B-128 SERIAL BUS INTERFACE

A HARDWARE ENHANCEMENT PRODUCT FOR THE B-SERIES COMPUTER

* A Full Featured Hardware Interface for the B-128 Implementing the Commodore Serial Bus with the Functions of Controller, Listener/Talker, Slow Bus, Fast Bus, Attention Acknowledge, Power-On Serial Bus Reset, Manual Serial Bus Reset! Comes in Rugged Plastic Case!

INSTALLATION PRECAUTIONS

Electrostatic discharge destroys ICs, that is a fact! The damage doesn't always show up immediately. An IC can be marginally working for days, weeks, and months and finally quit working. The damage occurs when the discharge takes place. If you are at the same potential as the ICs then no discharge takes place therefore no damage.

Please read and heed the following advice to minimize the hazzard of electrostatic discharge damaging your B-128 chassis and your Serial Bus Interface.

- 1. Pick a room that has high humidity and no carpeting. A damp basement with a bare cement floor would be best. DO NOT pick a room that is dry and has carpeting.
- 2. Take your shoes off. They are a great insulator of static electricity. The dampness of your feet will help conduct static electricity to the noncarpeted floor.
- 3. Spread pleanty of tin foil on the table top work surface and wrap the ground prong of the B-128 power cord with some of the tin foil. Make sure there is enough tin foil for your elbows and hands to be in contact with it. Maintain frequent if not constant contact with the tin foil so you will be at the same electrostatic potential as the B-128 chassis.
- 4. Maintain hand contact with the metallic switch on the Serial Bus Interface.
- 5. If you fail to take the above advice then satisfactory operation can not be expected when using your Serial Bus Interface.

INSTALLATION INSTRUCTIONS

- () Read these instructions completely before starting the installation to familiarize yourself with them.
- () Tools Required: Number 2 Phillips screwdriver, small flat blade screwdriver, approximately 3 foot length of tin foil to serve as an anti static mat for table top work surface.
- () Spread approximately a 3 foot length of tin foil on a clear table top. A table next to a wall works well as you can lean the top cover of the B-128 aginst the wall while installing the Serial Bus Interface. The tin foil will help Keep everything at the same static potential. Satisfactory results should

Page 1 (C) 1988 by Anderson Communications Engineering not be expected if you don't use the tin foil.

- () Remove all cables from the B-128.
- () Unplug the B-128 power cord from the wall and Keep it handy as you will need it in a minute.
- () Place the B-128 up side down on your lap and remove the 5 screws from the bottom cover using the number 2 Philips screwdriver.
- () Hold the B-128 together with your hands and place it right side up on the tin foil.
- () Connect the power cord into the back of the B-128 and wrap the wall outlet end in some of the tin foil. Make sure the round ground prong makes contact with the tin foil.
- () Carefully lift the top of the B-128 up and have someone else hold it upright or lean it against an adjacent wall or tall object.
- () Bend back the cardboard lined tin foil shield inside the B-128 and locate the user connector pin field at the rear left hand area of the B-128 main circuit board labled P1. Run the ribbon cable of the Serial Bus Interface with the mating surface of the connector faceing up in from the back of the B-128 and lay it in a slot that already exists in the metal backplate of the B-128. At this time the mating surface of the connector on the ribbon cable should be faceing up. Make a loop with the ribbon cable so the connector faces down and mate it with the connector P1 of the B-128. CHECK: A colored tracer on the very end wire of one end of the ribbon cable must be facing toward the middle of the B-128 main circuit board.
- () Replace the top cover of your B-128.
- () Hold the B-128 together with your hands and place it upside down on your lap and replace the 5 screws removed earlier from the bottom cover.
- () Reconnect all cables to the B-128.

OPERATION

* Power up: Perform the following instruction: PRINTPEEK(56321) The number returned should be 59. If it is not then something is wrong, since this product was tested and is known to be operational before shipment go over the installation instructions again and make sure it is installed properly. For a complete test of the interface type in the test program and jumper pins 1 to 4, and 5 to 6 with something such as a couple paper clips. Looking into the serial connector locate the Keyway notch at the top of the connector. Moving clockwise the first pin is #1, the next is #2, etc. The middle pin is #6.

* Serial Test: Run the enclosed program. With the jumpers installed all tests must pass. Note the switch position, it should match. When the display prompts with SERIAL BUS RESET TEST then press the momentary position and release. Typical reset time is approximately one second. Try the other switch position and run the program again.

* Function Select Switch: The momentary up position will generate a reset on the serial bus. The middle and down positions will allow for the selection of custom features determined by user software. The switch has not been labled to allow for user definition and lableing.

* User Software: It is reported that present user software makes use of the Function Select Switch in the following manner: the middle position selects serial only operations and the down position selects IEEE-488 operations. Anderson Communications Engineering makes no endorsements or representations with regard to the accuracy or suitability of any user software.

SUPPORT

* Anderson Communications Engineering will provide a repair service at a nominal cost for the Serial Bus Interface should it need repair. Write for details and describe the problem.

LIMITED WARRANTY

* Due to the fact that once this product enters the purchaser's hands and Anderson Communications Engineering no longer has control of static electricity precautions and proper handling techniques, Anderson Communications Engineering limits the warranty on this product to making available improvements and updates to the design and documentation. No warranty is made with respect to the hardware described herein. Anderson communications Engineering shall have no liability or responsibility to purchaser or any other person or entity with respect to any liability, loss or damage caused or alleged to be caused directly or indirectly by the use of this product, including but not limited to any interruption of service, loss of business or anticipated profits or damages resulting from the use of this product. Any and all warranties for merchantability and/or fitness for a particular purpose are expressly excluded.