

48V入力対応 2MHzで世界最小*ON時間9nsを実現

Breakthrough 9ns minimum ON-time control supports 48V input (at 2MHz)

* October, 2018 ROHM survey

ROHM
SEMICONDUCTOR

Nano Pulse Control® 搭載 2MHz降圧DC/DCコンバータ

2MHz Nano Pulse Control® Synchronous Buck Converters

BD9V100MUF-C, BD9V101MUF-LB

Features

- **2MHz動作で48V入力から3.3V or 5V出力可能**
Direct conversion from 48V to 3.3V or 5V (at 2MHz)
- **SW最小ON時間9nsで電流モード制御可能**
Unprecedented 9ns minimum ON-time control
- **大きな降圧比のシステムでも1段階降圧で構成可能**
Enables 1-stage buck configuration even with large step-down ratios

Applications

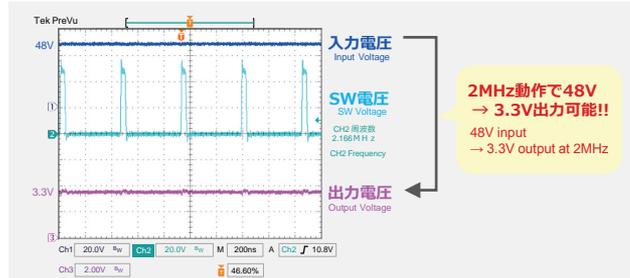
- **車載機器**
Automotive systems
- **産業機器/通信インフラ**
Industrial equipment / communications infrastructure
- **その他電子機器**
Other battery-powered sets

Specification

- **入力電圧 : 16V~60V (絶対最大定格70V)**
Input voltage : 16V to 60V (70V absolute maximum rating)
- **出力スイッチ電流 : 1A (Max.)**
Output switching current : 1A (Max.)

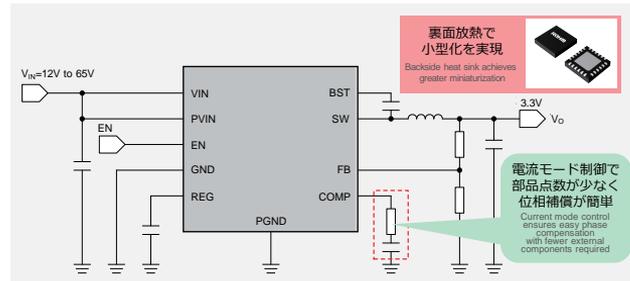
48Vバッテリーから直接3.3Vマイコン駆動可能

Direct Conversion from 48V to 3.3V MCU Power Supply



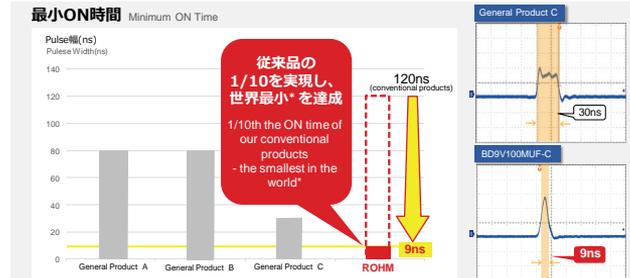
電流モード制御により位相補償が簡単

Current Mode Control Provides Easy Phase Compensation



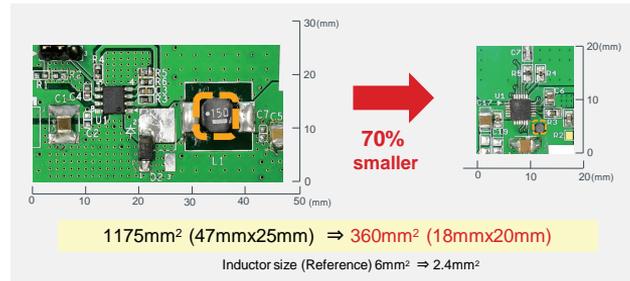
世界最小*ON時間9nsを実現

Unprecedented 9ns Minimum ON-time Control



2MHz駆動による実装面積の小型化

Mounting Area Reduction by 2MHz Operation



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