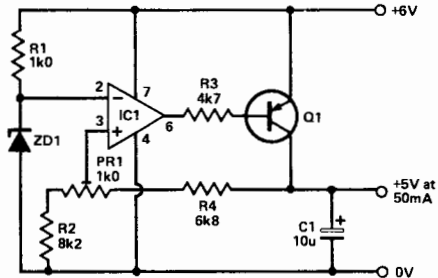


Battery Back-up Supply For RAM

R. Metcalf

Using a rechargeable 6 V lead acid battery and the voltage control circuit shown here, data can be held in a memory for a considerable length of time (governed only by the storage capacity of the battery). Nicads have a comparatively small Amp-hour rating for their package size and recharge rate.



NOTE:

IC1 IS 741

Q1 IS 2N3965 OR EQUIV.

ZD IS 2V7 400mW ZENER

An IC regulator would find the 1 V voltage margin between input and output too small for reliable operation. In this circuit the 741 op-amp sees a fixed 2V7 on its inverting input and subtracts the difference between this and the non-inverting input from its output. The ratio, once set by the preset, remains constant.