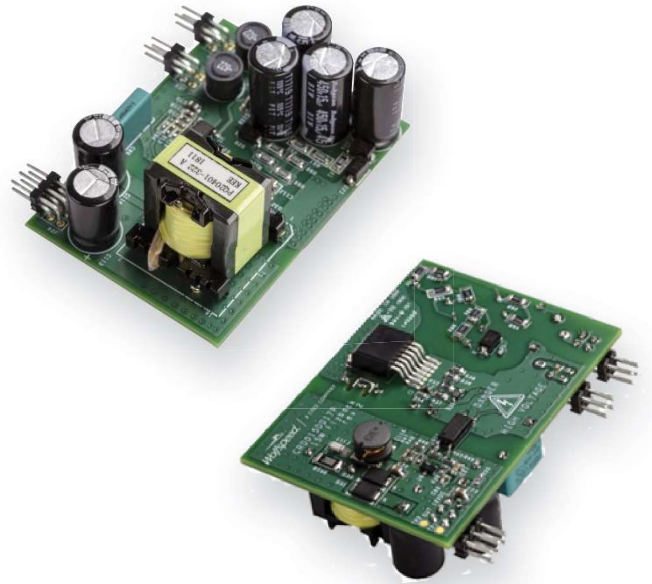


WIDE INPUT VOLTAGE RANGE (300 VDC-1200 VDC) 15 W FLYBACK AUXILIARY POWER SUPPLY BOARD

Wolfspeed introduces a wide input voltage range (300 VDC–1200 VDC) 15 W flyback auxiliary power supply board (P/N: CRD15DD17P) which is based on Wolfspeed’s (P/N: C2M1000170J) 1700V, 1 Ω SiC MOSFET with an availability of high blocking voltage and large creepage (~7 mm) distance. This design is mainly targeting high voltage applications such as motor drives, solar, traction and energy storage. The designed flyback converter can accept (480 VAC–530 VAC) or (300VDC –1200 VDC) at the input while providing 12 VDC at the output with an exceptional efficiency of 85 %. There is also a significant reduction in the form factor of the board due to it's high frequency operation.

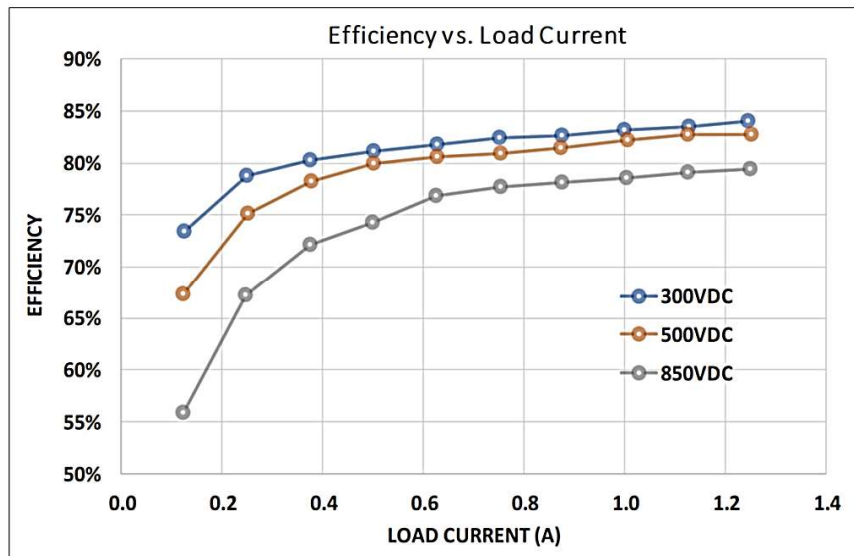
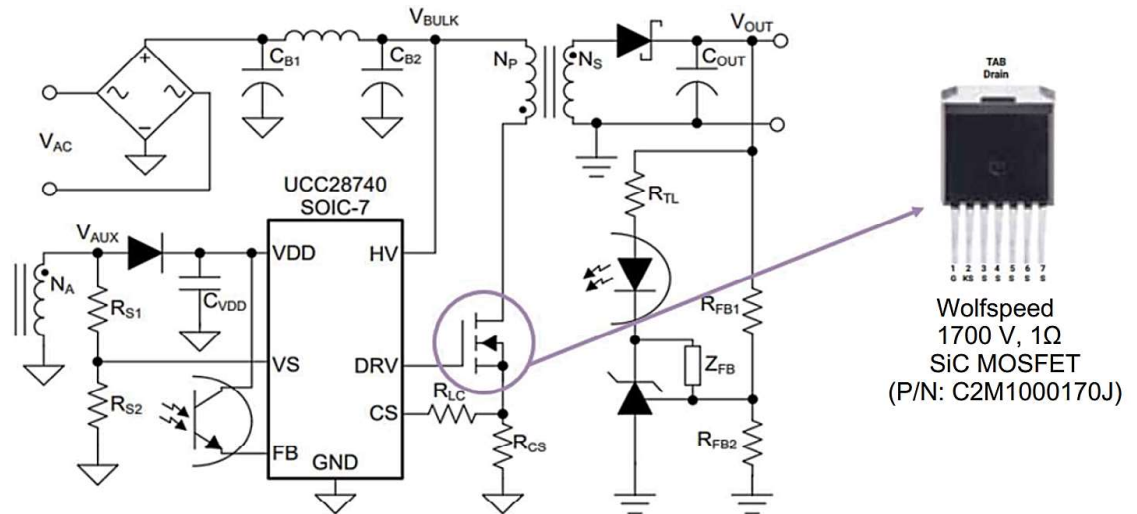


*(This reference design board is available for purchase)

15 W FLYBACK AUXILIARY POWER SUPPLY BOARD ELECTRICAL SPECIFICATIONS

Parameter	Value	Notes
Input Voltage	480 VAC - 530 VAC 300 VDC - 1200 VDC	Compatible with both AC & DC inputs
Efficiency	85%	@300 VDC
Output Voltage	12 VDC	DC output only
Output Power	15 W	
Switching Frequency	85 kHz	
Dimensions	64mm x 45mm x 25mm	

SYSTEM TOP LEVEL SCHEMATIC



KEY SYSTEM BENEFITS WITH SiC

- High Blocking Voltage
- High Efficiency
- High Power Density
- High Frequency Operation

APPLICATIONS

- Solar
- Traction
- Power System
- Energy Storage