

Notes:

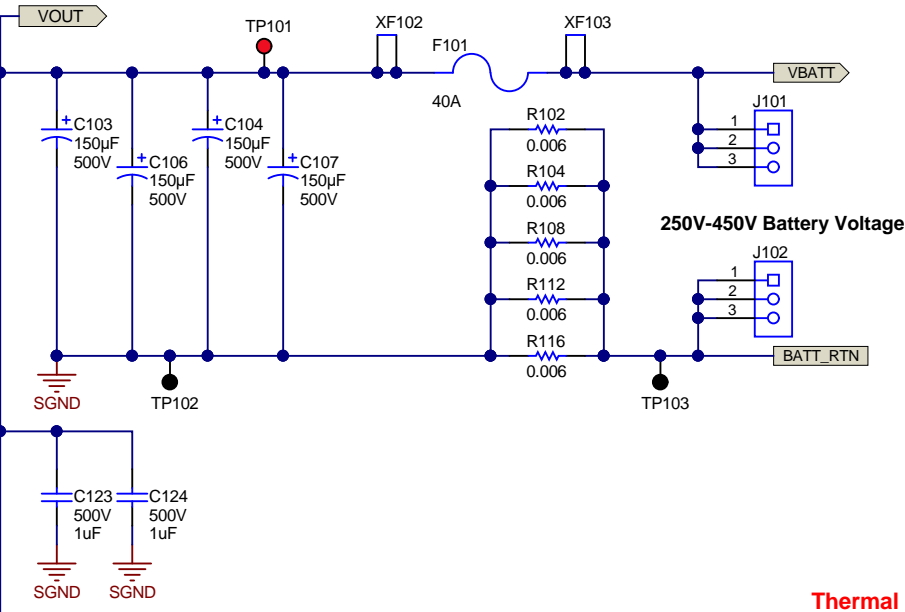
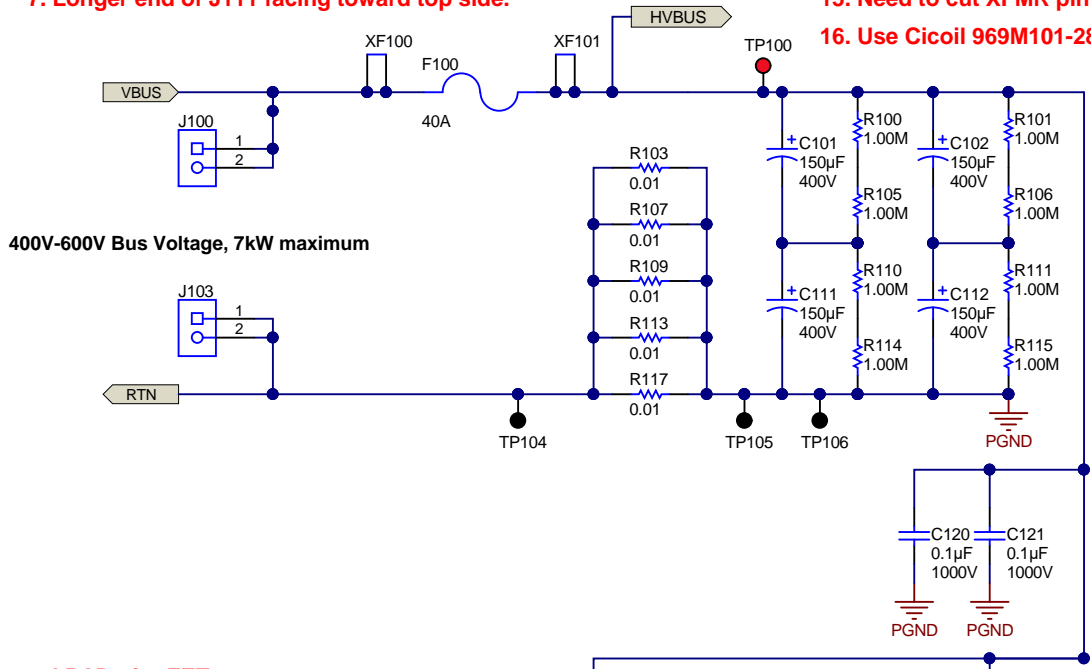
1. L100 and L101 are Rogowski coils for current sensing.
2. Use ATS-EXL6-254-R0 heatsink or larger at bottom for FETs and XFMR.
3. Use C3M0030090K x 8 for DAB switches.
4. Place Resonant capacitor on transformer pins.
5. Cut Transformer pins for Crp and Crs connections.
6. 5V for bias supply on primary side is powered from PMP22001 board.
7. Longer end of J111 facing toward top side.

