

Phototransistors

Phototransistors can also be configured as simple switches when connected in the manner shown in the figure below. It is closed (causing a logic HIGH, +5V, on pin 1) when it receives light. If no light is present, it is open (causing a logic LOW, 0V, on pin 1). In this way, they can be used as simple light-controlled switches. The outputs of the phototransistor can be connected to one of the C8051's input pins. The Figure 0.2 shows the pin layout for the L14C1 phototransistors available to the Embedded Control course. .

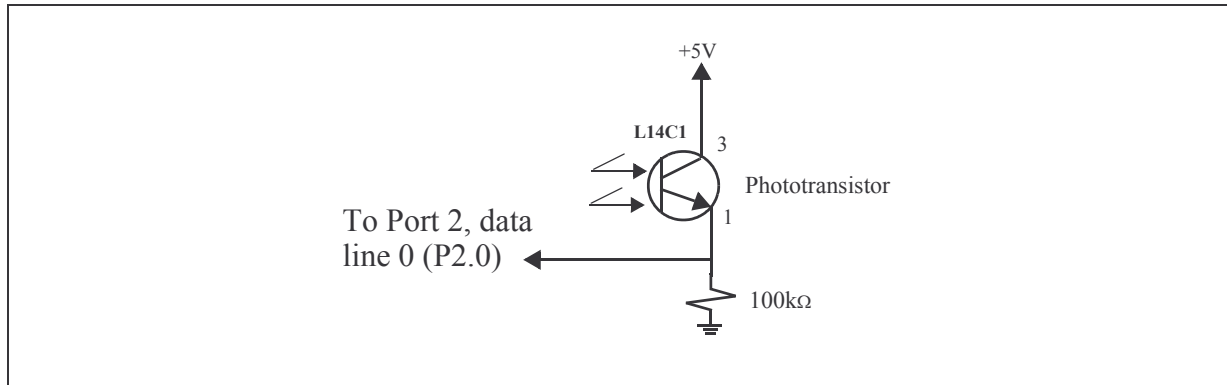


Figure 0.1 - Phototransistor configuration as a light-controlled switch

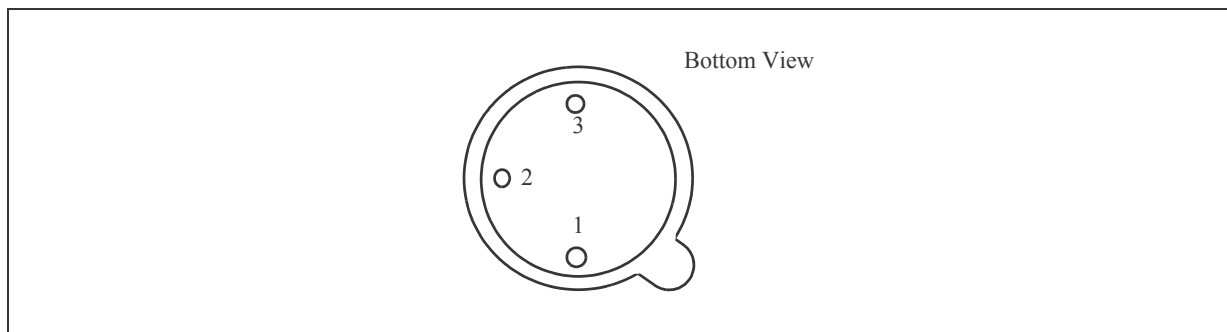


Figure 0.2 - Pin layout of the L14C1 phototransistor