



- Transmit and receive messages via CAN bus
- Allows processors with no CAN module access to the CAN bus
- Uses SPI bus for all configuration
- Access to dedicated input and output lines on the CAN controller
- 3 test switches and 2 test LEDs

1. 9-way downstream D-type connector
2. Patch system
3. SDO, SDI & SCK selection jumper pins
4. /CS and /INT enable selection jumper pins
5. Reset button
6. MCP2515 chip
7. 3 x Dedicated Input switches
8. Power screw terminals
9. MCP2551 chip
10. 20MHz crystal
11. End node selection jumper
12. CAN bus screw terminal
13. 2 x Dedicated Output LEDs

The CAN bus is a very popular, low cost, bus for communicating between electronic devices at high data rates. The bus allows up to 128 devices to communicate on a single bus at data rates up to 1M baud using simple twisted pair cable.

This E-block is designed to allow a CAN bus communications system to be easily set up using a wide range of microcontroller devices – even those without embedded CAN functions.

The board includes both a CAN Controller (Microchip MCP2515) and a CAN Transceiver (Microchip MCP2551). The CAN controller uses the high speed SPI™ bus to configure the CAN controller for transmitting and receiving CAN information. The host microcontroller must therefore have an SPI bus module. The CAN transceiver converts the CAN controller signals into differential signal level used by the CAN bus, and vice versa.

For development and training purposes the board is fitted with three switches and two LEDs which can be controlled using the CAN transceiver chip. The board is also compatible with microcontrollers that have embedded CAN modules.