Prerequisites

So you have calibrated an ESC32, build the into your multicopter and would love to program the settings all at once to all ESC32′s ? – well it is possible.

The ESC32 and the AutoQuad flightcontroller can use the OneWire communication protocol. Once attached to an AutoQuad flightcontroller you can upload the settings to the ESC32 by simple inserting the uSD card with the ESC32 configuration.

- AutoQuad flightcontroller with fw 6.6 r18 or later

- Esc32 with fw 1.4.1 build 5152 or later

- uSD card with *esc32.txt* file

- all ESC32′s attached to the AutoQuad flightcontroller.

As you can see, a default ESC32, no calibration data and a high max_amp. In this example we will change the settings marked by yellow.
Create an *esc32.txt* file (using any ordinary text editor, notepad is fine) on the root of the uSD card.
Every setting that the ESC32 allows can be placed in this file.

Now save the *esc32.txt* file and power-on the AutoQuad flightcontroller. Make sure the ESC32′s are also powered on but remove the props if you are using the main battery.

Insert the uSD card, the datalogging will also be started indicated by the fast flashing ready light.

Now simply press the reset button on the AutoQuad, the boot will take 1-3 seconds longer and ALL attached esc32′s will now be programmed with the settings from the *esc32.txt* file.
Verify by attaching a FTDI interface to one of the ESC32′s and look if the settings have been changed.

All settings have been changed…


```
E:\esc32.txt - Notepad++
File  Edit  Search  View  Encoding  Lang

esc32.txt
  1   STARTUP_MODE 0
  2   FF1TERM   +6.27696e-08
  3   FF2TERM   +1.07570e-03
  4   MAX_CURRENT   15.0
  5   PWM_RPM_SCALE      8300
  6   CL1TERM   -2.64160e-02
  7   CL2TERM   +1.03154e-03
  8   CL3TERM   +4.87982e-02
  9   CL4TERM   +6.31766e-06
 10   CL5TERM   +1.12532e+00
 11   SWITCH_FREQ 20
 12   ADVANCE 10.00
```