

## 40V Synchronous 4-Switch Buck-Boost Controller

### General Description:

The CM1801 is a synchronous four-switch buck-boost DC/DC controller capable of regulating the output voltage at, above, or below the input voltage. The CM1801 operates over a wide input voltage range of 4.5 V to 40 V to support a variety of applications.

The CM1801 employs current-mode control both in buck and boost modes of operation for superior load and line regulation. The switching frequency is programmed by an external resistor. This device also features a programmable soft-start function and offers protection features including cycle-by-cycle current limiting, input undervoltage lockout (UVLO), output overvoltage protection (OVP), and thermal shutdown.

The CM1801 is available in an QFN4x4-24L package, provides a very compact system solution and good thermal conductance.

### Features:

- Single Inductor Buck-Boost Controller for Step-Up/Step-Down DC/DC Conversion
- Wide Input Voltage from 4.5V to 40V
- High Efficiency
- Adjustable Switching Frequency
- Programmable External Soft-Start
- Auto Recovery after Faults
- Output Cord Voltage Drop Compensation
- Programmable Over Current Setting
- Power Good and Output Overvoltage Protection
- Over-Temperature Protection
- Thermal Enhanced QFN4x4-24L Package
- RoHS Compliant

### Application:

- Car Charger
- Rechargeable Portable Devices
- USB Power Delivery
- Automotive Industry

### Ordering Information:

Part Number	Package	Shipment
CM1801-AQF	QFN4x4-24L	Tape & Reel / 3000

\*A: Output Voltage Adjustable