

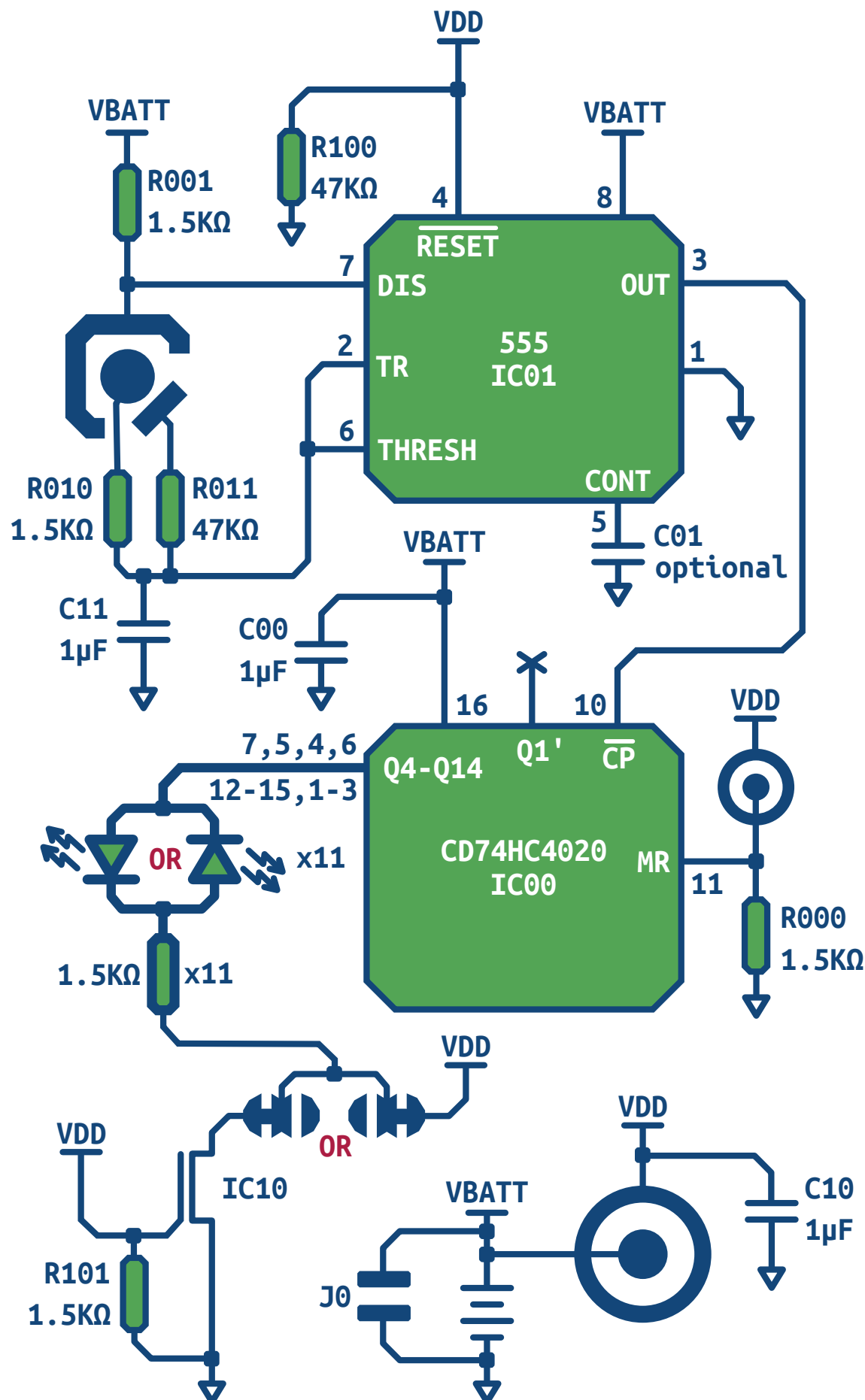
 Domes kindly donated
 by Snaptron
 snaptron.com

boldport.com/BINCO

BINCO

A binary up or
down counter
soldering project



0110111110111001000011000011011011001000100001101111
 A Boldport design
 with support from Snaptron
 Choose whether you'd
 like BINCO to count
 up or count down.
 This choice affects
 how the LEDs are
 oriented, and which
 side of the solder
 blob jumper to short
 OR
 CONFIGURE TO COUNT UP
 OR
 CONFIGURE TO COUNT DOWN
 Assemble:
 C01: DNP (do not populate) rest are 1µF
 R011, R100: 47KΩ, rest are 1.5KΩ
 For IC01, the bar corresponds to pin #1.
 Apply a little bit of solder to the central
 battery holder pad. J0 is optional and can be
 used for external power supply when the
 battery is removed.
 If set to counting down, R101 and IC10 are
 optional.
 For the buttons (*don't solder!*):
 From the tape sheet cut a piece that's about
 3mm oversized from the size of the button.
 First lay the tape on top of the button, only
 then align it to the pads and press firmly to
 stick the tape to the board.
 For the SLOW/FAST button, cut a corner off to
 correspond to the shorter leg. That leg
 needs to align with the bar of the pad.
 Pressing this button turns BINCO on.
 Keep pressing it while counting.
 A light touch counts slow, a full press
 counts fast.
 Pressing this button while the power
 button is pressed resets the counter
 Operate:
 Press down and keep holding the power button.
 A shallow press on the count button counts slow
 and a full press counts faster.
 It's important to release the count button
 before releasing the power button. Also, do
 not press the count button when power button
 isn't pressed. (Can you figure out what happens
 when you do; can you figure out why?)