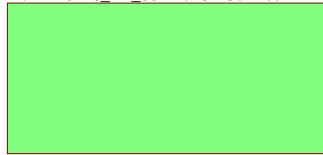


Revision History

Rev	ECN #	Approved Date	Approved by	Notes
N/A	N/A	N/A	N/A	N/A

Designator  
MainLM5176\_BB\_35Vmax8A.SchDoc



Designator  
Hardware.SchDoc



# DC-DC Power Specification Validation

- Full operation input voltage: 10.5V to 16V, Nominal 14V
- Output Voltage: 5V to 35V
- Output voltage ripple < 250mV at 35V output
- Tracking function - Response 35V to 5V in 2000us
- Synch frequency control from 400kHz to 500kHz
- Design to achieve lower system cost than existing solution
- Peak Output Power: 300W
- Crest factor (RMS to peak): 4 for 75W sustained power
- Peak power sustain period: 200ms
- Nominal efficiency > 93% at full load and nominal input
- PWM digital interface to control output voltage
- Max ambient operating temperature = 85C
- Short Circuit protected
- Current limit function

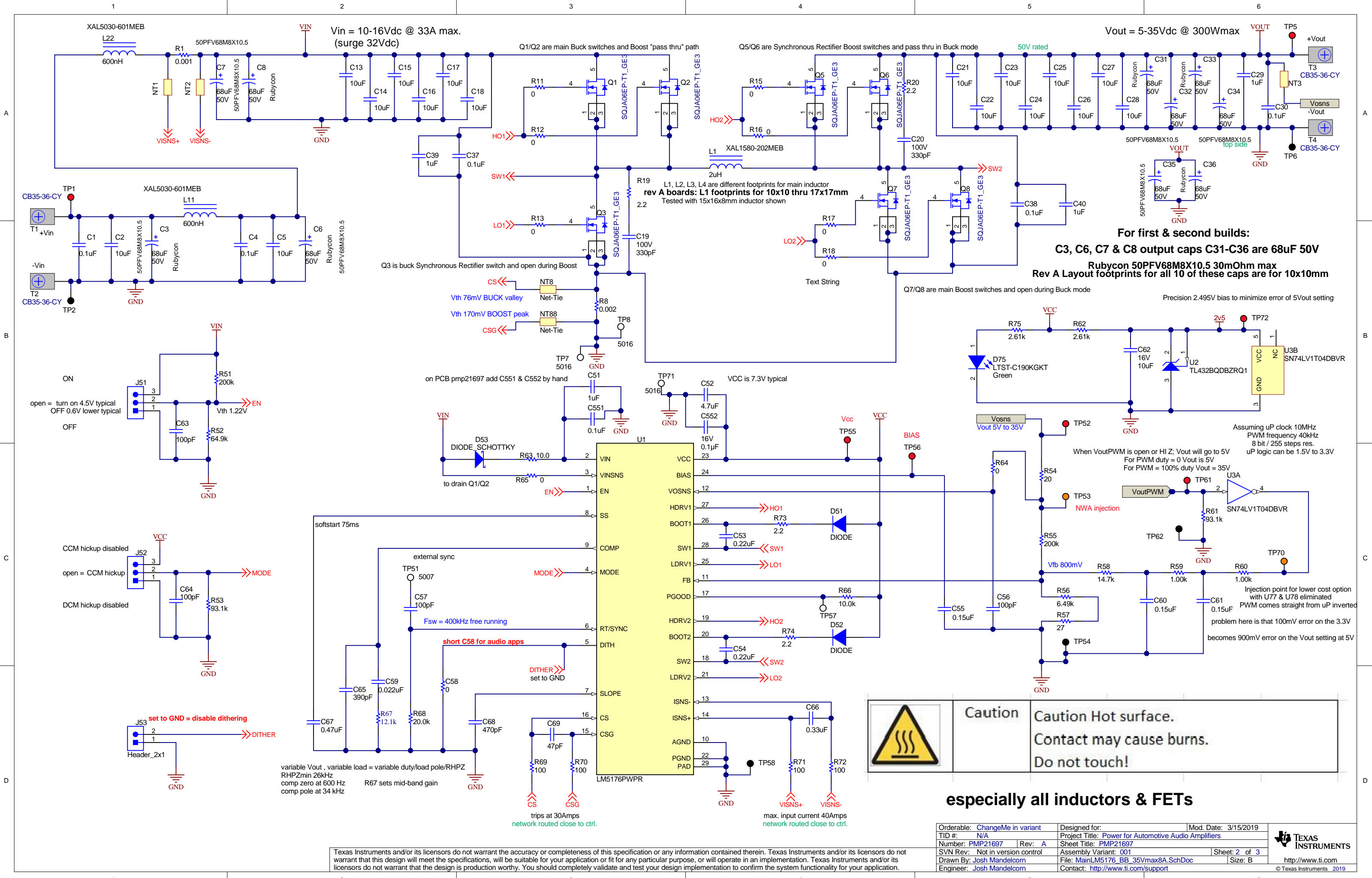


Caution

Caution Hot surface.  
Contact may cause burns.  
Do not touch!

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Number: PMP21697	Rev: A	Sheet Title: CoverSheet	
SVN Rev: Not in version control	Assembly Variant: 001	Sheet: 1 of 3	
Drawn By: Josh Mandelcorn	File: PMP21697_CoverSheet.SchDoc	Size: B	
Engineer: Josh Mandelcorn	Contact: <a href="http://www.ti.com/support">http://www.ti.com/support</a>		



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TID #: N/A	Project Title: Power for Automotive Audio Amplifiers	
Number: PMP21697	Rev: A	Sheet Title: PMP21697
SVN Rev: Not in version control	Assembly Variant: 001	Sheet: 2 of 3
Drawn By: Josh Mandelcom	File: MainLM5176_BB_35Vmax8A_SchDoc	Size: B
