

Features

- ▶ Operating supply voltage range 6V to 19V
- ▶ Tolerates automotive transients
- ▶ Standby current typ. 4µA
- ▶ 6 half bridges to drive 3, 4, or 5 DC motors
- ▶ $R_{DS,ON}$ of one half bridge typ. 1.25Ω
- ▶ Adjustable parameters to drive a high number of different motor types
- ▶ Output current max. 540mA per half bridge
- ▶ Three independent pulse detectors and counters
- ▶ Excellent positioning performance
- ▶ Minimum external components required
- ▶ SPI for communication with µC (5V or 3.3V)
- ▶ Diagnostic data via SPI (short circuit, open loop, overtemperature, over and undervoltage)
- ▶ AEC-Q100 qualified

Applications

- ▶ Automotive HVAC systems
- ▶ DC motor servo systems

General Description

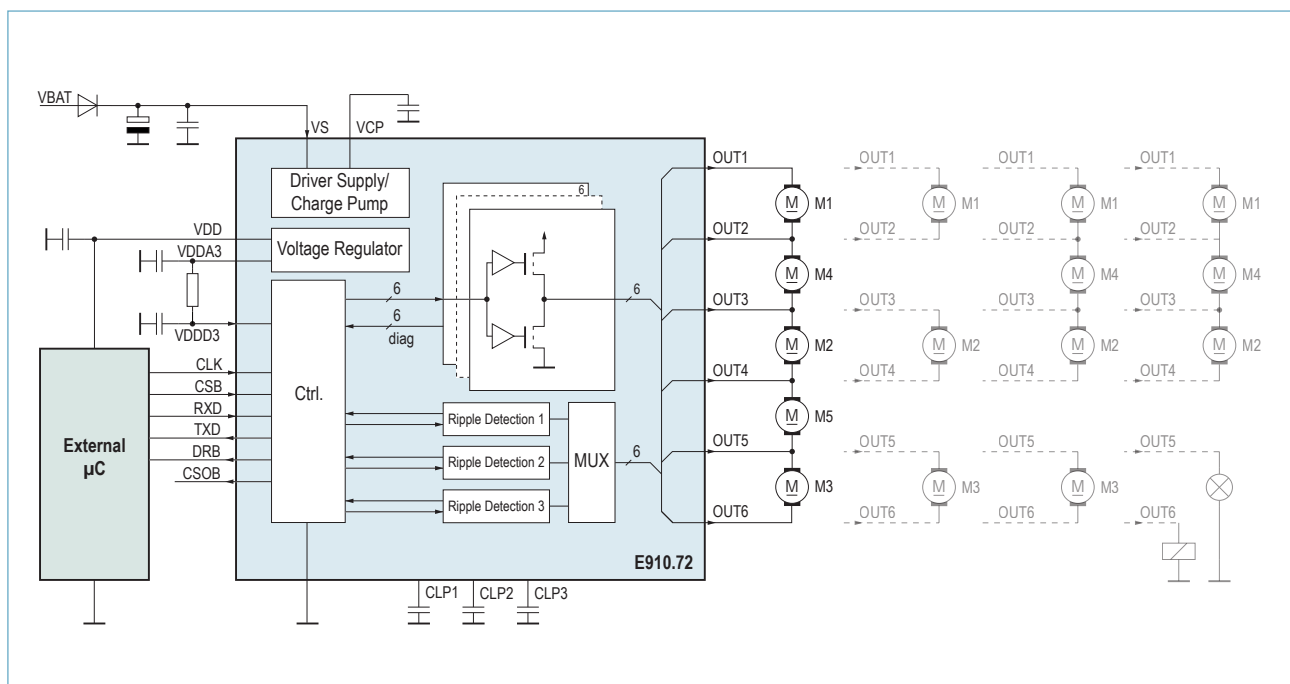
The E910.72 allows independent positioning of up to 5 DC motors. Pulse detection circuits convert the commutation current of the motors into countable digital signals especially for positioning of HVAC flap actuators.

Via an SPI a µC sends motor address, direction, and pulse count command to the device. The corresponding motor will then be driven to the desired position, and the actual number of counts is sent back to the µC.

Diagnostic data such as overcurrent, overtemperature and motor stall is also transmitted via the SPI. An open drain low side output indicates when a required motor position is reached or diagnostic data is available. ICs can be connected in a daisy chain.

Ordering Information

Product ID	Temp. Range	Package
E910.72	-40°C to +85°C	QFN32L5



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ELMOS Semiconductor AG – Headquarters
Heinrich-Hertz-Str. 1 | 44227 Dortmund | Germany
Phone +49 (0) 231-75 49-100 | Fax +49 (0) 231-75 49-159
sales@elmos.de | www.elmos.de

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