


MPPT CHARGE CONTROLLER BOARD

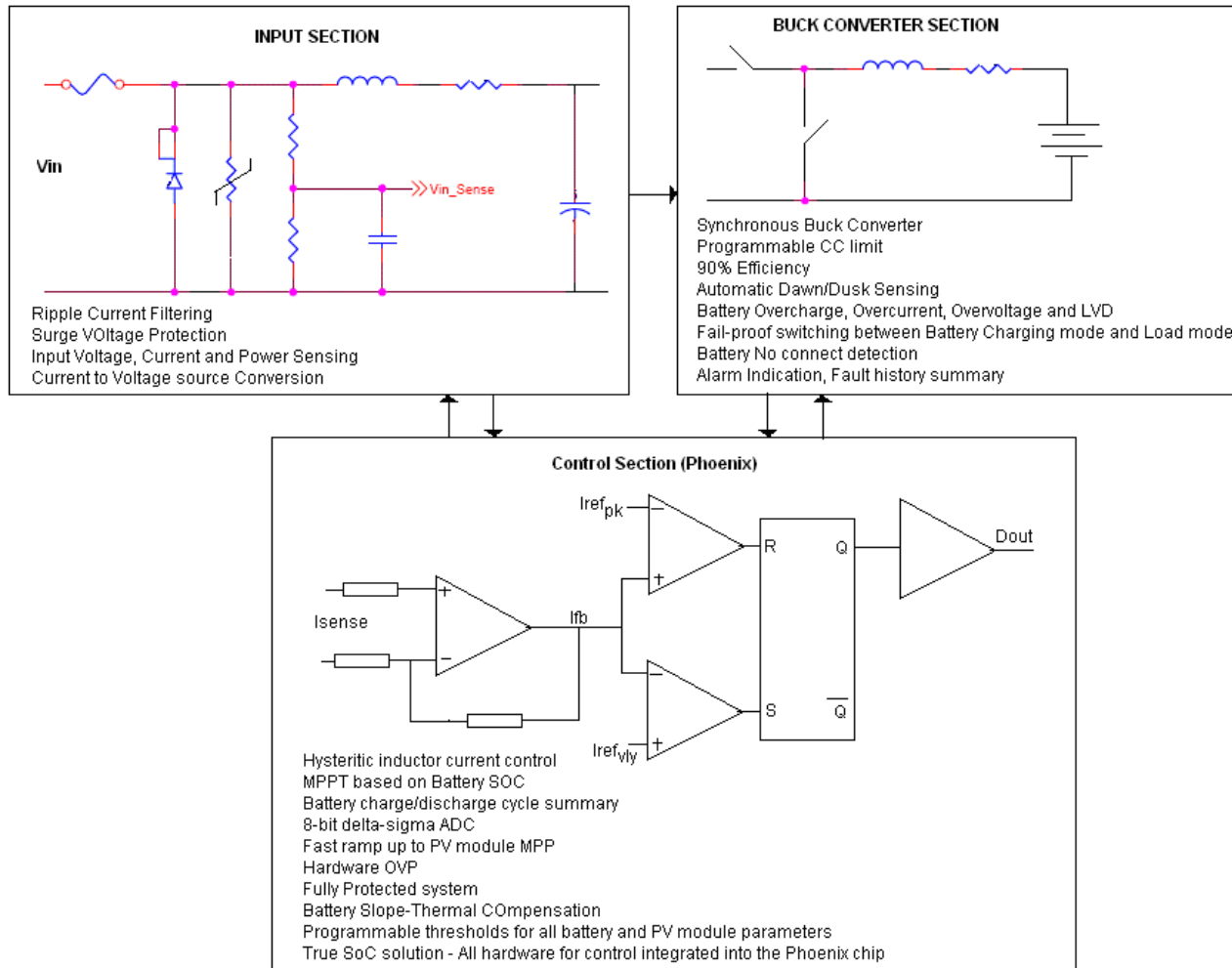
Sr	Revision	Date	Designer	Description
01	1.0	22-JULY-08	VAISHNAVI	INITIAL CREATION
02	1.01	23-JULY-08	VAISHNAVI	Added R415,C408, C610,C611,JP400 Updated the Block Diagram Updated J403 from 2 pin to 5pin Header
03	1.02	24-JULY-08	VAISHNAVI	Added 10K No-pop resistor R416 Cleared DRC warnings
04	1.03	29-JULY-08	VAISHNAVI	Add Solar Panel reverse indication LED Add battery reverse indication LED
05	1.04	05-AUG-08	VAISHNAVI	Updated U500 Added Regulator U501
06	1.05	06-AUG-08	VAISHNAVI	Updated LOAD_ENABLE circuit connections
07	1.06	11-AUG-08	VAISHNAVI	Added Mounting Holes
08	1.07	19-AUG-08	VAISHNAVI	Added SW0 and SW2 nets to the relay RL400 and RL401
09	1.08	20-AUG-08	VAISHNAVI	Updated the pin outs 23, 24, 25 and 26 of the Phoenix device U600
10	2.0	07-JAN-09	VAISHNAVI	Replaced Diode with Part no MBR4045CTPBF instead of relay RL400
11	2.1	12-JAN-09	VAISHNAVI	-Updated the Symbol and part no for the Diode CR408 as 90SQ045 -Update the Part no for the Terminal Blocks J400,J401 and J402 as 1714955
12	2.2	13-JAN-09	VAISHNAVI	-Added the Extra pins pin no 3(Anode) Pin no 4(Cathode) to the Diode CR408 to the Part no 90SQ045,for creating the footprint to place the metal plates
