

## 4.5V to 23V Input, 11A Sync Step-Down Converter with 3.3V/5V LDOs

## Features

- ★ **Input Voltage Range:**
  - 4.5V to 23V for PS1211A/AL/B/BL
  - 5.2V to 23V for PS1211C/CL
- ★ **Output Voltage Range:**
  - 0.6V to 5.5V for PS1211A/AL
  - 3.3V for PS1211B/BL
  - 5.1V for PS1211C/CL
- ★ **V<sup>2</sup>COT-based Architecture with 500kHz Support MLCCs Output Capacitors**
- ★ **11A Continuous Output Current**
- ★ **Selectable DEM/SDEM for Longer Battery Life/Avoiding Audio Noise**
- ★ **100mA Capability for LDO3 and LDO5**
  - LDO3 for PS1211B/BL
  - LDO5 for PS1211C/CL
- ★ **Over Current Protection (OCP)**
  - Adjustable OCP for PS1211A/AL
  - 15A OCP for PS1211B/BL/C/CL
- ★ **UVP, OVP and OTP Protections:**
  - Non-Latched Mode OTP, OVP and Hiccup Mode UVP for PS1211A/B/C
  - Latched Mode for PS1211AL/BL/CL
- ★ **Non-Latch UVLO Protection**
- ★ **UQFN-23L 3x3 (FC) package**
- ★ **RoHS Compliant and Halogen Free**

## General Description

The PS1211 series are cost-effective synchronous step-down DC-DC converters. The device achieves low power consumption with external pin selectable DEM/SDEM, respectively which could be beneficial for long battery life and avoid audio noise. V<sup>2</sup>COT-based architecture with current injection supports MLCCs output capacitors application without an external compensation network. The PS1211 provides open-drain Power Good indicator for power sequence control. The device integrates full protection features, including the cycle-by-cycle OCP, OVP, UVP, input UVLO and OTP. The PS1211 is available in a UQFN-23L 3x3 (FC) package and is specified from -40°C to +85°C ambient temperature range.

## Applications

- ★ Tablet PCs
- ★ Laptop Computers
- ★ Servers
- ★ Network Systems

## Simplified Application Circuit

