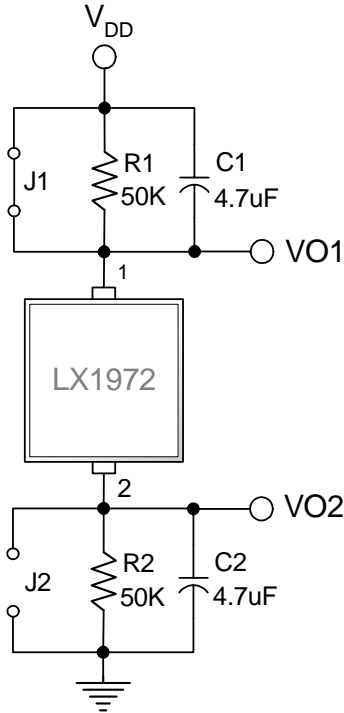


SCHEMATIC


The design of the LX1972 Mini Light Sensor Evaluation Board easily interfaces to allow control of virtually any lighting requirement. Changing the resistor values sets the desired minimum and maximum brightness range. As configured, there is considerable gain at lower light levels (from < 1lux to about 300lux with a 5V VDD). Output voltage is ground referenced (as configured VO2) or moving the jumper from J1 to J2 changes the voltage reference to VDD at VO1. The J1 and J2 locations also allow placing a second resistor in parallel to modify the light conversion gain; this will allow a wider light range (with less overall resolution).

$$V_{DD} = 3V \text{ to } 5.5V$$

$$VO1 = I_{SNK} \times R1 \text{ (if J1 Open)}$$

$$VO2 = I_{SRC} \times R2$$

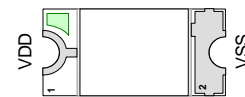
If $V_{DD} = 5V$ then :

$$\text{@ Total Dark } VO2 < 10mV$$

$$\text{@ 300 lux } VO2 \approx 3V$$

Protected By U.S. Patents: 6,787,757; Patents Pending

PHOTO

PACKAGE PIN OUT


BC PACKAGE
(Top View)

FUNCTIONAL PIN DESCRIPTION

NAME	DESCRIPTION
V _{DD}	Input Supply Voltage
GND	Ground Reference for Power and Signal Outputs