PEREGRINE SEMICONDUCTOR

AN10: Application Note

Connecting The PE3236/38, PE3335/36, PE9601 and PE9701/02 to a Serial Bus Interface

Features

- Ultra-low phase noise
- Low power
- PE3236 & PE3335 / 3336 for cellular and PCS applications
- PE9601 & PE9701 / 9702 for commercial space applications

Introduction

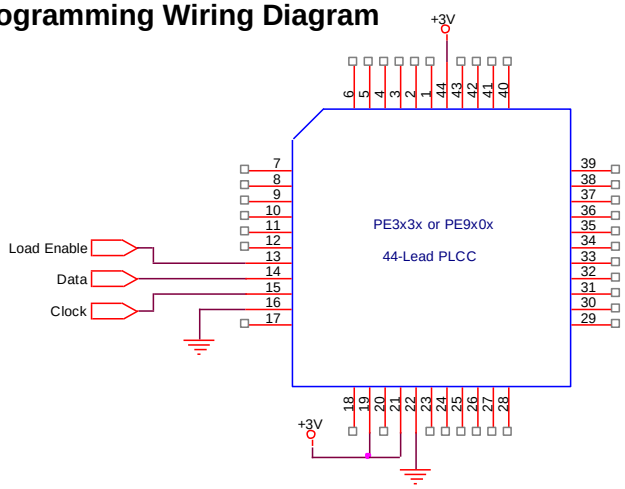
The PE3236/38, PE3335/36, PE9601, PE9701/02 PLLs can be programmed in either parallel, serial or direct mode. This application note describes how to configure the above PLLs for serial programming mode, and details the serial bus control lines needed to program the part using a microcontroller or IBM-compatible computer.

Serial Bus Command Lines

A 3-wire serial control line interface is needed to program the Peregrine PLL in serial mode. Figure 1 below shows the serial bus control lines that need to be connected between the microcontroller / PC and the Peregrine PLL.

Note: *The serial inputs to the PLL are compatible with 3-V logic only. If control line inputs are 5-V logic, a voltage divider must be used to reduce these levels to 3 volts.*

Figure 1. Serial Programming Wiring Diagram



Placing Part in Serial Mode

In addition to connecting the serial control lines to the part, five other input pins on the PLL must be tied to V_{DD} or ground to place the part in the serial programming mode. Table 1 defines the correct state for these pins.

Table 1. PLL Pin Connections

Pin Number	Pin Name	Logic State
16	FSELS	Ground
19	E_WR	Ground
21	Smode	V_{DD}
22	Bmode	Ground
44	Enh	V_{DD}

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Application Note Identification

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