

製品概要

NCV890200: Automotive Switching Regulator, Buck, 2 A, 2 MHz

技術情報は、データシートをご参照ください。

The NCV890200 is a fixed-frequency, monolithic, Buck switching regulator intended for Automotive, battery-connected applications that must operate with up to a 36V input supply. The regulator is suitable for systems with low noise and small form factor requirements often encountered in automotive driver information systems. The NCV890200 is capable of converting the typical 4.5 V to 18 V automotive input voltage range to outputs as low as 3.3 V at a constant switching frequency above the sensitive AM band, eliminating the need for costly filters and EMI countermeasures. The NCV890200 also provides several protection features expected in Automotive power supply systems such as current limit, short-circuit protection and thermal shutdown. In addition, the high switching frequency produces low output voltage ripple even when using small inductor values and an all-ceramic output filter capacitor - forming a space-efficient switching regulator solution.

特長

- 2 MHz Free-running Switching Frequency
 - Internal N-Channel Power Switch
 - Low VIN Operation Down to 4.5 V
 - High VIN Operation to 36 V
 - Withstands Load Dump to 40 V
 - Logic level Enable Input Can be Directly Tied to Battery
 - 2.2 A (min) Cycle-by-Cycle Peak Current Limit
 - Short Circuit Protection enhanced by Frequency Foldback
 - $\pm 1.75\%$ Output Voltage Tolerance
 - Output Voltage Adjustable Down to 0.8 V
- For more features, see the data sheet

利点

- Enable using small size, low cost inductors and EMI filters

アプリケーション

- Audio
- Infotainment
- Safety - Vision Systems
- Instrumentation

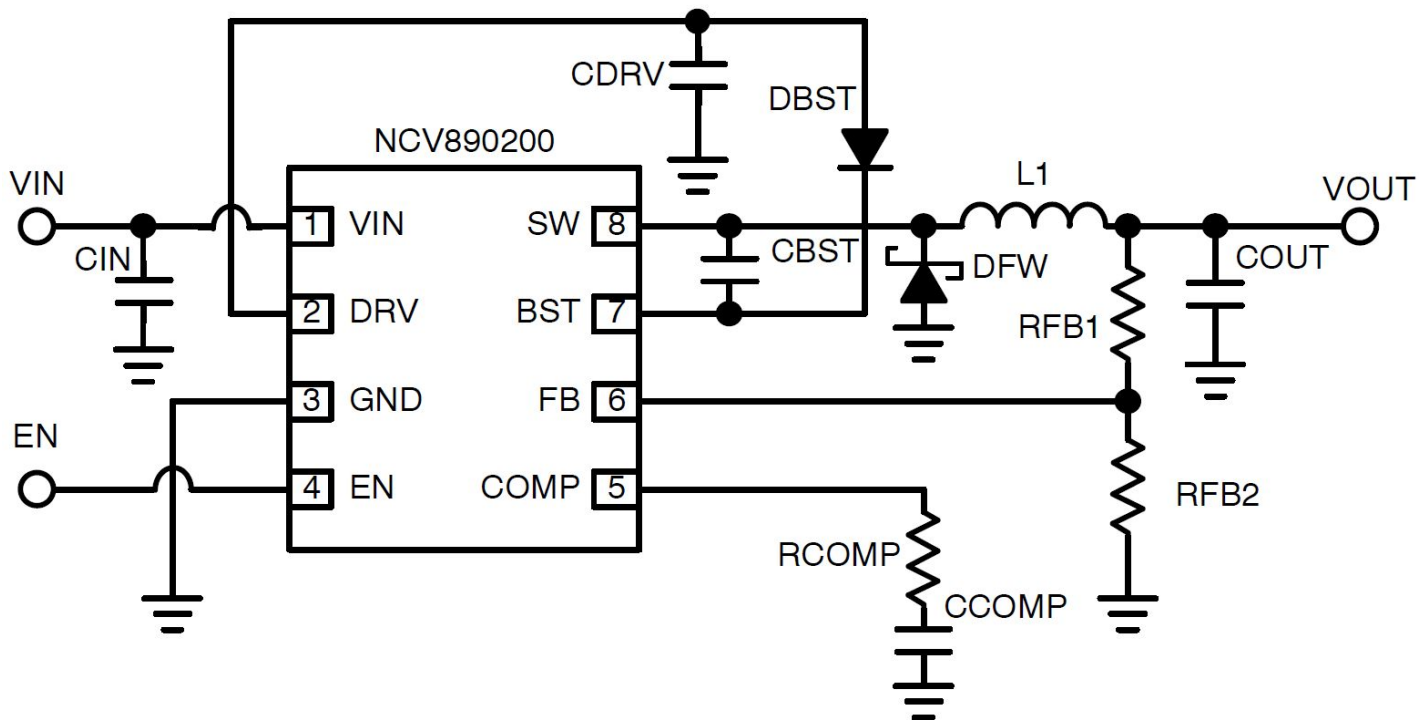
最終製品

- Automotive

電氣的仕様

製品	Pricing (\$/Unit)	Compliance	Status	Topology	Control Mode	V _{CC} Min (V)	V _{CC} Max (V)	V _O Typ (V)	I _O Typ (A)	Efficiency (%)	f _{sw} Typ (kHz)	Package Type
NCV890200PDR2G	1.6666	AEC Qualified PPAP Capable Pb-free	Active	Step-Down	Current Mode	4.5	40	Adjustable	2	-	Up to 2200	SOIC-8 EP

アプリケーション・ダイアグラム



詳細は、弊社 www.onsemi.jp の営業または販売代理店にお問い合わせください。

12/15/2019 作成