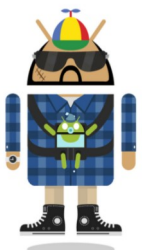
#BadgeLife

Rick Badge
@HackerLab

Welcome

- Handle: @soynerdito
- Name: Javier
- Developer
- I write the issues you exploit.



What is #BadgeLife

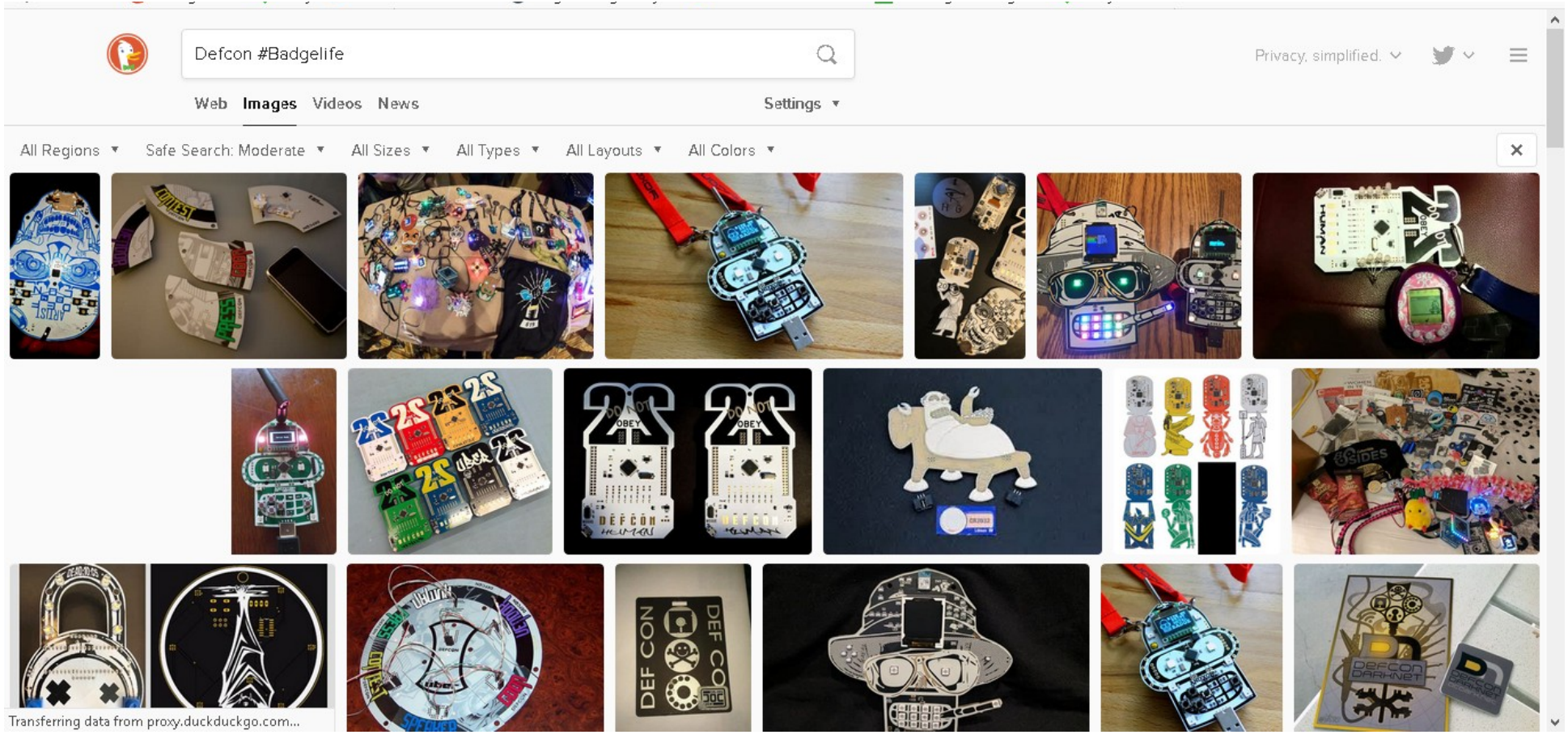
It’s a long story

https://www.syfy.com/syfywire/luis-from-ant-mans-5-funniest-movie-moments

Origin

- One conference (Defcon)
- People do their own badges
- Other people are crazy searching for

Oh my!


Defcon #Badgelife
Privacy, simplified.
Web
Images
Videos
News
Settings
All Regions
Safe Search: Moderate
All Sizes
All Types
All Layouts
All Colors
Transferring data from proxy.duckduckgo.com...

How it all started

- One meetup
- One conversation
- Vamos a hacer un badge para BSides

CHALLE

CHALLE

CHALLE

CHALLE

CHALLE

CHALLE

CHALLE

CHALLE

CHALLE

True that


YOU CAN DO IT IF YOU BELIEVE?
FALSE. YOU CAN DO IT IF YOU DO IT
memegenerator.net

Scared?

