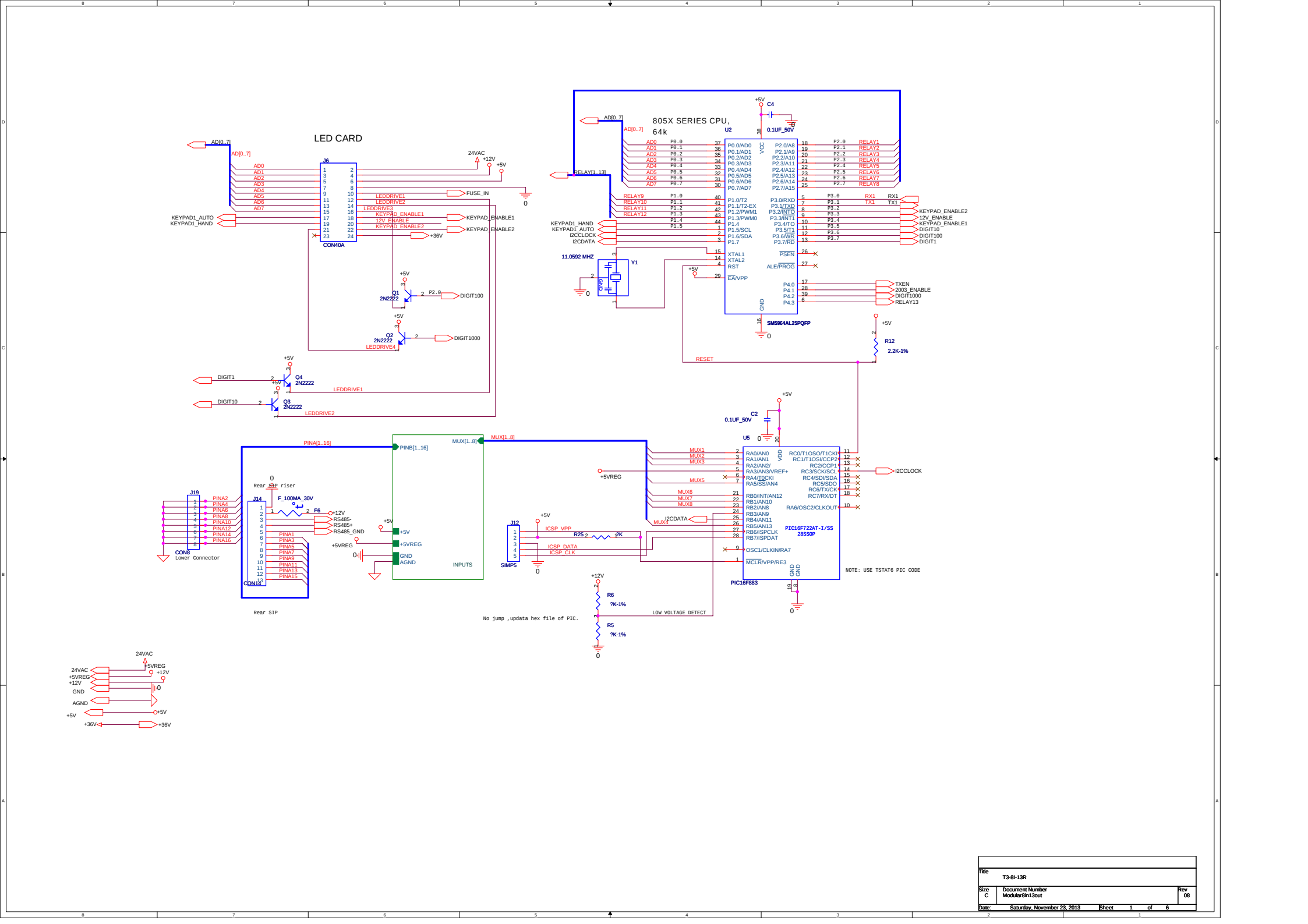
LED CARD
805X SERIES CPU, 64k
SM5964AL25PQFP
PIC16F722AT-I/SS 28SS0P
PIC16F883
NOTE: USE TSTAT6 PIC CODE
No jump ,updata hex file of PIC.
LOW VOLTAGE DETECT
INPUTS
Rear SIP
Lower Connector
11.0592 MHZ
2003_ENABLE
Title
T3-8I-13R
Size C
Document Number Modular8in13out
Rev 08
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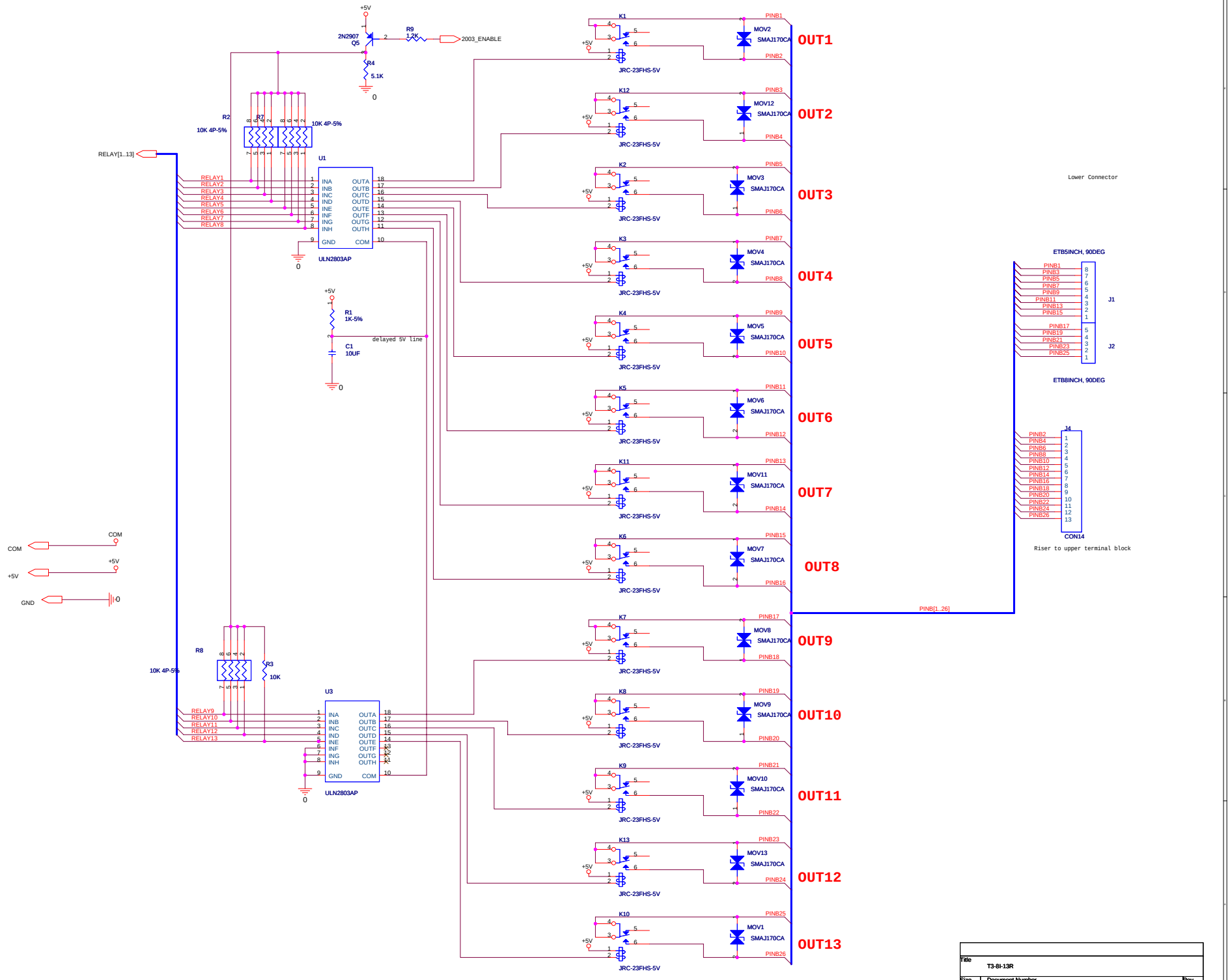

