

## 2.7V to 26V Input, Synchronous Step-Down Controller

## Features

- ★ VIN Input Voltage Range: 2.7V to 26V
- ★ Output Voltage Range:  
PS1501A: 0.704V to 5.0V, PS1501B: 0.4V to 5.0V
- ★ Built in PS1501A: 0.704V, PS1501B: 0.4V ( $\pm 0.5\%$ ) Reference Accuracy
- ★ V<sup>2</sup>COT-based Architecture with adjustable Fsw
- ★ Support MLCCs Output Capacitors with C<sub>FF</sub>
- ★ Internal 1.3ms Soft-Start
- ★ Open-drain Power Good Indicator
- ★ Selectable SDEM for Longer Battery Life and Avoiding Audio Noise
- ★ OC Setting Pin with 4200ppm/°C Current Source
- ★ Built-In OVP/UVLP/OCP
- ★ Non-Latch UVLO and OTP Protections
- ★ RoHS Compliant and Halogen Free
- ★ QFN 3mm x 3mm package with 16-Pin

## General Description

PS1501 is a cost-effective, dual synchronous step-down controller. Aimed for power supply solution of each computer fields. The device achieves ultra-low quiescent when system enters sleep mode and low power consumption with external pin selectable FCCM/SDEM, respectively which could be beneficial for long battery life in system stand-by mode and avoid audio noise. V2COT-based architecture with current injection supports MLCCs output capacitors application without external compensation network. The PS1501 operates with supply input voltage range from 2.7V to 26V and supports output voltages of 0.7V to 5V.

The PS1501 is available in a QFN 3mm x 3mm package with 16-Pin.

## Applications

- Computers and Servers
- Telecom/Datacom
- Point of Load Module

## Simplified Application Circuit