Bsides Badges

BSides2015
BSides2015

BSides2016

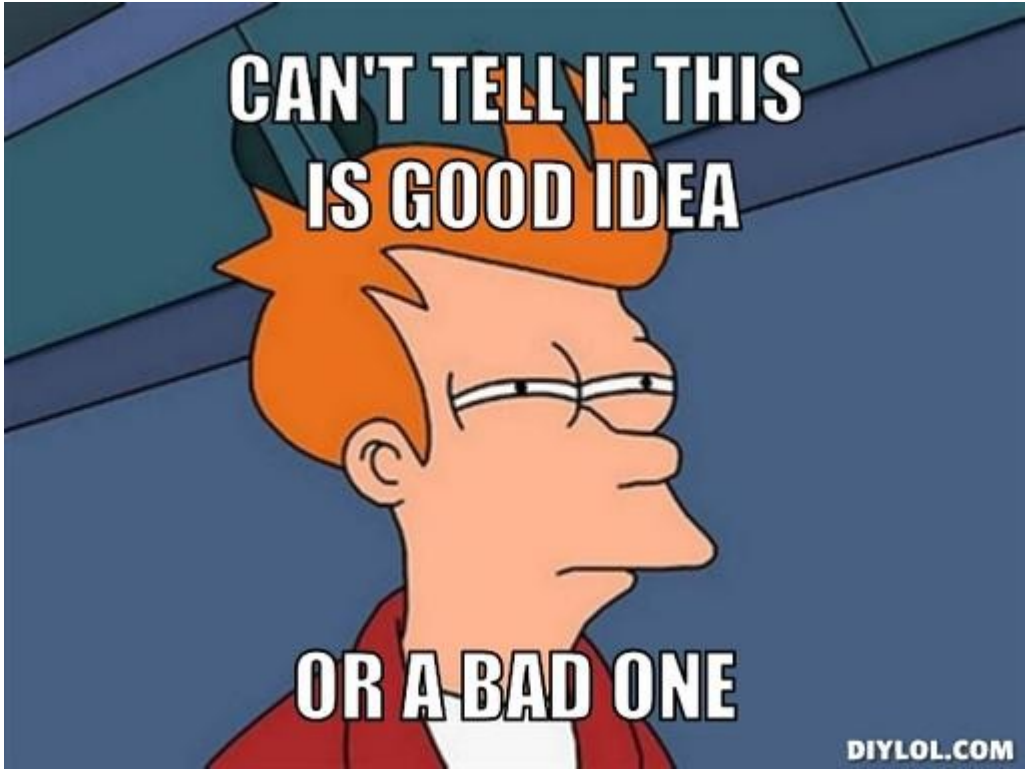
BSides2017/18

Jose again

Vamos a hacer uno para el Hackerlab!

Y...


Ooo! Ooo!
Me! I'll do it!
Pick me!


