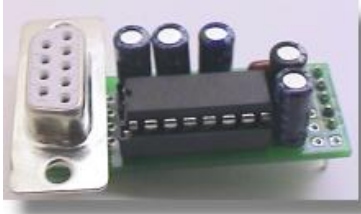


EZ232

Assembly and Hookup Sheet

Version 2.2

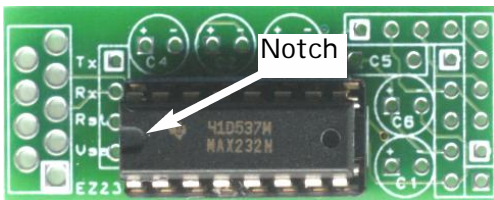


Includes the following

- Hookup Sheet
- Printed Circuit Board
- RS232 Driver Chip
- 16 Pin Socket
- 5, 10uf Capacitors
- .1uf Capacitor
- 4 Pin Header
- 9 Pin DSUB Connector
- LED

Assembly

You will need a soldering iron, solder and wire cutters.



Step 1

The Socket and chip are held in place with a rubber band. Leave the rubber band in place until you solder the 4 corners.

Hint: Follow these steps

1A: Solder the 4 corners in place

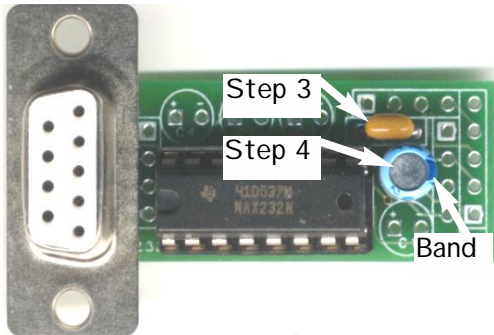
1B: Remove rubber band.

1C: Solder remaining pins.



Step 2

Insert the 9 pin connector as shown. It will only fit into the holes one way. Make sure it is nice and snug up against the board. You may have to wiggle it into place, as it is a tight fit.



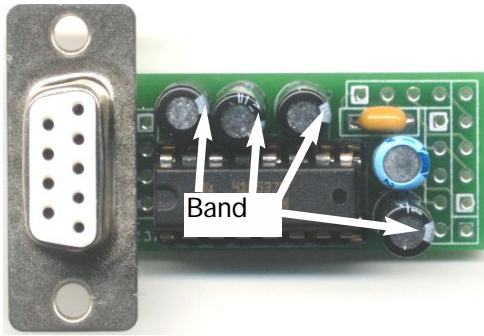
Step 3

Insert the .1uf Capacitor into the position marked C5 and solder in place.

Step 4

Insert one of the 10uf (blue) capacitor into the holes labeled C6. Make sure the negative side is facing the right side of the board as shown. (It's the side with the band)

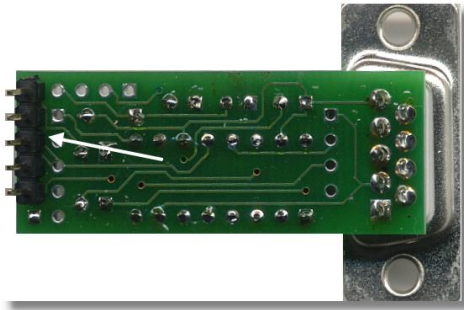
Solder in place and clip excess leads.



Step 4

Insert the 4 remaining 10uF capacitors (black or Blue) into the holes labeled C1-C5. Make sure the negative side is facing the right side of the board as shown. (It's the side with the band)

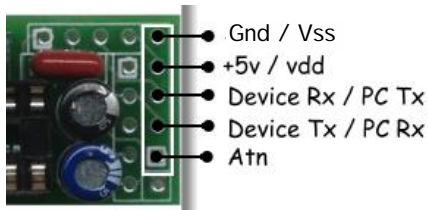
Solder in place and clip the excess leads.



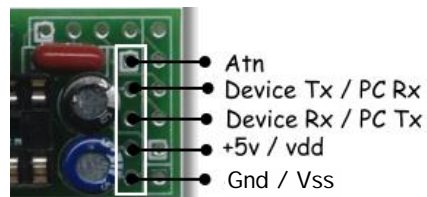
Step 6

From the underside of the board insert 5 pin headers as shown.

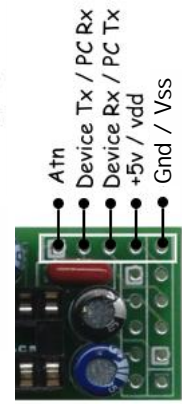
Solder in place from the top of the board as shown in the picture of step 7. Make sure it is in the hole indicated.



