



UC34363

Preliminary

LINEAR INTEGRATED CIRCUIT

CONSTANT VOLTAGE AND CONSTANT CURRENT CONTROLLER FOR BATTERY CHARGERS

DESCRIPTION

The UTC **UC34363** is a switch controller for constant voltage, constant current (CV/CC) application. The device could be used for battery charge. UTC **UC34363** is used of SOP-8 packages. Additionally the UTC **UC34363** intergrated a internal compensation capacitor, so that the application is simpicial.

FEATURES

- * CV/CC linear charge
- * 3A maximum charge current
- * PWM control Mode
- * Available charge current
- * Over Voltage protect ,Over Current Protect
- * Enable Control function
- * Very Low Power Dissipation in Standby Mode

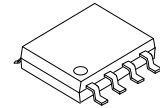
ORDERING INFORMATION

| Ordering Number | | Package | Packing |
|-----------------|----------------|---------|-----------|
| Lead Free | Halogen Free | | |
| UC34363L-S08-R | UC34363G-S08-R | SOP-8 | Tape Reel |

| | |
|---|--|
| <p>UC34363L-S08-R</p> <p>(1)Packing Type</p> <p>(2)Package Type</p> <p>(3)Lead Free</p> | <p>(1) R: Tape Reel</p> <p>(2) S08: SOP-8</p> <p>(3) L: Lead Free, G: Halogen Free</p> |
|---|--|

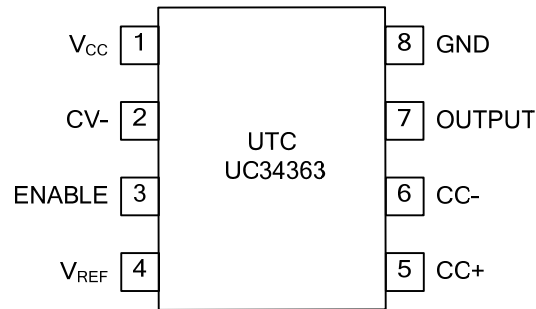
MARKING INFORMATION

| PACKAGE | MARKING |
|---------|---|
| SOP-8 | <p>8 7 6 5</p> <p>UTC □□□□</p> <p>UC34363□</p> <p>□□</p> <p>1 2 3 4</p> <p>→ Date Code</p> <p>→ L: Lead Free</p> <p>→ G: Halogen Free</p> <p>→ Lot Code</p> |



SOP-8

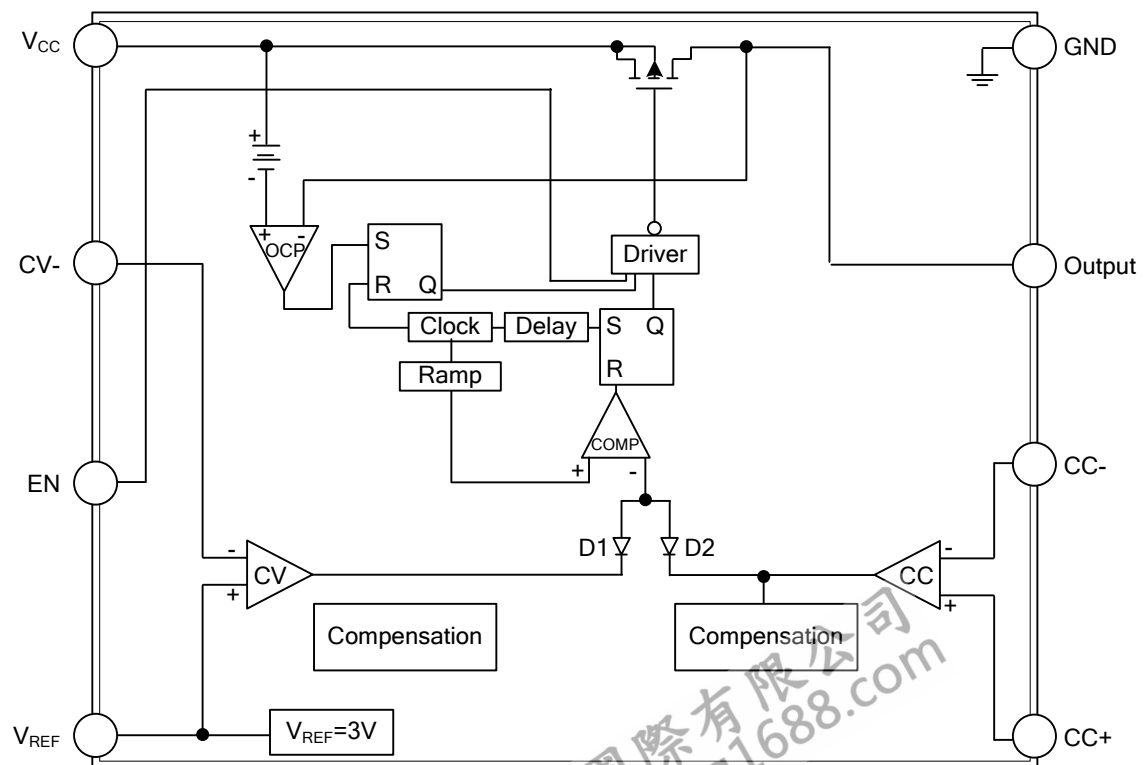
PIN CONFIGURATION



PIN DESCRIPTION

| PIN NO. | PIN NAME | DESCRIPTION |
|---------|------------------|---|
| 1 | V _{CC} | Power Supply |
| 2 | CV ₋ | Negative Input of the Voltage Amplifier |
| 3 | ENABLE | Enable Controlled ON/OFF for IC |
| 4 | V _{REF} | 3V external Voltage Reference |
| 5 | CC ₊ | Positive Input of Current Amplifier |
| 6 | CC ₋ | Negative Input of Current Amplifier |
| 7 | OUTPUT | Output |
| 8 | GND | Ground |

