

# Melexis

INSPIRED ENGINEERING



## DC-MOTOR WINDOW LIFT MOTOR

### MELEXIS SOLUTIONS FOR WINDOW LIFT APPLICATIONS

Melexis offers a complete solution kit for DC motors that are used in various applications such as window lifter and sun roof motors. For the actuation Melexis advises the MLX81325, a single-chip LIN predriver in small QFN 5x5 form factor, which enables fine PowerFET control for efficient, low noise drive with smooth start & stop. The MLX81325 is equipped with an 8 pin I/O bus, designed for 3.3V. Melexis position sensors can be directly connected on this IO bus which offers a cost optimized solution. For simple DC motors, MLX92212 and MLX92255 can be directly connected on the 3.3V bus. Both sensors provide a speed output that is used for the motor actuation. Moreover, the MLX92251 offers a speed and direction output so that the direction doesn't need to be computed on the uController.

#### KEY FEATURES

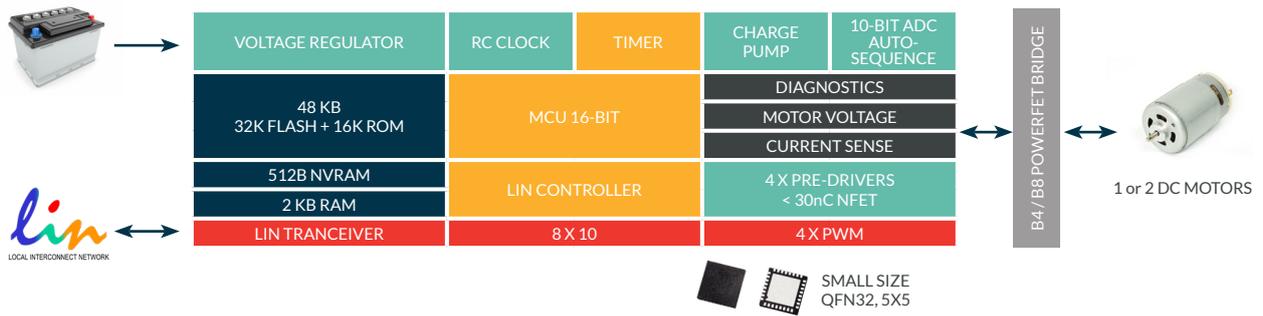
- ✓ MLX81325
  - For 12V and 24V applications
  - LIN interface
  - 48kB memory (32K Flash, 16k ROM)
  - 8x multi-function IOs
  - 4 integrated pre drivers (<30nC FET)
  - Diagnostic
  - Current Sense
- ✓ MLX92212
  - Single Hall output
  - 2.5V - 5.5V
  - ESD: 8kV
- ✓ MLX92255
  - Dual Hall Output
  - Speed Speed
  - 2.5V - 5.5V
- ✓ MLX92251
  - Dual Hall Output
  - Speed & Direction
  - 2.7V–24V

#### KEY APPLICATIONS

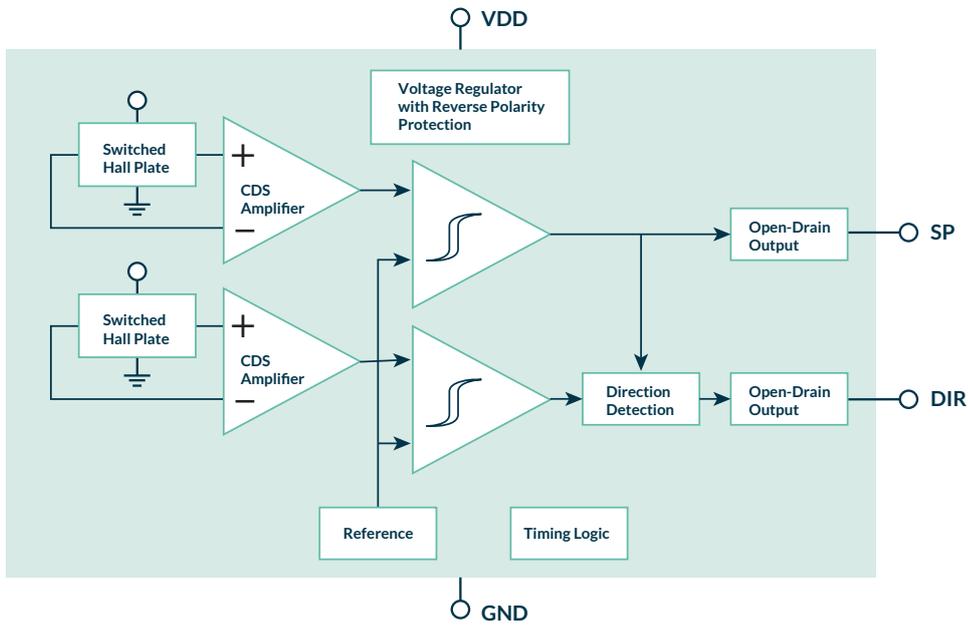
- ✓ Window lifter motor
- ✓ Sunroof motor
- ✓ DC motors
- ✓ Automotive / Industrial applications



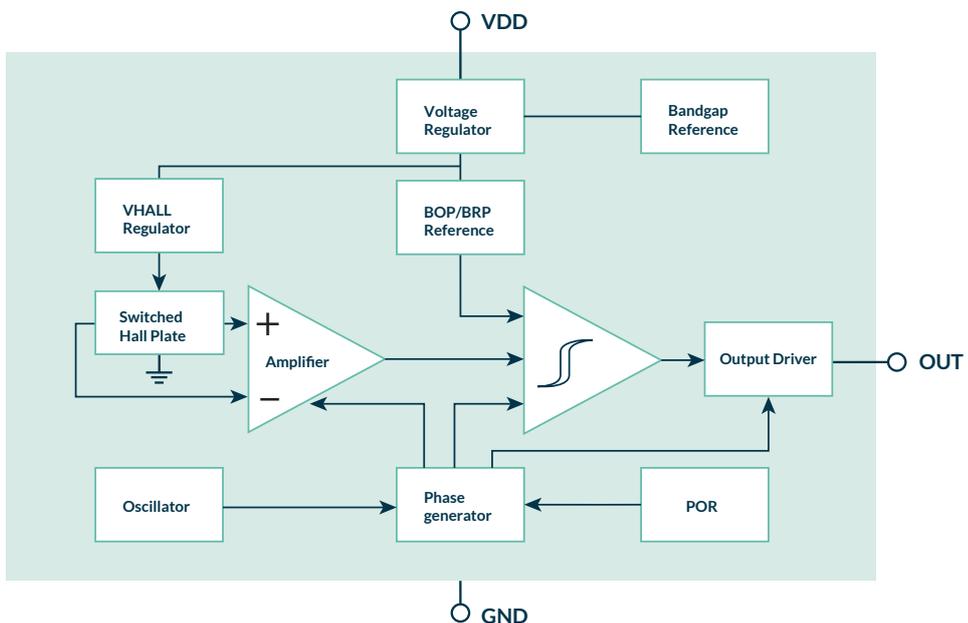
## BLOCK DIAGRAM MLX81325



## BLOCK DIAGRAM MLX92251



## BLOCK DIAGRAM MLX92212



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