13	2.3	15-JAN-09	VAISHNAVI	-Swapped the pin connections for the terminal Block J400
14	2.4	16-JAN-09	VAISHNAVI	-Pin 3 of U502 is made as NC. -R406, CR401 and R408 are made as NC
15	2.5	05-FEB-09	VAISHNAVI	-R614 is loaded. -R615 is made as No- Load. -O402, CR504 and CR601 are made as NO-Load.
16	2.6	09-FEB-09	VAISHNAVI	-Added the MOSFET Q403 with P/N IRF5210PBF. -Connected 12K resistor across the Gate and source of the Newly added MOSFET Q403. -Connected Drain of the newly added MOSFET Q403 to Anode of CR408 and Source of the newly added MOSFET Q403, cathode of CR408. -Added the 0 Ohm resistor from Gate to Drain of the MOSFET Q402A with reference R422. Also Added the 0 Ohm resistor from Gate to Drain of the MOSFET Q402B with reference R423
17	2.7	10-FEB-09	VAISHNAVI	-The 0 ohm resistor R422 connection has been updated. -The 0 ohm resistor R423 is removed from the schematics. -Q402 and R408 are populated.
18	2.8	13-FEB-09	VAISHNAVI	-Added the 10K resistor R518 between pin 3 of U502 and GND. -Added the part no to the ISSP Header J500. - updated the part no for the switch SW600 as EVP-AA602W
19	2.9	16-FEB-09	VAISHNAVI	-Test point TP400 made as No-Load.
20	3.0	21-JUL-09	SRINIVAS	-Updated R501 to 2.2K. - Updated R412 and R413 to 10 Ohms