Engineer: Josh Mandelcom	Contact: <a href="http://www.ti.com/support">http://www.ti.com/support</a>	<a href="http://www.ti.com">http://www.ti.com</a>

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H1 NY PMS 440 0025 PH  
H2 NY PMS 440 0025 PH  
H3 NY PMS 440 0025 PH  
H4 NY PMS 440 0025 PH

H5 1902C  
H6 1902C  
H7 1902C  
H8 1902C

DNP FID1  
DNP FID2  
DNP FID3  
DNP FID4  
DNP FID5  
DNP FID6

**PCB Number: PMP21697**  
**PCB Rev: A**


PCB LOGO  
WEEE logo  
PCB LOGO  
FCC disclaimer

ZZ1  
**Label Assembly Note**  
This Assembly Note is for PCB labels only  
ZZ2  
**Assembly Note**  
These assemblies are ESD sensitive, ESD precautions shall be observed.  
ZZ3  
**Assembly Note**  
These assemblies must be clean and free from flux and all contaminants. Use of no clean flux is not acceptable.  
ZZ4  
**Assembly Note**  
These assemblies must comply with workmanship standards IPC-A-610 Class 2, unless otherwise specified.

LBL1  
**PCB Label**  
THT-14-423-10  
Size: 0.65" x 0.20"

Variant/Label Table	
Variant	Label Text
001	ChangeMe!
002	ChangeMe!

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Number: <a href="#">PMP21697</a>	Rev: <a href="#">A</a>	Sheet Title: <a href="#">Hardware</a>	
SVN Rev: Not in version control	Assembly Variant: <a href="#">001</a>	Sheet: <a href="#">3</a> of <a href="#">3</a>	
Drawn By: <a href="#">Josh Mandelcorn</a>	File: <a href="#">Hardware.SchDoc</a>	Size: B	
Engineer: <a href="#">Josh Mandelcorn</a>	Contact: <a href="http://www.ti.com/support">http://www.ti.com/support</a>		

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