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

FEATURES

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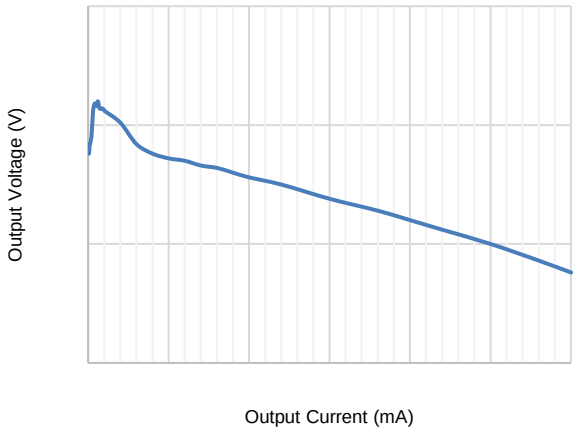
BST	6	Power supply for the high-side power MOSFET gate driver. Must connect a 0.1uF or greater ceramic capacitor between BST pin and SW node.

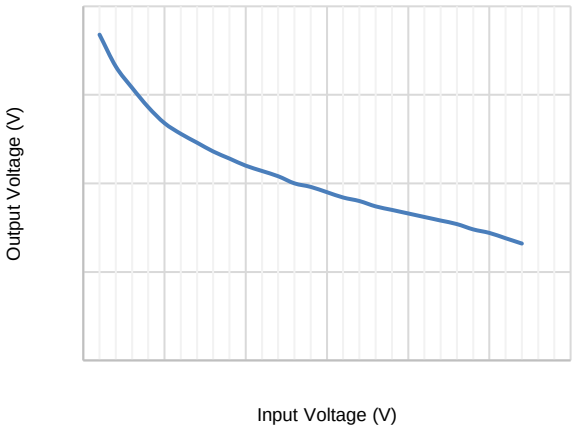
RECOMMENDED OPERATING CONDITIONS

ESD RATINGS

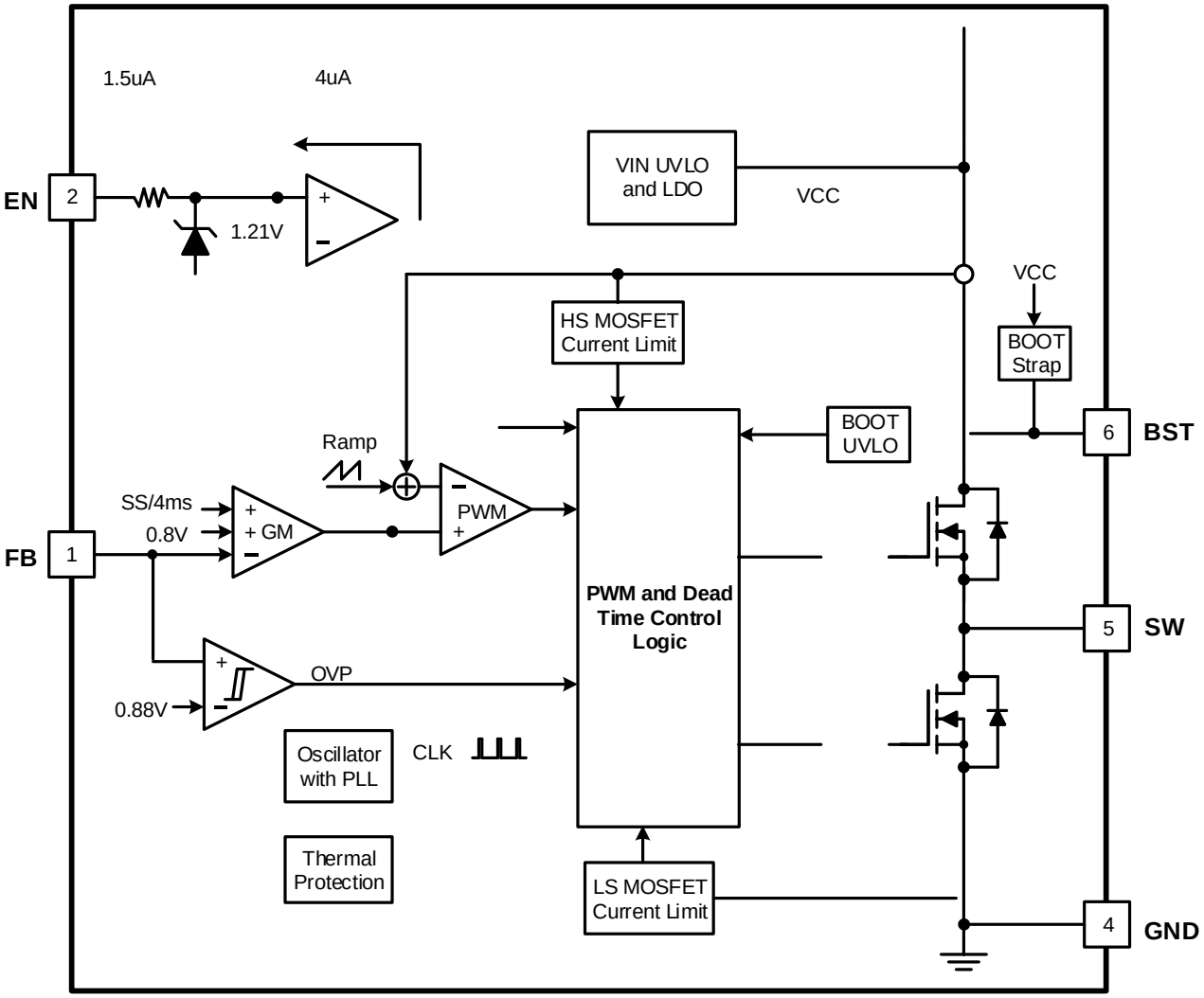
(1)
(2)

