

2.3 Single-Chip Mode

In single-chip mode, the address and data buses are not available externally, but there are two 8-bit I/O ports and one 4-bit I/O port. This mode allows the MCU to function as a self-contained microcontroller, with maximum use of the pins for on-chip peripheral functions. All address and data activity occurs within the MCU. Single-Chip Mode is entered on the rising edge of $\overline{\text{RESET}}$ if the $\overline{\text{IRQ}}$ pin is within normal operating range.

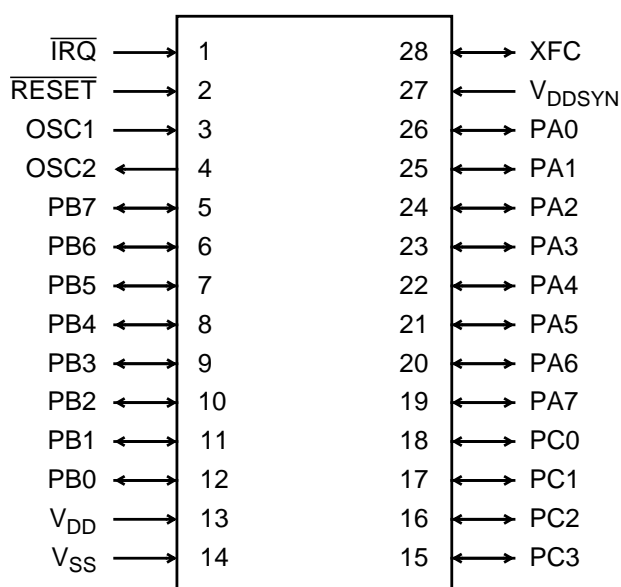


Figure 2-1. Single-Chip Mode Pinout of the MC68HC05E1

2.4 Self-Check Mode

The Self-Check Mode provides an internal check to determine if the device is functional. See [Figure 2-2](#).