CAN'T TELL IF THIS
IS GOOD IDEA
OR A BAD ONE
DIYLOL.COM

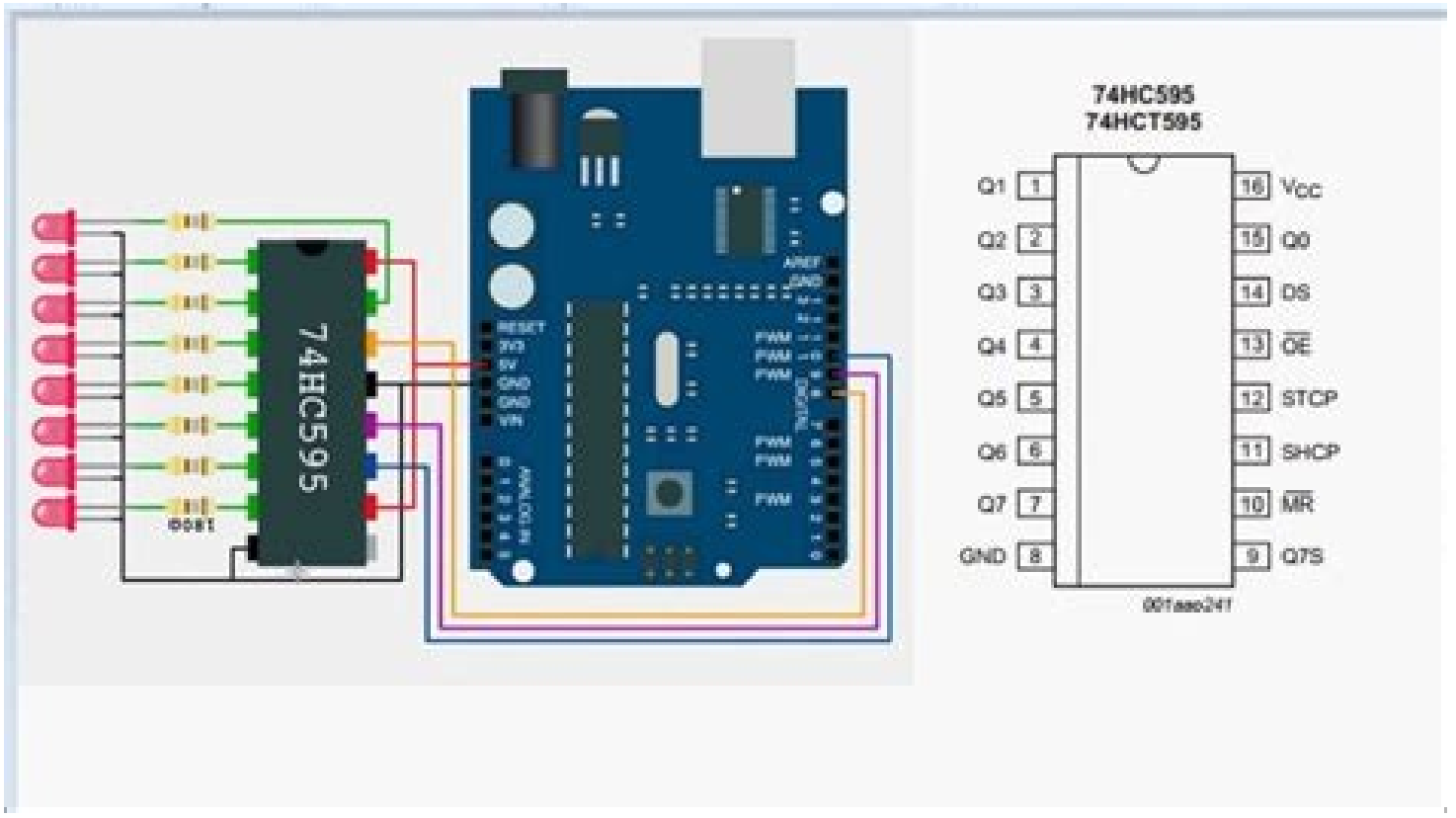
Rick Badge

Brain = Attiny13A
Extras:
1 x 74HC164 Shift Register
8 x Leds
8 x 680 ohm resistors
1 x 12.5k resistor
1 x 47uF capacitor

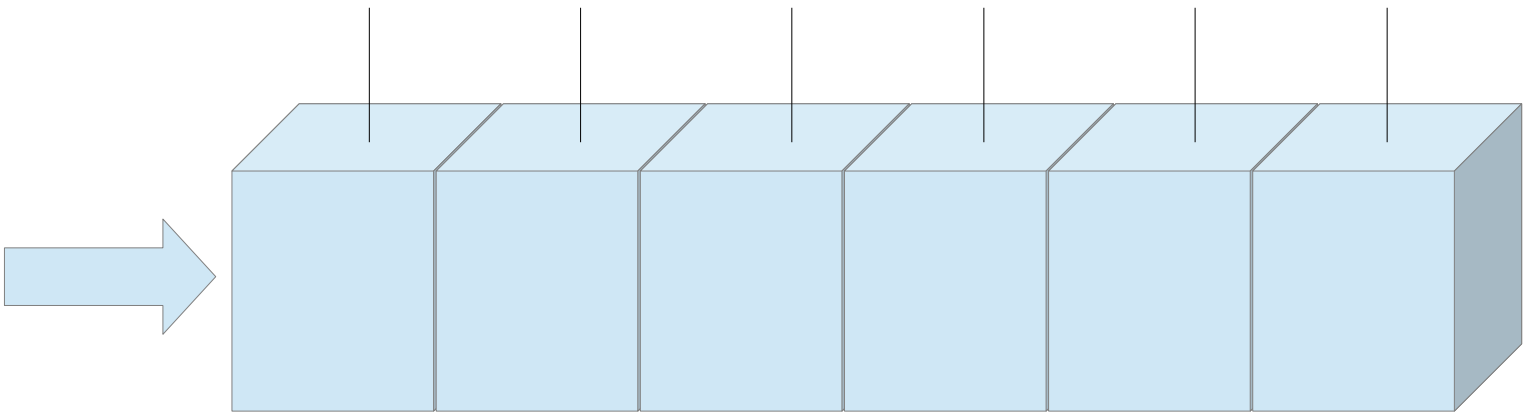
Software

- Programming:
  - Arduino
- Drawing:
  - Inkscape
  - LibreCAD
  - Gimp
- PCB Design:
  - KiCAd

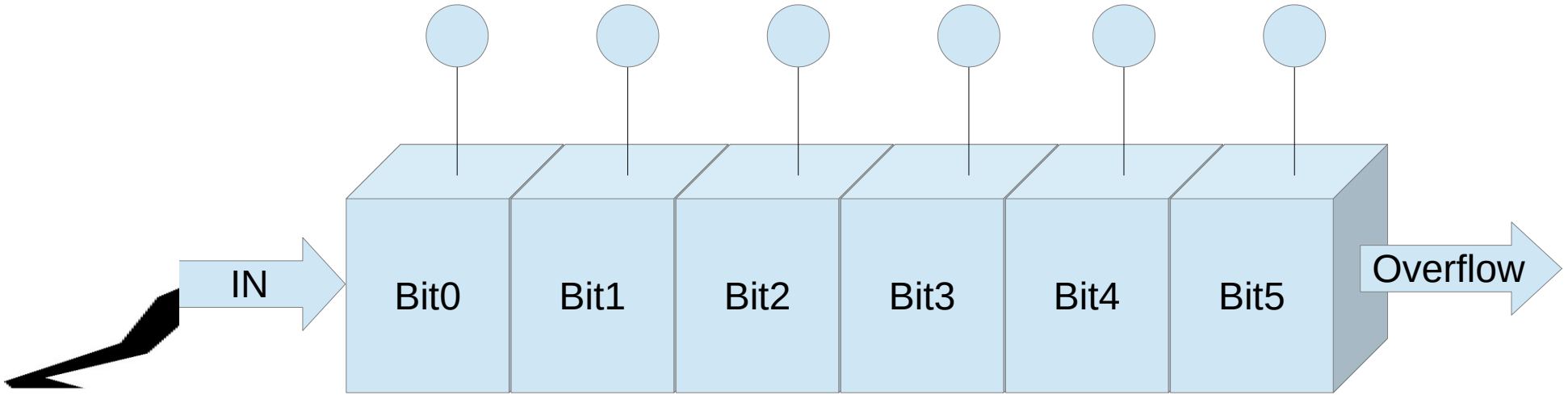
Shift Register



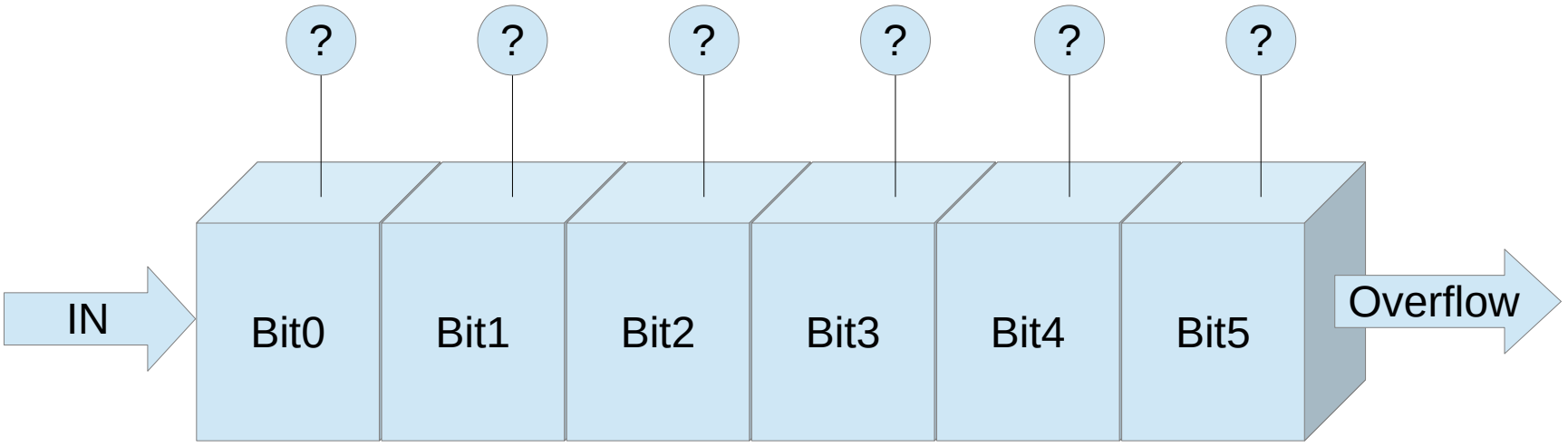
Shift Register



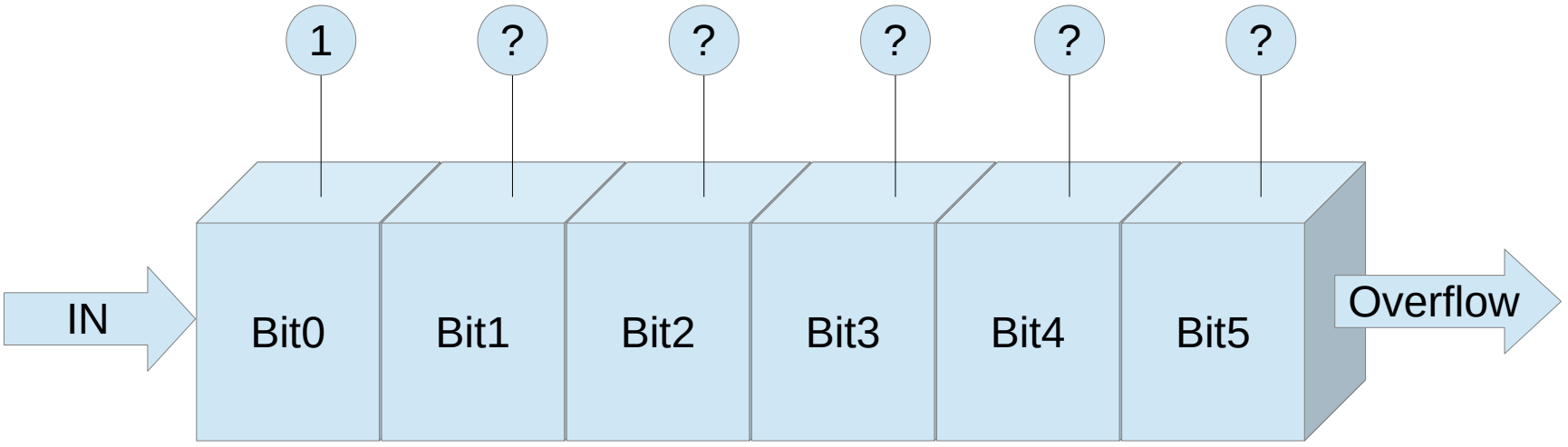
Shift Register



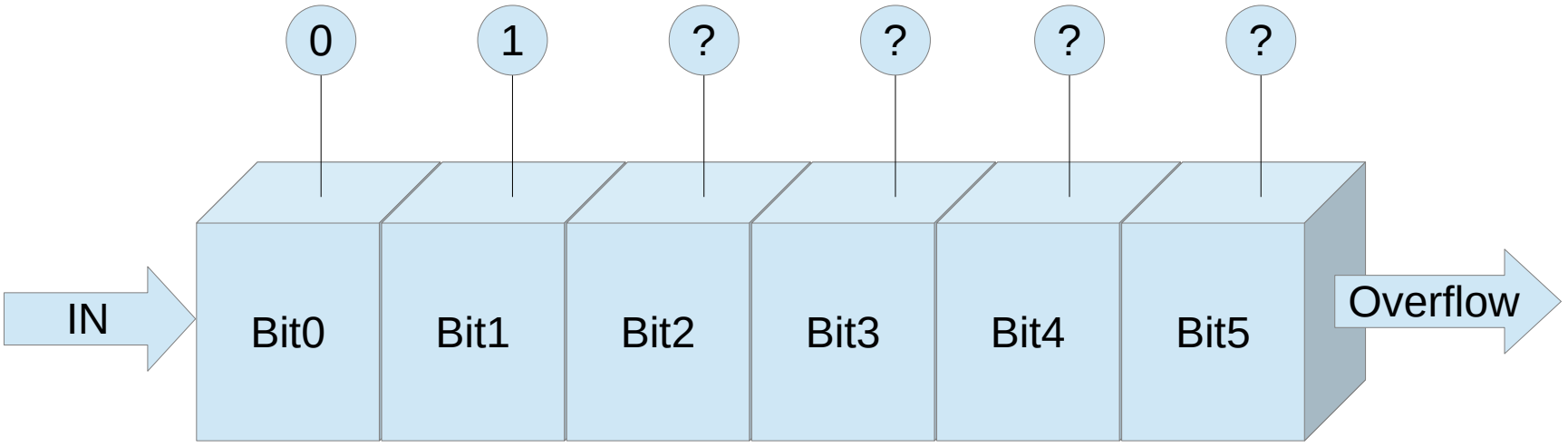
Shift Register



