

3.8V-32V Vin, 3A Synchronous Step-down DCDC Converter with EMI Reduction

FEATURES

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BST	6	Power supply for the high-side power MOSFET gate driver. Must connect a 0.1uF or greater ceramic capacitor between BST pin and SW node.
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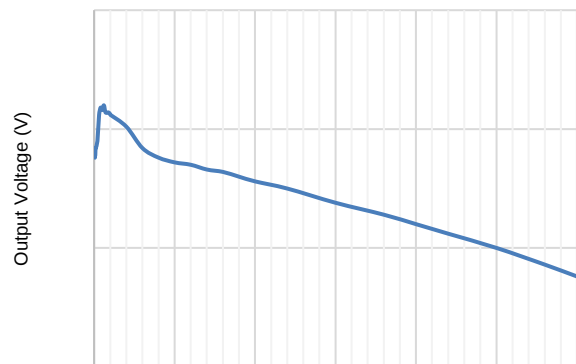
RECOMMENDED OPERATING CONDITIONS

ESD RATINGS

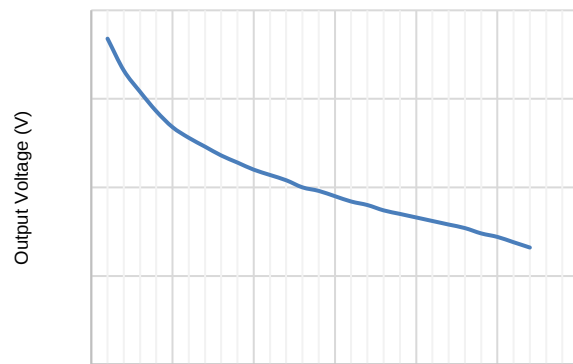
(1)

(2)

