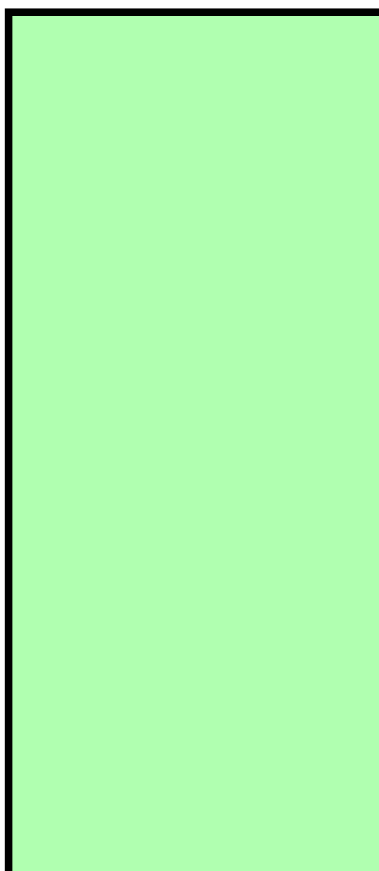


! ! ! ! ! ! ! ! ! !

circuits uses simple pics.
any pic will do it if capable of the inputs and outputs etc

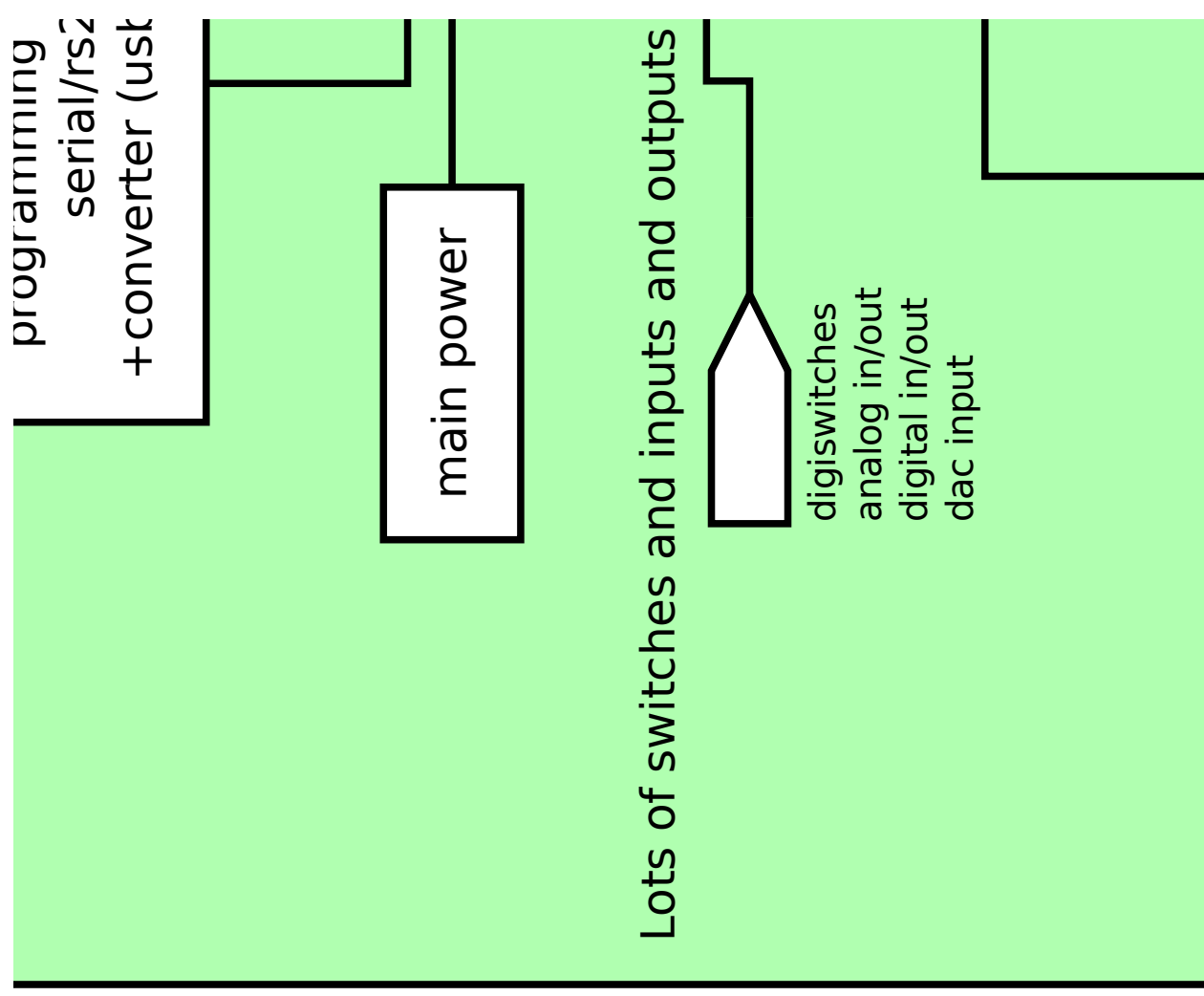


Mo

i2c

.

dule(s)

