

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



### Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China







# 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**

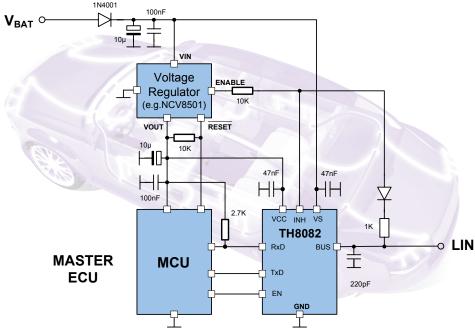
- Compatible to LIN Specification Version 1.3 and 2.0
- Compatible to ISO9141 functions
- · Baud rate up to 20 kBaud
- Operating voltage VS = 6 to 18 V
- Very low current consumption of typ. 7µA in sleep mode
- Remote wake up via BUS traffic
- Control output for voltage regulator with low on resistance 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)
- ±4kV ESD protection
- Small SOIC8 package







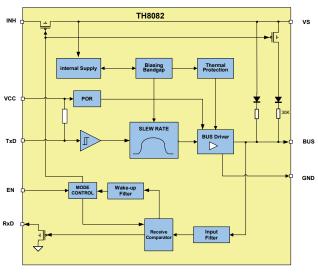
#### **Application Circuitry**



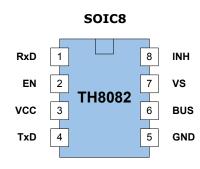
#### **Applications**

- 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**



Devices sold by Melexis are covered by the warranty and patent indemnification provisions appearing in its Term of Sale. Melexis makes no warranty, express, statutory, implied, or by description regarding the information set forth herein or regarding the freedom of the described devices from patent infringement. Melexis reserves the right to change specifications and prices at any time and without notice. Therefore, prior to designing this product into a system, it is necessary to check with Melexis for current information. This product is intended for use in normal commercial applications. Applications requiring extended temperature range, unusual environmental requirements, or high reliability applications, such as military, medical life-support or life-sustaining equipment are specifically not recommended without additional processing by Melexis for each application. The information furnished by Melexis is believed to be correct and accurate. However, Melexis shall not be liable to recipient or any third party for any damages, including but not limited to personal injury, property damage, loss of profits, loss of use, interrupt of business or indirect, special incidental or consequential damages, of any kind, in connection with or arising out of the furnishing, performance or use of the technical data herein. No obligation or liability to recipient or any third party shall arise or flow out of Melexis' rendering of technical or other services.

Email Europe and rest of the world: sales\_europe@melexis.com

Email USA: sales\_usa@melexis.com Email Asia: sales\_asia@melexis.com



For additional information go to our website at: