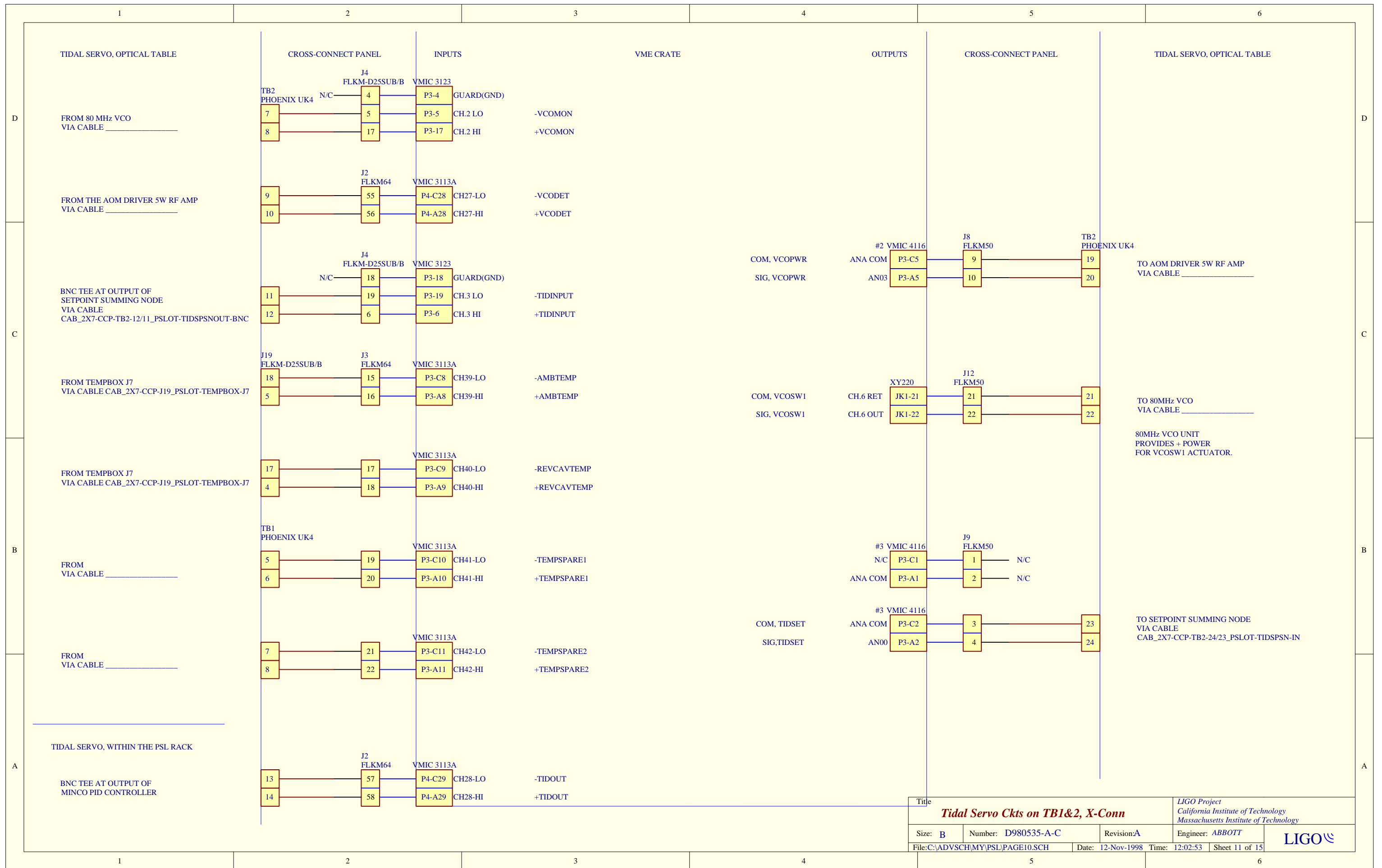
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| Title PMC Card/TB4 Ckts, X-Connect Panel | | LIGO Project California Institute of Technology Massachusetts Institute of Technology | |
| Size: B | Number: D980535-A-C | Revision: A | Engineer: ABBOTT |
| File: C:\ADV SCH\MY\PSL\PAGE8.SCH | Date: 12-Nov-1998 | Time: 12:02:29 | Sheet 9 of 15 |



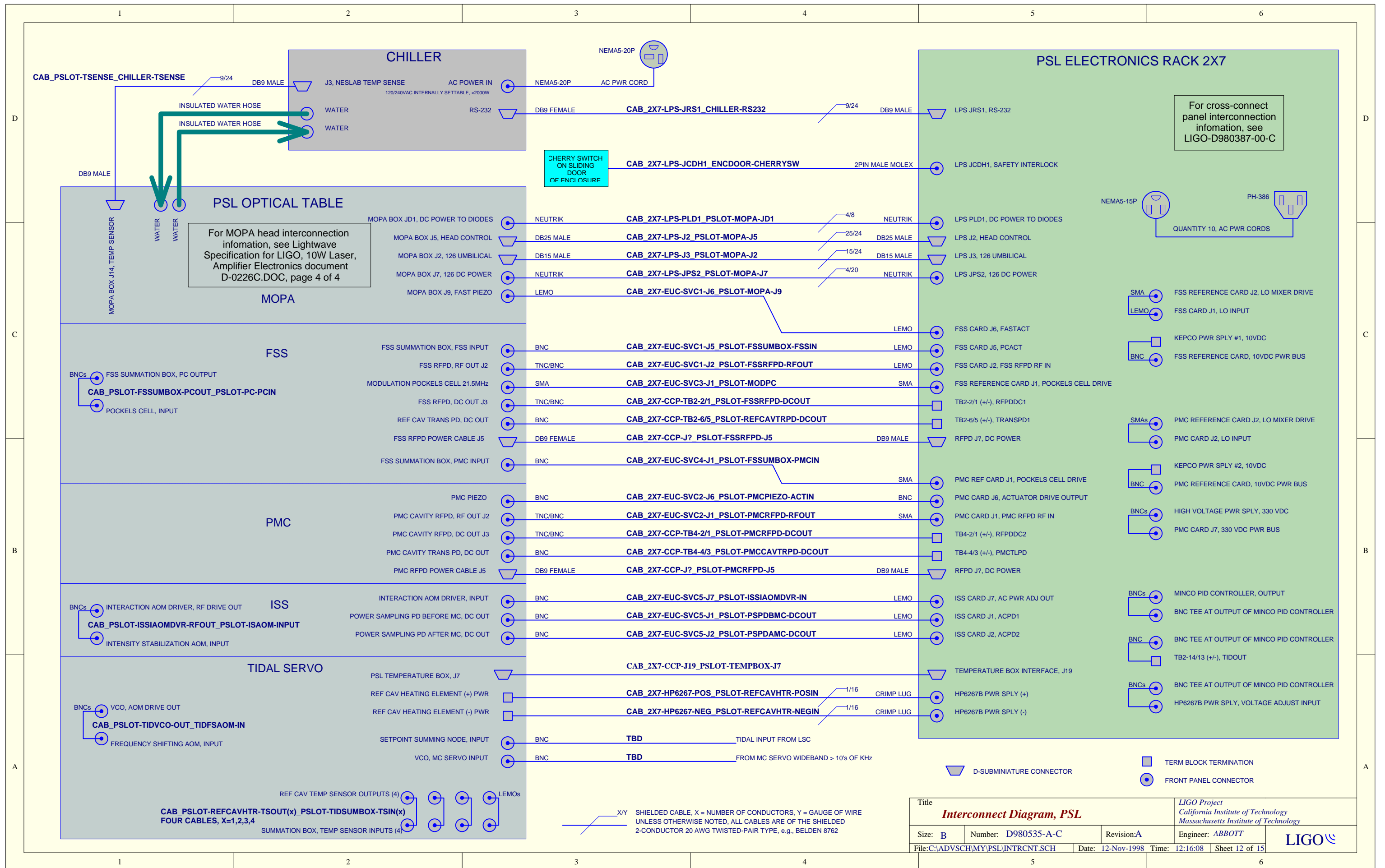


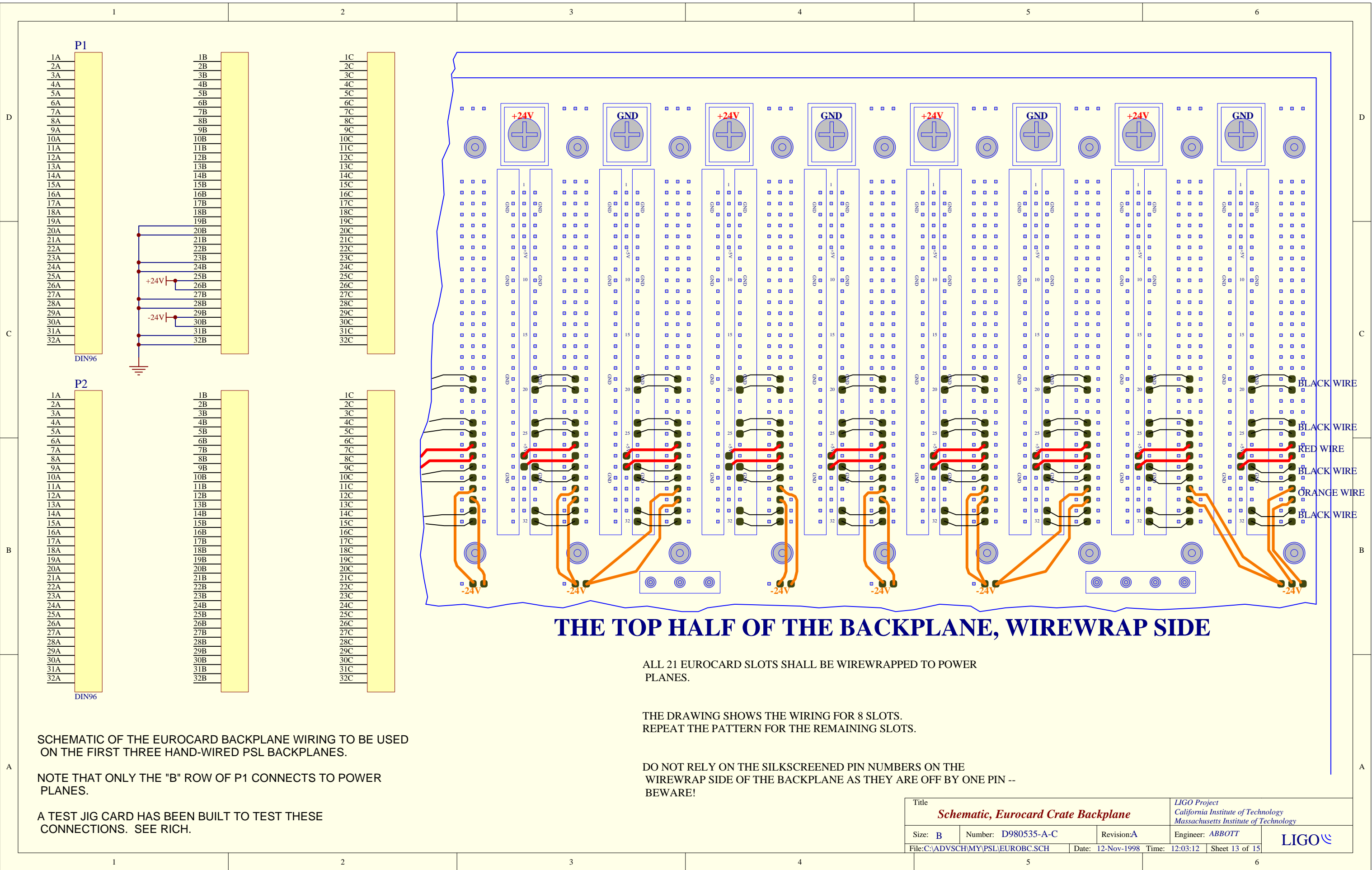
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| File: C:\ADV SCH\MY\PSL\PAGE9.SCH | | Date: 12-Nov-1998 | Time: 12:02:38 Sheet 10 of 15 |





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| Title | | <i>Tidal Servo Ckts on TBI&2, X-Conn</i> | | LIGO Project California Institute of Technology Massachusetts Institute of Technology | |
| Size: B | Number: D980535-A-C | Revision: A | Engineer: ABBOTT | LIGO | |
| File: C:\ADVSCH\MY\PSL\PAGE10.SCH | Date: 12-Nov-1998 | Time: 12:02:53 | Sheet 11 of 15 | | |





THE TOP HALF OF THE BACKPLANE, WIREWRAP SIDE

ALL 21 EUROCARD SLOTS SHALL BE WIREWRAPPED TO POWER PLANES.

THE DRAWING SHOWS THE WIRING FOR 8 SLOTS. REPEAT THE PATTERN FOR THE REMAINING SLOTS.

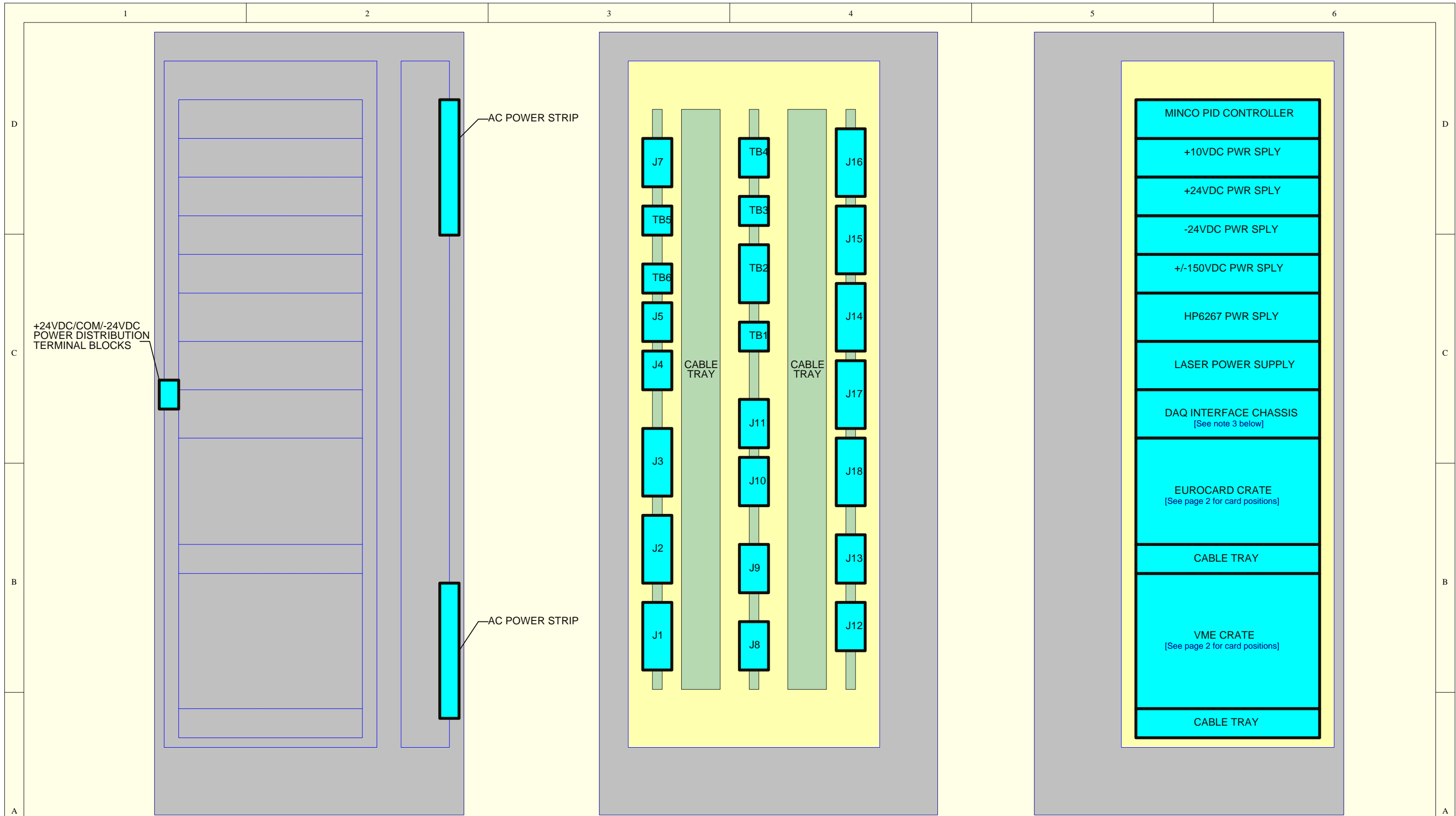
DO NOT RELY ON THE SILKSCREENED PIN NUMBERS ON THE WIREWRAP SIDE OF THE BACKPLANE AS THEY ARE OFF BY ONE PIN -- BEWARE!