THERMAL INFORMATION

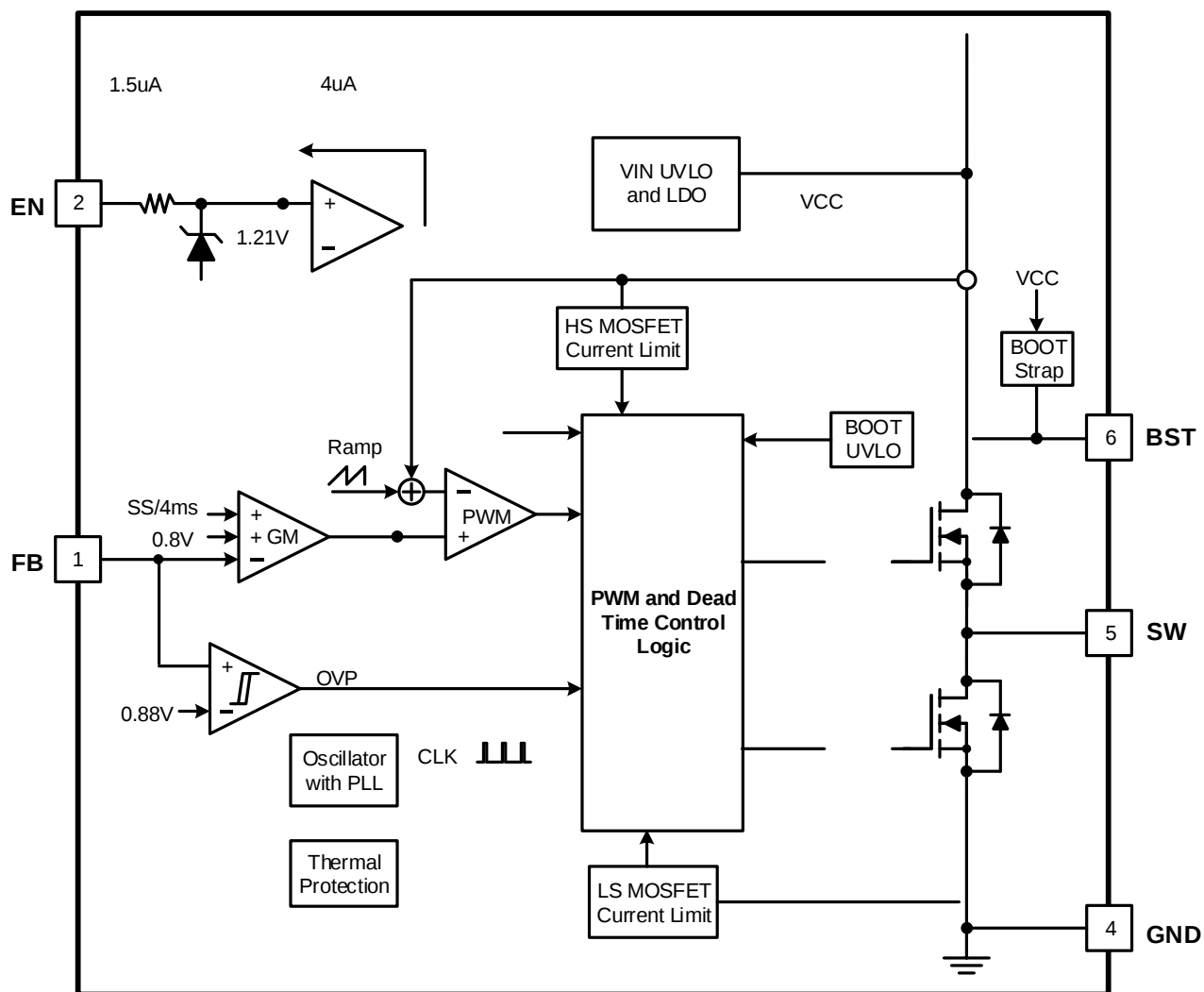


Output Current (mA)



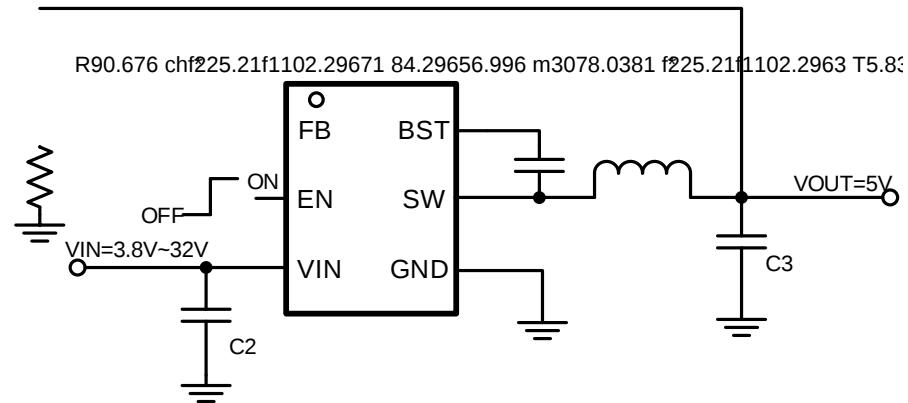
Input Voltage (V)

FUNCTIONAL BLOCK DIAGRAM



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APPLICATION INFORMATION



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Design Parameters	Example Value
Input Voltage	24V

(3)

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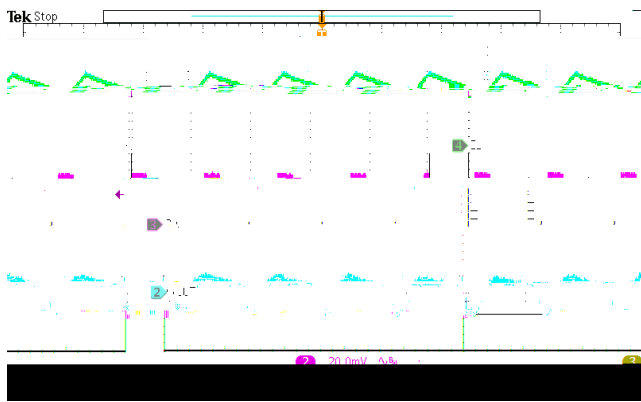


