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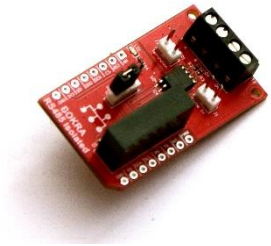
RS485 Isolated



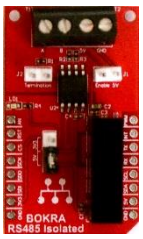
The **BOKRA RS485 Isolated** module is an isolated half-duplex RS485/422 transceiver used as an interface between the UART and the RS485/422 communication bus. The module implements half-duplex communication, has a reliable receiver input, isolation, AutoDirection (automatic direction selection, making the DE and RE signals unnecessary).

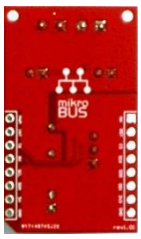
The module uses the MAX22028 chip from Maxim Integrated Products.

The maximum data transfer rate is 16Mbps.

The MAX22028 chip's AutoDirection algorithm removes the need for DE and RE signals and allows only RX / TX signals for communication.

Insulation:





- ± 10kV ESD (HBM) at driver outputs / receiver inputs
- Withstands 3.5kVRMS Isolation Voltage for 60 Seconds
- Withstands 630VPEAK Maximum Repetitive Peak (Isolation Voltage)
- Continuously Withstands 445VRMS Maximum (Working-Isolation Voltage)

Power supply of the **BOKRA RS485 Isolated** module - 5VDC or 3.3VDC. When using 5VDC input power, the module provides isolated 5VDC at the output connector (maximum current 1A, isolation 3kV).

Module size – 42,93 x 25,4 mm (mikroBUS form factor, size "M").

The **BOKRA RS485 Isolated** package includes contact headers for mikroBUS. Before connecting modules with the mikroBUS interface, these headers must be soldered to **BOKRA RS485 Isolated**. When ordering, you can also optionally indicate the need for presetting these contact headers.

The main areas of application of the module:

- Industrial application
- Devices and gateways
- Security systems
- Input/Output systems
- Motor control
- HVAC

The **BOKRA RS485 Isolated** scheme is as follows: