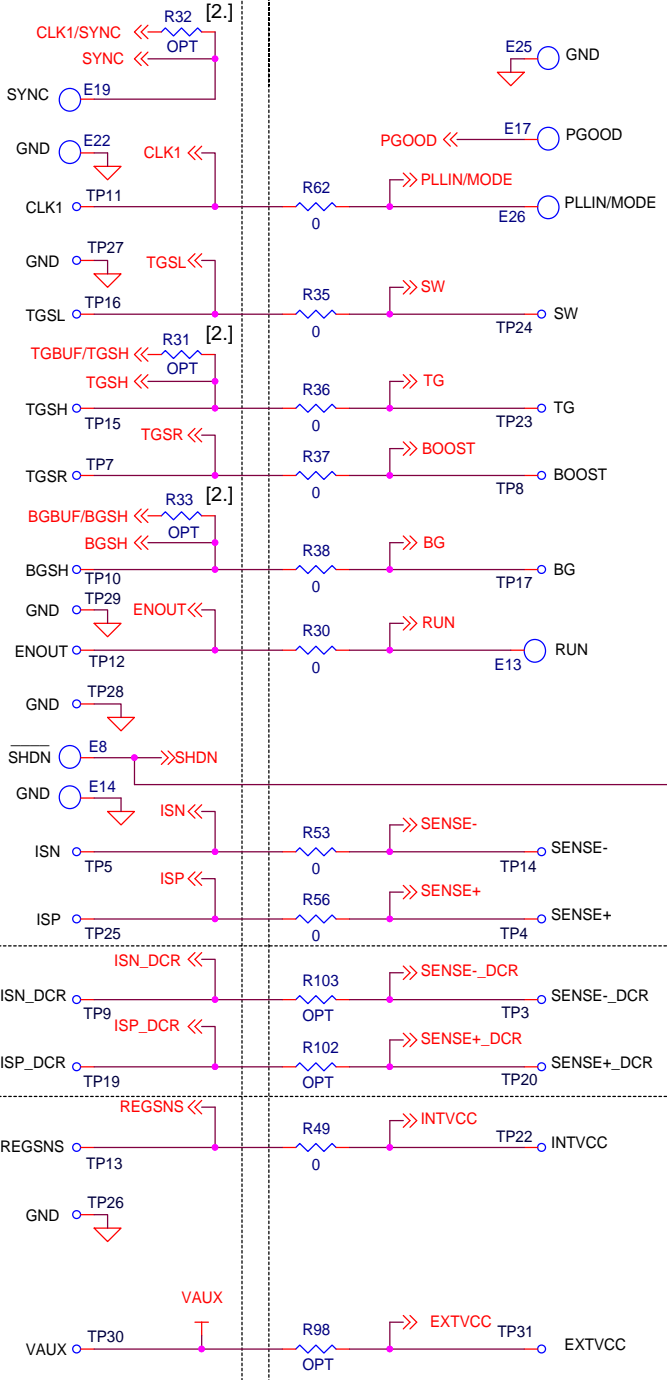


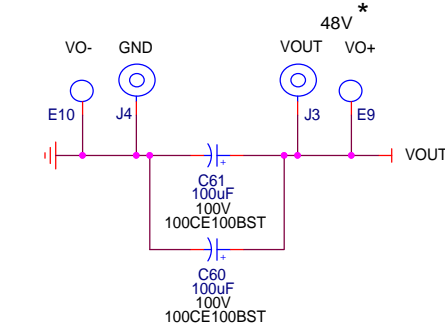
| REVISION HISTORY |     |             |          |            |
|------------------|-----|-------------|----------|------------|
| ECO              | REV | DESCRIPTION | APPROVED | DATE       |
| -                | 4   | PRODUCTION  | VK       | 02-07-2018 |



