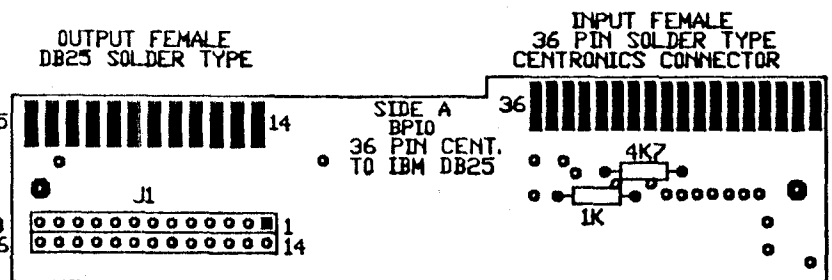
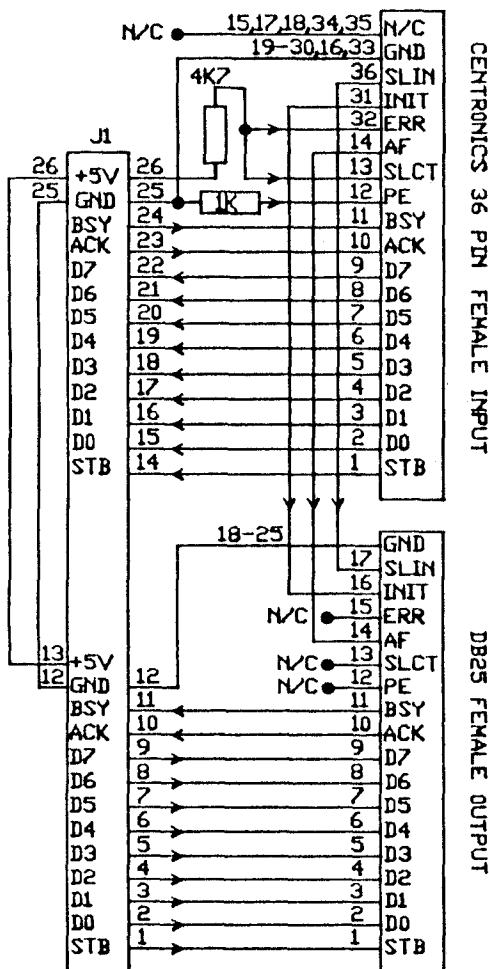


Updated 3-AUG-87

Back Panel Input/output board.

(BPIO)



BPIO \$9.00

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The cheapest printer cable that you can buy today is an IBM type DB25 to 36 pin Centronics. The BPIO board makes use of the IBM cable and standard connectors to save cost and simplify construction of cable interfacing to PBUFF. I feel that the cost of the BPIO board will be justified because of the savings on standard Centronics connectors and cable costs. Flat ribbon cable with standard 26 pin crimp type connectors are used to connect this board to the PBUFF board.

ASSEMBLY..... The BPIO board overlay (above) is drawn showing the component side of the board. A standard DB-25 female solder type connector is soldered onto the edge of the board into the position shown above. The female Centronics solder tail connector (or chassis type mount) will not be hard to obtain, but there are several types around. Some have spring clips that lock onto the male connector. The clips are nice, but as I have found, the standard (non-clip) connectors do lock hard onto the male connector quite firmly. The point to watch out for with the Centronics female connector is the distance between the two rows of solder tails. Lets say that a standard printed circuit board is about as thick as a 10 cent piece. (That's OZ money digger!!), which as a rough guide, it's close enough. Well, if you can slip a 10 cent plus a 20 cent piece, or two 20 cent pieces between the rows of pins, then you will have a lot of trouble trying to solder this type of connector to the edge of the board. Look for a connector that has the two rows close enough together to be able to solder to the edge of a printed circuit board. The pin numbers of the two connectors are marked on the BPIO board. You may need to use a file to bevel a slight 45 degree angle along the DB-25 connector tracks so that the DB-25 connector will push hard onto the board without damage. Looking at the overlay side of the board, the two female connectors should have the widest part facing down. They can be soldered into position. A 1K and a 4K7 resistor can be soldered into position as shown on the overlay. A 26 pin dual row male header can be soldered into the board as shown above. You have now finished the assembly of the BPIO board. If you are using the standard case as suggested in my PBUFF assembly instructions, the BPIO board can be installed in the rear of the case as close as possible to the bottom left corner (looking from rear of case) with the component side and male pins facing up. The board can be mounted using the two outer mounting holes of the DB25 and Centronics connectors only. Board inter-connections can be done with approx. 8 inches of 26 wire flat ribbon cable with 2 by 26 pin dual row IDC type female crimp headers.

Your existing cable plugs into the female Centronics. (INPUT) A standard IBM PC type cable plugs into the DB-25 female connector. (OUTPUT) The above changes shown in the circuit make the computer handshake to the buffer, and the buffer handshake to the printer. Some IBM users that had PBUFF running for some time now, (like a couple of years) found that "NEW" software was checking the error line and PBUFF was bombing out. The BPIO takes care of all of the handshake problems known to date.

Don't let the IBM type cable scare you. This board simply converts from your existing Centronics input cable to IBM standard. The IBM cable then converts back to standard Centronics, and it's cheap.