DRN BY	08/20/2008	 CYPRESS SEMICONDUCTOR #30/5, 1st Cross Street, R A Puram, Chennai-600 028
DATE	VAISHNAVI	
CHKD BY		File MPPT Charge Controller Board
DATE	BKLL/KDG	
APPD BY		Size C Document Number COVER PAGE
DATE		
PROPRIETARY INFORMATION NO DISSEMINATION OR USE ALLOWED WITHOUT PRIOR WRITTEN PERMISSION		Rev 2.9 Date: Tuesday, July 21, 2008 Sheet 1 of 6

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04	INPUT POWER SUPPLY
05	INTERFACE CONNECTORS
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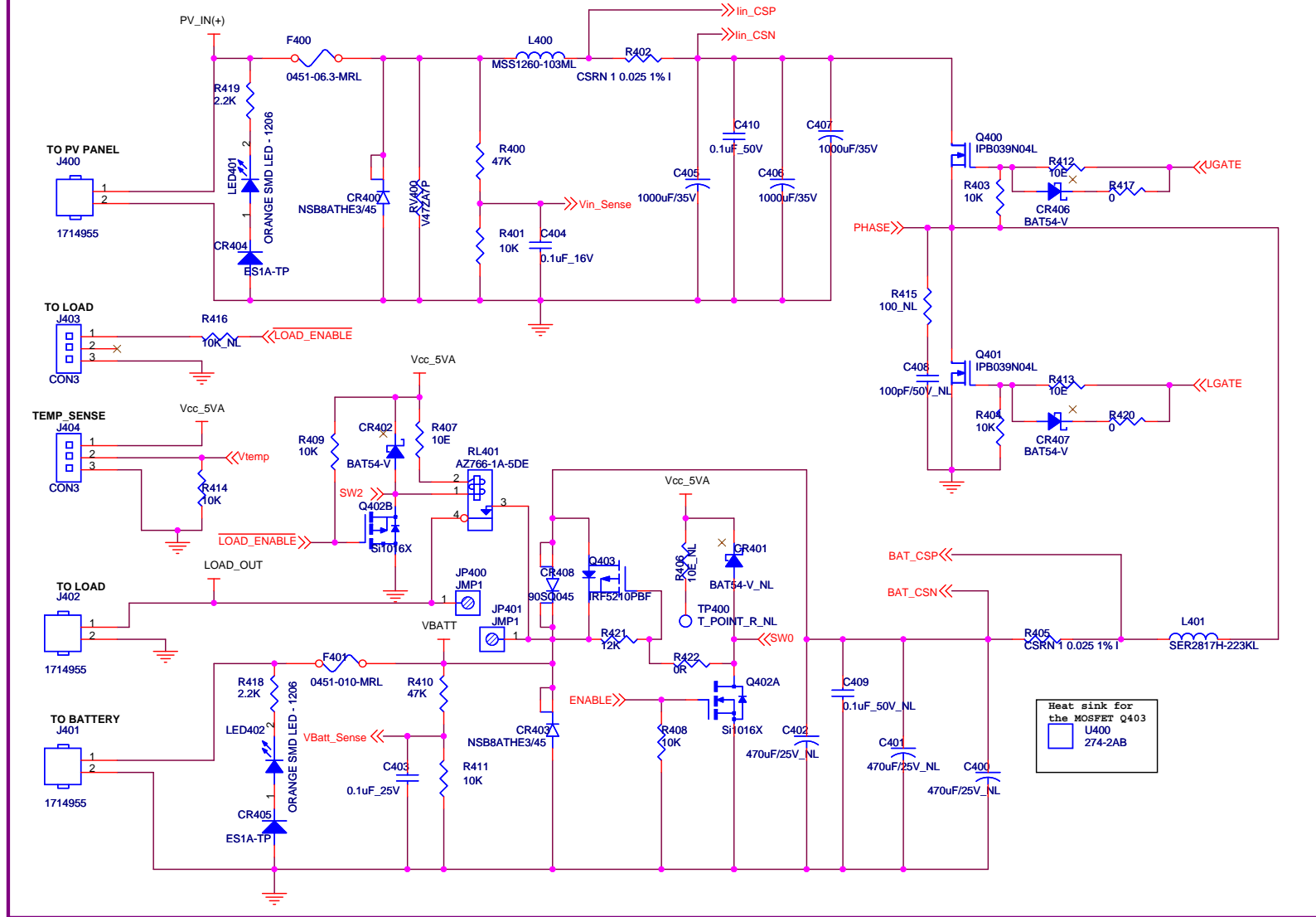
BLOCK DIAGRAM