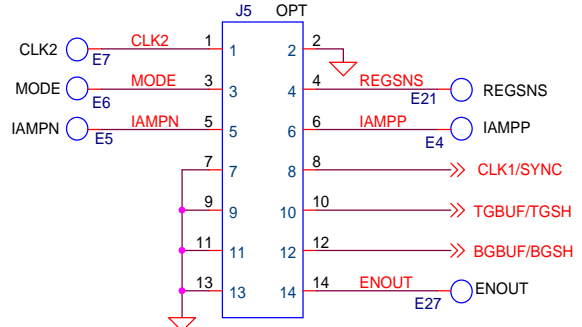
[1.] LT8551

[3.] LTC3769  
PRIMARY CONTROLLER

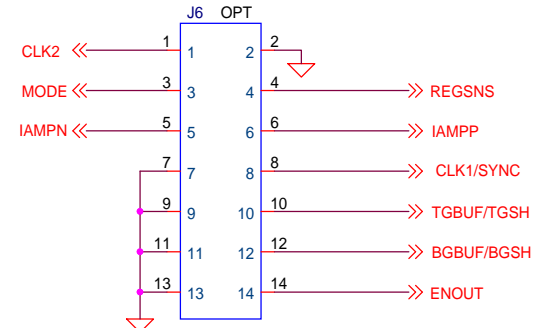
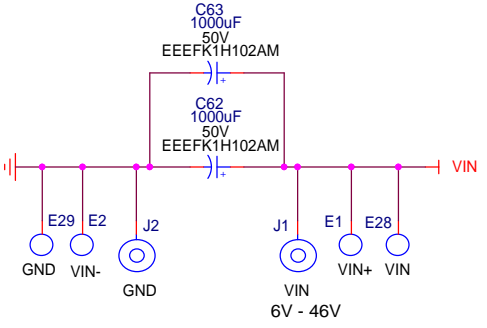
**OPTIONAL  
DCR SENSE**



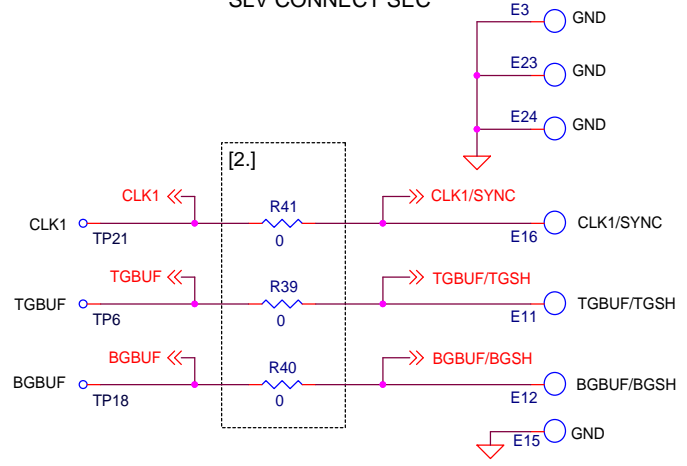
\* SEE THE DEMO MANUAL FOR CURRENT RATING



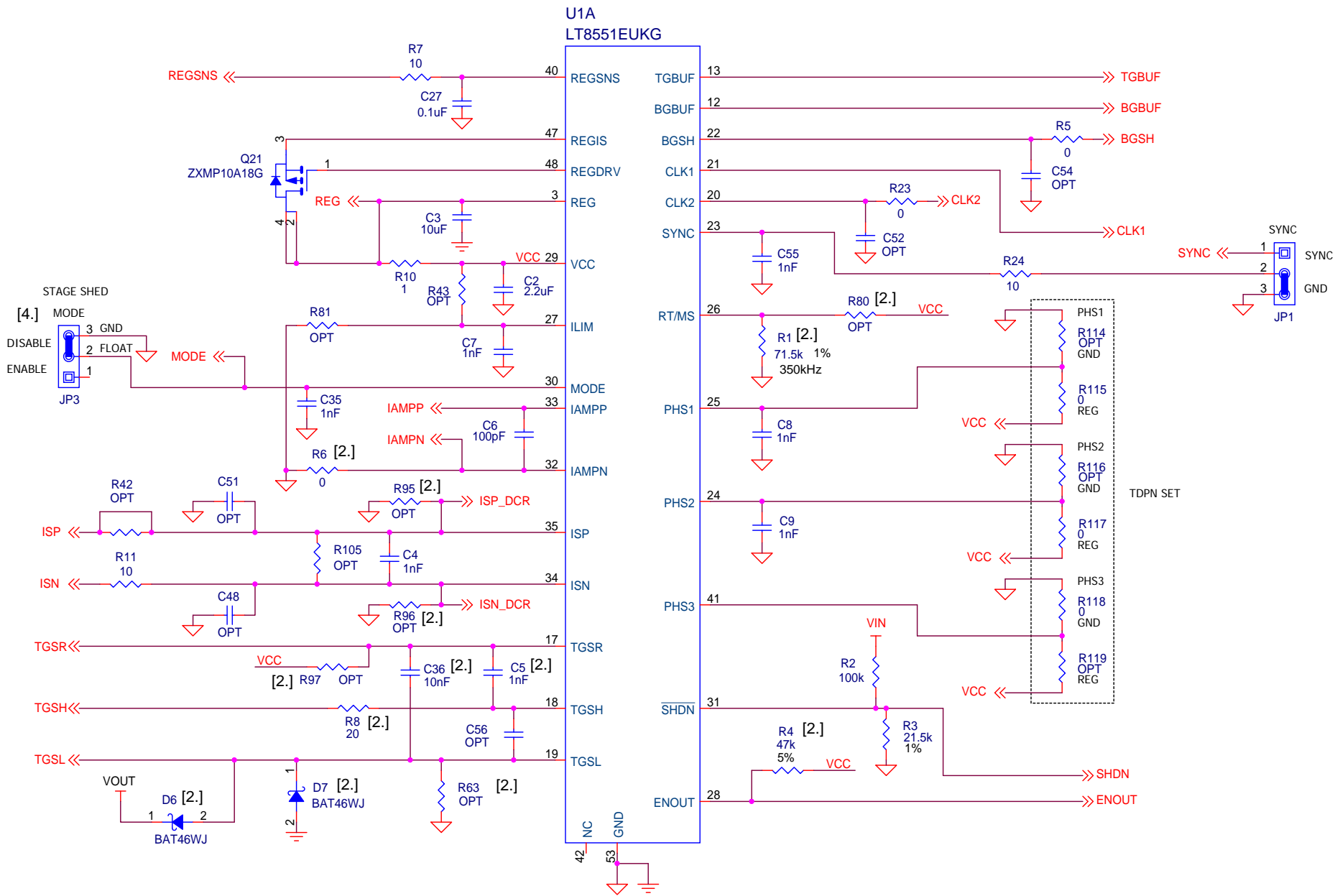
SLV CONNECT PRM





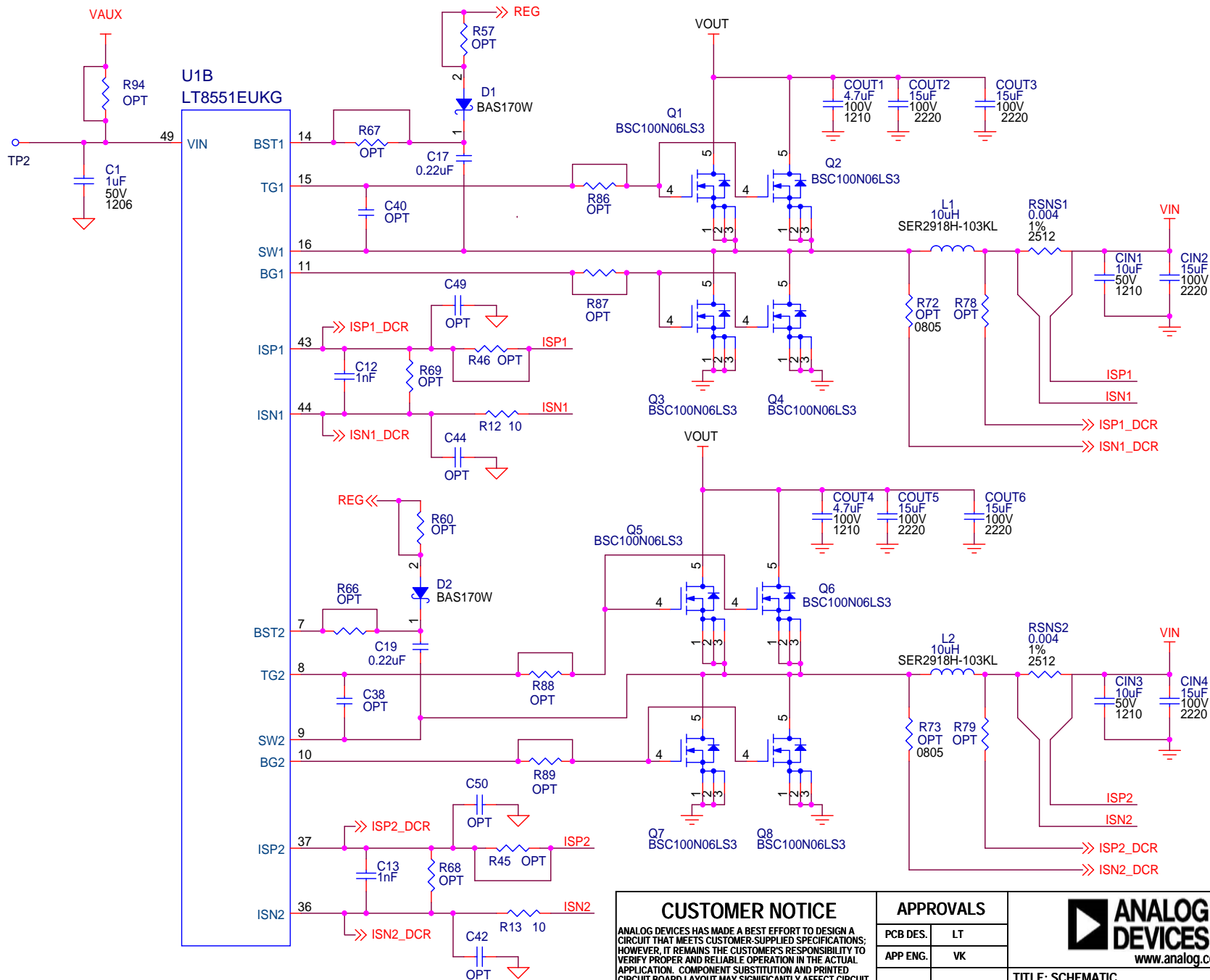
SLV CONNECT SEC



|   |     |                         |            |  |   |
|---|-----|-------------------------|------------|--|---|
| <p><b>CUSTOMER NOTICE</b></p> <p>ANALOG DEVICES 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 ANALOG DEVICES APPLICATIONS ENGINEERING FOR ASSISTANCE.</p> |     | <p><b>APPROVALS</b></p> |            | <br>www.analog.com                                   | <br>Phone: (408)432-1900  |
|   |     | PCB DES.                | LT         |  |   |
| <p>THIS CIRCUIT IS PROPRIETARY TO ANALOG DEVICES AND SUPPLIED FOR USE WITH ANALOG DEVICES PARTS.</p>  |     | APP ENG.                | VK         | <p>IC NO. LT8551EUKG</p> <p>SKU NO. DC2332A(A,B)</p> | <p>SCHEMATIC NO. AND REVISION:</p> <p><b>710-DC2332A(A,B)_REV04</b></p> |
| SIZE:   | N/A | DATE:                   | 02-07-2018 | SHEET 1 OF 6   |   |



| CUSTOMER NOTICE  |  | APPROVALS   |                  |   |
|--|--|---|------------------|---|
| ANALOG DEVICES 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 ANALOG DEVICES APPLICATIONS ENGINEERING FOR ASSISTANCE. |  | PCB DES.  | LT               |   |
|  |  | APP ENG.  | VK               |   |
|  |  | TITLE: SCHEMATIC MULTIPHASE BOOST CONVERTER EXPANDER WITH INTERNAL GATE DRIVERS |                  |   |
|  |  | IC NO. LT8551EUKG<br>SKU NO. DC2332A(A,B)                                       |                  | SCHEMATIC NO. AND REVISION:<br><b>710-DC2332A(A,B)_REV04</b>  |
| THIS CIRCUIT IS PROPRIETARY TO ANALOG DEVICES AND SUPPLIED FOR USE WITH ANALOG DEVICES PARTS.  |  | SIZE: N/A   | DATE: 02-07-2018 | SHEET 2 OF 6  |



**CUSTOMER NOTICE**  
 ANALOG DEVICES 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 ANALOG DEVICES APPLICATIONS ENGINEERING FOR ASSISTANCE.

**APPROVALS**

|          |    |
|----------|----|
| PCB DES. | LT |
| APP ENG. | VK |

THIS CIRCUIT IS PROPRIETARY TO ANALOG DEVICES AND SUPPLIED FOR USE WITH ANALOG DEVICES PARTS.



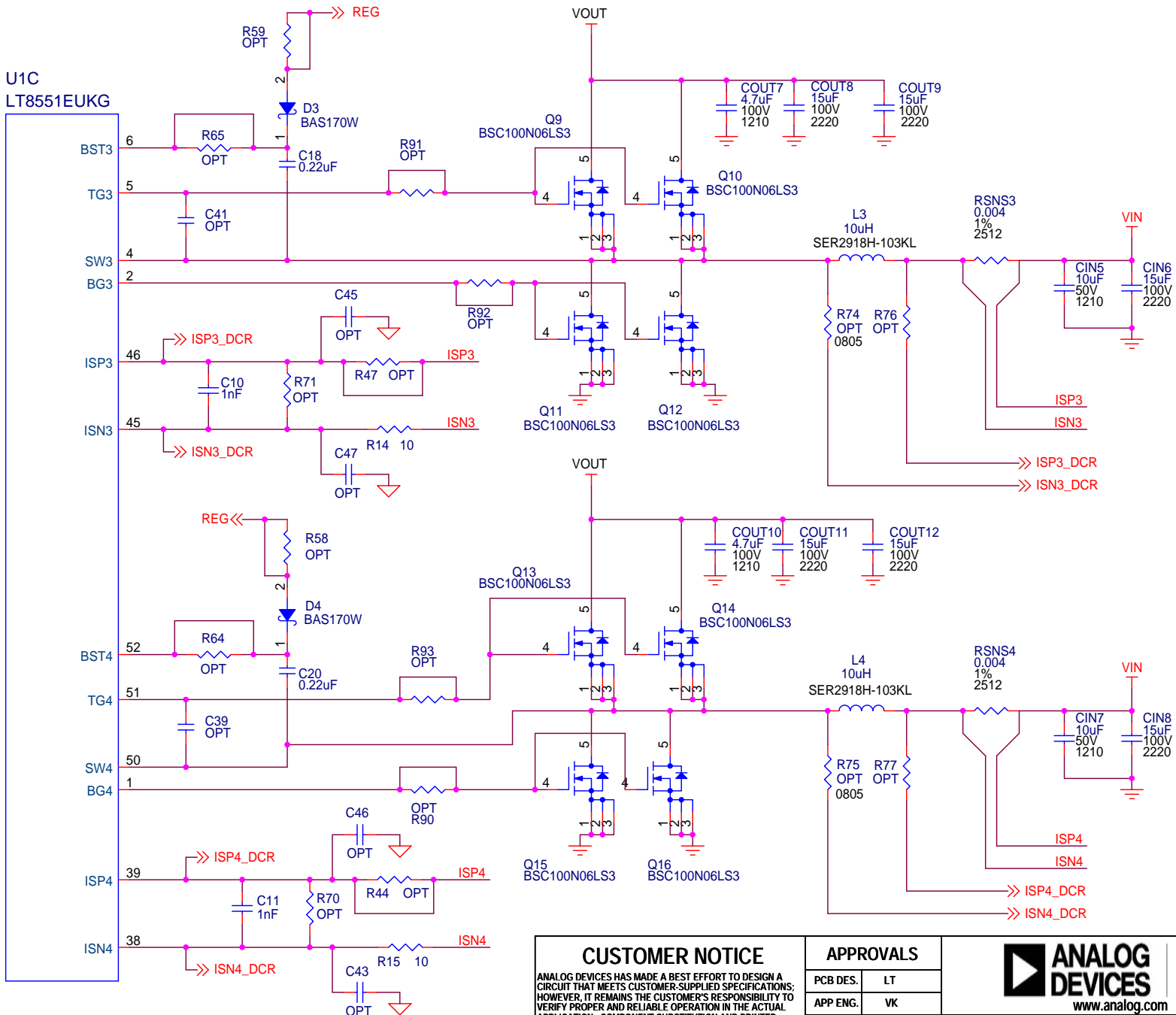
TITLE: SCHEMATIC  
**MULTIPHASE BOOST CONVERTER EXPANDER WITH INTERNAL GATE DRIVERS**

