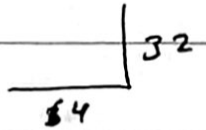
2×2 cells →



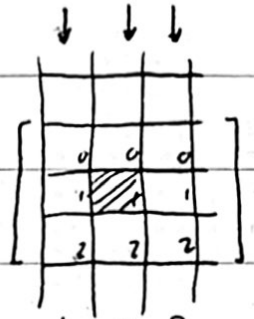
* clear screen and only draw alive. ✓

repr. each column as uint32! top to bottom ? 1 LSB 2 MSB

density usually quite low!

count w/ lookup table ✓

* don't use display buf



:)

edge[shift L & 0x7] + edge[shift R & 0x7] + center[shift C & 0x7]

edge:

0	0
1	1
2	1
3	2
4	1
5	2
6	2
7	3

center

0	0
1	1
2	-1 A
3	1 A
4	1
5	2
6	1 A
7	2 A

live cond

alive 2, 3

dead 3

00	0
01	0
10	0
11	1 ✓

✓

n == 3 || (n == 2 & alive)

n = # live neighbors

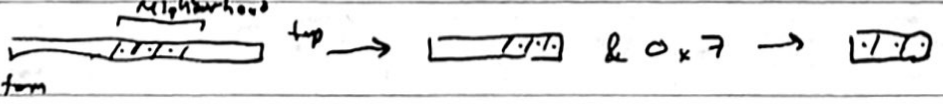
(still need this.

if alive, subtract 1

alive?= C & 2 ✓

(or just check)

shift by y-1, so that top in LSB ✓



✓ or: edge edge edge (all same) n = 3 || (n = 4 && alive)

✓ CIRCULAR SHIFT

Amdahl

$$speedup = \frac{1}{1 - p + \frac{p}{s}}$$

s = speedup of critical section

p = % time originally coupled by critical section

X ⊕ 111 = 0

)XXXXX

0000111

000000

I can force speedup & s to find p

orig: 36 ms/gen ~~per gen~~ pixel → 35

~~add delay 1 to drawCell:~~

10 μs delay → 37 ms

100 μs delay → 50 ms/gen (50-55 depends on # cells) increase of 14 ms -19

1400 - 1900 calls

$\frac{55}{36}$ = 1.53 speedup, call it 1.5

$$1.5 = \frac{1}{1 - p + \frac{p}{?}}$$ ah actually don't have enough info?