8. 5Vs for bias supply on secondary side is powered from PMP21999 main board.

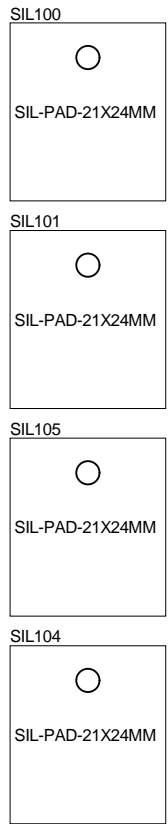
9. Net Leg_1_Prim and Crp_1 are shorted via boards to XFMR pin connections.
10. Net Leg_1_Sec and Crs_1 are shorted via boards to XFMR pin connections.
11. Longer end of the following connectors facing toward bottom side: J104, J106, J110.
12. 2 x 12V fan (Delta FFB0412EN-00Y2E, operate at 12V blow from input side of the bottom heatsink).
13. Driver bias supply top side facing C2000 control card for primary, away from C2000 control card for secondary.
14. Need to cut XFMR pin 2 on primary side and add Kapton tape between XFMR pin 2 and main board.
15. Need to cut XFMR pin 1 and 4 on secondary side and add Kapton tape among XFMR pin 2, 4 and main board.
16. Use Cicoil 969M101-28-4 flat wire to connect main board to primary side driver card signals.

17. PMP21999 J110 signals goes to the PMP22002 board connected to J108.

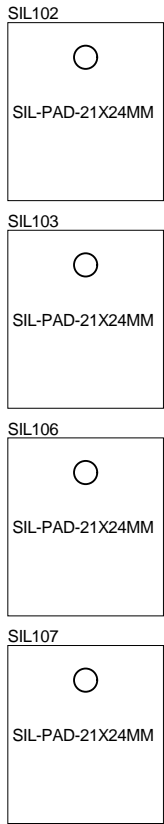
18. PMP21999 J111 signals goes to the PMP22002 board connected to J109.
19. L100 and L101 block dot facing up.
20. L100 and L101 "ST" pin go to Coil_xxx_N.
21. L100 and L101 "FN" pin go to Coil_xxx_P.
22. AMC1302 (U205) layout on this board isn't optimized. Different scaling on the code is required.



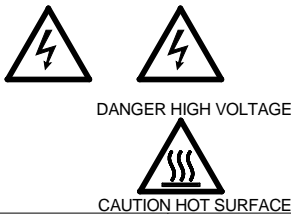
Thermal PADs for FETs



Thermal PADs for FETs



PCB LOGO
Pb-Free Symbol
PCB Number: PMP21999
PCB Rev: A



PCB LOGO
WEEE logo

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|---------------------------------|---|----------------------|
| Orderable: | Designed for: Public Release | Mod. Date: 8/14/2019 |
| TID #: TIDM-02002 | Project Title: Bidirectional CLLC converter | |
| Number: PMP21999 | Rev: A | Sheet Title: |
| SVN Rev: Not in version control | Assembly Variant: 001 | Sheet: 1 of 2 |
| Drawn By: | File: PowerStage_SchDoc | Size: B |
| Engineer: Sheng-Yang Yu | Contact: http://www.ti.com/support | |

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