IC NO. LT8551EUKG  
 SKU NO. DC2332A(A,B)

SCHMATIC NO. AND REVISION:  
**710-DC2332A(A,B)\_REV04**

SIZE: N/A DATE: 02-07-2018 SHEET 3 OF 6

U1C  
LT8551EUKG



**CUSTOMER NOTICE**  
 ANALOG DEVICES 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 ANALOG DEVICES APPLICATIONS ENGINEERING FOR ASSISTANCE.

THIS CIRCUIT IS PROPRIETARY TO ANALOG DEVICES AND SUPPLIED FOR USE WITH ANALOG DEVICES PARTS.

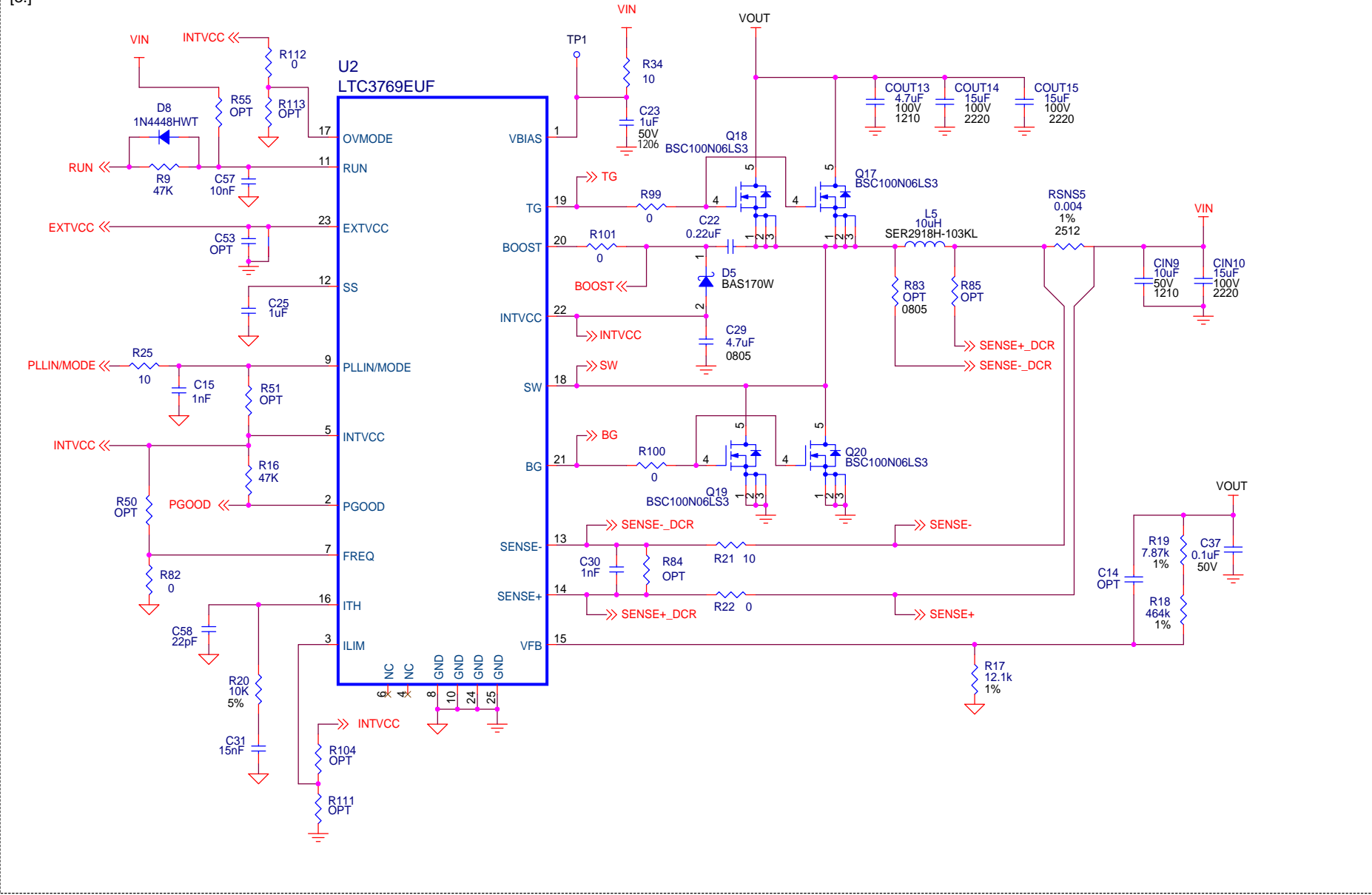
| APPROVALS   |                               |
|---|-------------------------------|
| PCB DES.  | LT                            |
| APP ENG.  | VK                            |
| TITLE: SCHEMATIC<br>MULTIPHASE BOOST CONVERTER EXPANDER<br>WITH INTERNAL GATE DRIVERS |                               |
| IC NO. LT8551EUKG   | SCHMATIC NO. AND REVISION:    |
| SKU NO. DC2332A(A,B)  | <b>710-DC2332A(A,B)_REV04</b> |
| SIZE: N/A   | DATE: 02-07-2018              |
| SHEET 4 OF 6  |                               |



