

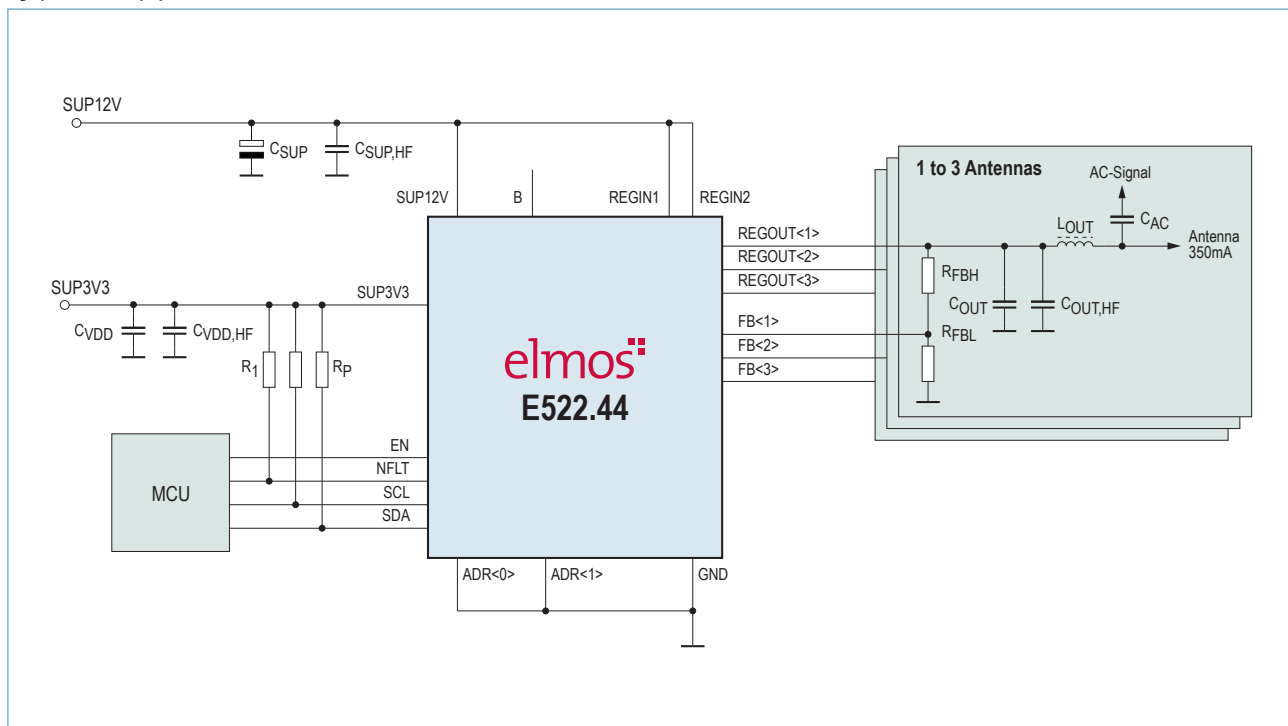
## Features

- Automotive compatible input voltage range from 4.5V to 40V including load dump transients
- I<sup>2</sup>C interface for full  $\mu$ 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

## Typical Application Circuit



## General Description

This device is a triple phantom power supply for antennas in automotive environments. The device features an I<sup>2</sup>C 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 I<sup>2</sup>C 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 I<sup>2</sup>C bus. Four predefined I<sup>2</sup>C 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

# Elmos Support

## Headquarters

Elmos Semiconductor SE  
Heinrich-Hertz-Str. 1  
44227 Dortmund (Germany)  
Phone: +49 (0) 231 / 75 49-100  
Fax: +49 (0) 231 / 75 49-149  
sales-germany@elmos.com  
www.elmos.com

## Sales and Application Support Office North America

Elmos NA. Inc.  
sales-usa@elmos.com

## Sales and Application Support Office China

Elmos Semiconductor Technology (Shanghai) Co., Ltd.  
sales-china@elmos.com

## Sales and Application Support Office Korea

Elmos Korea  
sales-korea@elmos.com

## Sales and Application Support Office Japan

Elmos Japan K.K.  
sales-japan@elmos.com

## Sales and Application Support Office Singapore

Elmos Semiconductor Singapore Pte Ltd.  
sales-singapore@elmos.com

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