

Automotive Electronics

Product Information

CJ135 - Lambda Probe Interface IC



BOSCH
Invented for life



Customer Benefits

- ▶ For use with Bosch or NTK Probes
- ▶ Digital signal output
- ▶ Available in compact package

General Description

The CJ135 is designed to operate and diagnose the Bosch wide band Lambda sensors LSU 4.9. or LSU ADV inside an ECU (electronic control unit for Diesel or Gasoline engines).

In addition, the CJ135 fulfills the requirements for operation of the NTK sensor ZFAS-U2 as defined in the common requirement specification of NTK and Bosch. However, due to its enlarged functionality and different housing the CJ135 is not pin-compatible to CJ125.

Features

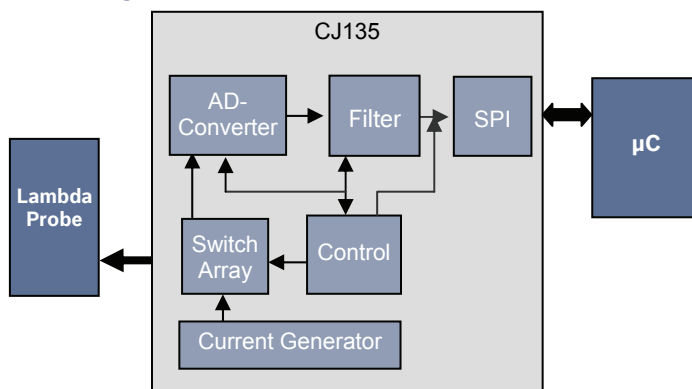
- ▶ OBDII diagnostics capability (separated failure detection of each sensor pin)
- ▶ Leakage current detection of the sensor pins
- ▶ Extended Ri- (temperature) measurement range till 6kOhm for fast Light-Off

Features (continued)

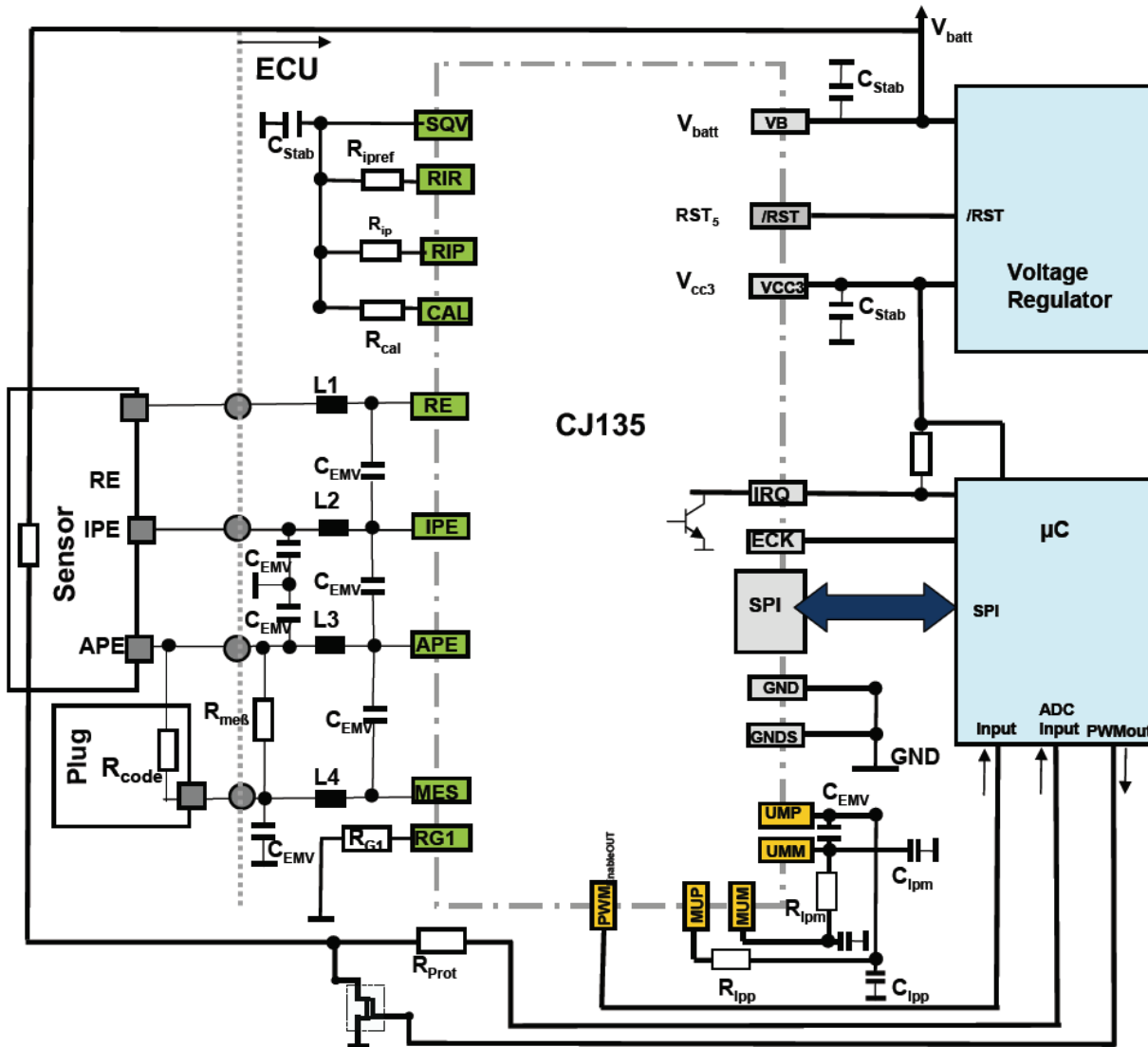
- ▶ Improved electrical strength of the probe pins between -1V...32V
- ▶ Blackening protection
- ▶ Inversed pump current capability
- ▶ Digitalized signal output
- ▶ 3.3V/5V SPI communication
- ▶ ESD performance: 200V for all pins, 4KV HBM for sensor pins, 750V CDM for corner pins
- ▶ EMC performance in accordance to BISS norm
- ▶ Reduced operating current consumption of the pin VDD (<20mA)
- ▶ Compact package: QFN36 or TQFPepad36

Maximum ratings	
Battery Pin	
Static	28V
Dynamic (without destruction)	1ms; 1Hz: 35V
Sensor pin (without destruction)	32V
Temperature Range (T _{Junction})	-40° ... 150°C

Block Diagram



Application Diagram



Regional sales contacts

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