www.analog.com

Phone: (408)432-1900

[3.]



|   |  |                  |   |              |
|---|--|------------------|---|--------------|
| <p><b>CUSTOMER NOTICE</b></p> <p>ANALOG DEVICES 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 ANALOG DEVICES APPLICATIONS ENGINEERING FOR ASSISTANCE.</p> | <p><b>APPROVALS</b></p>  |                  | <p><b>ANALOG DEVICES</b>   <b>POWER BY LINEAR</b></p> <p>www.analog.com Phone: (408)432-1900</p>                    |              |
|   | PCB DES.   | LT               |   |              |
|   | APP ENG.   | VK               |   |              |
|   |  |                  |   |              |
| <p>THIS CIRCUIT IS PROPRIETARY TO ANALOG DEVICES AND SUPPLIED FOR USE WITH ANALOG DEVICES PARTS.</p>  | <p>TITLE: SCHEMATIC</p> <p><b>MULTIPHASE BOOST CONVERTER EXPANDER WITH INTERNAL GATE DRIVERS</b></p> |                  | <p>IC NO. LT8551EUKG<br/>SKU NO. DC2332A(A,B)<br/>SCHEMATIC NO. AND REVISION:<br/><b>710-DC2332A(A,B)_REV04</b></p> |              |
|   | SIZE: N/A  | DATE: 02-07-2018 |   | SHEET 5 OF 6 |
|   |  |                  |   |              |

**NOTES:**

|      |      |                       |
|------|------|-----------------------|
| [1.] | ASSY | LT8551 MASTER / SLAVE |
|      | -A   | MASTER                |
|      | -B   | SLAVE                 |

