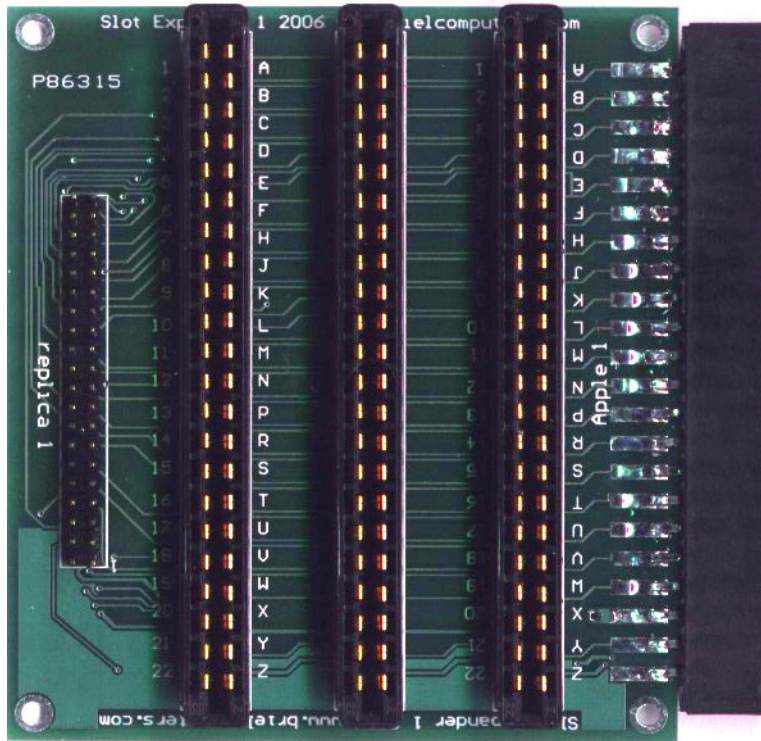


# Slot Expander 1 board



Slot Expander 1

January 2007

## Briel Computers

Preliminary manual for the Slot Expander 1 board for the replica 1/Apple 1 computers

## **Assembly:**

### **Tools needed:**

Soldering Iron

Solder

Ohm meter to check connections (optional)

The assembly is straight forward and simple except for the slot connector on the edge of the board. To solder this you will need to exercise patience since the connector wasn't really designed for this type of connection. Align the slot along the edge so that it lines up with the edge pins on the edge of the board. You might want to bend some of the pins on the edge connector so that contact is better but the edge of the board sits about in the middle of the slot connector. Start by soldering one pin on each edge making sure that they stay down on the contact points on the board. Flip the board over and solder the 2 other ends on the bottom of the board. Check to make sure the board is still sitting in the middle of the slot connector and finish soldering the rest of the edge pins. You may want a small flat screwdriver to help hold the pins down onto the board.

Once you have the edge connector soldered you can install the replica 1 40 pin connector. Hold the 40 pin connector fitting into place and flip the board so the top of the board is facing your workbench and with the replica 1 header connector resting on the workbench you can now solder it in place.

The last step is to solder the 3 slot expansion connectors into place. If you look carefully at the slot connector you might be able to make out a small dot in one corner; that is pin1. The connector does not have to be installed this way but it is the correct way. Hold all three connectors with the board, then flip the board over and set down on workbench so all three are resting on the bench while the board is sitting on top of the 3 connectors. You can now solder you slot connectors in place. Check you work with an ohm meter to verify all the connections on the end connector are making good contact.

## Installation:

### Apple 1:

Installing on the Apple 1 or look-alike clone computers is straight forward. Simply plug the slot expander 1 board into the edge connector on the Apple 1 computer and you are ready to go. You can double check that the connections match with an ohm meter and the 1 slot on the Apple 1 with any of the 3 slots on the expansion board.

### Replica 1:

To install the slot expander 1 board on the replica 1, you need to attach a 40 pin connector cable to both the expander board and the replica 1. Pin 1 on the expander board is marked with a 1. Find the red edge of the cable and either end to find pin 1 on the connector. Carefully plug the cable into the expansion board. On the replica 1, pin 1 is not as easy to identify but it is located closest to the silver looking 4 pin clock OSC.



replica 1 showing pin 1 location

This pin is 180 degrees off from the expansion board so you will need to be careful when plugging in the cable to make sure you have it correct.



**replica 1 shown with correct cable orientation**

To make certain that you have the cable installed correctly, you can test pins 20 and X with ground (mounting hole on replica 1) to make sure they are the same.

Please feel free to ask any questions regarding installation of assembly of this product to [vbriel@yahoo.com](mailto:vbriel@yahoo.com)

Visit Briel Computers website at <http://www.brielcomputers.com> for information on expansion boards for the replica 1 and apple 1 computers.

Get answers about your replica 1 at the replica 1 users forum:

<http://www.brielcomputers.com/phpBB2/>