SCHEMATIC OF THE EUROCARD BACKPLANE WIRING TO BE USED ON THE FIRST THREE HAND-WIRED PSL BACKPLANES.

NOTE THAT ONLY THE "B" ROW OF P1 CONNECTS TO POWER PLANES.

A TEST JIG CARD HAS BEEN BUILT TO TEST THESE CONNECTIONS. SEE RICH.

| | | | | | |
|-----------------------------------|---------------------|--|------------------|---|--|
| Title | | <i>Schematic, Eurocard Crate Backplane</i> | | LIGO Project California Institute of Technology Massachusetts Institute of Technology | |
| Size: B | Number: D980535-A-C | Revision: A | Engineer: ABBOTT | | |
| File: C:\ADVSCH\MY\PSL\EUROBC.SCH | Date: 12-Nov-1998 | Time: 12:03:12 | Sheet 13 of 15 | | |



REAR VIEW, WITH DOOR OPEN

LEFT SIDE VIEW, SIDE COVER REMOVED

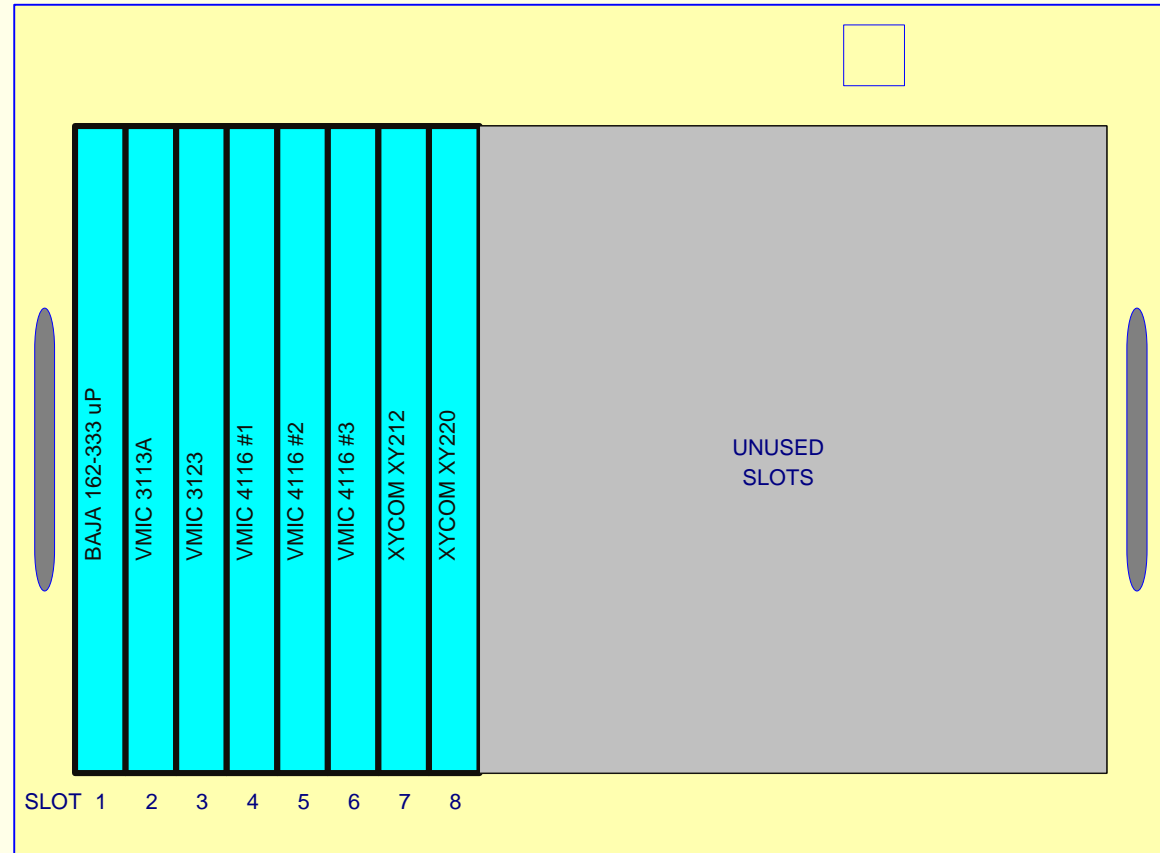
FRONT VIEW, WITH DOOR OPEN

NOTES: 3) FOR DAQ INTERFACE CHASSIS CABLE INTERCONNECTION INFORMATION REFER TO DRAWING #####-##-# PSL SIGNALS TO DAQ RACK
 2) FOR PSL CABLE INTERCONNECTION INFORMATION REFER TO DRAWING D980384-00-C INTERCONNECTION DIAGRAM, PSL
 1) CABLES TERMINATING AT THE OPTICAL TABLE EXIT THROUGH THE BOTTOM OF THE RACK.