Figure 14. SW node waveform and Output Ripple
VIN=24V, IOUT=3A

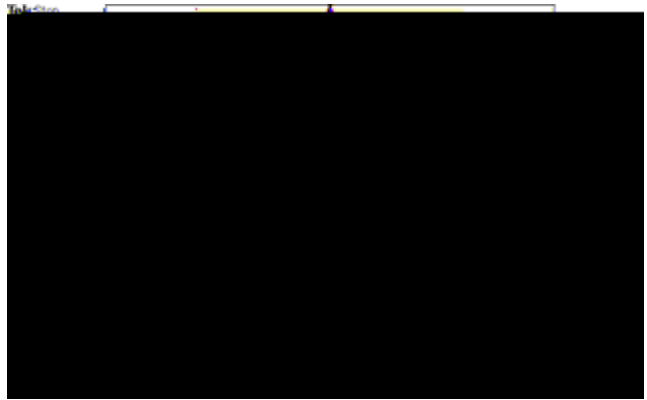


Figure 15. SW node Waveform and Output Ripple
VIN=24V, IOUT=10mA

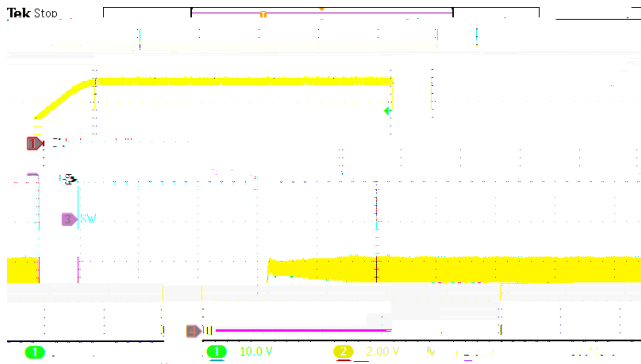


Figure 16. Power Up
VIN=24V, VOUT=5V, IOUT=3A

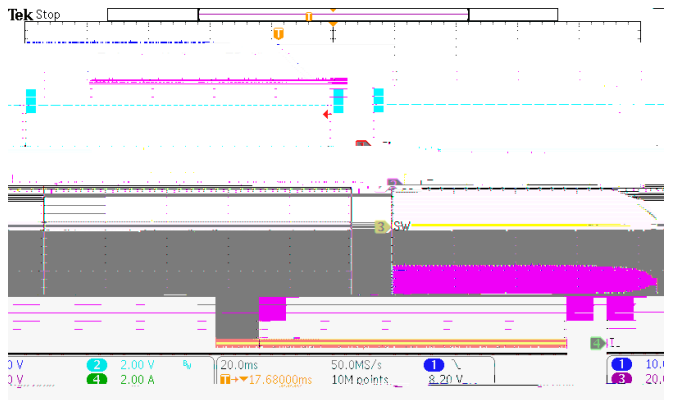


Figure 17. Power Down
VIN=24V, VOUT=5V, IOUT=3A

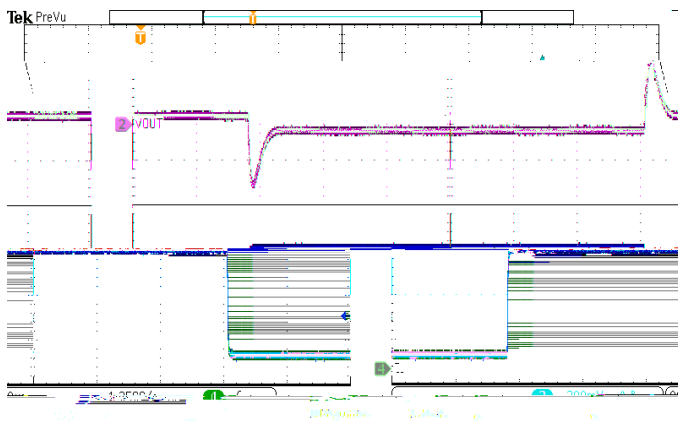


Figure 18. Load Transient
