# ABRIDGED DATA SHEET

## MAX20047

## Dual 3A USB DCP Charger

### General Description

The MAX20047 is an automotive-grade, low-cost, small-footprint dual-port charger IC designed for automotive charging applications. It combines a fully synchronous 6A step-down buck converter with integrated high-side and low-side FETs capable of operating with input voltages from 3.5V to 36V and delivering 5.2V output voltage. The IC features integrated iPod®/iPhone® 1.0A and iPad® 2.1A dedicated charging modes.

The IC delivers up to 3A of charging current with 93% efficiency per port through integrated switches with programmable current limit and thermal foldback control. The buck converter switching frequency is programmable from 0.4MHz to 2.2MHz. Short-to-ground protection and overcurrent protection are also provided on the protected HVBUS outputs to protect the internal BUS power rail from an overcurrent fault. The MAX20047 offers short-to-battery up to +18V and can also be ordered with spread-spectrum operation to reduce EMI.

### Applications

- USB Dedicated Charging Ports (DCP)
- Automotive Cigarette Lighter Adapters
- Power Supply for Linear Chargers



*19-100165; Rev 0; 9/17*

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