MAX20011C

Active in Production.

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Automotive Single 16A/12A Step-Down Converter

Industry Leading High-Efficiency, ASIL-D Compliant Synchronous Step-Down Converter Capable of Up to 16A Output Current

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Product Details | Technical Documentation | Design & Development | Order & Quality | Support & Training

Product Details

Package | Pin | Size | Features | Description

The MAX20011C/MAX20011D is a high-efficiency, synchronous step-down converter that operates with a 3.0V to 5.5V input voltage range and supplies a 0.5V to 1.275V output voltage range. The wide input/output voltage range and the ability to provide up to 16A peak output current make this device ideal for on-board point-of-load and post-regulation applications. The MAX20011C/MAX20011D achieves ±1.5% output error over load, line, and temperature ranges.

The MAX20011C/MAX20011D features a 2.2MHz fixed-frequency PWM mode for better noise immunity and load-transient response. The 2.2MHz frequency operation allows for the use of all ceramic capacitors and minimizes external components. The spread-spectrum frequency modulation option minimizes radiated electromagnetic emissions. Integrated low $R_{DS(ON)}$ switches improve efficiency at heavy loads and make layout simpler than discrete solutions.

The MAX20011C/MAX20011D is offered with factory-preset output voltage. The I²C interface supports dynamic voltage adjustment with programmable slew rates. Other features include programmable soft start, overcurrent, and overtemperature protections.

Technical Docs

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Design & Development

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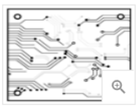
Hardware Development



EVALUATION BOARD

MAX20011CEVKIT

Design Tools and Models

TOOLS & MODELS

EE-Sim: Design & Simulate MAX20011C

Create Design

Order & Quality

Part Number	Price/Unit*	Package	Temperature	Carrier Type	Fabprocess	Technology	Sample Size	Reje
Select		Select	Select					
MAX20011CAFOA/VY+ Buy Active		FC2QFN; 17Pin;	-40°C to +125°C	Tray	Contact reliability engineer for information			
MAX20011CAFOA/VY+T Buy Active		FC2QFN; 17Pin;	-40°C to +125°C	Reel	Contact reliability engineer for information			

Support & Training

Search our knowledge base for answers to your technical questions.

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