



Using a PIC12C671 To Create a High Voltage, Low Current, Programmable Switch Power Supply

Author: Keith Curtis ESS Henderson, Nevada kcurtis6@ix.netcom.com field through the diode into the 220 μF capacitor. The voltage across the capacitor is then sampled back to the A/D. Based on the feedback, the duty cycle of the drive to the transistor is modified to stabilize the output voltage at the value loaded serially through the RX line. The TX line broadcasts the present output voltage.

INTRODUCTION

The boost cycle is started by turning the 2N2222 on, which builds a magnetic field in the inductor. The 12Ω resistor limits the current to approx. 400 mA, within the current limit of the 2N2222. After 1 ms, the transistor is released and the inductor discharges the magnetic

FIGURE 1: SCHEMATIC



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