THERMAL INFORMATION

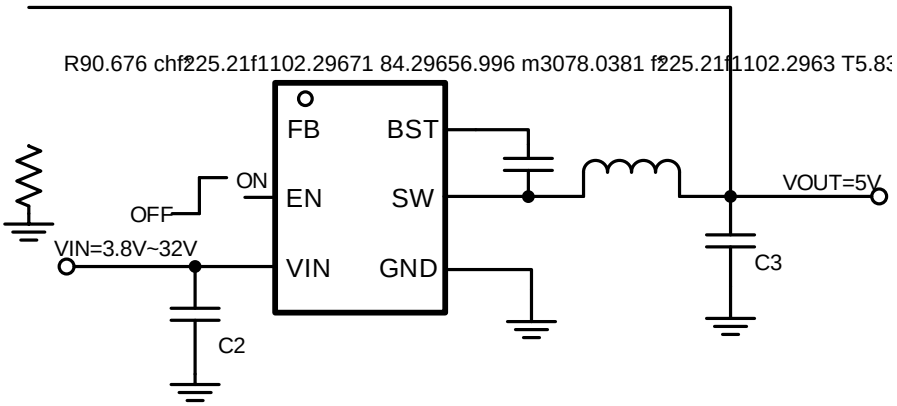

Output Voltage (V)
Output Current (mA)


Output Voltage (V)
Input Voltage (V)

FUNCTIONAL BLOCK DIAGRAM



APPLICATION INFORMATION



C

Design Parameters	Example Value
Input Voltage	24V

(3)

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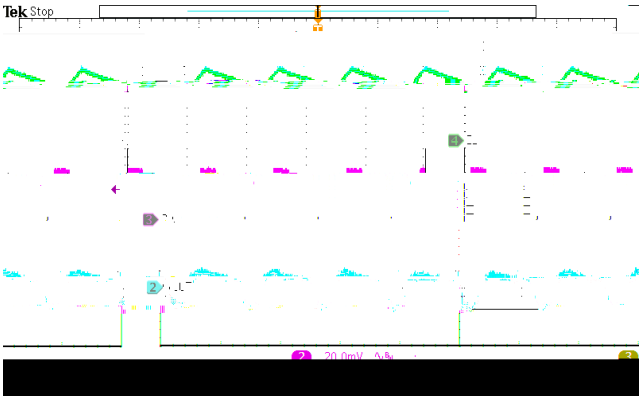


