PRODUCT DATASHEET

CAN Transceiver MCP2518FD

333020

The MCP2518FD transceiver connects microcontrollers to CAN networks, supporting CAN 2.0B and CAN FD with data rates up to 8 Mbps.

Full product documentation, files and tutorials: **solde.red/333020**

CORE ATTRIBUTES

SKU **333020**

WEIGHT **8 g**

BARCODE **732388674404**

DESCRIPTION

Connect your Arduino or microcontroller projects to automotive and industrial CAN networks with our **MCP2518FD transceiver board**. Designed for automotive diagnostics, industrial automation, and IoT applications, this board supports both legacy CAN 2.0B and modern CAN FD standards with data rates up to 8 Mbps. If you are building vehicle diagnostic tools, industrial monitoring systems, or custom automotive interfaces, this SPI-controlled module provides reliable, high-speed communication with built-in termination. The MCP2518FD controller at the heart of this board delivers CAN communication with arbitration bit rates up to 1 Mbps and data bit rates up to 8 Mbps for CAN FD applications. The integrated ATA6563 transceiver ensures signal integrity in harsh automotive and industrial environments, while the SPI interface provides easy integration with Arduino, ESP32, and other microcontroller platforms. The onboard 120-ohm termination resistor can be easily enabled via a jumper, making this board perfect for end-node applications or network testing. What sets this CAN transceiver apart is its automotive-grade components combined with maker-friendly design. The screw terminal connections ensure secure, vibration-resistant connections for all applications, while the compact 38×22mm form factor fits easily into smaller projects. With Arduino library support and detailed documentation, you can quickly integrate CAN communication into your projects without deep protocol knowledge. Perfect for automotive enthusiasts, industrial automation engineers, and IoT developers who need reliable CAN connectivity.

TECHNICAL DETAILS

- **Standards:** CAN 2.0B i CAN FD
- **Voltage:** 2.7V i 5V
- **Current:** from 10uA to 12mA
- SPI interface
- **Dimensions:** 38 × 22 mm / 1.5 × 0.9 inch

SPECIFICATIONS

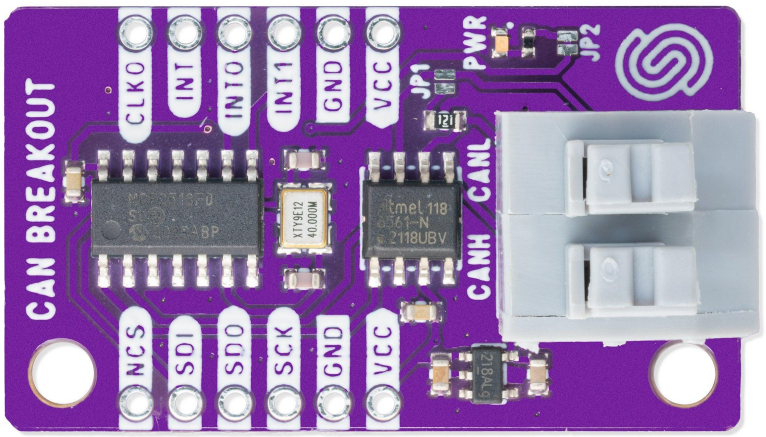
INTERFACE	Spi, Can
QWIIC COMPATIBLE	No
BREADBOARD COMPATIBLE	Yes
IC PART NUMBER	MCP2518FD
LOGIC LEVEL	3V3 Only
OPERATING CURRENT (MA)	12 mA
SLEEP CURRENT UA	10

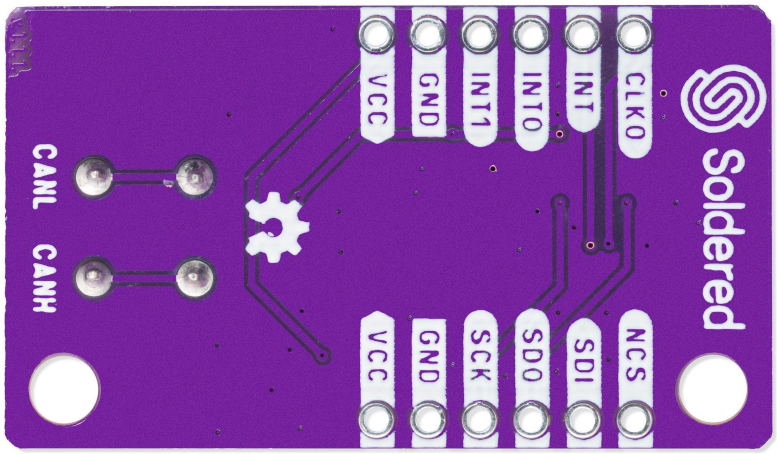
LINKS

Arduino Library	https://github.com/SolderedElectronics/Soldered-CAN-Bus-Breakout-MCP2518-Arduino-Library
Open Source Hardware Files	https://github.com/SolderedElectronics/CAN-Transceiver-MCP2518-board-hardware-design
Full Documentation	https://docs.soldered.com/mcp2518/overview/
Arduino: Get Started	https://docs.soldered.com/mcp2518/arduino/geting-started/
Hardware Details	https://docs.soldered.com/mcp2518/hardware/
Arduino Library Documentation	https://docs.soldered.com/mcp2518/arduino/can20examples/
Pinout	https://cms.soldered.com/products/333020/media/333020_pinout-png_adff9e.svg

GALLERY


CAN BREAKOUT
NCS
SDI
SDO
SCK
GND
CLKO
INT
INT0
INT1
GND
VCC
JP1
PWR
JP2


CAN BREAKOUT
CLKO
INT
INT0
INT1
GND
VCC
JP1
PWR
JP2
CANL
CANH
NCS
SDI
SDO
SCK
GND
VCC


CANL
CANH
VCC
GND
INT1
INT0
INT
CLKO
VCC
GND
SCK
SDO
SDI
NCS
Soldered