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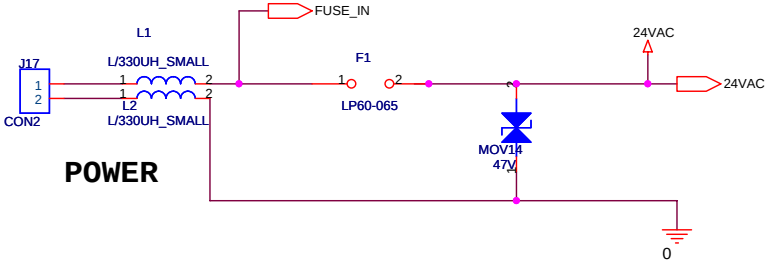
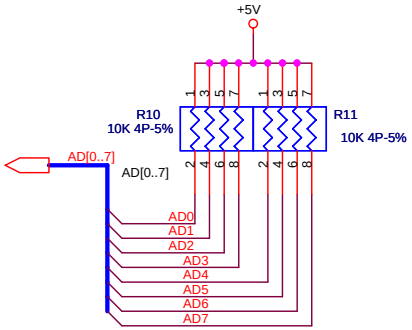
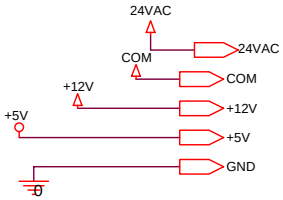
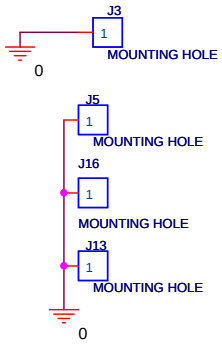
POWER