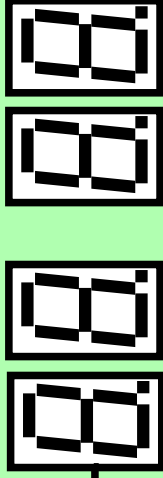


Interface

32

) optional

Display



send/re

st

cc

Startbox
main circuit

Speaker / Buzzer

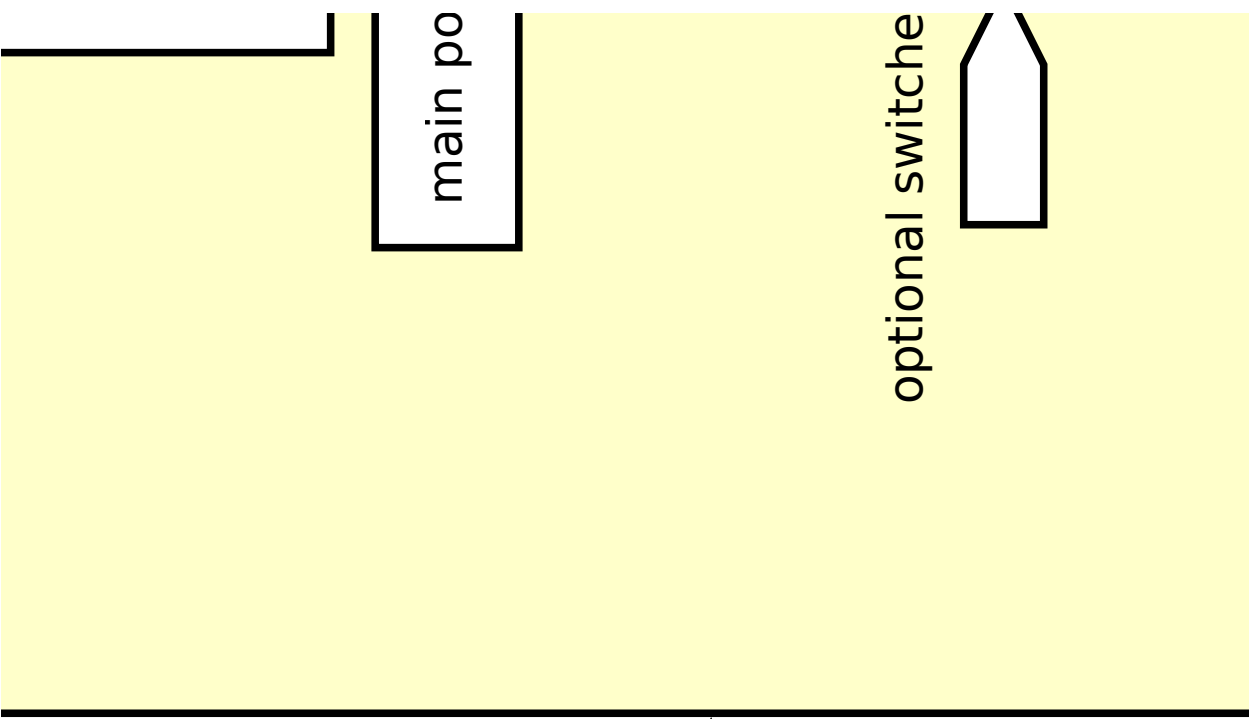
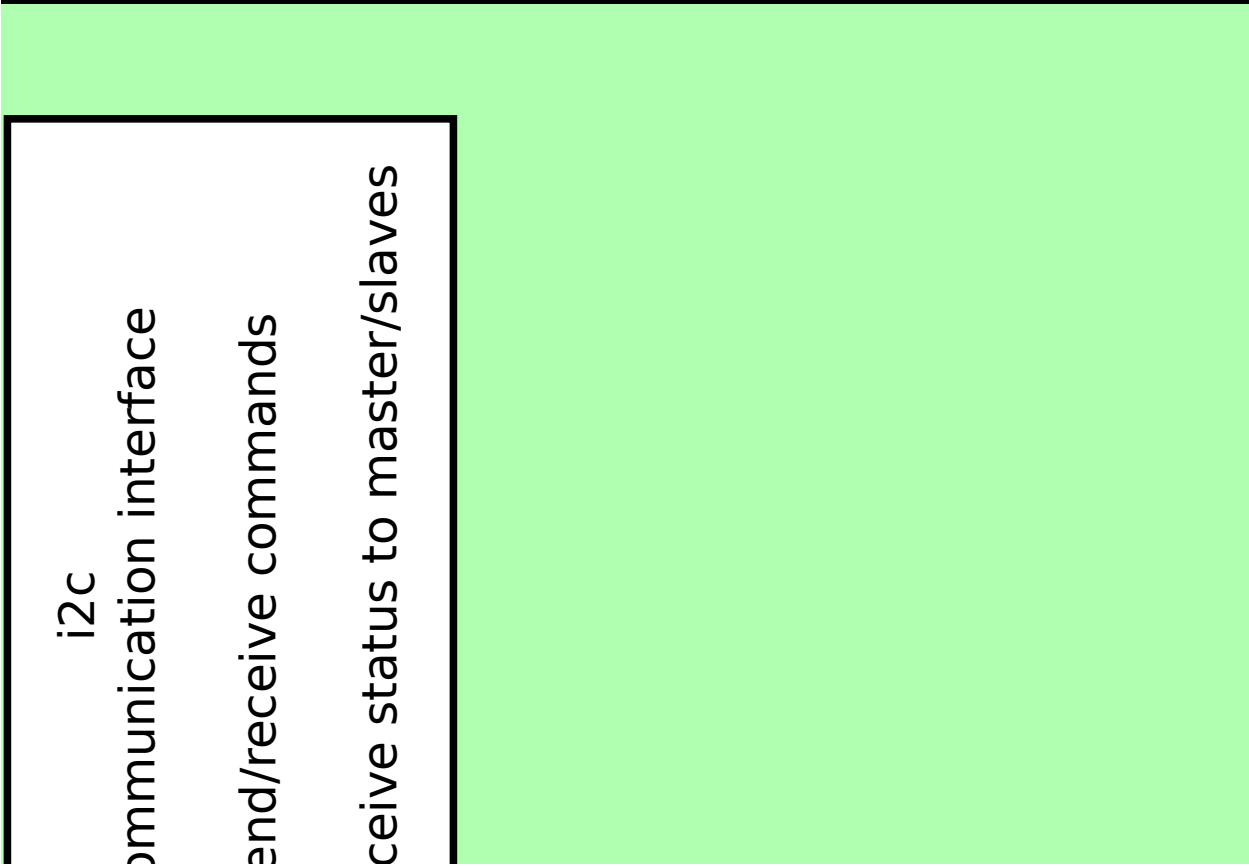


