

1.4 PIN ASSIGNMENTS

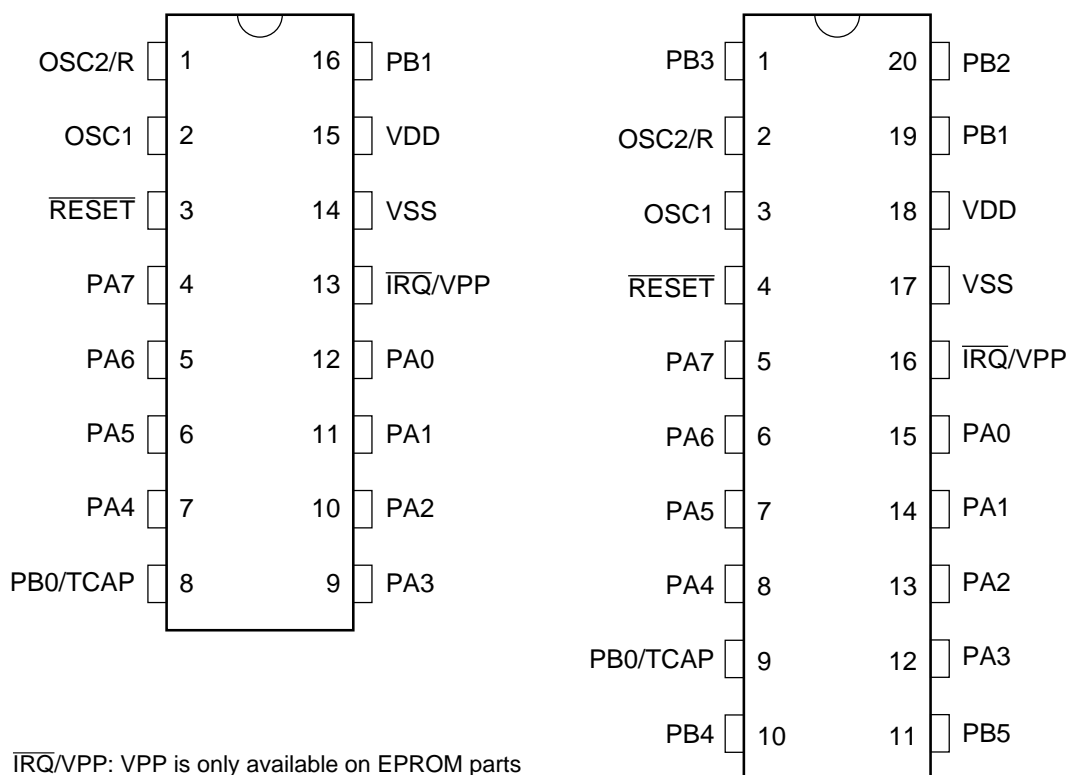


Figure 1-2. Pin Assignments for 16-Pin and 20-Pin Packages

1.5 FUNCTIONAL PIN DESCRIPTION

The following paragraphs give a description of the general function of each pin assigned in **Figure 1-2**.

1.5.1 V_{DD} AND V_{SS}

Power is supplied to the MCU through V_{DD} and V_{SS}. V_{DD} is the positive supply, and V_{SS} is ground. The MCU operates from a single power supply.

Very fast signal transitions occur on the MCU pins. The short rise and fall times place very high short-duration current demands on the power supply. To prevent noise problems, special care should be taken to provide good power supply bypassing at the MCU by using bypass capacitors with good high-frequency characteristics that are positioned as close to the MCU as possible. Bypassing requirements vary, depending on how heavily the MCU pins are loaded.

1.5.2 OSC1, OSC2/R

The OSC1 and OSC2/R pins are the connections for the on-chip oscillator. The OSC1 and OSC2/R pins can accept the following sets of components: