

## Product Information CY141



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### Features

#### General features

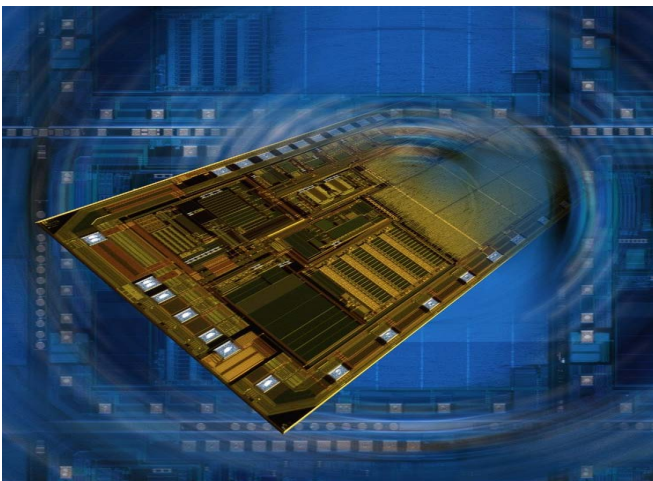
- ▶ Standby current max. 500uA
- ▶ Supply voltage range 4...60V

#### Switched regular step up/ step down

- ▶ Input voltage range 4...60V
- ▶ Output voltage range 5.5...8V  
Output current:
  - Step down 1.5A
  - Step up 1.4A; condition:  $|U_{IN}-U_{OUT}|<2V$
- ▶ Switch frequency 360kHz
- ▶ External compensation for step up and step down regulator necessary

#### 5 output stages for driving external high side switches (HRx: Gate, SENx: Source)

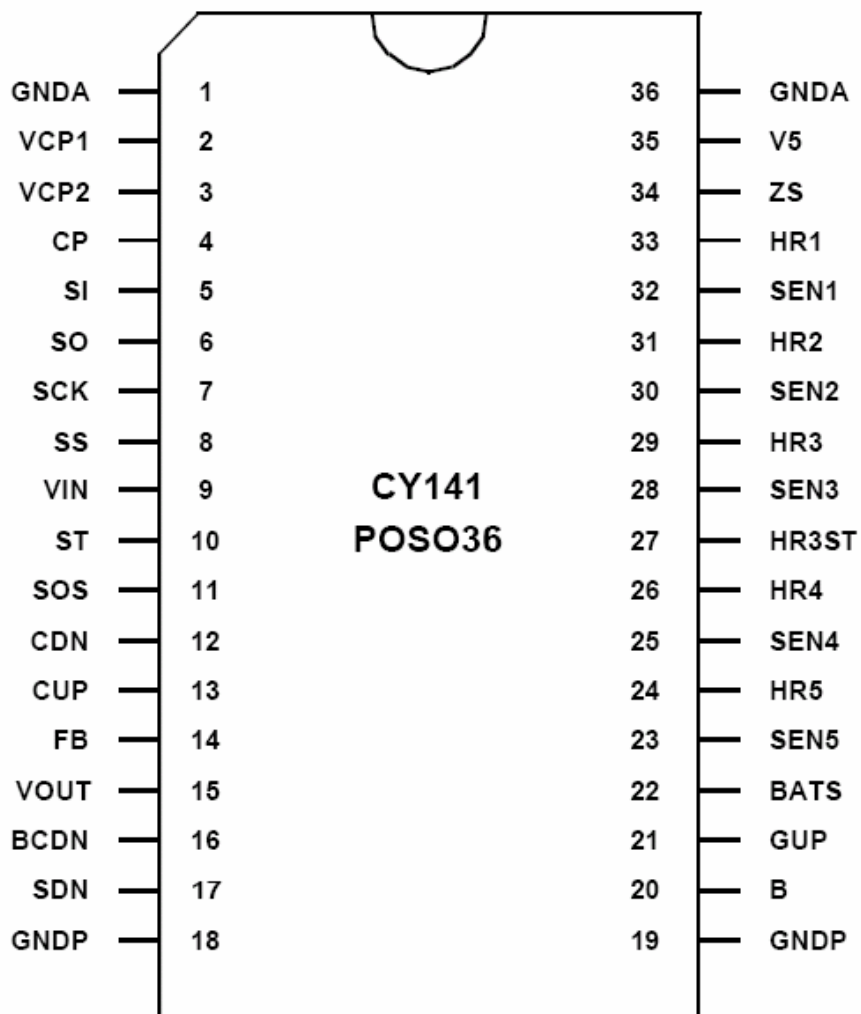
- ▶ - Switch on time: max. 60us
- ▶ - Condition: gate capacity ext. high side switch max. 5nF
- ▶ Gate hold current: typ. 100uA
- ▶ Short circuit detection by drain source evaluation, short circuit threshold for each high side switch separate adjustable by SPI, threshold voltage range 200...550mV short circuit diagnosis and reset by SPI
- ▶ Possible configurations HR1 driver by SPI:
  - regulator mode - regulation voltage 34V or 38V if battery voltage will increase this threshold
  - switch mode - HR1 will switch off if battery will increase 34V or 38V
- ▶ Possible configurations HR2 (alternative HR3) driver by SPI:
  - switch mode - HR2/HR3 will switch off if battery will increase 34V or 38V
  - the switch mode can be disabled



CY141

#### Customer benefits:

- ▶ Excellent system know-how
- ▶ Smart concepts for system safety
- ▶ Secured supply
- ▶ Long- term availability of manufacturing processes and products
- ▶ QS9000 and ISO/TS16949 certified



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