

XPIO Rev 3 Board

A small carrier board with a 3.3v power supply RS232 transceiver for an XPort (tm) module by Lantronix Inc. (www.lantronix.com). The boards provides pin outs for all of the module's connections including a serial DB9 connector. It also has provisions for a general purpose transistor switch

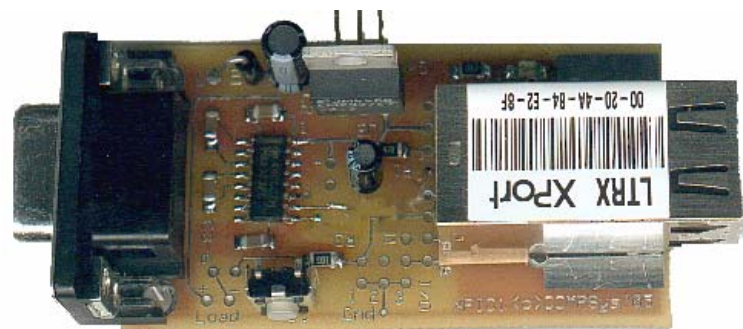
IMPORTANT!

Assembly of this kit requires that the user has the necessary tools and skills to work with SMD (surface mount device) components. **If you are not comfortable with soldering miniature parts, then please seek assistance from someone who is capable to do so.** Small mistakes can cause many frustrating hours of grief in trouble shooting!

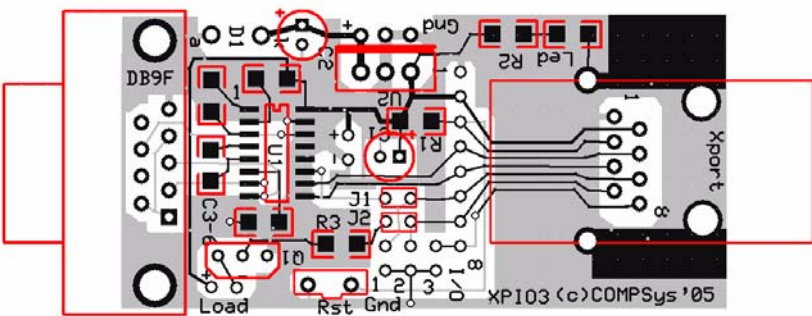
Minimum tools required:

A fine point low power (25w max) soldering iron and thin solder. Ideally, 0.020" diameter (or less) silver-bearing non-corrosive rosin core should be used. In addition, narrow needle nose pliers, diagonal cutting pliers, good quality tweezers, large magnifying glass, volt-ohm meter, and a 7 to 12 vdc power supply.

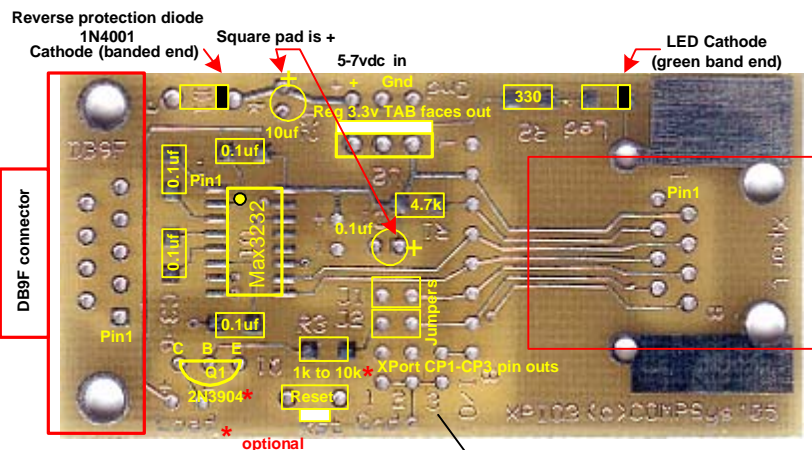
Make sure that you work in a clean well lighted area and have adequate desk area. If you have carpeting then please be aware of static discharge as well as accidentally losing tiny components in the carpets fiber. SMD capacitors and resistors are very tiny and can quickly become lost in the carpeting.



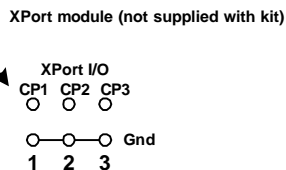
Shown assembled with an XPort(TM) module installed. The XPort module IS NOT included in the kit.



Note: Lantronix Inc (www.lantronix.com) provides information, firmware and utilities on using the XPort module. Their website also includes a list of suppliers. For example, in the US, Mouser (www.mouser.com) and GridConnect (www.gridconnect.com) are on-line suppliers.



J1 closed = Xport CP1 (CTS) connects to RS232 IC
J2 closed = XPort CP2 connects to base of Q1



PARTS

- | | |
|--------------------|-----------------------|
| C1 1uf or .1uf cap | U1 Max3232 RS232 |
| C2 10uf cap | U2 LM2937 3.3 reg |
| C3-C6 0.1uf cap | LED |
| R1 4.7k resistor | Reset switch |
| R2 330 resistor | Misc: header pins |
| DB9F connector | Printed circuit board |
| D1 1N4001 diode | |

Optional

- R3 2.2k
Q1 2N3904 or equiv

Assembly Procedure

- Carefully orient & mount the Max3232 IC (Note Pin 1)
- Mount the SMD caps and resistors
- Orient & mount the SMD LED (green band is the cathode)
- Mount D1 (1N4001 diode) Banded end is the cathode
- Orient and mount C1 and C2 radial caps (long leg is +)
- Orient and mount the regulator (tab faces outwards)
- Optionally, orient and mount Q1 and R3
- Mount the reset switch and headers
- Double check all soldering. Apply 5-7vdc to the board's Vin pin and Gnd. The LED should light up. Check for 3.3v on the board (there are + - holes next to the Max3232)
- Mount the DB9F connector
- Carefully insert the XPort module in place. The black "legs" will snap into the holes and may require a little force. **Be careful not to bend the 6 connector pins!**

XPort documentation and applications are available at the Lantronix web site, www.lantronix.com

Disclaimer and Terms of Agreement

As with any kit, only the individual parts supplied are guaranteed against defects and not the user assembled unit. All kit parts are purchased from reputable sources such as Digikey Inc, Allied Electronics and Mouser Inc, however, should a kit part be ascertained to be defective it will be replaced at no charge within 30 (thirty) days of the purchase date. Beyond that, COMPSys Workbench and / or the COMPSys developer(s) assume no liability and WILL NOT be held liable nor be held responsible wholly or in part for any damages caused by the construction of and / or use of their products sold .

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