

TLF 4277 active antenna supply

The TLF 4277 is a monolithic integrated low drop out voltage regulator capable of supplying loads up to 200 mA.

For an input voltage up to 40 V the TLF 4277 provides an adjustable output voltage in a range from 5 V up to 12 V.

The integrated current monitor function is a unique feature that provides diagnosis and system protection functionality. Fault conditions such as overtemperature and output overvoltage are monitored and indicated at the current sense output. The maximum output current limit of the device is adjustable to provide additional protection to the connected load.

Via the enable function the IC can be disabled to lower the power consumption. The PG-SSOP14 EP package provides an enhanced thermal performance within a SO8 body size.

Application:

The TLF 4277 is the ideal companion IC to supply active antennas for car infotainment applications. The adjustable output voltage makes the TLF 4277 capable of supplying the majority of standard active antennas such as:

- FM/AM
- DAB
- XM
- SIRIUS

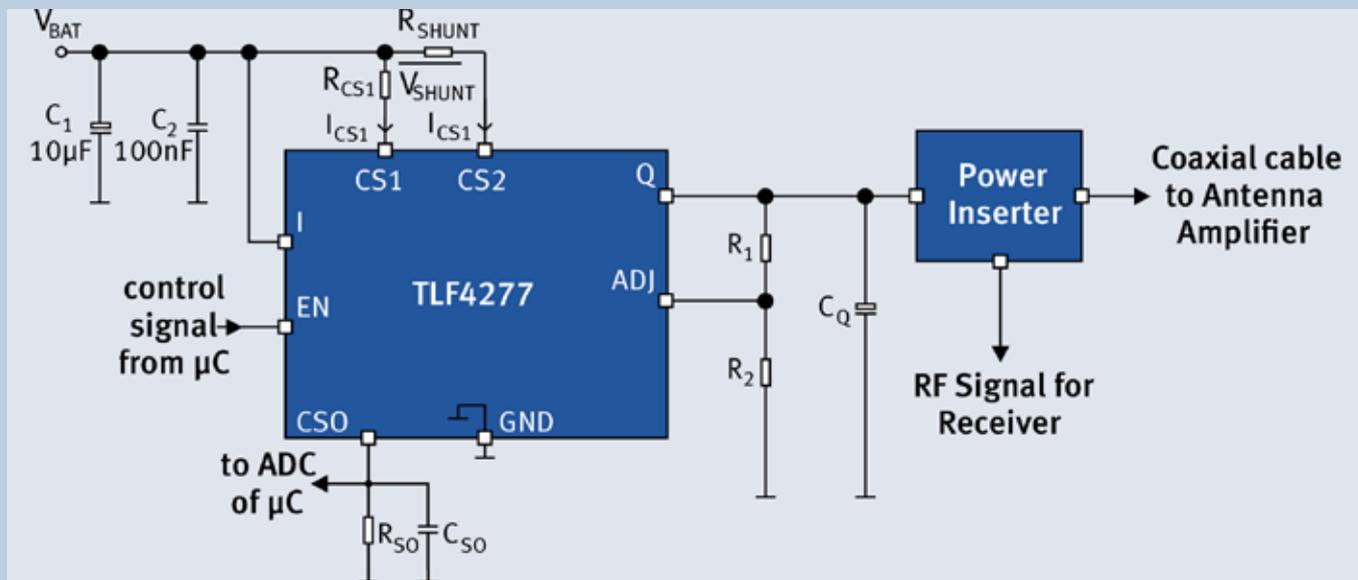
Key Features

- Current monitor functionality
- Adjustable current limitation
- Adjustable output voltage
- Short-circuit detection to GND and battery voltage level
- PG-SSOP14EP package
- Over-temperature detection/ protection

Key Benefits

- Diagnosis of antenna system status (linear current detection)
- Flexible protection of sensitive components
- Easy adjustment to the application requirements
- Fast identification of short circuit failures
- Enhanced thermal characteristics

TLF 4277



TLF 4277 Block Diagram

Key Facts:

- Integrated Current Monitor
- Adjustable Current Limitation
- Adjustable Output Voltage $V_Q = 5V \dots 12V$
- Current Capability 200mA
- Current Consumption in off-Mode less than $3\mu A @ 25^\circ C / \mu A$ up to $85^\circ C$
- Low Quiescent Current $I_Q = \max 250\mu A @ I_Q = 200\mu A$ up to $85^\circ C$
- Low drop Out Voltage $V_{Dr} = \max 500mV @ I_Q = 150mA @ I_Q = 50mA$

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