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POWER TRAIN CIRCUITRY

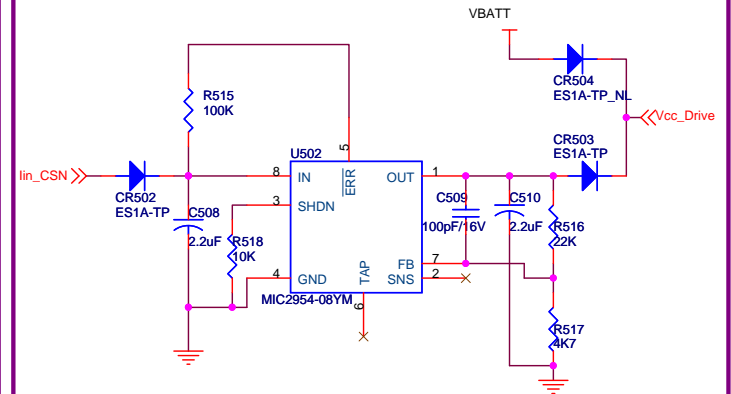
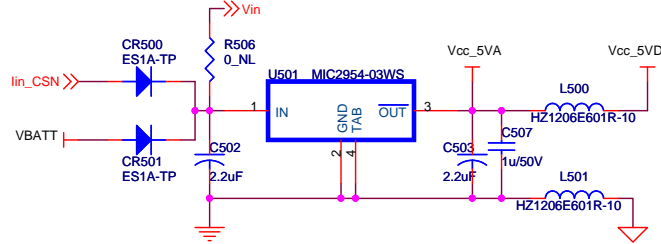
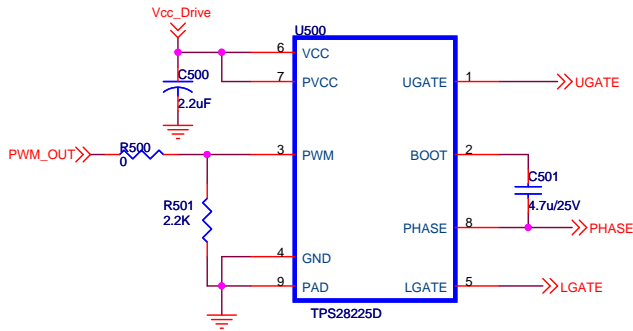


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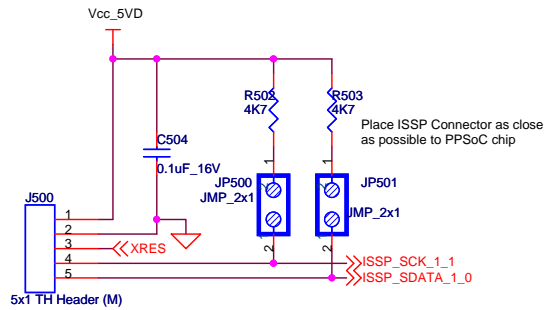
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GATE DRIVER, EXTERNAL Vcc & INTERCONNECT CIRCUIT

