

Generate a Negative Voltage for OP-AMP or Comparator with 1 Pin from PIC12C508

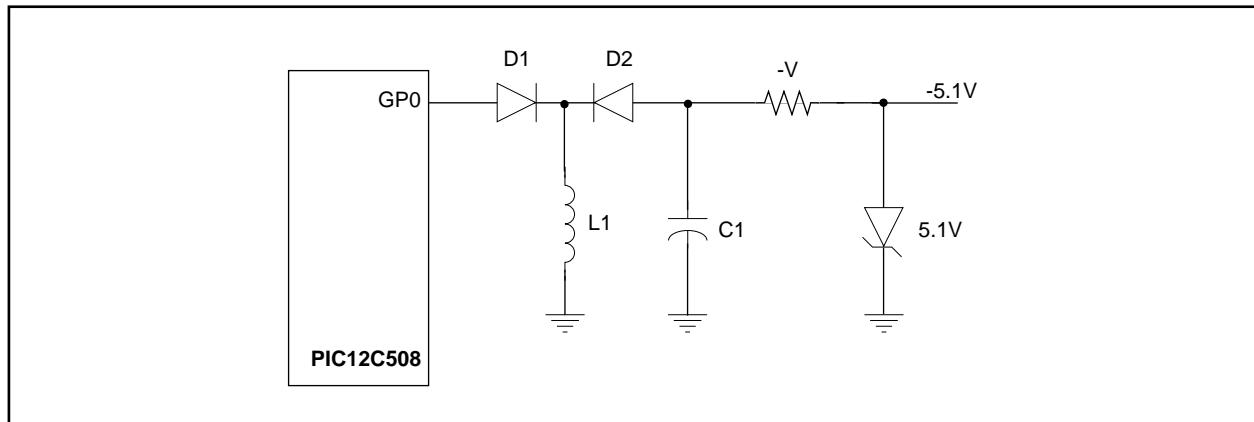
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Pulse GP0 to feed current thru L1. When the port line goes low, D2 will conduct and C1 will charge to a negative voltage. Select frequency and duty cycle to establish current thru L1, -5V has limited current.

INTRODUCTION

Low cost op-amps and comparators often need +/- supplies for signal conditions to feed a transducer signal to the PICmicro. A simple charge pump can be implemented from one port pin to provide the negative voltage.

FIGURE 1: SCHEMATIC



Simple Circuit

NOTES: