

**45208 Digital Logic Laboratory**  
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**Downloading the JEDEC File to a PLD chip**

Follow the procedure specified below to download your JEDEC file to PALCE16v8 IC. The programmer is located in the back of WSB 105.

Step 1: Executing WACCESS program

Double click on WACCESS icon from the programmer's window. ALL-11 Universal Programmer window will open up.

Step 2: Choose PLD

Click on the DEVICE heading and choose item 6 which is PLD.

Step 3: Mfr and Type numbers

Select the desired manufacturer, in this case CYPRESS, by clicking on CYPRESS. Alternatively, you can key in the desired manufacturer name and press the <TAB> key. Then the type menu screen will appear.

The device type is selected in the same way as the manufacturer. You can use the mouse to click on a particular device or you can type in the device name followed by pressing the <ENTER> key. In this case you can type "16v8" followed by <ENTER> key. After selecting the correct type, click on the RUN button.

Step 4: Load JEDEC file

To load the JEDEC file from disk select "Load JEDEC File" from the "File" menu and the Load File window will open. Select your JEDEC file from your A drive and click on OK. The indicated file will be transferred to the programmer's working buffer.

Step 5: Place the chip in the socket

Simply flip the lever into the upright position, insert the chip, and flip the lever down; make sure the bottom of the chip is in the bottom of the socket. Note the notch on the drawing next to the socket. This corresponds to the notch on the chip; Pin 1 should be located on the lever side of the DIP socket. Make sure they are aligned properly.

Step 6: Blank Check

Choose this option to make sure there is no data on the chip. If it is not blank, use the Erase option to erase the data.

Step 7: Program

The program function is used to copy the contents of the working buffer to a device. Invoke the programming function by clicking the "Program" icon, or by typing P. A Programming Device window

will open. Click on "OK" or press "Y" on the PC keyboard or the "YES" button on the Universal Programmer to start programming the buffer contents into the blank PLD.

Step 8: Verify

After programming the device new contents will be compared against the contents stored in the programmer's working buffer. This is called a VERIFY operation. If the contents match then the GOOD LED will light. Make sure to wait for the BUSY LED to turn off before removing the chip.

Step 9: Quit

To exit the programming process, click "Cancel" or press <ESC> to return to the main menu.

Step 10: Remove the chip from the socket

Remove the SPLD at this time and verify your logic using traditional breadboarding methods.