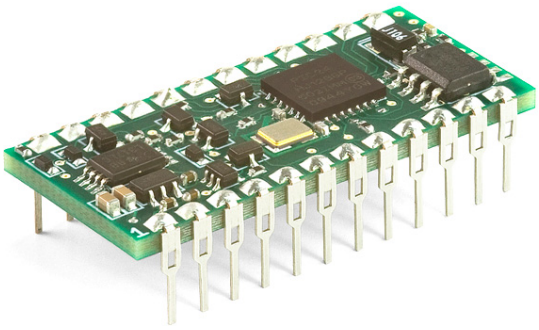
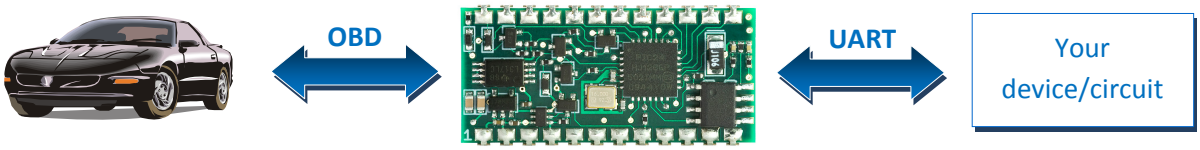
microOBD 200



Product Overview

microOBD 200 is a quick and easy way to add **OBD support** to any embedded project. It is a complete **OBD to UART interface** in a **DIP-24** form factor, designed for in-vehicle applications. The module is based on the STN1120 IC, which uses an enhanced version of the popular **ELM327** command set, supports **UART speeds up to 10 Mbps,** and is **firmware upgradeable.** Additional documentation is available from http://www.microobd.com.



Key Features

- Supports all legislated OBD-II protocols and SAE J1939 (heavy duty vehicles)
- Small form factor (1.3” x 0.6”) in a standard DIP-24 package
- Vibration resistant, can be used with a machined socket or soldered directly to the host PCB
- Software configurable low current (<1 mA) sleep mode with multiple triggers
- Fully compatible with the ELM327 command set
- Extended “ST” command set for access to advanced functionality not available in the ELM327
- Firmware upgradeable

Supported OBD Protocols

- SAE J1850 PWM
- SAE J1850 VPW
- ISO 9141
- ISO 14230 (KWP 2000)
- ISO 15765 (CAN)
- ISO 11898
- SAE J1939

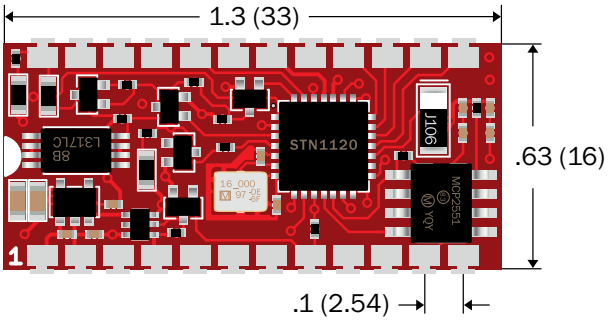
Typical Applications

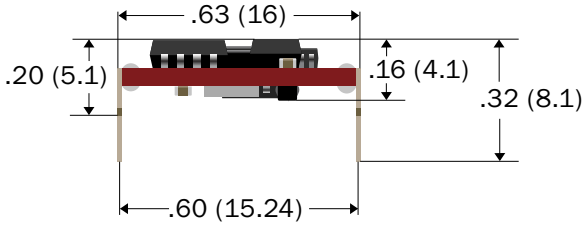
- Fleet management and tracking applications
- OBD data loggers
- Automotive diagnostic scan tools and code readers
- Digital dashboards
- Academic projects

Pinout

Pin	Description	Pin	Description
1	+5V power input	**24**	J1850 Bus+
2	Ground	**23**	J1850 Bus-
3	No connect	**22**	Module reset input
4	Positive battery terminal input	**21**	No connect
5	ISO L line	**20**	Analog input
6	ISO K line	**19**	Analog ground reference
7	External sleep control input	**18**	Analog positive supply
8	External power control output	**17**	+3.3V power output
9	UART Rx	**16**	UART Rx LED output
10	UART Tx	**15**	UART Tx LED output
11	CAN Low bus line	**14**	OBD Rx LED output / Interrupt output
12	CAN High bus line	**13**	OBD Tx LED output / NVM reset input

Dimensions





Dimensions specified as "inches (millimeters)"

Electrical Specifications

Specification	Min	Typical	Max	Units
Positive battery terminal input (pin 4) voltage	8	12	20	V
+5V input (pin 1) voltage	4.5	5	5.5	V
+3.3V power output (pin 17) voltage	3.2	3.3	3.4	V
Positive battery terminal input (pin 4) current, active			10	mA
Positive battery terminal input (pin 4) current, sleep		0		mA
+5V input (pin 1) current, active		80	110	mA
+5V input (pin 1) current, sleep		0.2	1	mA
+3.3V power output (pin 17) current			85	mA