



**NOTES:**  
 PINOUTS ARE FOR A PIC16F818 DIP.  
 IC<sub>2</sub> IS A CD4071B OR FUNCTIONALLY EQUIVALENT SINGLE-OR GATE.  
 IC<sub>3</sub> IS A CD4077B OR FUNCTIONALLY EQUIVALENT SINGLE-XNOR GATE.  
 CONNECT PIN 14 TO V<sub>DD</sub> AND PIN 7 TO GROUND ON IC<sub>1</sub> AND IC<sub>2</sub>.  
 GROUND ALL UNUSED GATE INPUTS.

**Figure 1**

This microcomputer-based digital-PLL circuit locks to signals over a 4- to 40-kHz range and requires a minimal number of components.