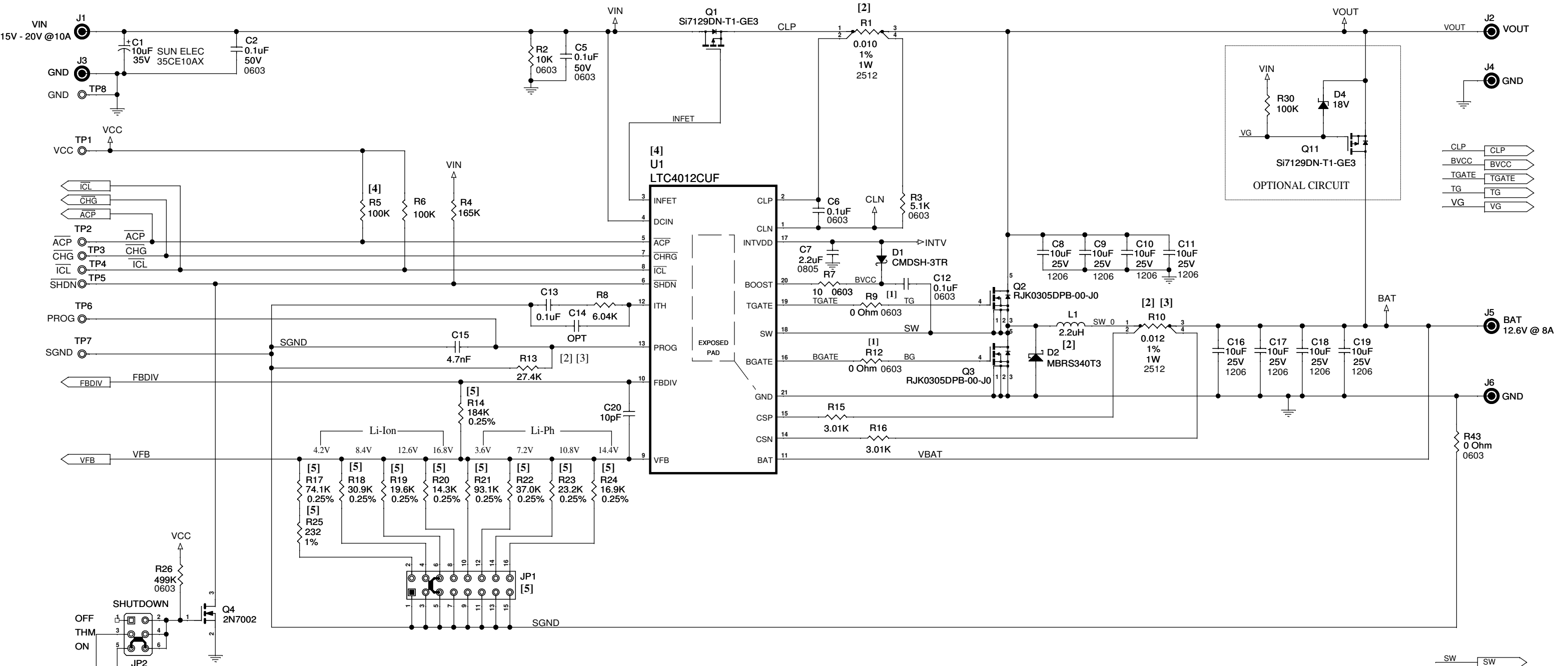
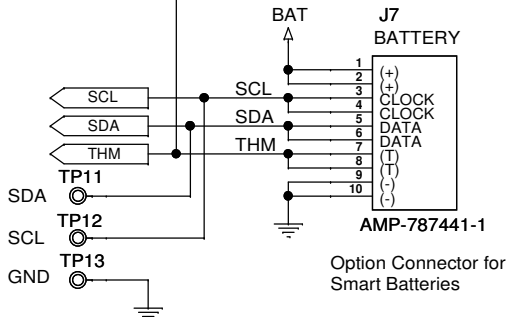
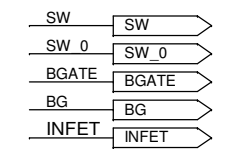


| REVISION HISTORY | | | | |
|------------------|-----|-------------|----------|----------|
| ECO | REV | DESCRIPTION | APPROVED | DATE |
| - | 2 | PRODUCTION | JOSH Y | 05/27/10 |



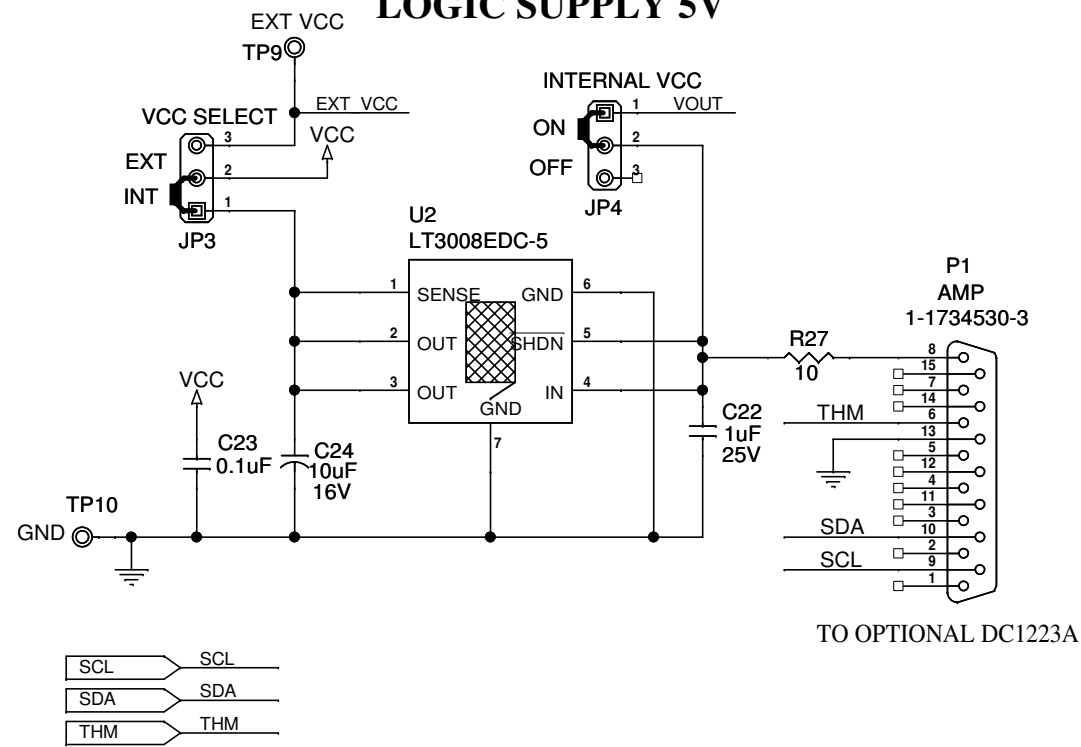
NOTES: UNLESS OTHERWISE SPECIFIED,

1. CHANGE R9 AND R12 TO 100 OHMS WHEN USING GATE DRIVER CIRCUIT.
2. ADJUST R1, R10, R13 AND L1 APPROPRIATELY FOR INCREASED OUTPUT CURRENT.
3. R13 IS ADJUSTED WITH R10 TO OBTAIN 8A OUTPUT CURRENT.
4. OPTION: FOR SLA OPTIONAL CIRCUIT, DO NOT INSTALL R14, R17 THRU R25, JP1.
5. ALL CAPACITORS AND RESISTORS ARE 0402.