This is the primary connection point for the Athena, Dios and breadboard use. The Header is placed into the bottom of the board and soldered

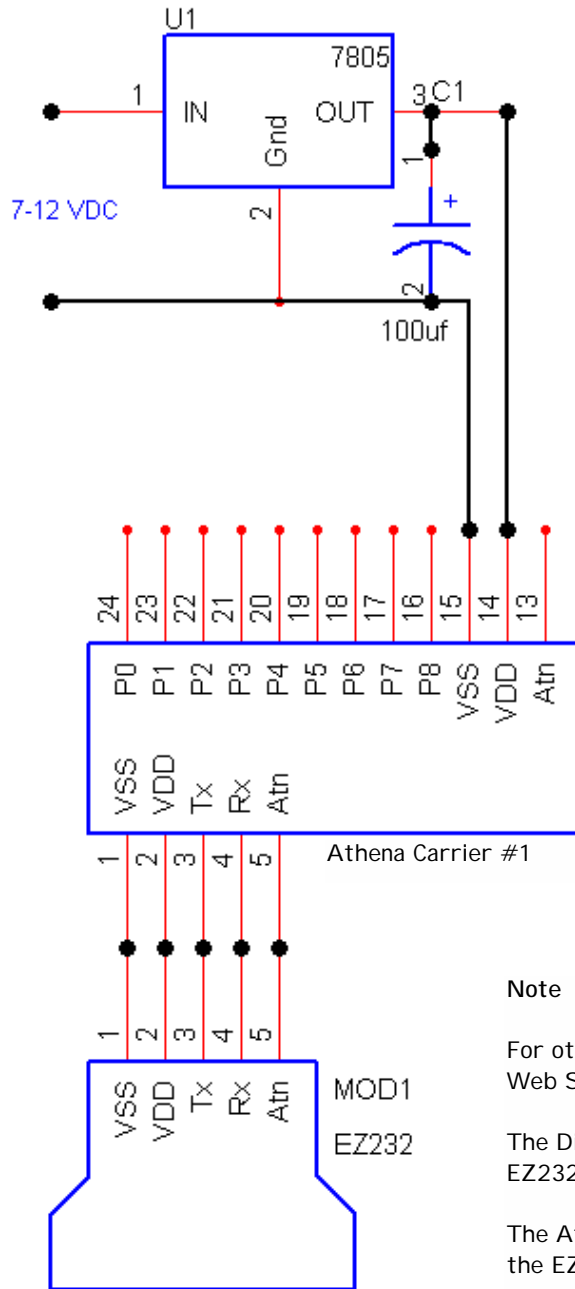


There are two alternate connection headers that may be used for other applications.



Typical Connection

This shows the connection of the EZ232 to a Athena and Carrier #1 board.



Note

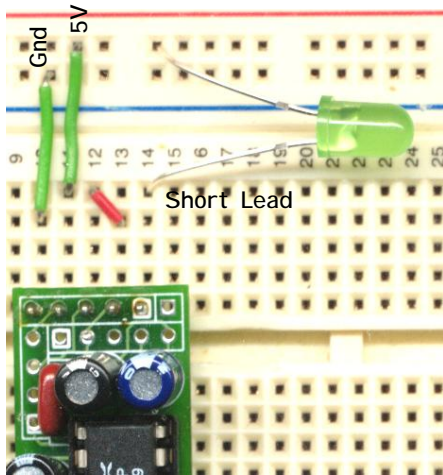
For other connections Visit the Kronos Robotics Web Site.

The Dios 101 Section shows how to connect the EZ232 directly to the chips and modules.

The Athena 101 Section shows how to connect the EZ232 directly to the chips and modules.

Also take a look at some of the various application notes.

Testing The EZ232



Step 1

If you just built the RS232 Driver you may want to perform the following test.

Connect the Driver as shown.

- A - Plug the PC cable into the PC and the Driver
- B - Plug the Driver into a Bread Board
- C - Connect 5v and Gnd as shown.
- D - Connect Small jumper between Transmit and Recieve.
- E - Connect the included LED to the Atn lead and 5v. Note that the short lead connects to the Driver.

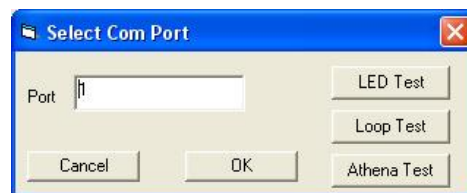
Step 2

With power applied the LED should NOT glow. This is the idle state of the driver. Select the Test LED button. Watch the LED. It should glow for about 100ms then go back out.

Once you complete the LED Test Select the Loop Test Button. A small dialog box will indicate a pass or fail on this test.

If it does not blink or the Loop Test fails check the following.

- A - Be sure you have the correct com port selected.
- B - Double check your soldering on the RS232 Driver.
- C - Check to make sure all the negative side of the capacitors are facing the header pins. (right side)
- D - You have power to the driver.
- E - You have the proper 9 pin male to female straight through cable
- F - That you cable is properly connected.
- G - Make sure that the Driver chip is inserted properly into its socket.



Note

If you purchased the Easy RS232 for use other than the Athena and Dios Programming you can perform the same test by raising DTR.

Links

Be sure to visit the Kronos Robotics web site for more information and updates. You can also download example programs for various processors for the serial LCD.

Web Site

<http://www.kronosrobotics.com>

Full color assembly instructions and other downloads

<http://www.kronosrobotics.com/gl/article.php?story=2004051011340551>