$1 - p + \frac{p}{s} = 0.75$

~~T - p~~

1 -

$0.25 = p + \frac{p}{s}$

$0.25s = sp + p$

$p(s+1)$

$p = \frac{0.25s}{s+1}$

If s = 1 p = 0.125

10 0.227

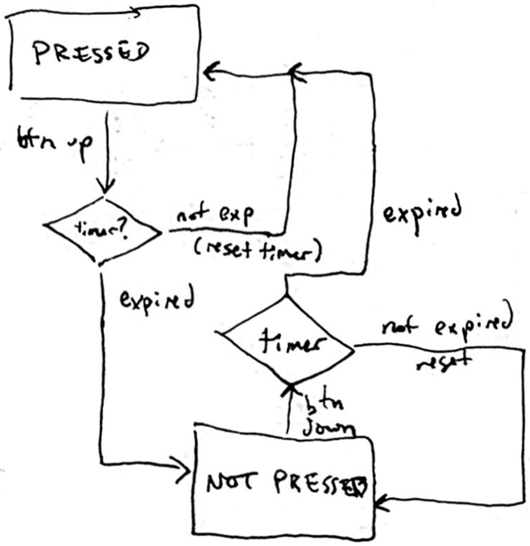
100 0.248

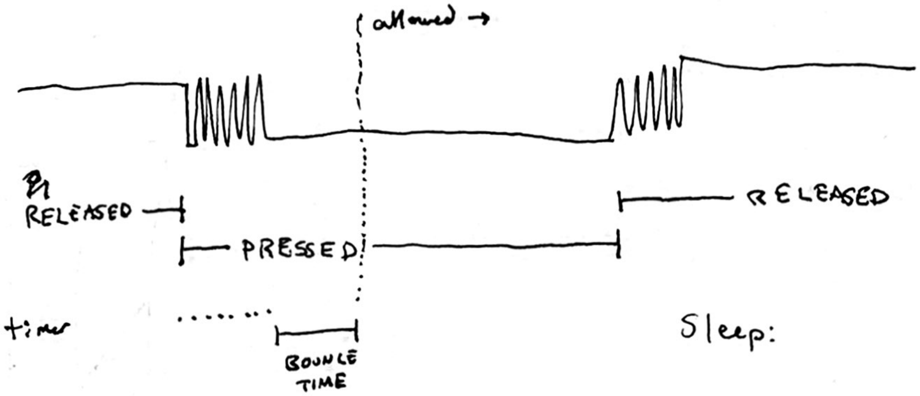
1000 0.25

MICROS

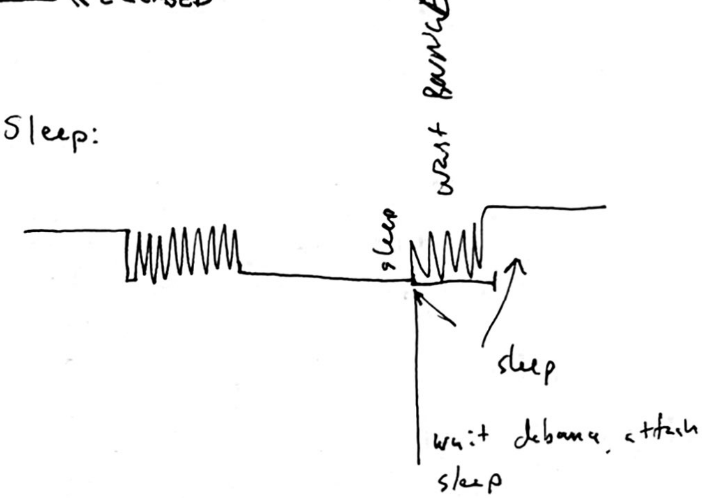
Pixel 35185 → call it 35200

Rect 36437 → 36800

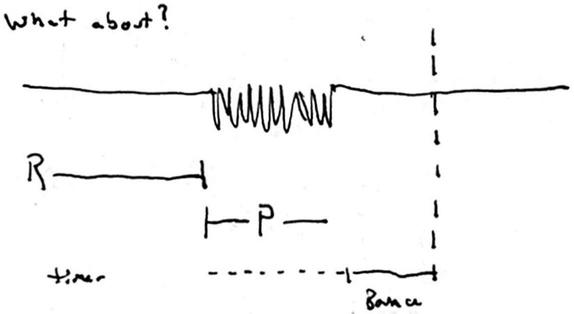




Sleep:



what about?



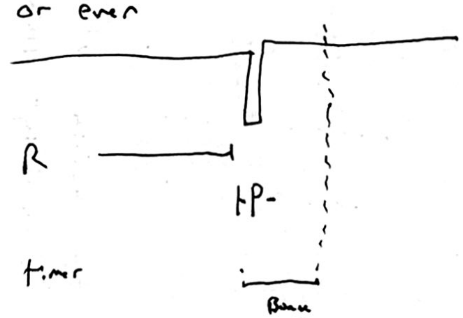
∅ can only attach one interrupt!

Lt Gov
Ayatollah?
Cash Grand
primary
broadband expansion

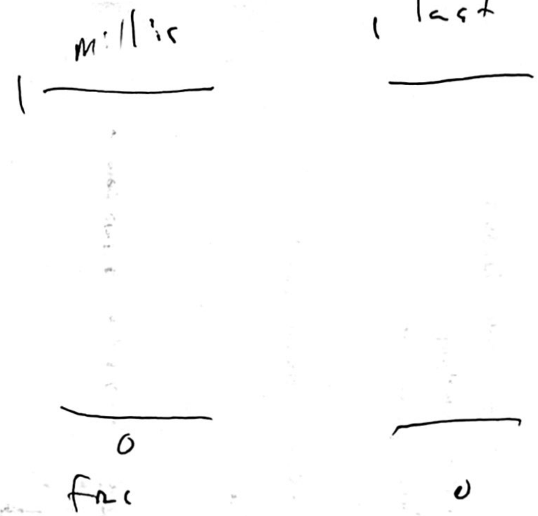
Half a Ayatollah

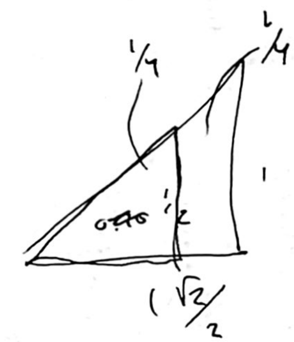
Flooo dondes?? wtf

or even



wake: ⟶ wait for up
disable int
delay, reattach





Mouthfuls | thinly sliced grated diced chopped cubed

delete things in queue

Empty ing!

TRAIN BOX - NEW PARTS.

NEW

- trimpot ✓
- JST connectors B.O.'d
- RPI zero w ✓
- RPI headers - hammer?
  - 20x2 ✓
- LCD - 16 pin f

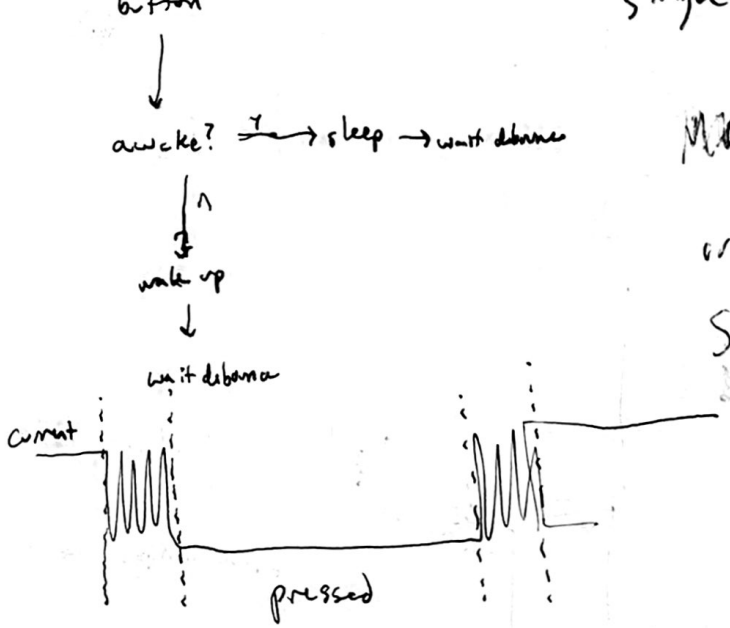
HAVE display

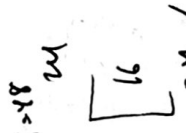
some headers

VER1 hammer + female headers
confirm working.

VER2 direct solder :o

JST + SOIC backordered.





state machine w/
"transitioning" state

store every n generations in large prime. should capture single glider case!

Max interesting loop length?

or → int. loop detect

Screen 128×64

scale: 64×32 cells

glider moves @ 1 cell per 4 ticks

move 64 cells in 256 ticks

prime → 257