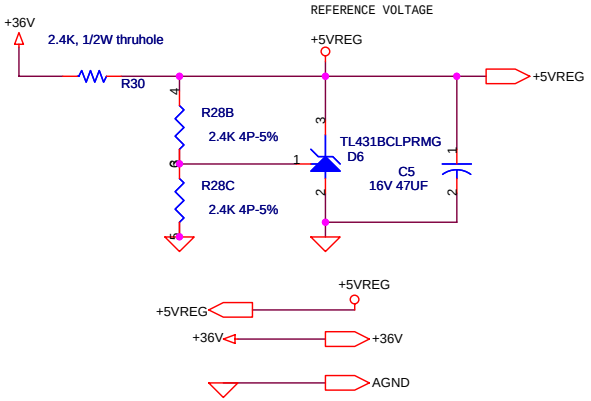




Mounting Holes







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note given output relays, cannot put AC power

TBD: on analog board, all the above chanegs

TBD: isolated network gnd
TBD: change riser card header from 0.1inch to 0.2 inch
TBD: on upper board, no vias allowed under switches, add 4 holes to switch footprint
TBD: try to pass 110VAC on any pin

InOut Relay Rev4
Done: use DS2003 chip to drive relays
Done: change LM4040 to 7405
Done: move board to board header away from relays, to make room for shrouded header
Done: replaced output filter caps with TVSs

SINKING REV0
Done: Use new crystal footprint
Done: added voltage regulator to the system and added capacitor for stability
TBD: make sure all outputs are off during RS485 flash update, no relays jumping allowed
TBD: add resistror on RS485 GND line
TBD: make hardware rev visible on board while inside the enclosure

T3-8IN-16OUT REV0 (05/02/11)
Done: fix RX and TXEN lines. They were swapped.
Done: spread MOVs out a bit so they are not so crammed
Done: spread switches out just a bit so they are not so crammed
Done: verify connections to the out connector. 12 V was not done properly
Done: connect zero crossing and low voltage.

