

Features

- Automotive compatible input voltage range from 4.5V to 40V including load dump transients
- I²C interface for full μ C control and diagnosis
- Resistor configurable output voltage
- Output voltage range 3V to 40V
- Three channels (output current: 350mA/200mA/80mA) with automatic protection functionality
- Automatic switch-mode activation
- Output current and voltage sensing
- Thermal protection and temperature monitoring
- Over current/open load detection
- Short circuit protection
- Short to battery protection
- Reverse current protection
- Reverse voltage protection
- Optional external PNP transistor for power dissipation optimization
- Thermally efficient DFN5040 package

Applications

- Automotive Antenna Modules
- Navigation and Radio Units
- General Voltage Regulator Applications
- Sensor and Camera Applications

General Description

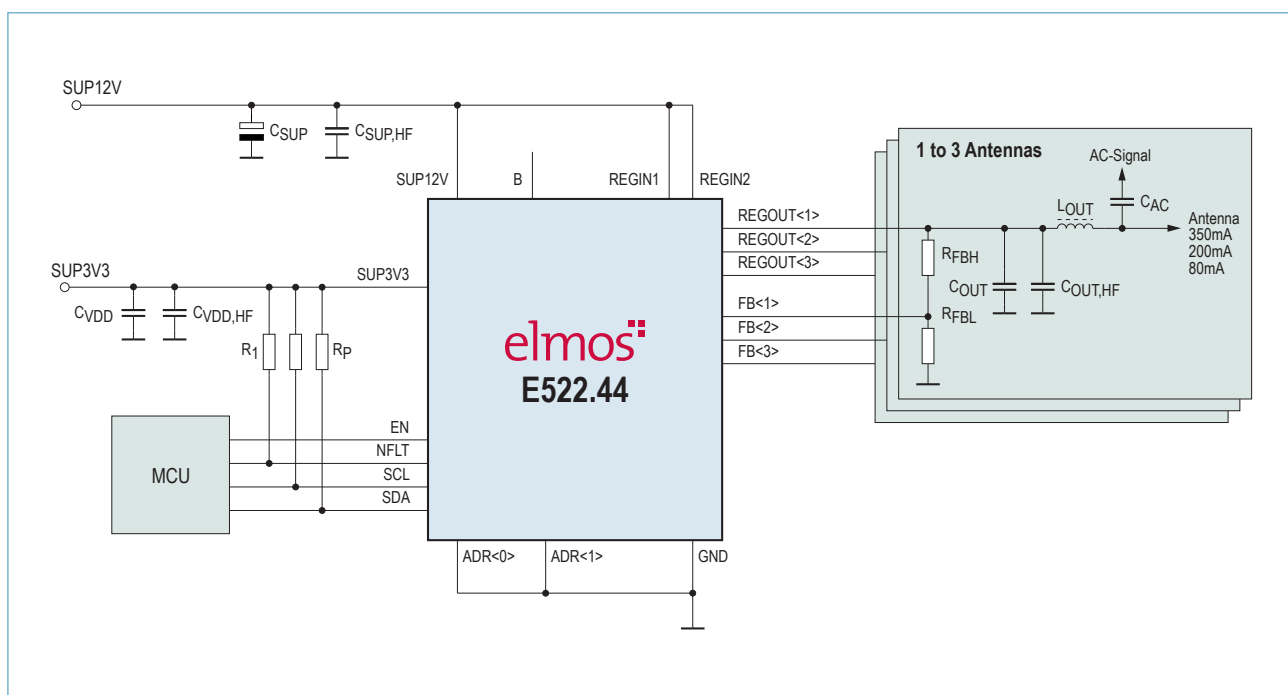
This device is a triple phantom power supply for antennas in automotive environments. The device features an I²C interface for configuration and diagnosis. Protection is offered against short to ground, short to battery, thermal overstress, reverse voltage and reverse current. The output voltages and output currents are monitored by a **10 bit ADC** via the I²C interface.

Channel specific overcurrent and open load limits are configurable. The output voltages can be programmed via external voltage dividers in a range from 3V to 40V. Continuous output even at low voltage supply condition is provided by switch mode. Up to four devices can be connected to one I²C bus. Four predefined I²C addresses are selectable by pin programming. Thermal management flexibility is provided by an optional external pnp transistor for pre-regulation of the input voltage. A fault indication pin is provided to signal error states.

Ordering Information

Ordering-No.:	Temp Range	Package
E52244B84CXX2	-40°C to +125°C	DFN18L5040-SLP

Typical Application Circuit



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