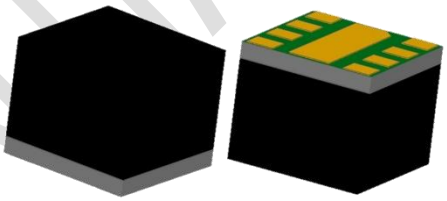
# BL001PD65VCM

## General Description

The BL001PD65VCM integrated-inductor power module is tailored for space-constrained industrial applications. It features an adjustable (ADJ) output voltage range of 1.0V to 25V, paired with an input voltage span of 4.5V to 65V and a maximum output current of 1.0A. Exceptionally user-friendly, the module requires only four external components for operation. Fully optimized for high-performance, low-EMI industrial scenarios with tight space constraints, it integrates an open-drain Power-Good output—this provides accurate system status feedback and eliminates the need for additional supervisory components, reducing both cost and board space.

## Features



- 4.5V to 65V wide operating input voltage
- 1.0 V to 25 V adjustable output voltage
- Up to 1 A output current
- Requires only Cin, Cout, and Rfb for application implementation
- Adjustable soft-start and output voltage tracking
- Power-Good (PG) flag
- Adaptive CCM/DCM/PFM mode switching
- Built-in control loop compensation, soft-start, OCP, SCP, OTP, and UVLO
- Miniature 4.0mm × 4.0mm × 3.0mm package

## Applications

- Industrial Control System
- Single- or Multi-Cell Li-Ion Battery System
- Internet of Things (IoT)
- Home Automation and Home Security

## Parameters

| Part Number | Vin | Vout | Iout | $T_{vjmax}$ |
|---|---|---|---|---|
| BL001PD65VCM | 4.5V~65V | 1.0V~25V | 1.0A | -40°C~150°C |

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