T3-8IN-16OUT REV1 (05/03/14)
Done: corrected the ground connection on the lower INPUT line
Done: correct footprint of 2803 and 273 chips
Done: update thermal relief
Done: make space for 20 pin header

T3-8IN-16OUT REV2 (05/06/02)
Done: change the VCC supply to the pic chip to 5Vreg
Done: made more space between Goal and PIC for sockets
Done: move the 12V output jumper (J2) cuz too close to output header

T3-8IN-16OUT REV3
Done: move the i2c data line, conflict with ISP
Done: shift LED board to the left
Done: high speed counter signal added to pic and CPU.
note that firmware will not be same anymore given some pin connections had to be swapped
Done: add p-channel mosfet to driver chip
Done: out connector with REX header to be more centered
Done: in connector top header not alligned
Done: added a 12V_enable for the 2003 enable chips
note forgot to change label on silk screen... still writes rev02

T3-8IN-16OUT REV4
Done: remove pull-up and pull-down resistor on RS485 line
Done: fix BAS40 on RS485 line
Done: add PIC for high speed analog inputs
Done: no need for 12V supply, deleted
Done: added 16 relays, 5V
Done: add the Clear line on the Latches to reduce relay startup problems.
Done: add an RC on latches to reduce relay flicker on startup
Need to experiment with values

T3-8IN-13RELAY_REV0
TBD: add terminal for 12V aux output
Done: change to larger PIC for high speed inputs
Done: delete hand_off_auto_2 pins
Done: get rid of one latch, use CPU
Done: similar hardware connections as 8out type
Done: put header to the side of the board
Done: clean up board output

T3-8IN-13RELAY_REV01
DONE:Change the part NO of the mov1..mov13
DONE: fix the part no of the mcu chip
DONE: add the pic chip programming jumper

T3-8IN-13RELAY_REV05
TBD: put notes from the last revisions
TBD: add 0-10V jumper positions if there is room
TBD: change the TVS to be MOV components for the relay side
TBD: change the rs485 chip to opto module
TBD: change the rs485 chip to 34063 module
TBD: change the power connector
TBD: Change I2CLOCK to pin RC5 of PIC,conflict with ICD2
TBD:Add ISP jumper,put this jumper nearby terminal,the user does not open the encloure to put/take this jumper.

T3-8IN-13RELAY_REV5
TBD:use rs485 module replace 485 circuit
TBD:change the input circuit make it support 40v
TBD:change to relay 2apm N4100

T3-8IN-13RELAY_REV06
DONE: change the pic to 16f882 and add vref chip.
DONE: change RS485 circuit
DONE: move the termial a little far away. About 2.5mm
DONE: change the 12v chip LM2576 to 34063.
DONE: add the jumper for 10v voltage input .
DONE: change the pic to 16f882 and add vref chip.

T3-8IN-13RELAY_REV07
DONE: CHANGE THE PIC CHIP TO 16F882
DONE:ADD THE INPUT TYPE . 0-5V. 0-10V. 4- 20MA
DONE : The sm5964 schematic footrprint is copy from the rev 5 ,but it is not correct . Correct it

T3-8IN-13RELAY_REV08
DONE: change the 5VRef to match mini panel
DONE: change the input resistors from 1k to 10k, MATCH TSTAT6
DONE: CHECK ALL SCREW TERMINALS WITH 24VAC ON REV7 BEFORE MAKING REV8
DONE: change this to fuse symbol, not R, update bom, SAME PART# AS TSTAT6
DONE: need to add zigbee header
DONE: J6 PIN24 ADD +36V FOR +5VREG INPUT .
DONE: Add RS485 LED .

