

PRODUCTS

APPLICATIONS

SUPPORT

DESIGN RESOURCES

QA & RELIABILITY

ORDER

ABOUT US

Maxim / Products / Power / Switching Regulator - Switching Regulators / MAX20011C

MAX20011C

Active in Production.

Buy Now

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

NDA Required. Request Full Data Sheet and Software

Subscribe

Design in EE-Sim

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

Document Type

Document Title

Select document Type

Search

★

Data Sheet

Automotive Single 16A/12A Step-Down Converter

Jun 11, 2021

Design & Development

Click any title below to view the detail page where available.

All

Hardware Development

Design Tools and Models

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
MAX20011CAFOA/V Y+ Active	Buy	FC2QFN; 17Pin;	-40°C to +125°C	Tray	Contact reliability engineer for information			
MAX20011CAFOA/V Y+T Active	Buy	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.

Filtered Search

Our dedicated team of Applications Engineers are also available to answer your technical questions. Visit our support portal .

FOLLOW US

Newsroom

Events

Blogs

About Us

Contact Us

Ordering FAQ

Investor Relations

Customer Testimonials

Customer Support

Worldwide Franchised

Corporate Responsibility

Cookie Consent

By clicking “Accept All Cookies”, you agree to the storing of cookies on your device to enhance site navigation, analyze site usage, and assist in our marketing efforts. Visitors have the right to withdraw their consent. Cookie Policy

Cookies Settings

Accept All Cookies

Downloaded from Arrow.com