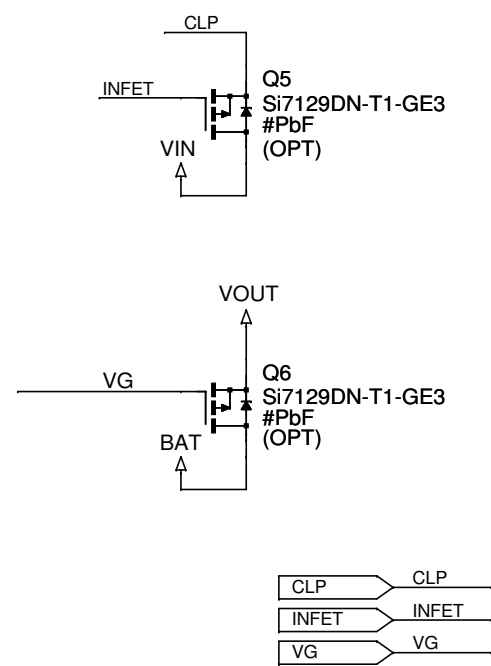
| CUSTOMER NOTICE | | APPROVALS | | LINEAR TECHNOLOGY | | 1630 McCarthy Blvd. Milpitas, CA 95035 www.linear.com Phone: (408)432-1900 Fax: (408)434-0507 LTC CONFIDENTIAL - FOR CUSTOMER USE ONLY | |
|--|--|--------------|--------|--------------------------------|--------|--|--------|
| LINEAR TECHNOLOGY HAS MADE A BEST EFFORT TO DESIGN A CIRCUIT THAT MEETS CUSTOMER-SUPPLIED SPECIFICATIONS; HOWEVER, IT REMAINS THE CUSTOMER'S RESPONSIBILITY TO VERIFY PROPER AND RELIABLE OPERATION IN THE ACTUAL APPLICATION. COMPONENT SUBSTITUTION AND PRINTED CIRCUIT BOARD LAYOUT MAY SIGNIFICANTLY AFFECT CIRCUIT PERFORMANCE OR RELIABILITY. CONTACT LINEAR TECHNOLOGY APPLICATIONS ENGINEERING FOR ASSISTANCE. | | PCB DES. | RJB | TITLE: SCHEMATIC | | THREE CELL 12.6V@8A SWITCHING BATTERY CHARGER | |
| THIS CIRCUIT IS PROPRIETARY TO LINEAR TECHNOLOGY AND SUPPLIED FOR USE WITH LINEAR TECHNOLOGY PARTS. | | APP ENG. | JOSH Y | SIZE | IC NO. | LTC4012CUF | REV. 2 |
| C:\PADS PROJECTS\1614A\SCH\1614A_REV3.DSN | | SCALE = NONE | | DATE: Monday, October 04, 2010 | | SHEET 1 OF 2 | |