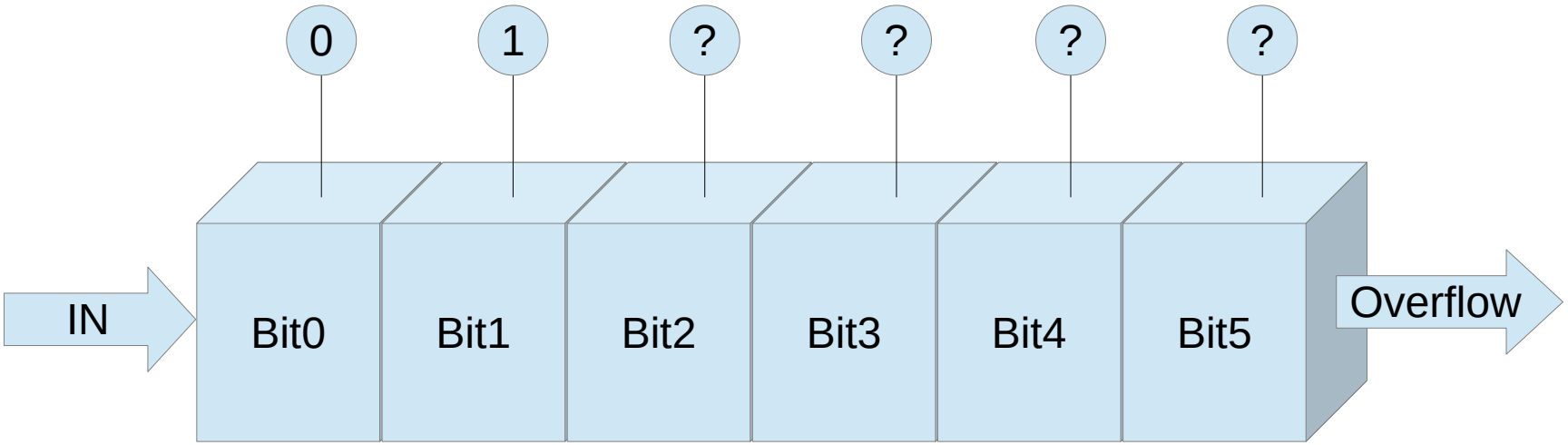
Shift Register



Shift Register



Shift Register

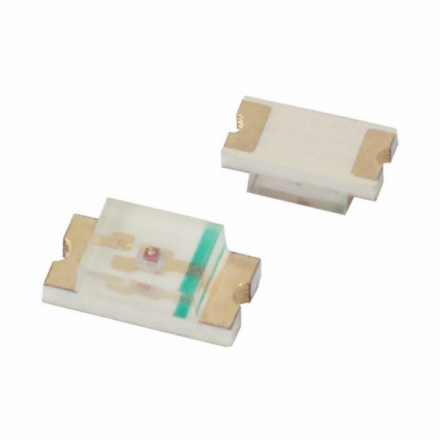


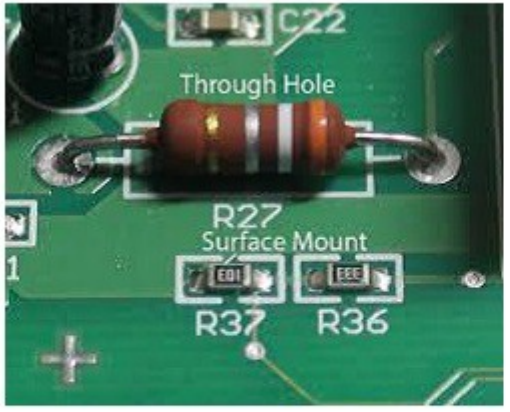
And that’s a shift register, serial to parallel