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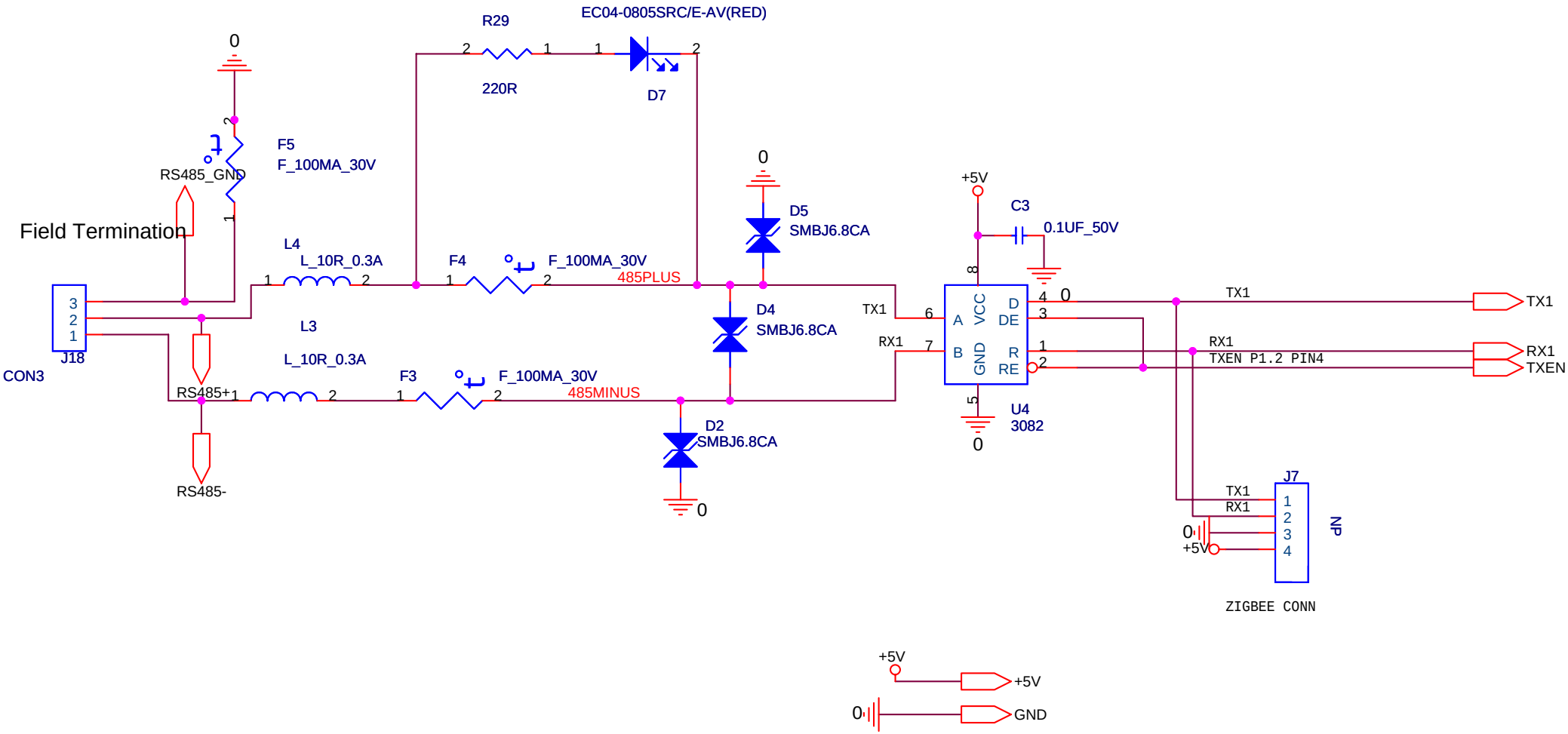