LOGIC SUPPLY 5V

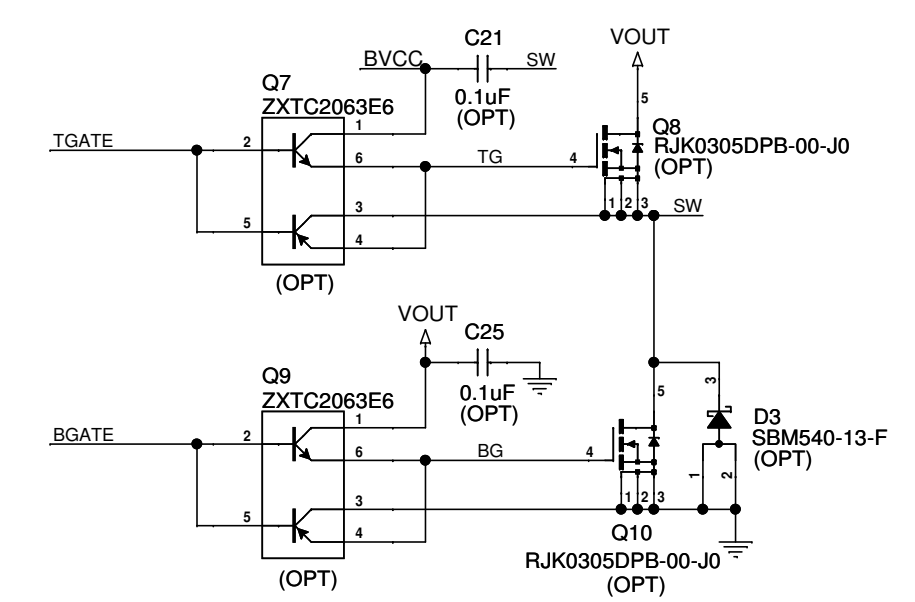


TO OPTIONAL DC1223A

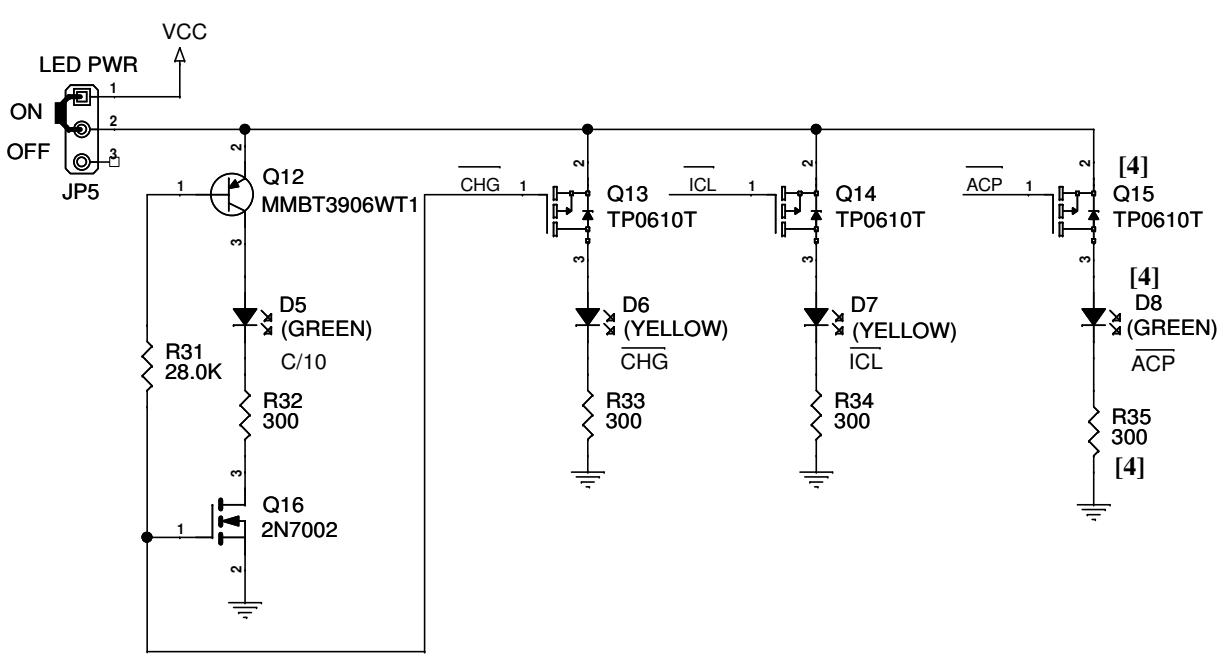
OPTIONAL CIRCUIT(INFET) & VOUT



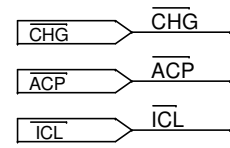
OPTIONAL INCREASED GATE DRIVE CIRCUIT



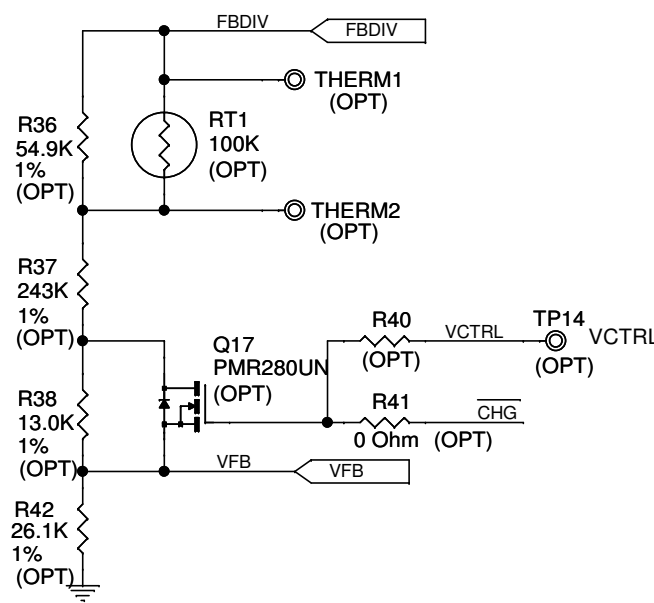
1. REMOVE ALL ABOVE COMPONENTS WHEN NOT USING GATE DRIVER CIRCUIT.
2. Q7 AND Q9 CAN BE PBSS4140DON OR CMLF3474 DEPENDING ON REQUIRED DRIVE STRENGTH.



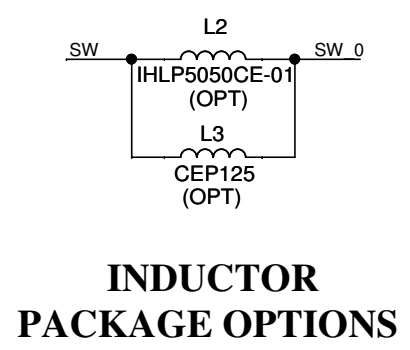
INDICATOR CIRCUIT



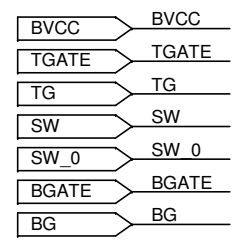
OPTIONAL CIRCUIT (SEALED LEAD ACID)



1. REMOVE ALL ABOVE COMPONENTS WHEN NOT USING SLA CIRCUIT.



INDUCTOR PACKAGE OPTIONS



| | | | | | | | |
|--|--|---|--|---|--|---|--|
| CUSTOMER NOTICE LINEAR TECHNOLOGY HAS MADE A BEST EFFORT TO DESIGN A CIRCUIT THAT MEETS CUSTOMER-SUPPLIED SPECIFICATIONS; HOWEVER, IT REMAINS