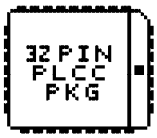
USING THE APLCC3228 COMBINATION ADAPTER



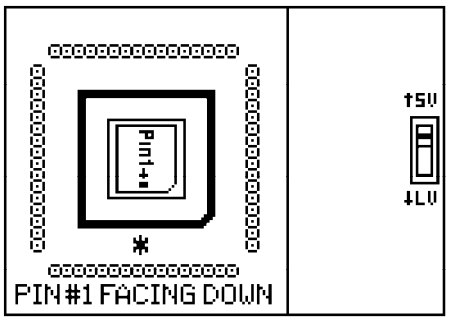
The APLCC3228 combination adapter is designed to support two standard 32 pin PLCC (Plastic Leaded Chip Carrier) memory device groups. Two industry standard DIP (dual in-line/pins on two sides) packages exist for memory devices ranging in capacity from 64K to 8 MEG. A dip package for 64K, 128K, 256K and 512K bit devices will always have 28 pins. These devices include the 2764, 27128, 27256 and 27512 as well as the CMOS (27C) versions plus the 29C256 flash device. Devices with capacities greater than 512K, beginning the a 27C010 (1 MEG) up through the 27C080 (8 MEG) will always have 32 pins. These devices also include flash memories, such as the 29C and 29F device families, however the flash memories will have a maximum capacity of 4 MEG (29C040, etc.).

Confusion occurs when a memory device normally found in a 28 pin DIP package is placed into a PLCC package. Although 28 pin PLCC packages do exist, the electronics industry does not typically place a 28 pin DIP compatible memory device into a 28 pin PLCC package. Instead, the device is placed into a 32 pin PLCC package which results in four unconnected pins. This causes an inconsistent pin assignment for these memory parts with respect to their 28 pin dip packages and thus the need for two adapters.

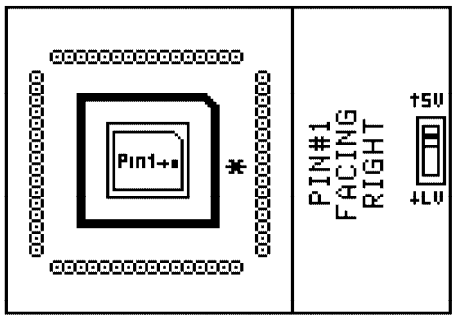
The APLCC3228 combination adapter addresses this issue by allowing the user to position a single 32 pin PLCC socket assembly in a fixed base depending upon the desired device. The 32 pin PLCC socket assembly is removed from the adapter base and rotated to align the correct set of socket pins to the receiving base strips. To separate the top assembly from the base, grasp the base with one hand and the top with the other. Gently pull the two assemblies apart while keeping both boards parallel. Be careful not to bend the pins at the point of separation.

The illustrations below show the proper alignment of the 32 pin socket assembly. If you are working with a device which is normally found in a 28 pin DIP package, install the top assembly as indicated in the illustration on the left (PIN 1 facing down). If you are working with a device which is normally found in a 32 pin DIP package install the top assembly as indicated in the illustration on the right (PIN 1 facing right). To reassemble the two halves of the adapter, align the top socket pins with the receiving strips on the base. Gently press the two halves together while keeping the boards parallel. Be sure the two halves are fully mated. **WARNING:** ***Never position the top socket assembly with PIN 1 UP or LEFT.***

ORIENTATION FOR 32 TO 28 PIN DEVICES



ORIENTATION FOR 32 TO 32 PIN DEVICES



INSERTING AND REMOVING PLCC DEVICES FROM THE SOCKET

The 32 pin PLCC socket installed on the adapter is a Zero-Insertion-Force (ZIF) design. If used with care, this socket will provide many years of trouble free service. To insert a device into the socket align pin 1 with the indicator **(*)** on the socket board. Be certain that the chip is parallel to the socket, not tilted. Gently press down on the chip. The socket collar will rise as the chip is inserted: press until the chip is flush against the socket base. To remove a chip from the socket simutaneously press both sides of the collar until the chip is ejected.

PROGRAMMING LOW VOLTAGE DEVICES

The APLCC3228 adapter supports both standard 5 volt devices and low voltage (LV) parts. The voltage range is selected using the small slide switch on the base board. Set the switch to the 5V position for standard parts. Set the switch to the LV position for low voltage parts. A low voltage part is normally identified by the letters LV, V, BV or W in the part number. EXAMPLE: 29LV010 or 29W040 are both low voltage flash memory parts. Normal EPROM and flash memory parts use the 5V setting.