

Product Information

Single LIN Transceiver

TH8082

The TH8082 is a physical layer device for a single wire data link. It is capable of operating in applications where no high data rates are required and lower data rates can generate cost reductions both in the physical media components and in the microprocessor which uses the network.

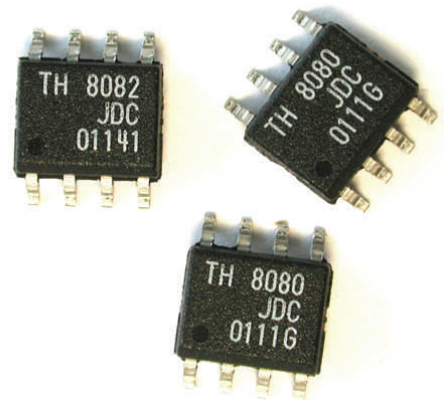
Conforms to LIN Protocol Specification Rev. 1.3, 2.0 and SAE J2602

Because of its very low current consumption in recessive state TH8082 is suitable for ECU applications that have stringent standby current requirements.

Features

- Compatible to LIN Specification Version 1.3 and 2.0
- Compatible to ISO9141 functions
- Baud rate up to 20 kBaud
- Operating voltage $V_S = 6$ to 18 V
- Very low current consumption of typ. 7 μ A in sleep mode
- Remote wake up via BUS traffic
- Control output for voltage regulator with low on resistance for switchable master termination
- High signal symmetry for use in RC – based slave nodes
- Slew rate control for good EME behavior
- High EMI immunity
- Fully integrated receiver filter
- BUS terminals proof against short-circuits and automotive transients
- High impedance BUS pin in case of loss of ground or under-voltage condition
- BUS short to ground protection
- Automotive Temperature Range of -40°C to 125°C
- Thermal overload protection
- Load dump protection (40V)
- $\pm 4\text{kV}$ ESD protection
- Small SOIC8 package

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Automotive ICs

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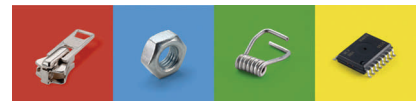
Bus ICs

Hall ICs

CMOS Imaging

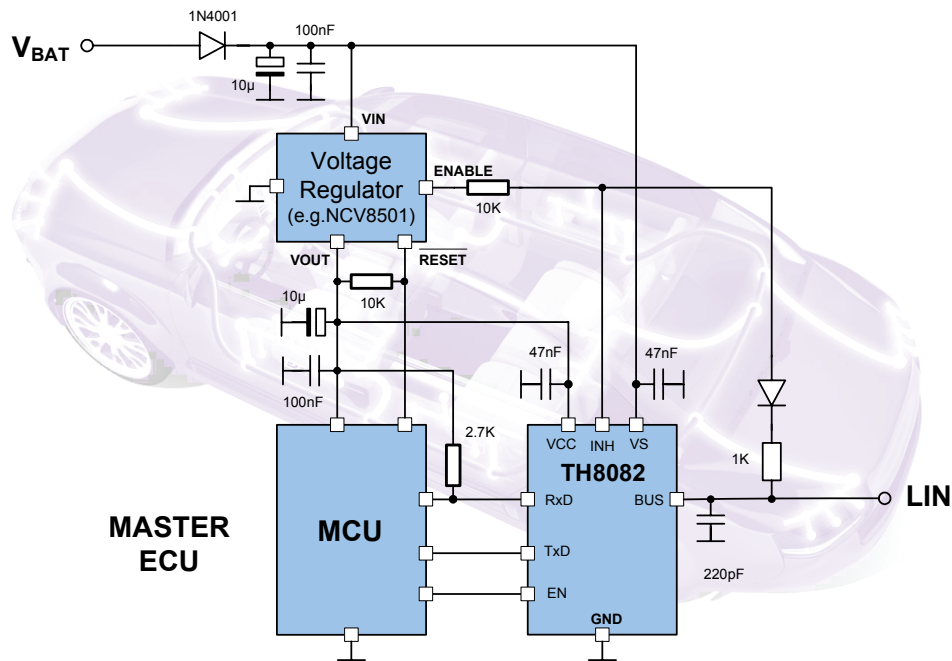
Silicon MEMS

IR Temperature



Small things make a big difference.

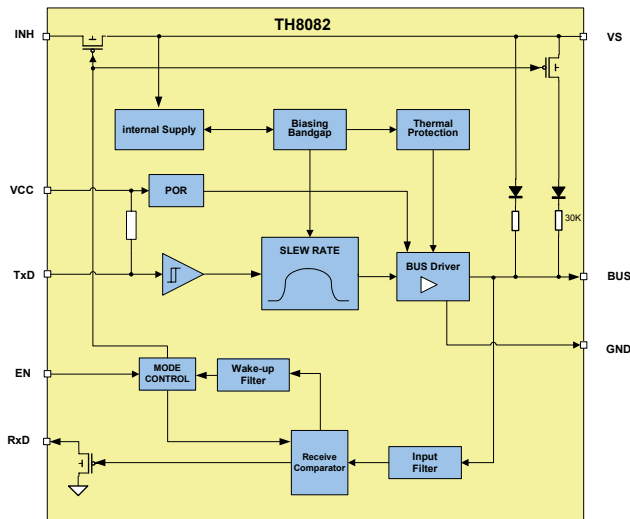
Application Circuitry



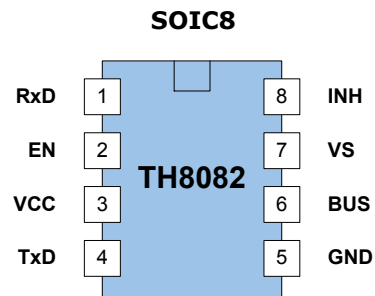
Applications

- All Applications that require a LIN Interface
- Well suited for development of both LIN master and slave ECU modules
- Intelligent Actuator-, Sensor- and Switch implementations for Door, Seat, Dashboard, Roof and other submodules

Block Diagram



Pinout



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