THE CUSTOMER'S RESPONSIBILITY TO VERIFY PROPER AND RELIABLE OPERATION IN THE ACTUAL APPLICATION. COMPONENT SUBSTITUTION AND PRINTED CIRCUIT BOARD LAYOUT MAY SIGNIFICANTLY AFFECT CIRCUIT PERFORMANCE OR RELIABILITY. CONTACT LINEAR TECHNOLOGY APPLICATIONS ENGINEERING FOR ASSISTANCE. <small>C:\PADS PROJECTS\1614A\SCH\1614A_REV3.DSN</small> | | APPROVALS PCB DES. R'B APP ENG. JOSH Y | | | | 1630 McCarthy Blvd. Milpitas, CA 95035 www.linear.com Phone: (408)432-1900 Fax: (408)434-0507 <small>LTC CONFIDENTIAL - FOR CUSTOMER USE ONLY</small> | |
| THIS CIRCUIT IS PROPRIETARY TO LINEAR TECHNOLOGY AND SUPPLIED FOR USE WITH LINEAR TECHNOLOGY PARTS. | | SCALE = NONE | | TITLE: SCHEMATIC THREE CELL 12.6V@8A SWITCHING BATTERY CHARGER | | SIZE N/A IC NO. LTC4012CUF DEMO CIRCUIT 1614A REV. 3 | |
| | | DATE: Monday, October 04, 2010 | | SHEET 2 OF 2 | | | |