USING THE SERIAL EEPROM SURFACE MOUNT PROBE SET AND CHIP CLIP

The serial eeprom probe set and chip clip allow you to attach the EPROM+ programming system directly to parts installed into an existing circuit. Reading and programming devices “in circuit” (not removed from a circuit board) is normally successful although there is no guarantee. The reason is that the circuitry in the EPROM+ and the circuitry which is connected to the part while it is on the board will conflict. Although the EPROM+ will drive the connections to the part, there is no way to guarantee that the signals sent to or received from the part will meet specified logic levels. This is due to the variable nature of the electronic components in the circuit with which you are working. Our experience and that of our customers is that in most circumstances you will be successful.

PRECAUTIONS AND NOTES

1. ***Never*** connect the EPROM+ to a circuit while power is applied. Attaching the EPROM+ to an active circuit will damage the EPROM+ and void your warranty. Be sure power is removed from the circuit before you connect the EPROM+ to the chip.
2. If you are not having success with a direct connection to the part, try disconnecting the power (Vcc) pin (see illustration) from the circuit. All other pins may remain connected. Now connect the EPROM+ to the device including the power pin. This allows the EPROM+ to power only the part and not the entire circuit which may happen if power from the chip is fed throughout the board.
3. Use only the connecting cable supplied with the probe set or clip. A longer cable may cause voltage reflections resulting in unreliable operation.
4. If you are unsuccessful in reading or programming the chip “in circuit”, you will have to remove the part from the circuit board before attaching the probes or clip.
5. Use great care when attaching to the part. A surface mount clip can physically pull the traces from a circuit board if not properly attached and removed. Also verify that no connections are shorted when the probes are attached to the surface mounted chip.

COLOR CODED PROBES AND LEADS

The leads and probes which comprise the probe set are color coded. The colors conform to the EIA standard. The colors and their corresponding pin numbers are: #1 - BROWN, #2 - RED, #3 - ORANGE, #4 - YELLOW, #5 - GREEN, #6 - BLUE, #7 - VIOLET, #8 - GRAY. Use these color codes to attach the probes to the corresponding pins on the chip with which you are working.

INSTALLING THE CABLE TERMINATOR BOARD INTO THE SERIAL EEPROM ADAPTER

The probe set or clip attaches to a terminator board (#PBCP1) with a 10 pin female header. The female header mates with 10 pins on the top of the terminator board. PIN 1 of the 10 pin set is marked with the letters **BRN** (BROWN wire). Orient the female header such that the brown wire corresponds to this position when the header is pressed into place. To insert the terminator board into the serial eeprom adapter, lift the adapter handle. With the **BROWN** wire on the **RIGHT**, carefully align the 8 pins on the bottom of the board with the 8 pins of the desired position on the ASEREE2 socket. With the board in place, release the adapter handle. Note that the word “**ALIGN**” is also printed on the top of the board. Align this word with the corresponding serial eeprom section printed on the ASEREE2 board.

STANDARD PIN CONNECTIONS

The illustrations below show a top view of the pin connections for the most common industry standard device families. Each pin is marked as it would appear in the manufacturers data book. Note that there are other serial eeprom devices, which vary slightly in their operation and connections, however most will conform to one of the standard packages below.