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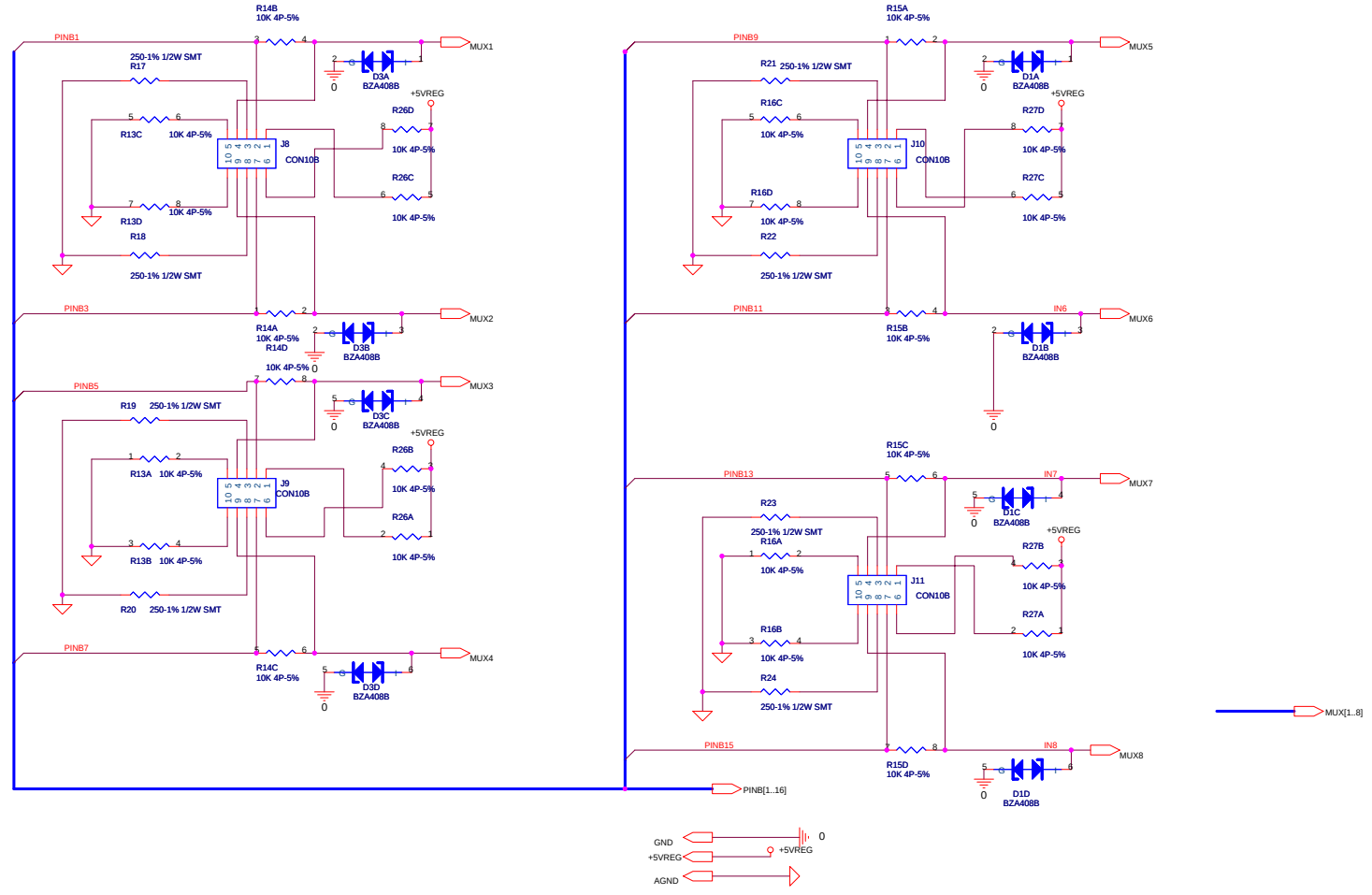
TBD: change the input resistors from 1k to 10k



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