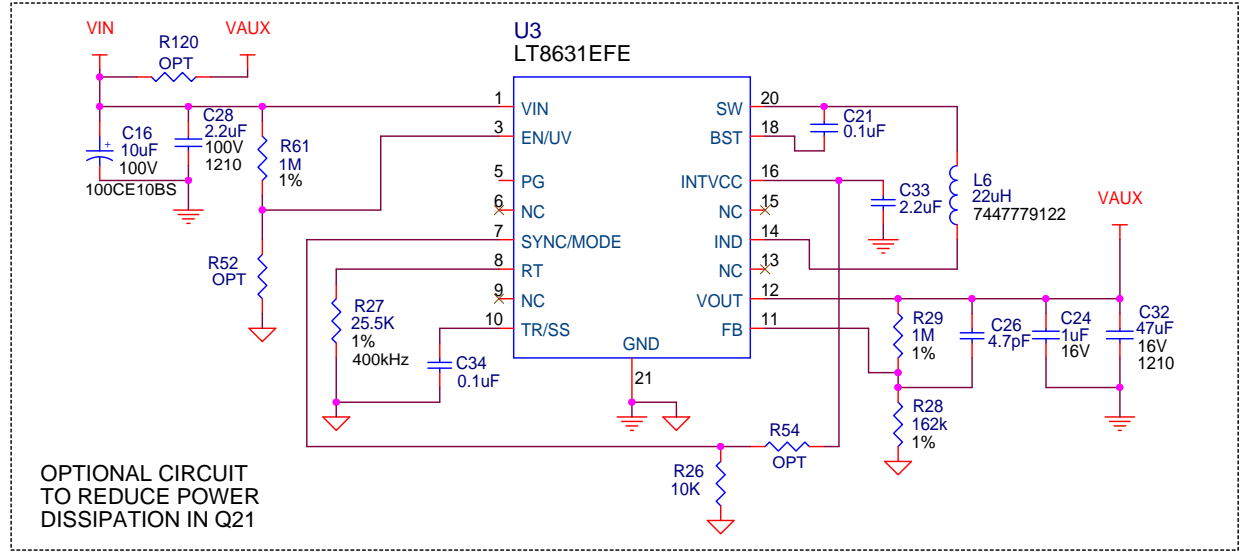
|      |      |       |     |                |       |                                     |     |      |         |
|------|------|-------|-----|----------------|-------|-------------------------------------|-----|------|---------|
| [2.] | ASSY | R1    | R4  | R6,R39,R40,R41 | R8    | R31,R32,R33,R63,<br>R80,R95,R96,R97 | C5  | C36  | D6,D7   |
|      | -A   | 71.5K | 47K | 0 OHM          | 20    | OPT                                 | 1nF | 10nF | BAT46WJ |
|      | -B   | OPT   | OPT | OPT            | 0 OHM | 0 OHM                               | OPT | OPT  | OPT     |

|      |      |  |
|------|------|--|
| [3.] | ASSY | LTC3769 PRIMARY CONTROLLER<br>COMPONENTS INSTALLED / REMOVED |
|      | -A   | INSTALLED  |
|      | -B   | REMOVED  |

|      |      |                  |
|------|------|------------------|
| [4.] | ASSY | JP4 (STAGE SHED) |
|      | -A   | DISABLE          |
|      | -B   | ENABLE           |

|      |      |            |
|------|------|------------|
| [5.] | ASSY | JP5 (SYNC) |
|      | -A   | GND        |
|      | -B   | SYNC       |

6. UNLESS OTHERWISE SPECIFIED,  
ALL RESISTORS ARE 0603, 5%  
AND ALL CAPACITORS ARE 0603.



|   |   |   |  |    |          |    |  |
|---|---|---|--|----|----------|----|--|
| <p><b>CUSTOMER NOTICE</b></p> <p>ANALOG DEVICES 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 ANALOG DEVICES APPLICATIONS ENGINEERING FOR ASSISTANCE.</p> | <p><b>APPROVALS</b></p> <table border="1"> <tr> <td>PCB DES.</td> <td>LT</td> </tr> <tr> <td>APP ENG.</td> <td>VK</td> </tr> </table> |   | PCB DES.   | LT | APP ENG. | VK | <p><b>ANALOG DEVICES</b>   <b>POWER BY LINEAR</b></p> <p>www.analog.com Phone: (408)432-1900</p> |
|   | PCB DES.  | LT  |  |    |          |    |  |
| APP ENG.  | VK  |   |  |    |          |    |  |
| <p>THIS CIRCUIT IS PROPRIETARY TO ANALOG DEVICES AND SUPPLIED FOR USE WITH ANALOG DEVICES PARTS.</p>  |   | <p>TITLE: SCHEMATIC<br/><b>MULTIPHASE BOOST CONVERTER EXPANDER WITH INTERNAL GATE DRIVERS</b></p> |  |    |          |    |  |
|   |   | <p>IC NO. LT8551EUKG<br/>SKU NO. DC2332A(A,B)</p>   | <p>SCHEMATIC NO. AND REVISION:<br/><b>710-DC2332A(A,B) REV04</b></p> |    |          |    |  |
|   |   | <p>SIZE: N/A DATE: 02-07-2018</p>   | <p>SHEET 6 OF 6</p>  |    |          |    |  |