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# L99DZ8x Family

## Leading-edge devices “raise the bar” in car door zone innovation



### Smooth window operation and optimized electromagnetic emissions of door electronics are addressed by an innovative semiconductor solution

Even more innovation in car door electronics; ST's L99DZ80EP and L99DZ81EP are the first devices that specifically target the door zone market. Their main feature is the PWM (Pulse Width Mode) control for the H-Bridge motor drive in window lift systems.

#### KEY FEATURES

##### All door module loads supported

- Window lift
- Locks
- Mirror levelling
- Mirror adjustment
- Mirror defroster
- Lighting (Bulbs/LEDs)
- Electro-chromatic mirror
- Driving and diagnostics provided through SPI

#### KEY BENEFITS

##### Increased comfort

- Reduces size and weight of door zone electronics
- Ensures smoother and quieter window lift operations

#### KEY APPLICATIONS

Front (L99DZ80EP) and rear (L99DZ81EP) car doors



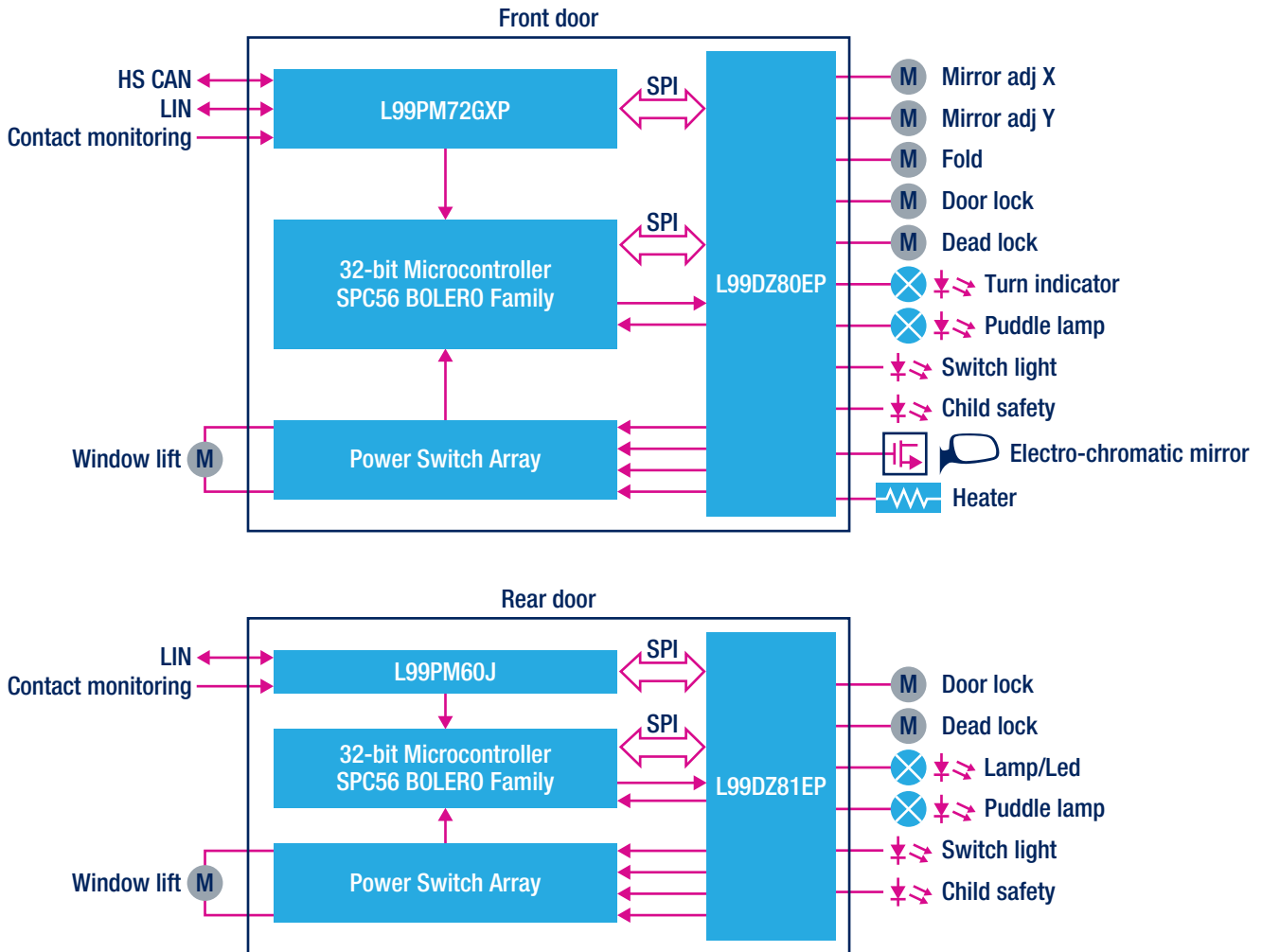
## DEVICES AT A GLANCE

The L99DZ80EP and L99DZ81EP are smart power ASSPs and offer an extremely integrated and optimized solution for door zone electronic modules. Both devices include an SPI-programmable slew-rate control IP that can drive 4 external MOSFETs in a PWM-driven bridge configuration dedicated to PWM-driven electric-window applications.

In addition, the SPI-programmable slew-rate control of the external MOSFETs enables tight control of switching noise thus ensuring the best results in terms of electromagnetic compatibility (EMC). Devices are tailored to drive front and rear door relevant loads such as door-lock, bulbs and LEDs (both devices) as well as mirror fold, mirror-axis and mirror defroster

(L99DZ80EP only). The front door device (L99DZ80EP) also integrates a control block with an external MOS transistor for electrochromatic charging and discharging of (dimnable) mirror glasses. The L99DZ80EP and L99DZ81EP are housed in a TQFP64-exposed pad package.

## TYPICAL APPLICATION DIAGRAMS



Part Number	Mirror Adj.	Fold	Lock	Dead Lock	Heater	Electro- chromatic Glass	Window Lift	Bulbs/LEDs
<b>FRONT DOOR</b>								
L99DZ80EP	•	•	•	•	•	•	•	•
<b>REAR DOOR</b>								
L99DZ81EP			•	•			•	•