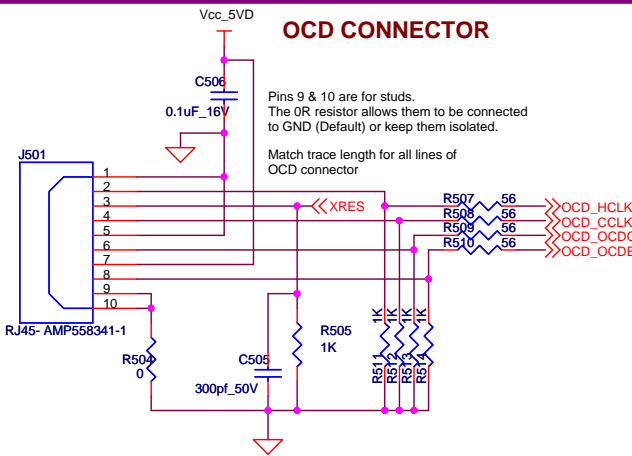
HIGH-FREQUENCY 6A SINK SUNCHRONOUS MOSFET DRIVERS



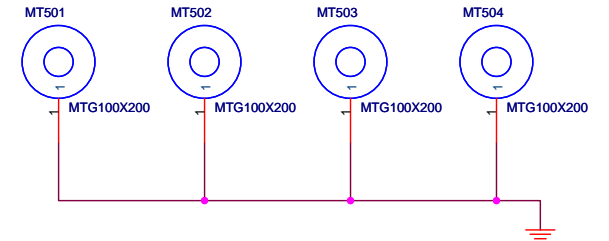
ISSP CONNECTOR



OCD CONNECTOR

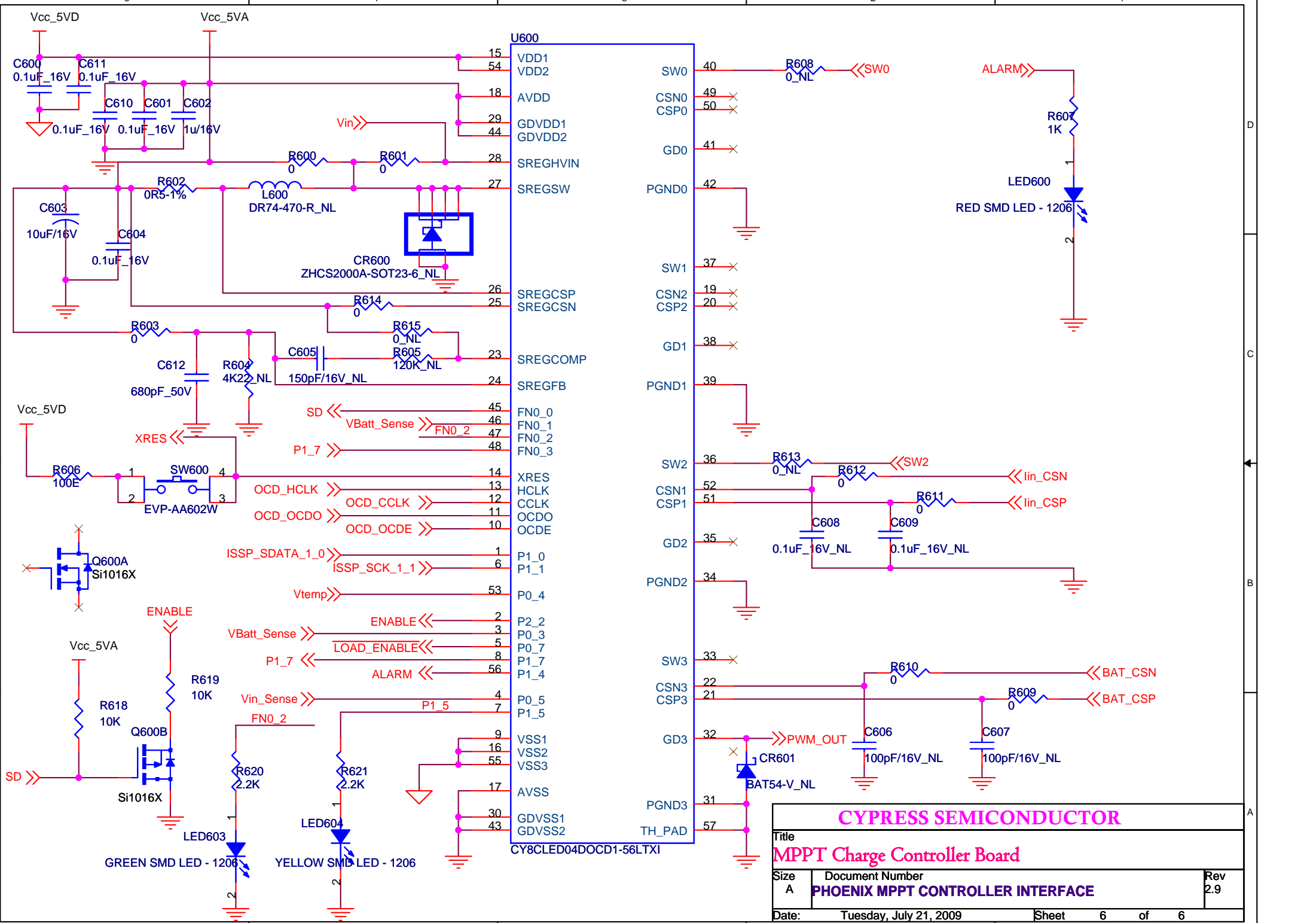


MOUNTING HOLES



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