Components

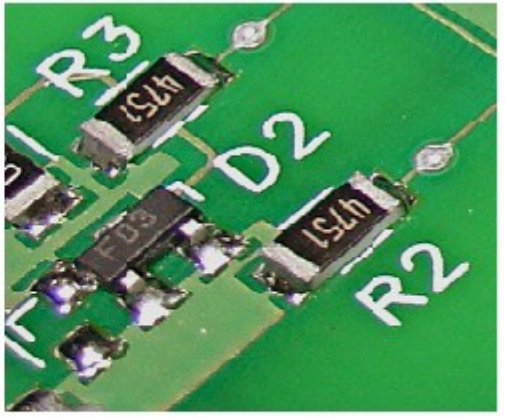
Through Hole

Surface Mount



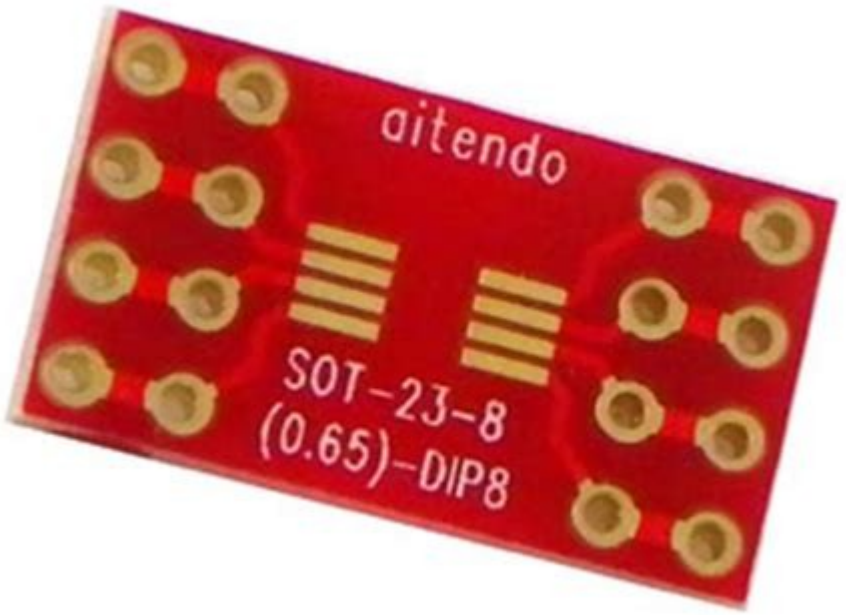


Surface mount resistor when compared to the size of a normal resistor

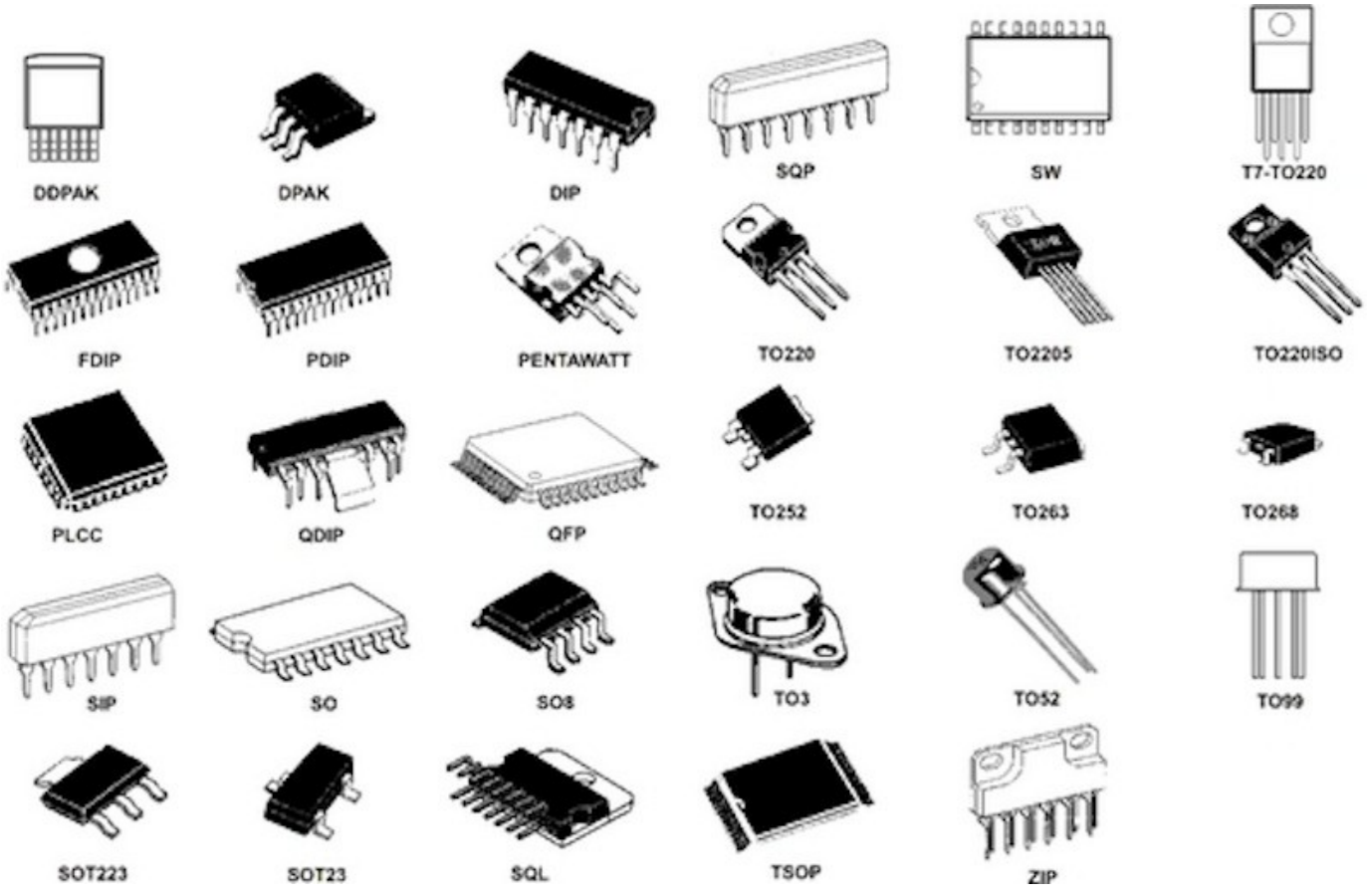


Surface mount resistors mounted on a PCB

Adapters Surface mount to through hole

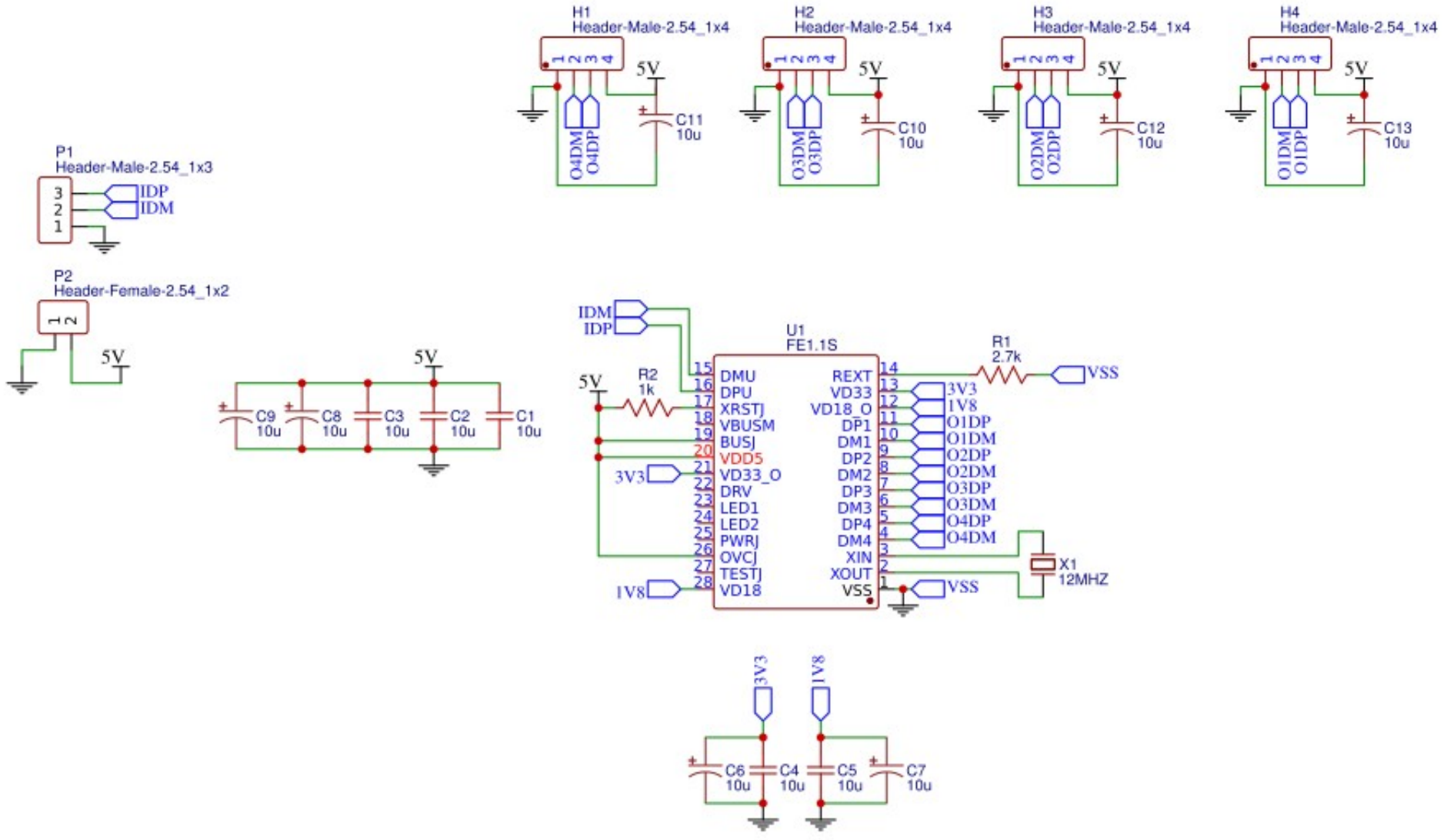


Package Families



Some Surface mount Package sizes

Package type	Size in inches	Size in mm
0201	0.024” x 0.012”	0.6 mm x 0.3 mm
