

# **Micro Control Systems**

APPLICATION NOTE  
APP-003

## **Installation of Software and Config Chips**

### **Revision History**

Date	Author	Description
05/20/97	Brian Walterick	Created Application Note.
05/12/11	Weston Klebs	Updated MCS-8 Picture.

This Application Note describes the installation of software and configuration chips on a MCS-8 micro-controller.

## Theory

The MCS-8 has three chips that can be upgraded in the field. These chips are installed into sockets that are soldered on the printed circuit board. The three chips that can be upgraded are

1. Software Chip (EPROM) at location U11
2. GAL Chip (22V10) at location U13
3. Configuration Chip (E<sup>2</sup>PROM) at location U10

Follow the procedure below for replacing any or all of these chips.

### Chip Installation Procedure

1. Turn off power to the MCS-8 board.
2. Then remove the old chips from the sockets.
  - This is done by using a small flat head screw driver. Place the end of the screw driver between the socket and chip at one end of the chip. Then slowly and gently pry the chip part of the way loose. Now remove the screw driver and place it at the other end of the chip between the socket and chip. Again slowly and gently pry the chip loose from the socket. You may need to pry it again at both ends. Take care not to bend any pins on the chip.
3. Now install the new chip.
  - Identify the correct chip for this location. Next to each socket and on each chip there is a location number, i.e., U11. Match the location number next to the socket with the location number on the chip.
  - Note that the chip has a notch or dot at one end. Insert the chip into to the socket so this notch or dot is on the right hand side.
  - Take care to make sure all pins go into the socket. A pin can easily be bent under the chip or not inserted into the socket.
4. Double check that the chip is installed correctly.
  - Correct chip for the Location
  - Notch to the right
  - No bent pins
5. Turn power on to the MCS-8.
  - Verify that the system is running properly.

## MCS-8 Chip Location Diagram