Figure 14. SW node waveform and Output Ripple
VIN=24V, IOUT=3A

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

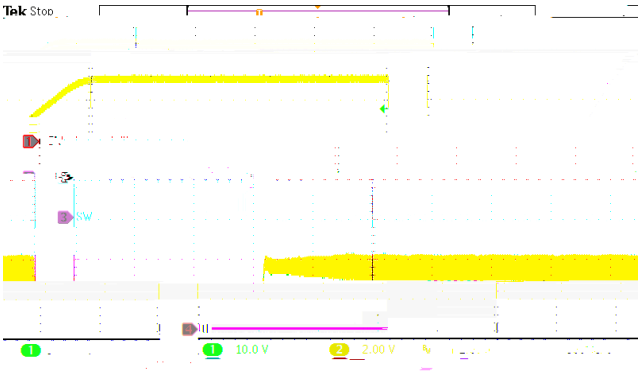


Figure 16. Power Up
VIN=24V, VOUT=5V, IOUT=3A

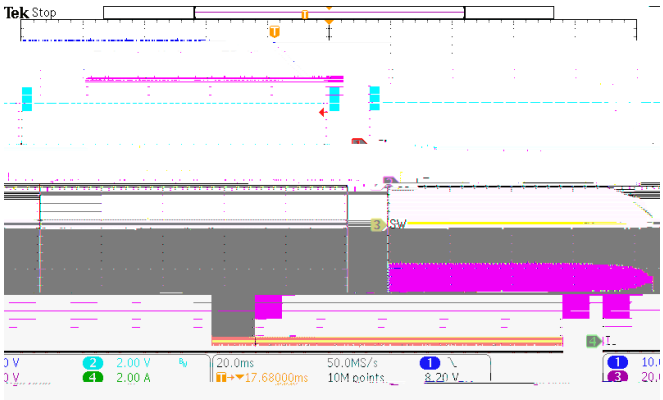


Figure 17. Power Down
VIN=24V, VOUT=5V, IOUT=3A

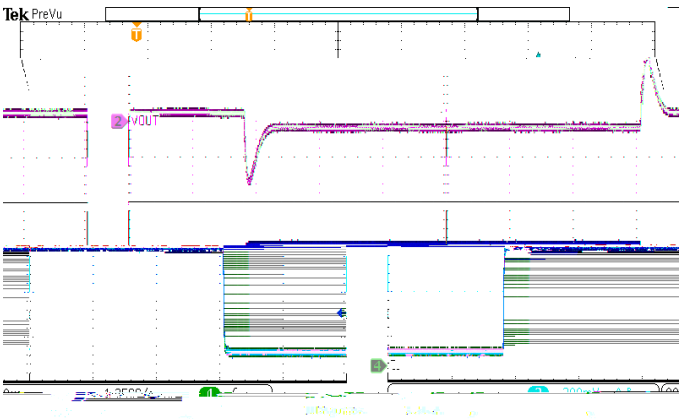


Figure 18. Load Transient