| | | | |
|--------------------------------------|---------------------|---|-------------------------------|
| Title PSL Electronics Rack | | LIGO Project California Institute of Technology Massachusetts Institute of Technology | |
| Size: B | Number: D980535-A-C | Revision: A | Engineer: ABBOTT |
| File: C:\ADV SCH\MY\PSL\RACK1.SCH | | Date: 12-Nov-1998 | Time: 12:03:36 Sheet 14 of 15 |

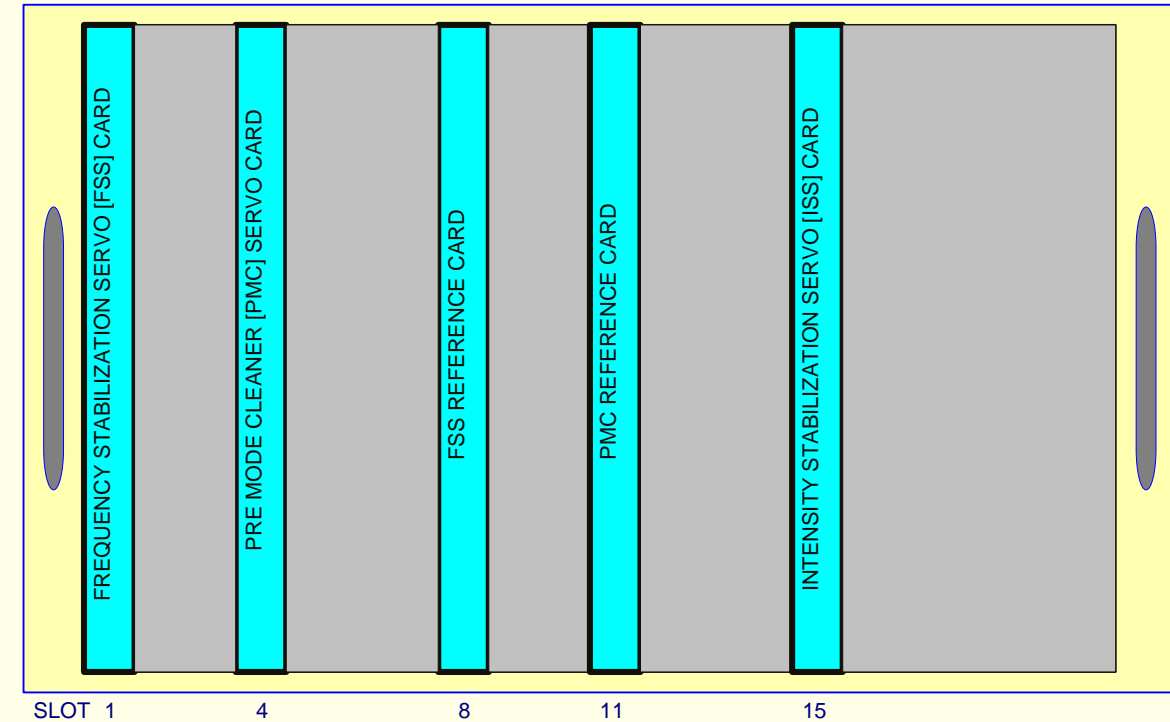


VME CRATE
CARD POSITIONS



- VME CRATE NOTES:
- 1) THE DC POWER SUPPLY FOR THE VME CRATE IS LOCATED INSIDE THE REAR COMPARTMENT OF THE CRATE. CONNECT THE DC OUTPUT VOLTAGES [+5V, +/-12V, COMMON] FROM THE DC POWER SUPPLY TO THEIR RESPECTIVE TERMINALS ON THE HYBRICON VME CRATE BACKPLANE. REFER TO THE HYBRICON PRODUCT CATALOG FOR POWER CONNECTION INFORMATION.
 - 2) CONNECT +12VDC POWER TO THREE FANS ON THE BOTTOM TRAY OF THE VME CRATE.
 - 3) CHECK JUMPER LOCATIONS AND DIP SWITCH SETTINGS FOR EACH CARD BEFORE INSERTION. REFER TO JOE'S PSL ELECTRONICS RACK WHITE BINDER FOR NOTES PERTAINING TO VME CARD JUMPER/SWITCH SETTINGS AND VME SHORT ADDRESS SPACE ASSIGNMENTS.
 - 4) INSERT VME CARDS; ROUTE FRONT PANEL CABLES THROUGH CABLE TRAY LOCATED BELOW THE CRATE.
 - 5) PLUG IN THE AC POWER CABLE TO THE BACK OF THE VME CRATE AND THEN TO THE AC POWER STRIP.

EUROCARD CRATE
CARD POSITIONS



- EUROCARD CRATE NOTES:
- 1) INSTALL ADAPTERS, WHICH ARE KEYED TO MATE WITH DIN-96 "C" CONNECTOR, ONTO THE WIREWRAP SIDE OF THE EUROCARD CRATE BACKPLANE SLOTS 1, 4, 8, 11, & 15. FOR EACH ADAPTER, USE TWO #2-56 PAN HEAD SCREWS & TWO FLAT WASHERS ON THE FRONT SIDE, AND TWO FLAT WASHERS AND TWO NUTS ON THE WIREWRAP SIDE. DO NOT OVERTIGHTEN.
