

Features

- Automotive compatible input voltage range from 3.3V to 40V including load dump transients.
- Resistor programmable output voltages from 3.3V to V_{BAT} with integrated soft start.
- Up to 200mA load current with digitally programmable overcurrent- and open load levels.
- Protection against supply over/under voltage, overtemperature and overcurrent with open-drain error flag.
- Output for optional external bipolar NPN-transistor to reduce power dissipation.
- Integrated I²C interface allows for programming of protection limits and voltage and current monitoring.
- Control interface with digital comparator for additional functions.
- Fast 8bit ADC samples relevant system voltages and currents.

Applications

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

General Description

The E522.40B is a dual phantom supply with I²C interface for antennas in automotive environments. It affords protection of the antenna lines against ESD, short to ground and battery, as well as protection against thermal over-stress of the IC.

The I²C interface allows addressing of several devices with only 2 interface lines. Various antenna voltages from 3.3V to 18V can be programmed independently using external voltage dividers.

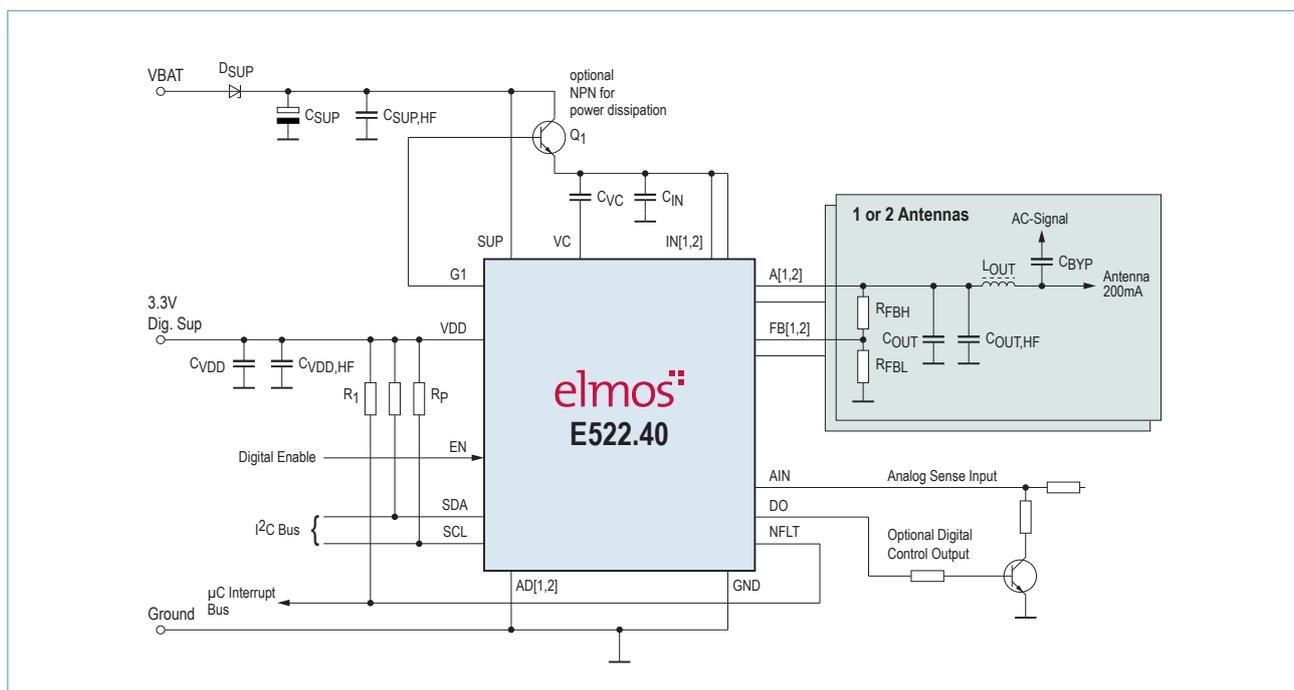
A separate control line can be connected to an external bipolar NPN-transistor as a pre-regulator to reduce power dissipation in the IC. An I²C interface in conjunction with a 8bit ADC allows monitoring of antenna voltages and currents. Overcurrent and open load limits can be programmed for each antenna line separately, and will lead to automatic shutoff if tripped.

An analog sense input and digital control line can be used to interface with an additional phantom supply or for other functions.

Ordering Information

Ordering No.:	Temp Range _{AMB}	Package
E52240B62C	-40°C to +125°C	QFN20L5

Typical Application Circuit



Elmos Semiconductor AG reserves the right to change the detail specifications as may be required to permit improvements in the design of its products.

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