

EEPROM

Initializing SD
card...

Check if
SD is present and
initialized

Yes

No

Card Initialized
Logging to: file

Card failed, or
not present

start up .csv file with
time stamp and
column headers

loop()

capture time

in milliseconds from
start and store in
millisVal

if
 $\text{millisVal} / \text{RPM_INT}$
increases

True

False

$\text{rpm} = \text{revolutions} * \text{rpm_factor}$
reset *revolutions* = 0

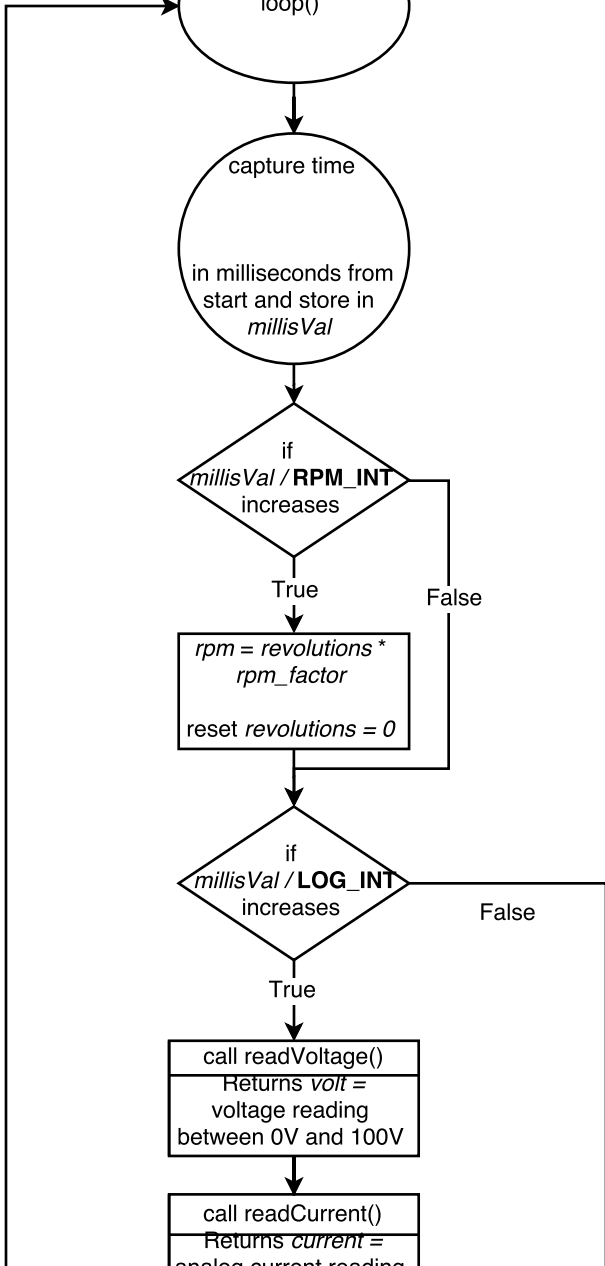
if
 $\text{millisVal} / \text{LOG_INT}$
increases

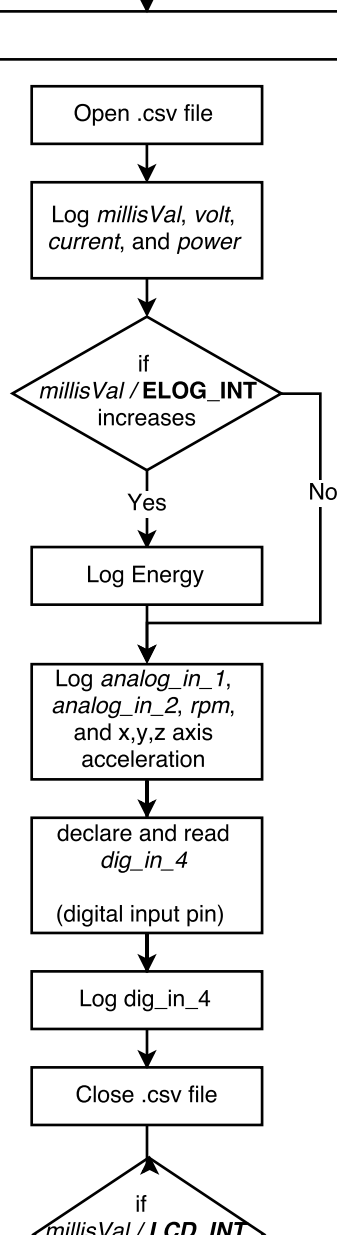
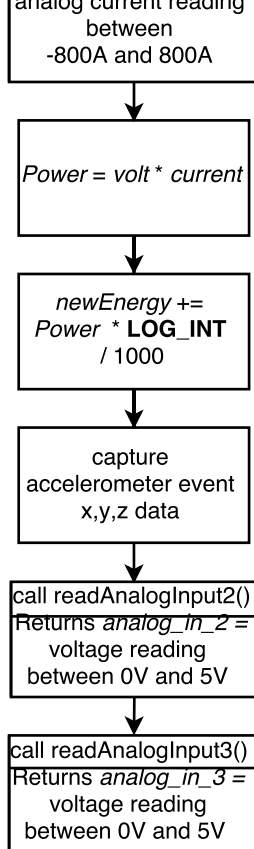
False

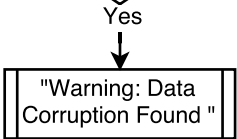
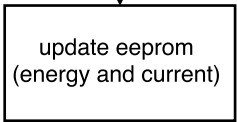
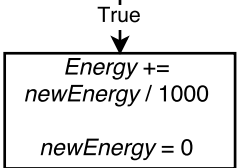
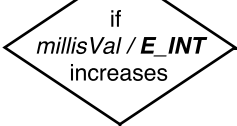
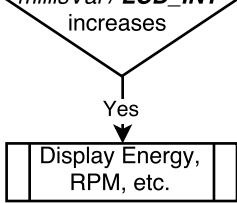
True

call readVoltage()
Returns *volt* =
voltage reading
between 0V and 100V

call readCurrent()
Returns *current* =
analog current reading







Return to loop()