 - 2) RUN THREE 18 AWG WIRES FROM THE DC POWER DISTRIBUTION TERMINAL BLOCKS TO THE WIREWRAP SIDE OF THE EUROCARD CRATE; TAP OFF OF +24VDC, COMMON, & -24VDC.
 - 3) SOLDER THE +24VDC WIRE ONTO ONE OF THE 3-CONDUCTOR MALE PINS LABELLED "AUX B". THE "AUX B" PINS ARE LOCATED ALONG THE MIDDLE ROW OF WIREWRAP PINS.
 - 4) NOTE THAT THE TOP ROW OF +24VDC & COMMON BUS SCREW TERMINALS ALTERNATE, STARTING WITH +24VDC ON THE LEFTMOST POWER BUG AS SEEN FROM THE WIREWRAP SIDE. FOR WIREWRAP INFORMATION REFER TO LIGO DWG. #####-##-, SCHEMATIC, EUROCARD CRATE BACKPLANE
 - 5) CRIMP A RING LUG ONTO THE +24VDC WIRE. FASTEN THE +24VDC WIRE LUG ONTO THE LEFTMOST "POWER BUG" SCREW TERMINAL. (AS SEEN FROM THE WIREWRAP SIDE)
 - 6) CRIMP A RING LUG ONTO THE COMMON WIRE. FASTEN THE COMMON WIRE LUG ONTO THE "POWER BUG" SCREW TERMINAL SECOND FROM THE LEFT.
 - 7) USE SMALL PLASTIC CABLE TIES TO NEATLY DRESS THE DC POWER WIRES TO THE RACK.
 - 8) A TEST CARD HAS BEEN BUILT TO TEST THE BACKPLANE WIRING. SEE RICH. BUZZ OUT THE BACKPLANE WITH A CONTINUITY METER TO TEST FOR SHORTS ON +24V & -24V TO COMMON. ENERGIZE THE EUROCARD CRATE BACKPLANE. PLUG THE TEST CARD INTO EACH SLOT; VERIFY THAT ALL 4 LEDs ARE LIT & CHECK VOLTAGES ON LEMOS.
 - 9) INSERT SERVO CARDS; ROUTE FRONT PANEL CABLES THROUGH CABLE TRAY LOCATED BELOW THE CRATE.

| | | | |
|-----------------------------------|---------------------|---|------------------|
| Title PSL VME CRATE | | LIGO Project California Institute of Technology Massachusetts Institute of Technology | |
| Size: B | Number: D980535-A-C | Revision: A | Engineer: ABBOTT |
| File: C:\ADV SCH\MY\PSL\RACK2.SCH | Date: 12-Nov-1998 | Time: 12:03:47 | Sheet 15 of 15 |