BLOCK DIAGRAM



■ ABSOLUTE MAXIMUM RATING

| PARAMETER | SYMBOL | RATINGS | UNIT |
|--------------------------------|-----------|---------|------|
| Power Supply Voltage | V_{CC} | 30 | V |
| CC+ Voltage | V_{CC+} | 10 | V |
| CC- Voltage | V_{CC-} | 10 | V |
| CV- Voltage | V_{CV-} | 10 | V |
| Operating Junction Temperature | T_J | 125 | °C |

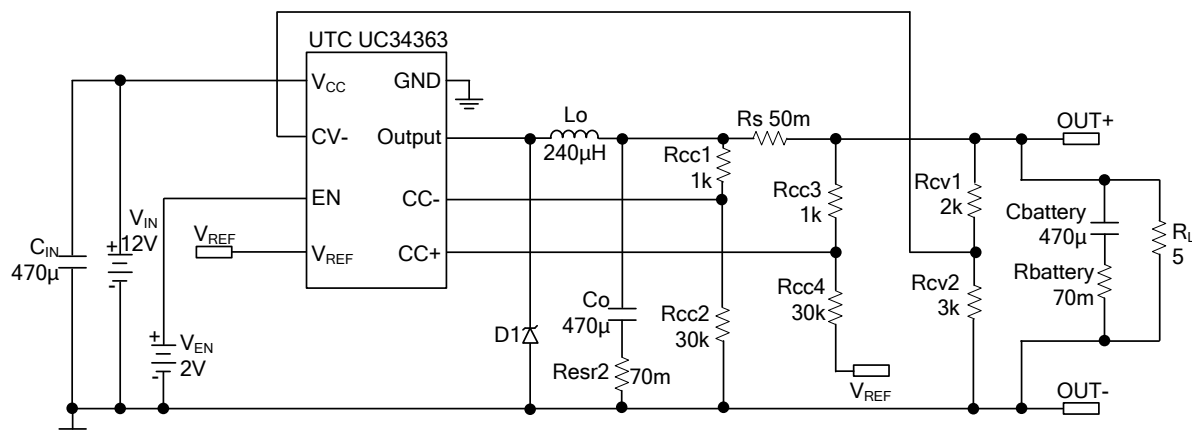
Note: Absolute maximum ratings are those values beyond which the device could be permanently damaged.

Absolute maximum ratings are stress ratings only and functional device operation is not implied.

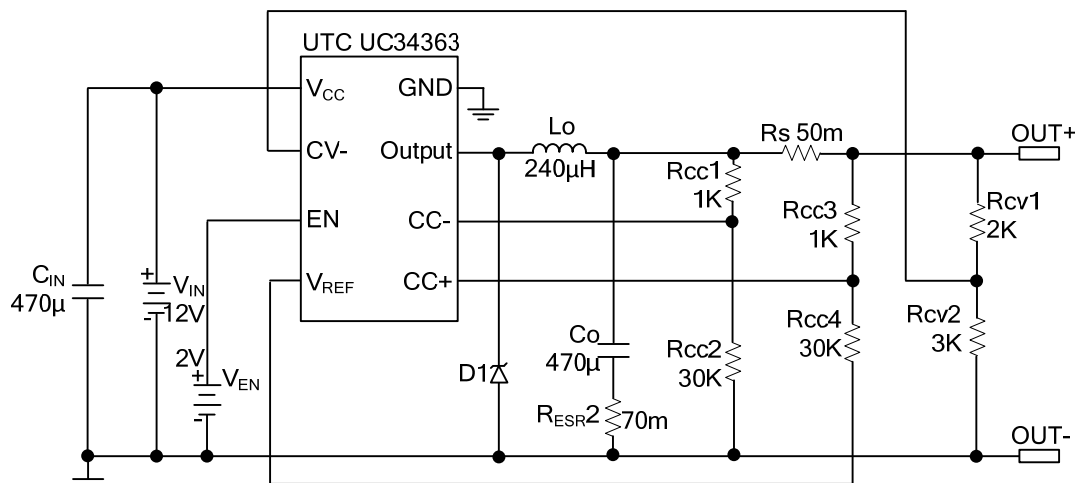
■ ELECTRICAL CHARACTERISTICS ($V_{IN}=15V$, $T_A=25^{\circ}C$, Unless otherwise specified)

| PARAMETER | SYMBOL | TEST CONDITIONS | MIN | TYP | MAX | UNIT |
|-------------------------|---------------|---|-----|-----|-----|------|
| Power Supply | | | | | | |
| Power Supply Voltage | V_{CC} | | 8 | | 30 | V |
| Standby Supply Current | $I_{STANDBY}$ | $V_{CC}=30V$ | | 7 | 15 | mA |
| Osc | | | | | | |
| Oscillator Frequency | F_{OSC} | | | 75 | | KHZ |
| CC | | | | | | |
| Constant Current | CC | $R_S=50m\Omega$, $R_{CC1}=R_{CC3}=1K$, $R_{CC2}=R_{CC4}=30K$ | | 2 | | A |
| Enable | | | | | | |
| Enable Logic Input Leve | V_{ON} | | 2 | | | V |
| | V_{OFF} | | | | 1.5 | V |
| V_{REF} | | | | | | |
| Reference Input Voltage | V_{REF} | $I_{LOAD}=5mA$ | | 3.0 | | V |
| Protect | | | | | | |
| Thermal Shutdown | T_{OTP} | | | 150 | | °C |

■ TEST CIRCUIT



■ TYPICAL APPLICATION CIRCUIT



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