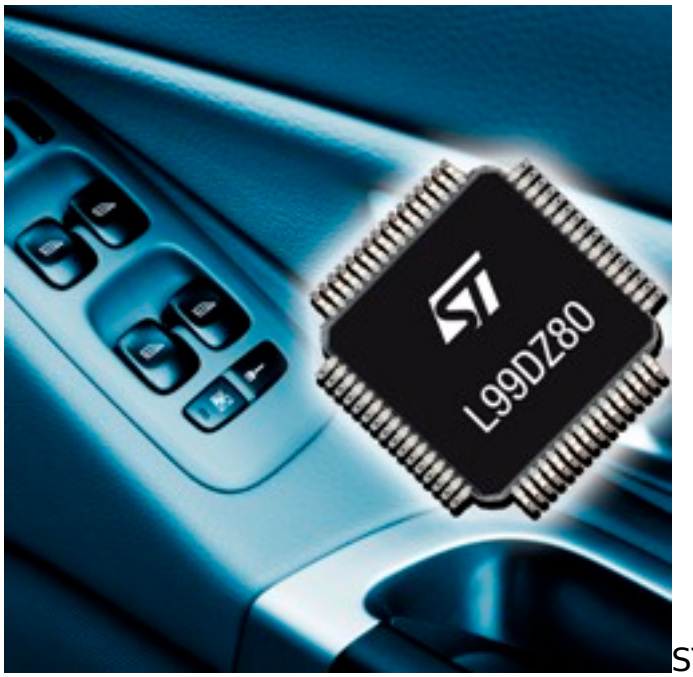
Car-Door Controller IC Features Integrated Window Function



STMicroelectronics, a global semiconductor leader serving customers across the spectrum of electronics applications and a leading supplier of car-door electronics, introduced what is presented as the market's first multi-functional door-zone driver with an integrated electric-window control. This innovative chip, which reduces bill-of-material costs and offers new levels of passenger comfort, has already been selected for broad adoption at a leading German car manufacturer.

Today, equipment manufacturers use relays to drive the electric-window motors. ST's newest door actuator driver redefines the established system topology, removing the need for mechanical relays in car-window control. The innovation slashes component costs and eliminates expensive electromagnetic compatibility (EMC) countermeasures, associated with the existing solutions, while enabling users to enjoy a smoother and quieter car-window operation. ST's new door-zone driver supports adjustable window speeds related to the position of the window - soft start and shutdown - and reduces noise levels with the removal of the relay as well.

ST's L99DZ80 embeds an SPI-programmable slew-rate control IP that can drive 4 external MOSFETs in a half-bridge configuration dedicated to PWM (Pulse Width Mode)-driven electric-window applications. Other features include six bridges for double door-lock control, mirror fold, and mirror-axis control, together with a high-side driver for mirror defroster, bulbs and LEDs. The device also integrates a control block with an external MOS transistor for charging and discharging of electrochromic (dimmable) mirror glasses.

ST is the world's largest supplier of car-door electronics, with more than 100 million door-actuator devices shipped over the past ten years. Designed for state-of-the-art automotive door-module applications, ST's market-proven devices are renowned and recognized for their scalability, small size, advanced power-management functionality, and superior thermal performance.

The newest addition to ST's family of microcontroller-driven multi-functional car-door actuator drivers, the L99DZ80 is available in volumes. For pricing options, please contact your ST sales office.

Further information on ST can be found at www.st.com [1].

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[1] http://www.st.com