VOUT=5V, IOUT=0.3A to 2.7A, SR=250mA/us

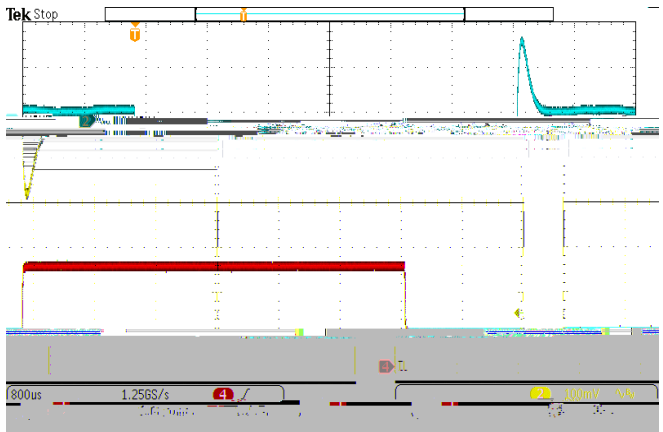
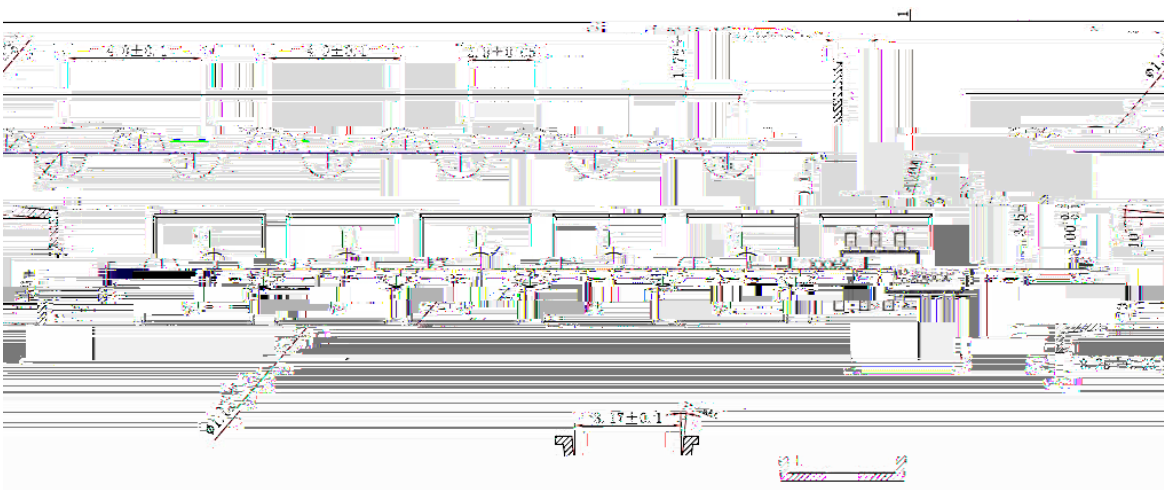
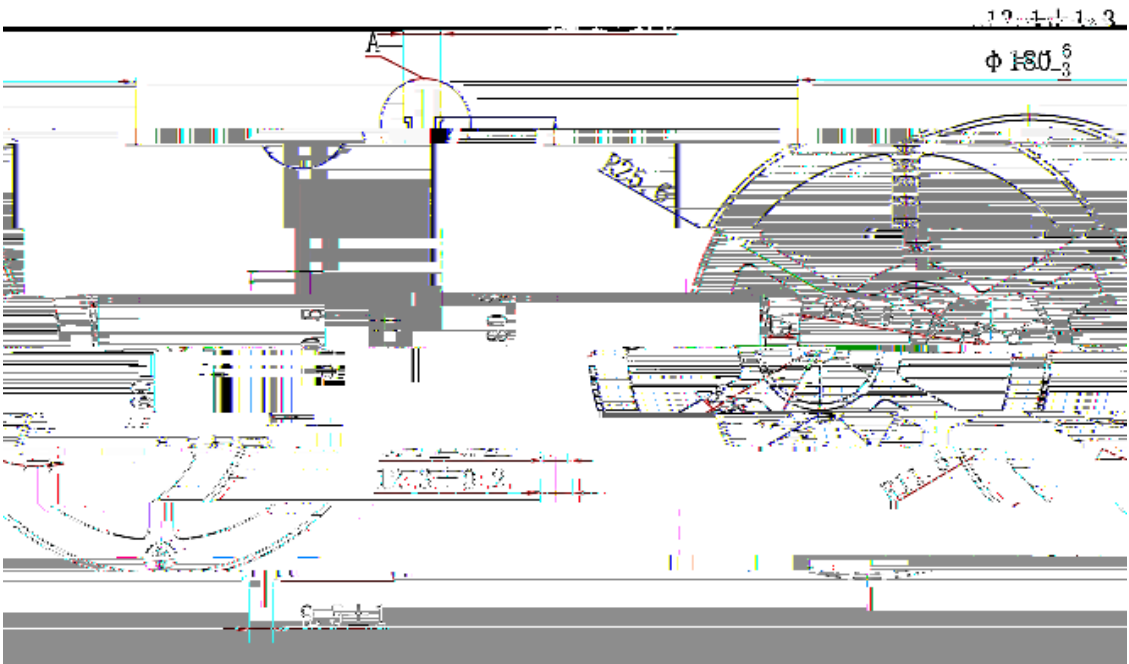


Figure 19. Load Transient
VOUT=5V, IOUT=0.75A to 2.25 A, SR=250mA/us

PACKAGE INFORMATION

TAPE AND REEL INFORMATION



RELATED PARTS

PN	DESCRIPTION	COMMENTS
SCT2320	3.8V-32V Vin, 2A Synchronous	
SCT2321	Step-down DCDC Converter with	