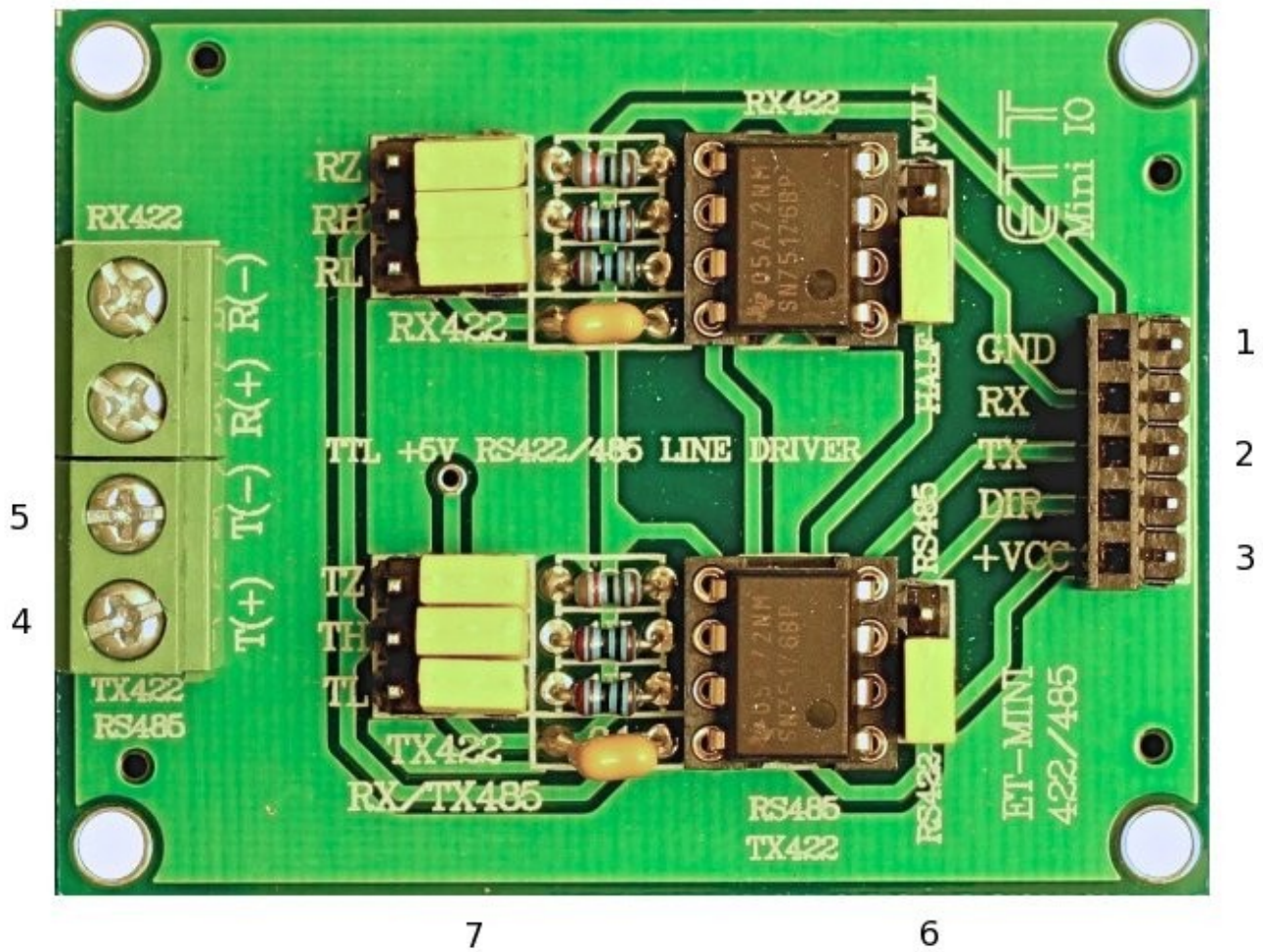Mini RS-485 Master

      This OEM board runs on 5V DC and can send RS-485 data at 10 mbps. It is therefore well-suited to act as an RS-485 master when using a 5V microcontroller to drive a chain of PinballControllers.com Power Driver boards. It will likely also work with a 3.3V microcontroller, though the VCC input needs to be connected to 5V regardless of the microcontroller.

The diagram and table below describe how to connect the Mini RS-485 Master to your microcontroller and to the first PinballControllers.com Power Driver board in your chain:

Ref #	Mini-RS485 Item	Connection
1	GND	Common GND
2	TX	Controller's Serial Data Output pin
3	+VCC	5V
4	T(+)	First driver board in chain: Serial+ : J9-pin1
5	T(-)	First driver board in chain: Serial- : J9-pin2
6	RS422/RS485 Selection Jumper	RS422*
7	TX422 Jumpers	All on the pins closest to the IC

* RS422 is selected because it is a transmit only protocol. Selecting RS485 would necessitate also connecting the DIR pin. Selecting RS422 makes the DIR pin irrelevant.