lots of status leds



Main Power Switch



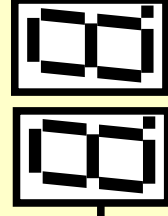


communication interface

send/receive commands

send/receive status to master/slaves

power

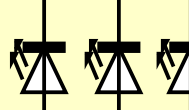
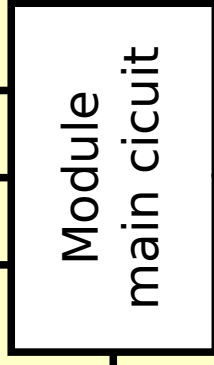


optional Display

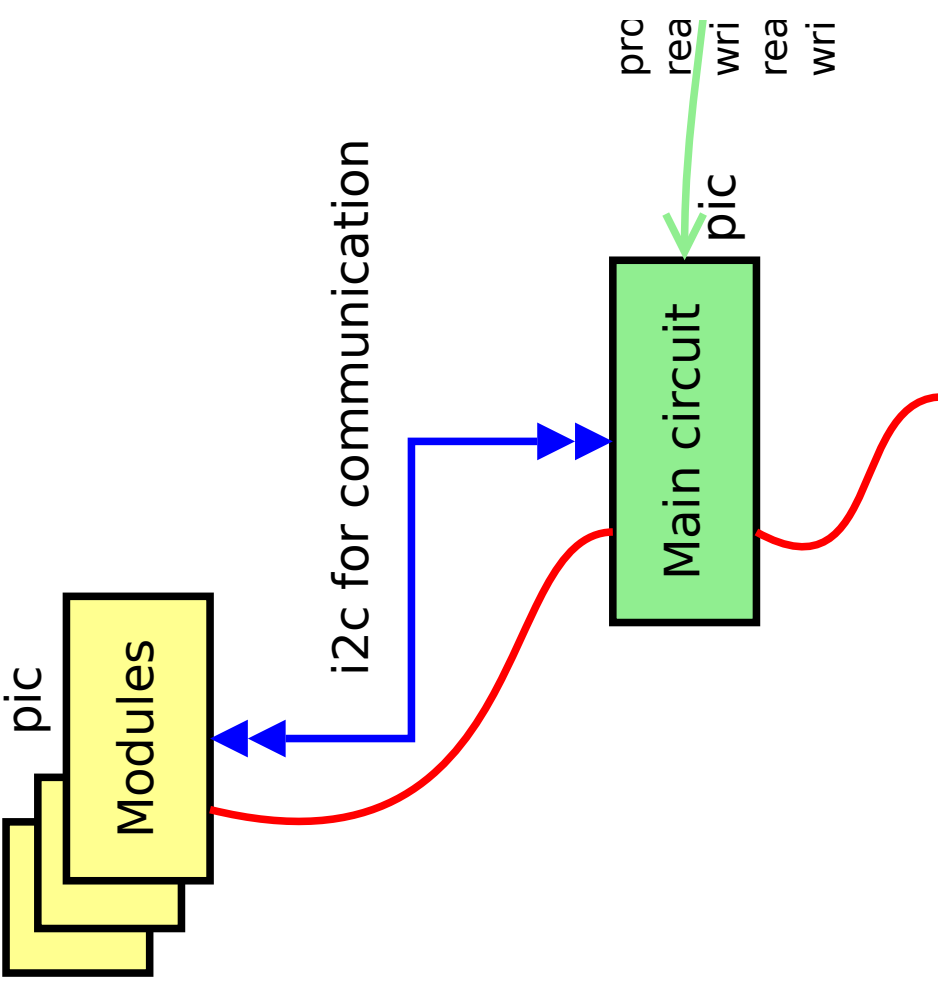
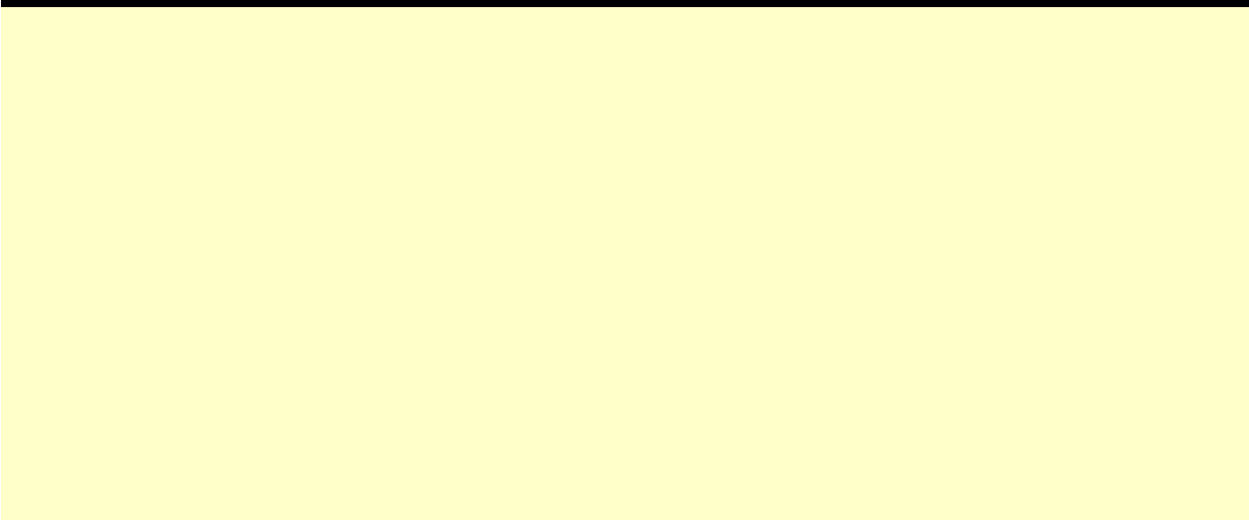


optional Speaker / Buzzer

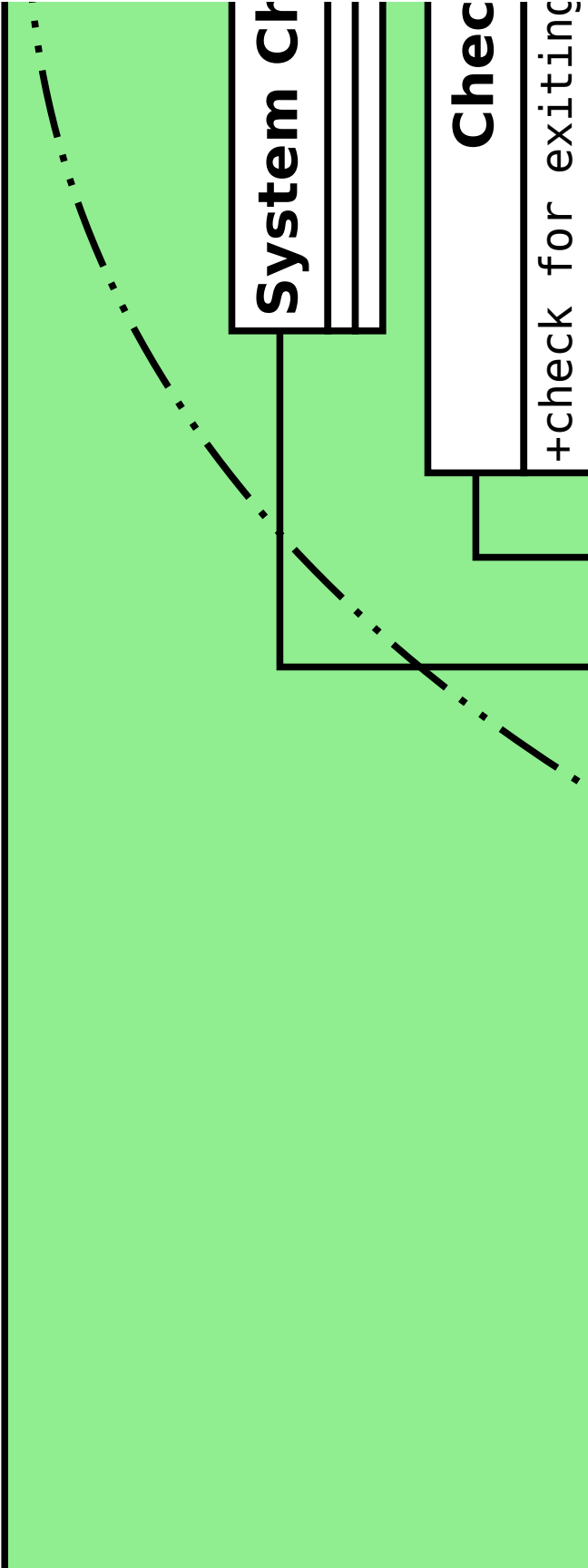
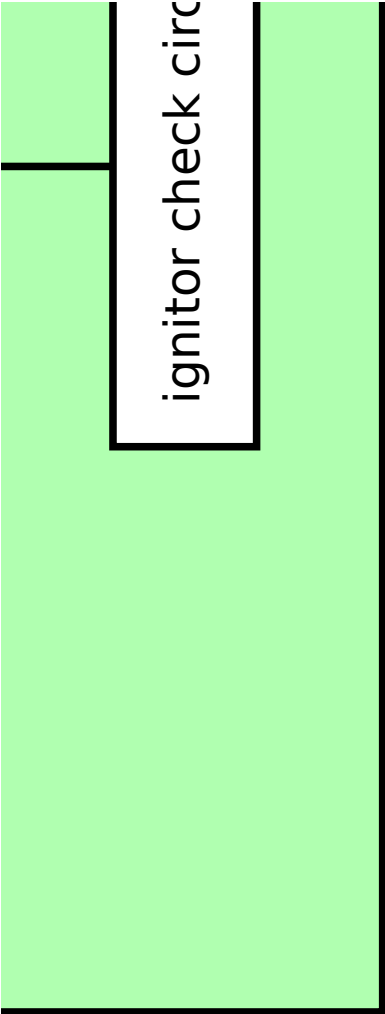
s and i/o



optional status leds





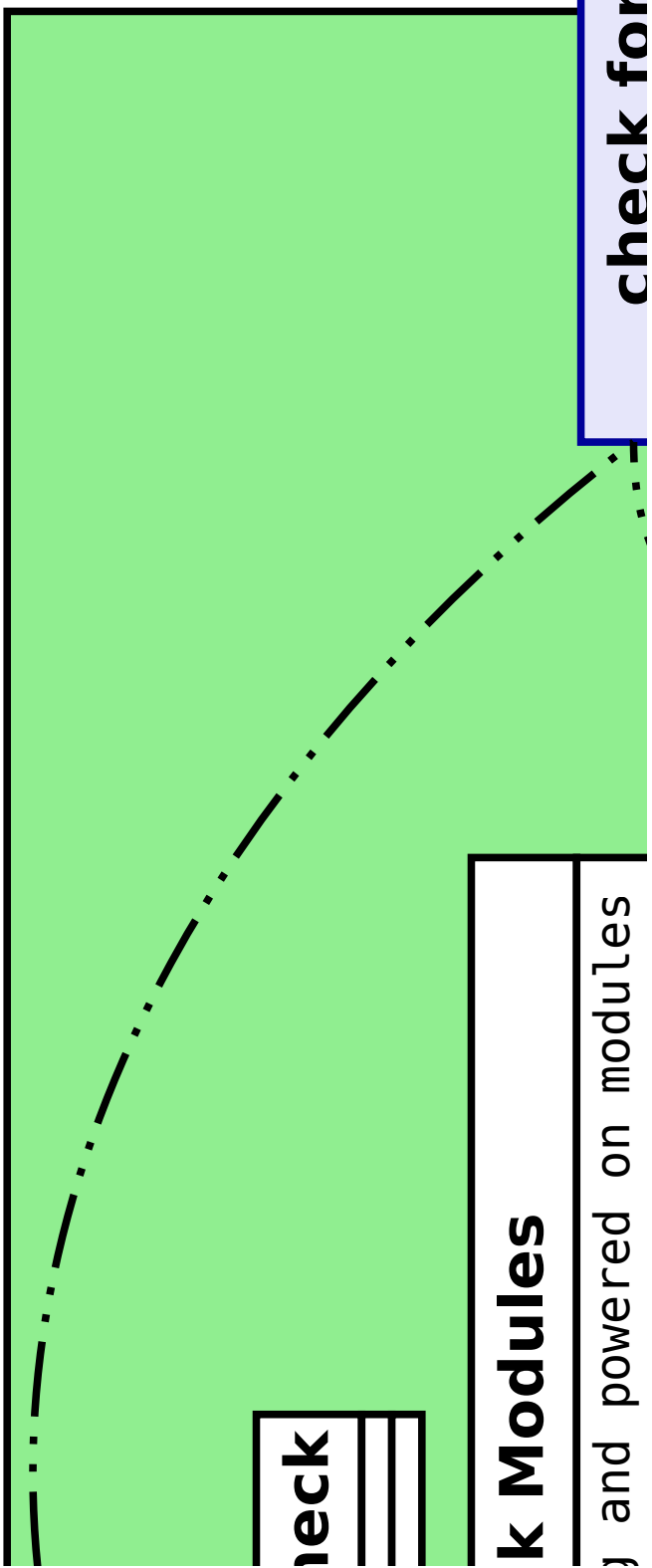




fuses
Keyswitch
ARM
(analog switches! preferred)

Start

uit

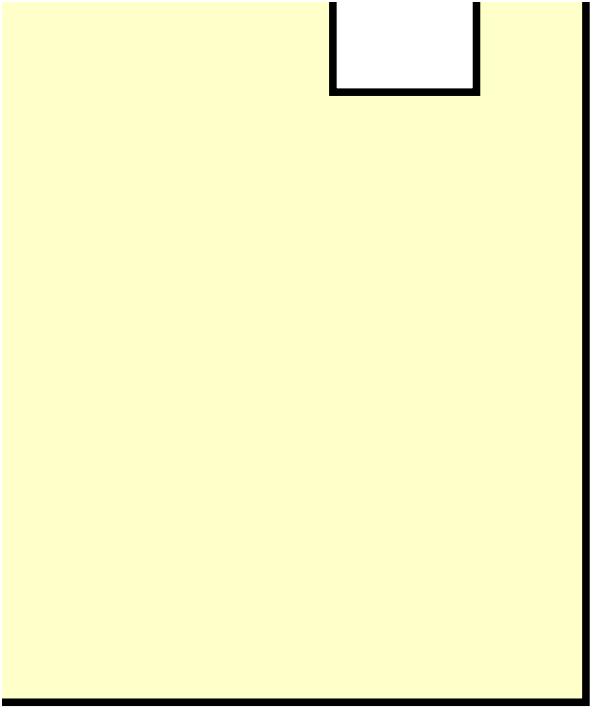
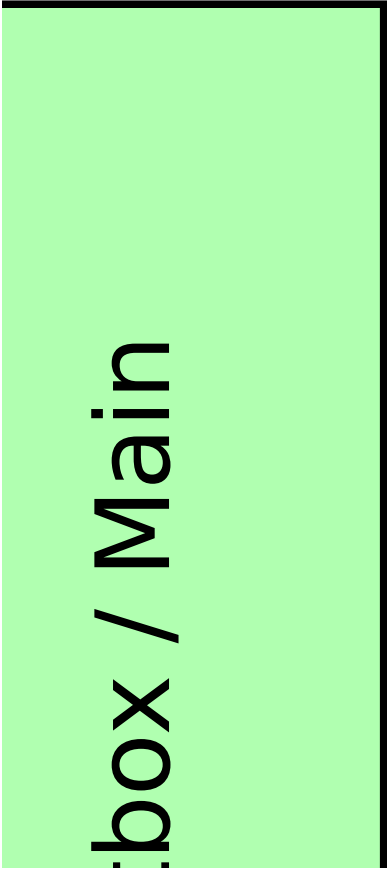


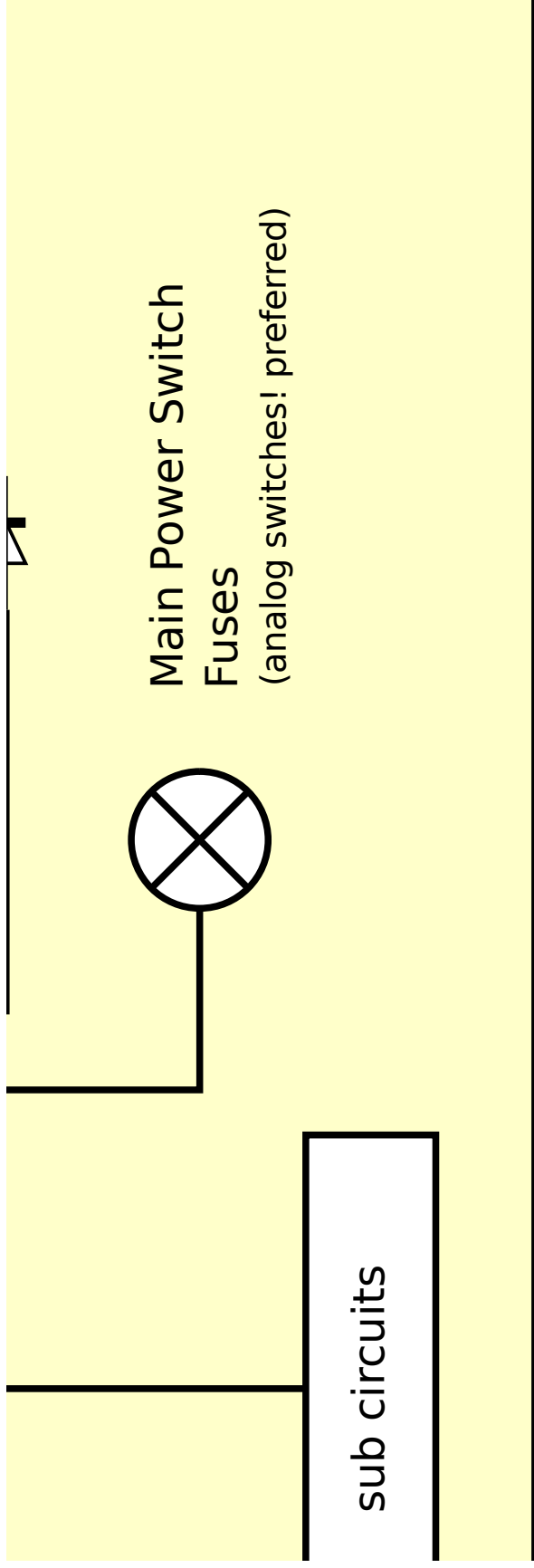
neck

k Modules

and powered on modules

check for error

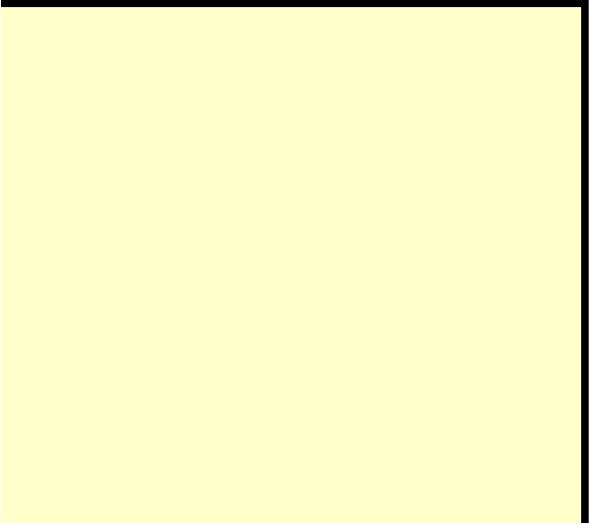




example module:
check launchpad safety a
with lightbarriers

stuff to do

- +power on
- +status check
- +init stuff

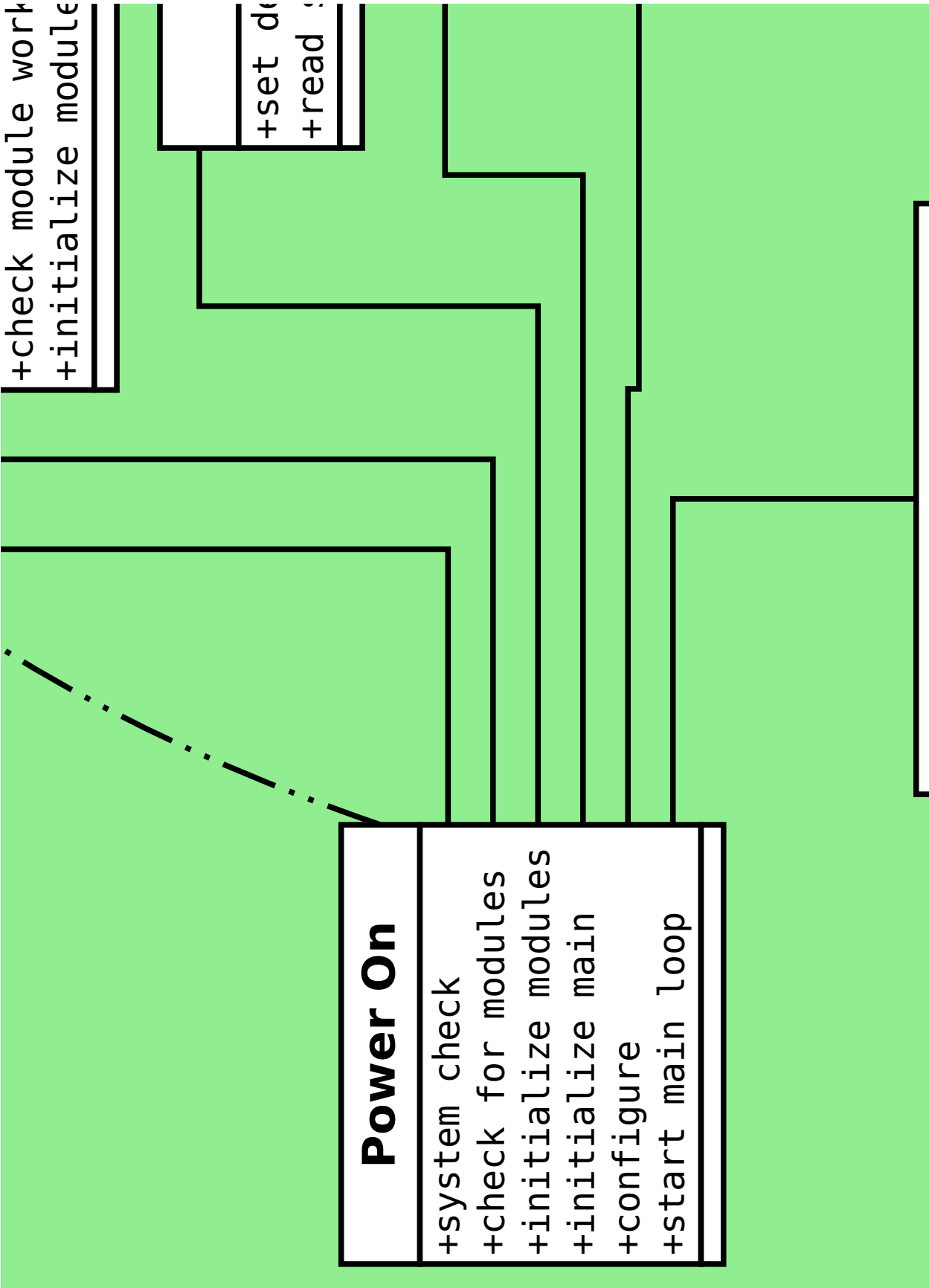


Power

rea

C input from external connector for I





king status

Init Modules

default values
status / current values

initialize main

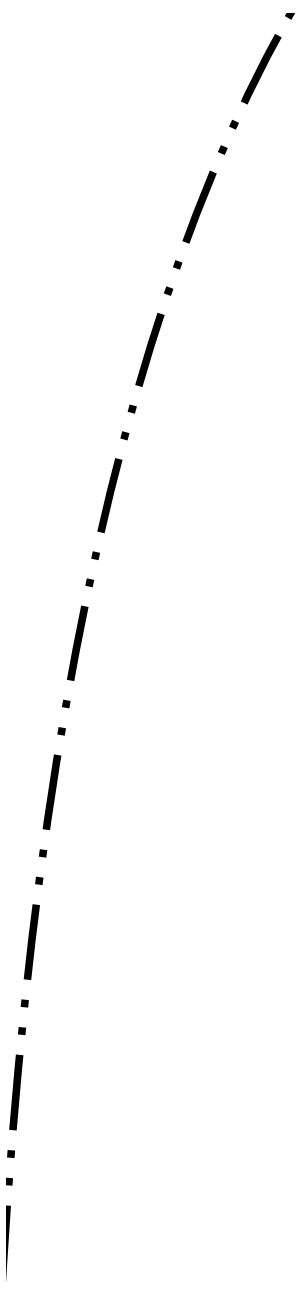
+set default values

configure

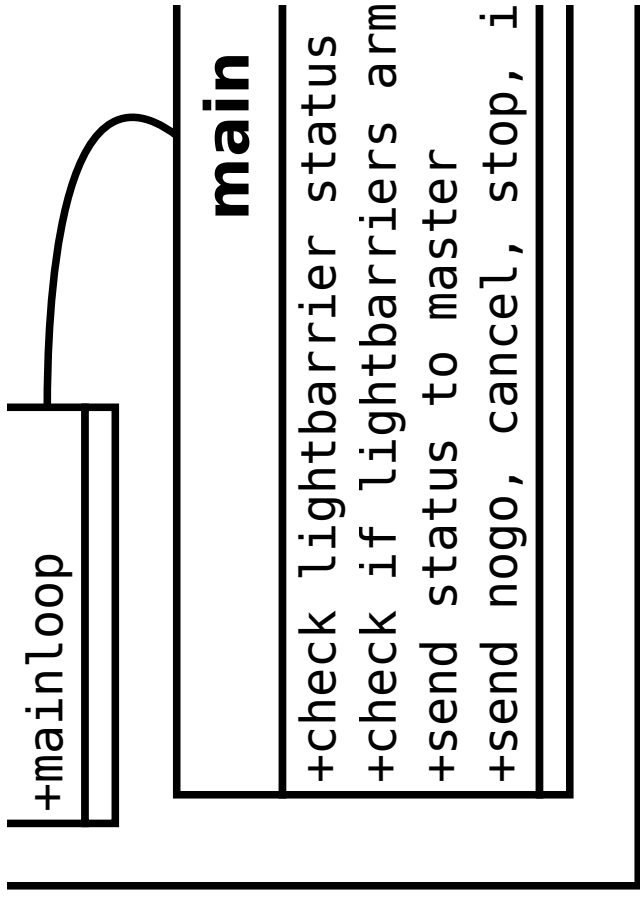
+set custom values

+display error code/r
+continue
+set NOGO!
+Cancel Program
+Return
+etc

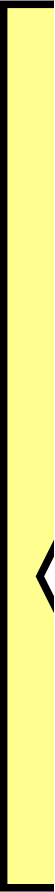
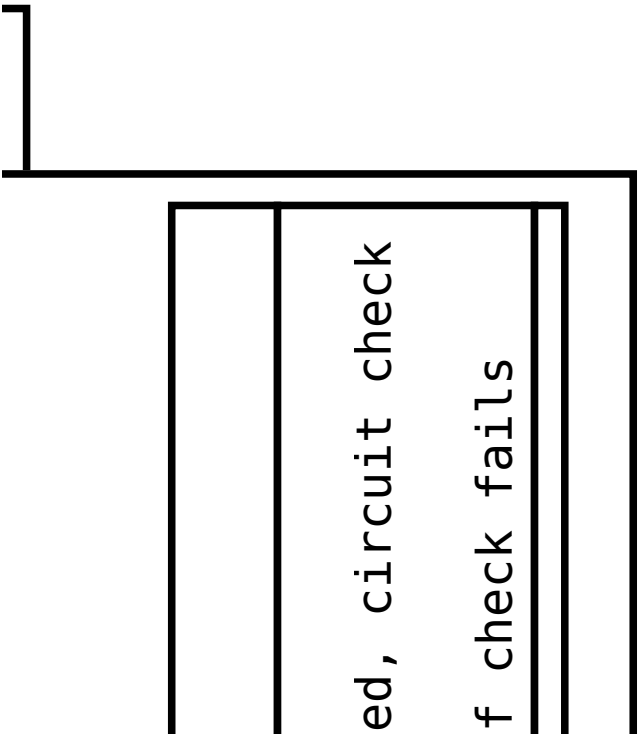
master
can re
modu



er checks module presence and status
ead and write configuration parameters
le could send go nogo, warnings, change status, cancel/hold countdown



etc.





Main Loop

+wait for input / keypress
+run program

Startbox / Main

+lay
+go
+lay
+st
+in.

Programs

unch preparation checks
nogo checks, e.g. modules
unch circuit check
art launch program
italize countdown

Module(s)

Power On

```
+system check
+...check for (sub)modules (?) c
+...initialize modules (?) not s
+...would be a nice feature! yea
+initialize main
+configure
+start main loop
```

!

System Check

initialize main
+set default values

configure
+set custom values

optional?
no bad idea....
sh

...