0402	0.04” x 0.02”	1.0 mm x 0.5 mm
0603	0.063” x 0.031”	1.6 mm x 0.8 mm
0805	0.08” x 0.05”	2.0 mm x 1.25 mm
1206	0.126” x 0.063”	3.2 mm x 1.6 mm
1210	0.12” x 0.10”	3.2 mm x 2.6 mm
2020	0.20” x 0.20”	5.08 mm x 5.08 mm


H1
Header-Male-2.54_1x4
1 2 3 4
5V
O4DM
O4DP
C11
10u
H2
Header-Male-2.54_1x4
1 2 3 4
5V
O3DM
O3DP
C10
10u
H3
Header-Male-2.54_1x4
1 2 3 4
5V
O2DM
O2DP
C12
10u
H4
Header-Male-2.54_1x4
1 2 3 4
5V
O1DM
O1DP
C13
10u
P1
Header-Male-2.54_1x3
3
2
1
IDP
IDM
P2
Header-Female-2.54_1x2
1 2
5V
5V
C9
10u
C8
10u
C3
10u
C2
10u
C1
10u
IDM
IDP
U1
FE1.1S
5V
R2
1k
3V3
1V8
15 DMU
16 DPU
17 XRSTJ
18 VBUSM
19 BUSJ
20 VDD5
21 VD33_O
22 DRV
23 LED1
24 LED2
25 PWRJ
26 OVCJ
27 TESTJ
28 VD18
14 REXT
13 VD33
12 VD18_O
11 DP1
10 DM1
9 DP2
8 DM2
7 DP3
6 DM3
5 DP4
4 DM4
3 XIN
2 XOUT
1 VSS
R1
2.7k
VSS
3V3
1V8
O1DP
O1DM
O2DP
O2DM
O3DP
O3DM
O4DP
O4DM
X1
12MHZ
VSS
3V3
1V8
C6
10u
C4
10u
C5
10u
C7
10u

Good Tutorial
Contextual Electronics (Youtube)

https://www.youtube.com/watch?v=iTyi3RvNoB0&list=PLy2022BX6Esr6yxwDzhqYZyuuenJE2s5B