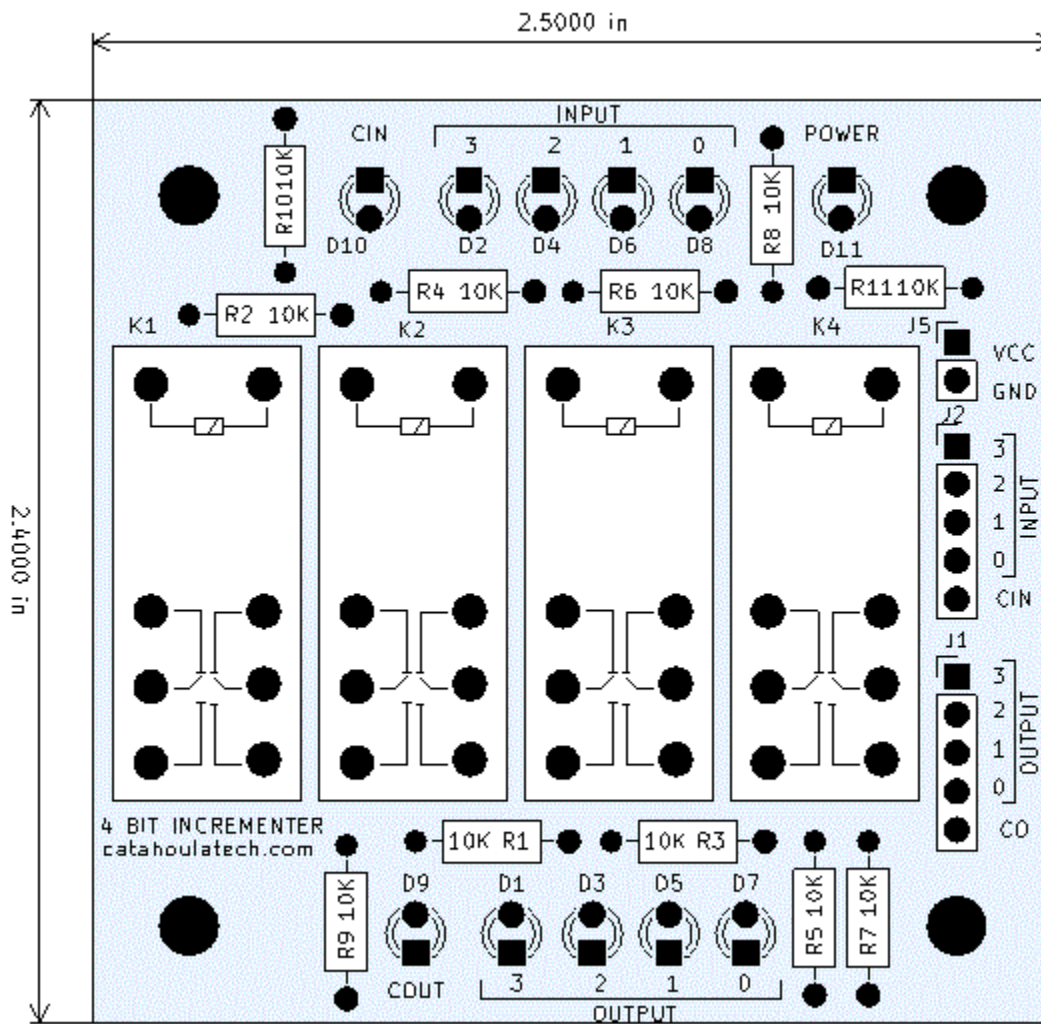


RL4108 – 4-bit binary incrementer



Bill of Materials

Part	Value	Description
R1-R11	10K 1/4W	LED current limiting resistor (optional)
D1-D11	LED	3mm T-1 LED (optional)
K1-K4	G2R-2-12VDC	DPDT relay
J1-J5	Header	0.1" pitch header, right angle recommended

Mount holes are 4mm (#8 screw) diameter.

Input Ports

Name	Size	Description
INPUT	4	Operand
CIN	1	Carry input
VCC	1	Power supply 12VDC
GND	1	Power supply ground

Output Ports

Name	Size	Description
OUTPUT	4	Sum of Operand + CIN
CO	1	Carry output

Logic function

$OUTPUT [4:0] = INPUT [3:0] + CIN$

$CO (Carry Output) = OUTPUT[4]$

Typical Application

The RL4108 module could be cascaded to implement larger data widths. CIN of the first module could be used as an increment *enable* control to determine if the output will be incremented or maintain the input value.

Increment
 $OUT = IN + 1$

