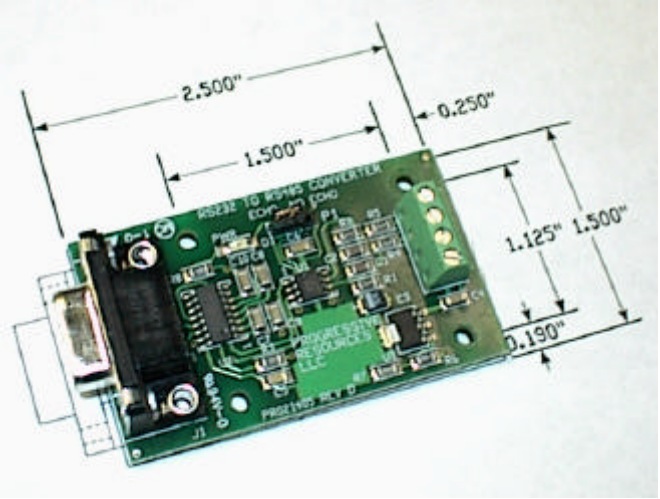
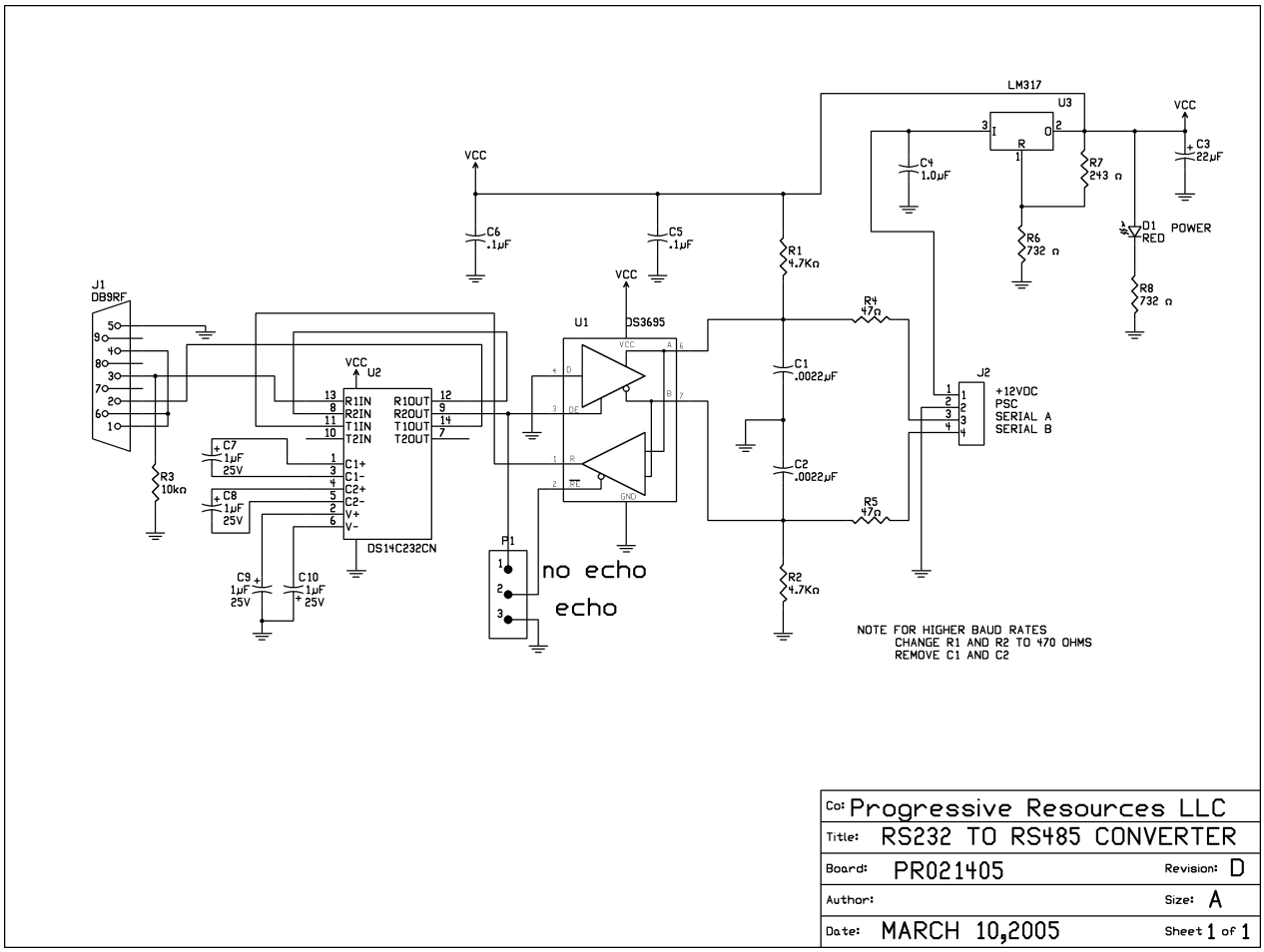
Progressive Resources LLC **RS232 to RS485 Converter**



The RS232 to RS485 Converter allows access to a multi-drop RS485 network or connection to a point-to-point RS485 device. Our converter allows up to 32 RS485 (2-wire) devices to be connected to a standard PC COM port. It offers an "auto turnaround" feature allowing software developers to utilize standard COM drivers. No fancy DLLs required!!

Features:

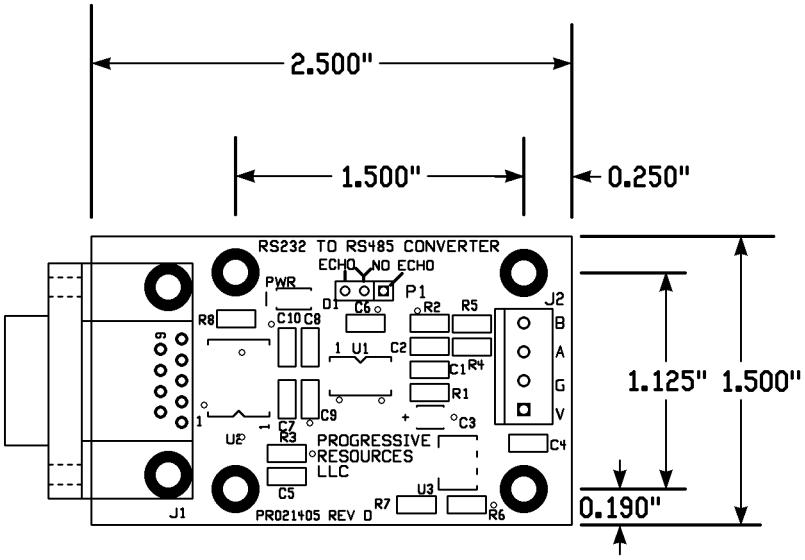
- 8-24VDC operation
- Simple screw-terminal connections
- Connects to standard PC COM port
- 32 RS485 Devices (or loads) allowed
- Baud Rates up to 115,200



The J1 connection is a “straight through” RS232 connection ready to plug directly into a PC COM port. There are no handshaking requirements. Since the RS485 side of the converter is a half-duplex differential pair, any characters that are transmitted by the PC or host device via RS232 will get an echo of each character transmitted. This is useful in detecting collisions on the RS485 network.

There is no address generation or protocol within the device, so the host has the ability to utilize whatever protocol is required for the system configuration you are connecting to. It can be as simple or as complex as you need. There is also an auto-turn-around feature in that the RS485 driver is only enabled during active data bits. This eliminates buffer enable/disable glitches as well as blind-intervals while the buffer data direction is changing.

The jumper located at the top of the assembly marked “Echo/No-Echo” allows for the RS232 side to selectively receive the outgoing RS485 characters. In some system echoed characters will confuse the RS232 host, in others, the echoed character is essential in the detection of collision with data from other devices.



The J2 connection has the following four signal definitions:

V	-	This is V+, which is 9-24VDC
G	-	This is the Ground or Common for signal and power supply
A	-	This is the non-inverted RS485 line
B	-	This is the inverted RS485 line

In a typical RS485 configuration, all non-inverted points are tied together and all inverted points are tied together. Up to 32 devices can be connected as a network. In some instances termination may be required on large networks using lengthy connections. Refer to the DS3695 (National Semiconductor) datasheets and application notes for details on termination and RS485 signaling specification and operation.

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