VOUT=5V, IOUT=0.3A to 2.7A, SR=250mA/us

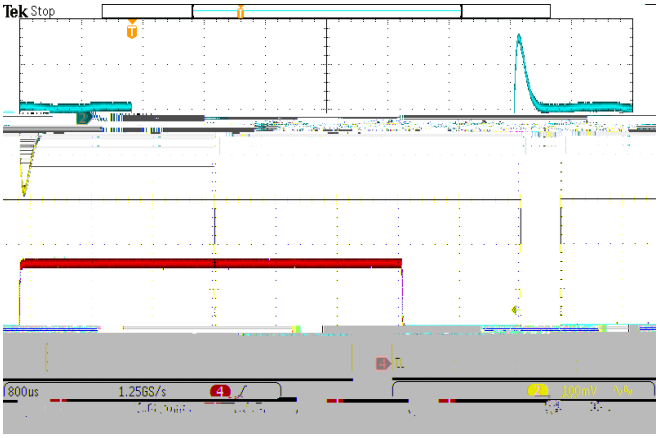
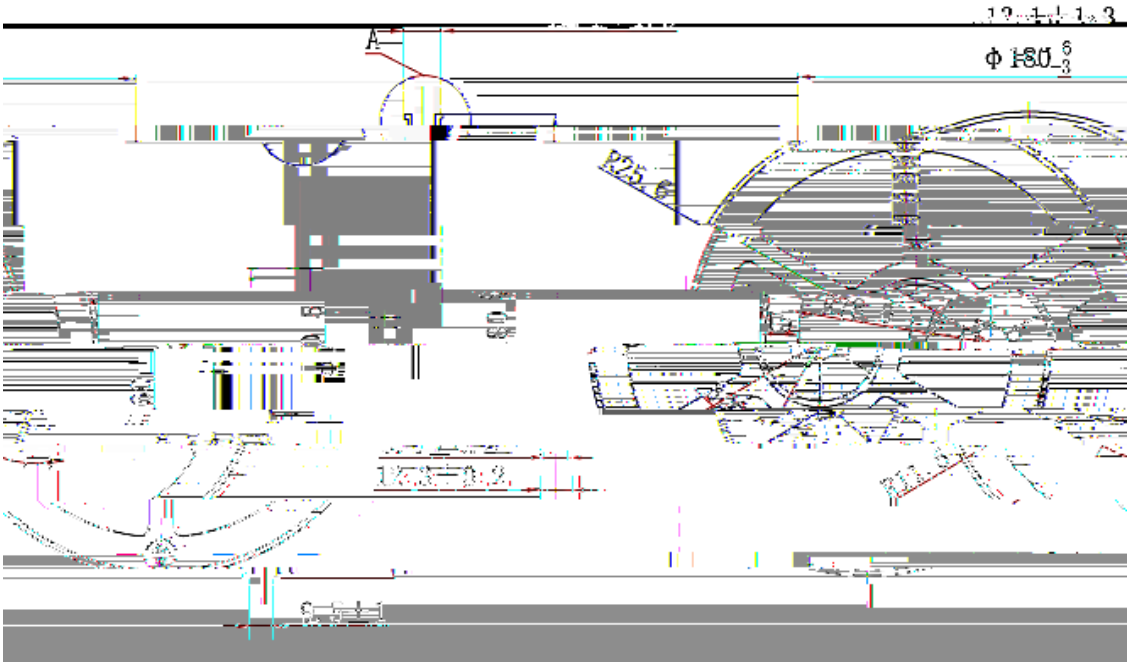
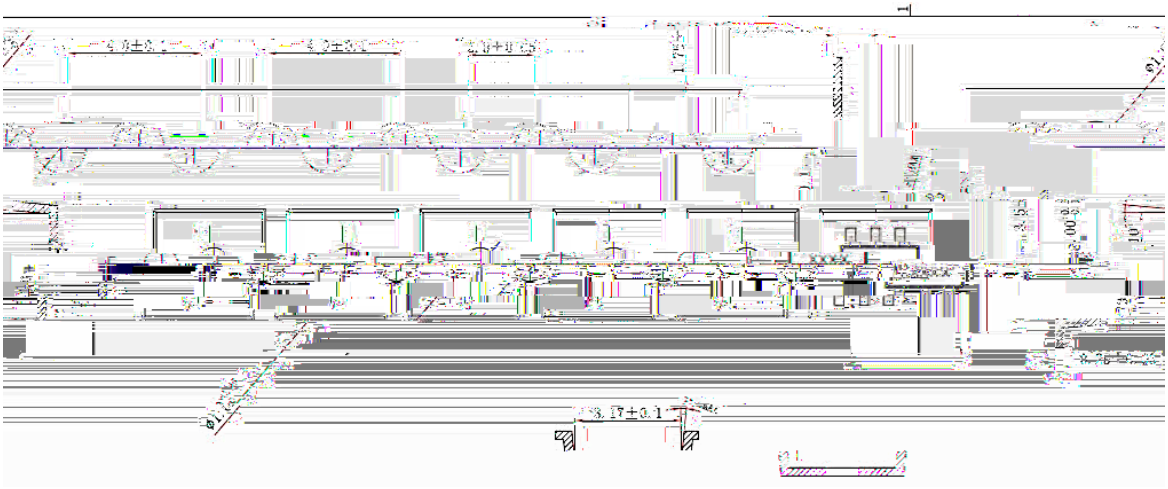


Figure 19. Load Transient
VOUT=5V, IOUT=0.75A to 2.25 A, SR=250mA/us

PACKAGE INFORMATION

TAPE AND REEL INFORMATION





RELATED PARTS

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