Crazy Circuits Brown Dog Gadgets

## 2x2 Current-Limited Surface Mount LED Module v1.3 A Lego-compatible Crazy Circuits module.

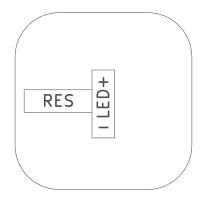
Attaching an LED directly to a microcontroller's output pins can damage the pins, so this module has the LED in series with a current-limiting resistor. At 100 ohms, it can be used with both 3V and 5V power sources and still emit a red light.

## Bill of Materials

Ref	Qty	Description	Digikey PN
LED1	1	LED RED 2V $625$ NM $1206$ SMT	732-4991-1-ND
R1	1	RES 100 OHM $5\% 1/4W 1206$	311-100ERCT-ND

## Manufacturing Notes

This board must be v-scored. Do not panelize with support tabs or mouse bites. ### Assembly Diagram



## **Board Previews**

