

## 40V, 3.5A, 220kHz CC/CV Step-Down Converter with Synchronous Gate Driver Featuring USB-PD

### General Description

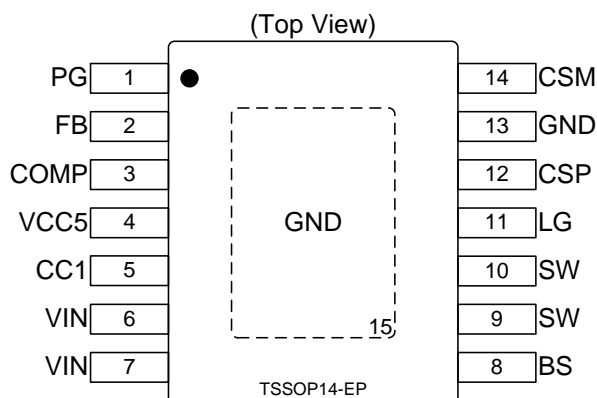
The AN6565 is a CC/CV step-down switch mode converter with a built-in high-side power MOSFET and a gate driver for a low side external power MOSFET. It achieves 3.5A continuous output current over a wide input supply range with excellent load and line regulation. Current mode operation provides fast transient response and eases loop stabilization. The converter can be configured as single output or dual outputs with independent over current protection (OCP). Fault condition protections include cycle-by-cycle current limit and thermal shutdown.

The AN6565 is available in a TSSOP14-EP package, provides a very compact system solution and good thermal conductance.

### Features

- Wide Input Voltage from 4.75V to 40V
- Up to 3.5A Output Current
- USB-PD Type-C Support
- Adjustable Output Voltage from 3.3V up to 20V
- High Efficiency Up to 93%
- High Duty-Cycle Up to 96%
- Internal Soft-Start
- Auto Recovery into Full Load after Faults
- Low Output Short Current
- Output Cord Voltage Drop Compensation
- Programmable Over Current Setting
- Input Over-Voltage Protection
- Over-Temperature Protection
- Thermal Enhanced TSSOP-14 Package
- RoHS Compliant

### Pin Configuration



### Application

- Car Charger
- CC/CV regulation converter
- Rechargeable Portable Device

### Ordering Information

Part Number	Package	Shipment
AN6565-ATD	TSSOP14-EP	Tape & Reel / 2500

\*A: Output Voltage Adjustable

\*TD: TSSOP14-EP