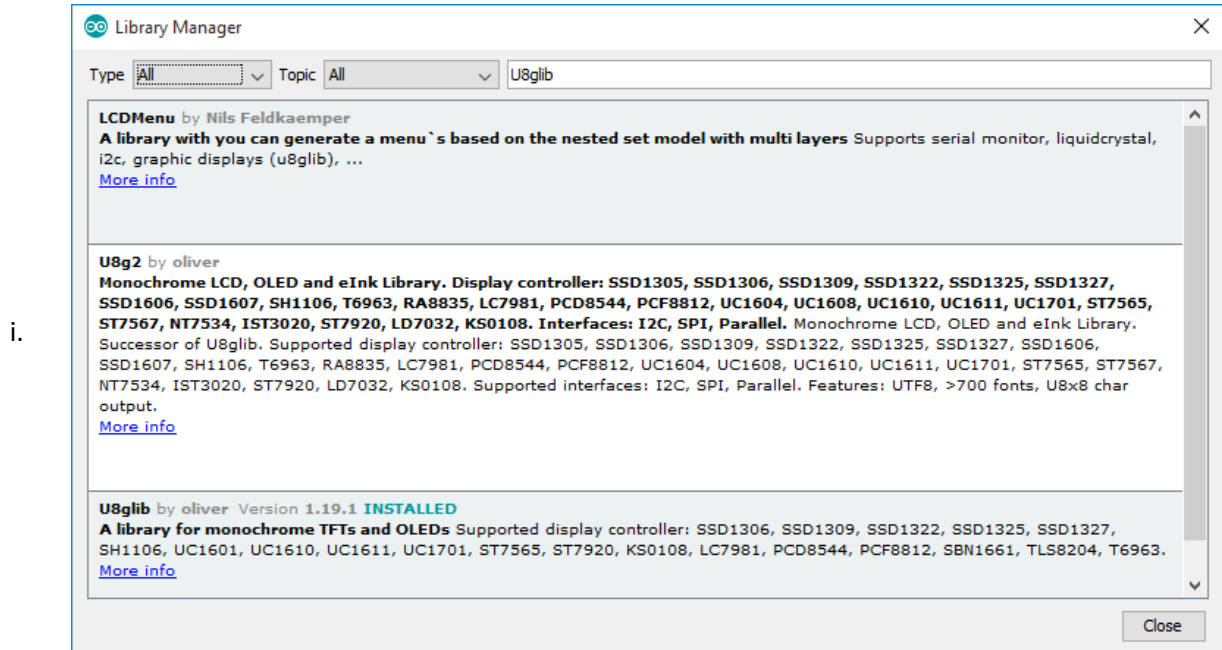


- a. Zmeny, ktoré je treba udelat jsou popsane zde: <http://reprap.org/wiki/Marlin>
- b. Je treba I stahnout U8glib pomoci Library manageru (v Arduino IDE menu Sketch->Include Library->Manage Library). Do filteru zadat "U8glib ". Kliknout na U8glib by Olivier version... A dat Install. Nic dalsiho nedelat. Pak dat Compile/Upload...
POZOR: Nesmi se stahovat knihovna z uvedeneho linku (a davat kamkoli manualne), protoze jinak to skonci chybou, ze jsou funkce definovane duplicitne (resenim je odstavit manualen pridane knihovny a odmazat I z
c:\Users\SKUTECNYUSERNAME\AppData\Local\Temp\arduino_build_52969\sketch)



- i.
 - ii. **U8g2** by oliver
Monochrome LCD, OLED and eInk Library. Display controller: SSD1305, SSD1306, SSD1309, SSD1322, SSD1325, SSD1327, SSD1606, SSD1607, SH1106, T6963, RA8835, LC7981, PCD8544, PCF8812, UC1604, UC1608, UC1610, UC1611, UC1701, ST7565, ST7567, NT7534, IST3020, ST7920, LD7032, KS0108. Interfaces: I2C, SPI, Parallel. Monochrome LCD, OLED and eInk Library. Successor of U8glib. Supported display controller: SSD1305, SSD1306, SSD1309, SSD1322, SSD1325, SSD1327, SSD1606, SSD1607, SH1106, T6963, RA8835, LC7981, PCD8544, PCF8812, UC1604, UC1608, UC1610, UC1611, UC1701, ST7565, ST7567, NT7534, IST3020, ST7920, LD7032, KS0108. Supported interfaces: I2C, SPI, Parallel. Features: UTF8, >700 fonts, U8x8 char output.
[More info](#)
 - U8glib** by oliver Version 1.19.1 **INSTALLED**
A library for monochrome TFTs and OLEDs Supported display controller: SSD1306, SSD1309, SSD1322, SSD1325, SSD1327, SH1106, UC1601, UC1610, UC1611, UC1701, ST7565, ST7920, KS0108, LC7981, PCD8544, PCF8812, SBN1661, TLS8204, T6963.
[More info](#)
- c. Dokoncit configuration avanced
 - i. `#define E0_AUTO_FAN_PIN 9` - viz
<https://github.com/MarlinFirmware/Marlin/issues/5940>
<https://github.com/MarlinFirmware/Marlin/issues/5147> nebo
<https://github.com/MarlinFirmware/Marlin/issues/3234>
 - Configuration_adv.h add `#define E0_AUTO_FAN_PIN 9`
 - ii. In pins_RAMPS.h add `#undef FAN_PIN` at line 196 (bug fix) nebo v RC8 na radku
 - iii. `#define Z_DUAL_STEPPER_DRIVERS` - osa Z ovladana dvema samostatnymi drivery
 - iv. `#define BABYSTEPPING`
 - v. `#define ENSURE_SMOOTH_MOVES` - zpomaluje display, aby se tisk netrhal
2. Zmenit kroky - lze udelat pres Repetier Host pres EEPROM Settings, ale lze I v Configuration.h na radku :


```
* Default Axis Steps Per Unit (steps/mm)
* Override with M92
*
*                               X, Y, Z, E0 [, E1[, E2[, E3]]]
*/
#define DEFAULT_AXIS_STEPS_PER_UNIT { 160, 160, 6400, 299 }
```
5. Zmenit Max feedrate


```
* Default Max Feed Rate (mm/s)
* Override with M203
*
*                               X, Y, Z, E0 [, E1[, E2[, E3]]]
*/
#define DEFAULT_MAX_FEEDRATE      { 200, 200, 2, 25 }- v repetieru jsem mel na E 50tku
```

6. Max acceleration

```
/**
 * Default Max Acceleration (change/s) change = mm/s
 * (Maximum start speed for accelerated moves)
 * Override with M201
 *
 * X, Y, Z, E0 [, E1[, E2[, E3]]]
 */
#define DEFAULT_MAX_ACCELERATION { 3000, 3000, 100, 10000 }

/**
 * Default Acceleration (change/s) change = mm/s
 * Override with M204
 *
 * M204 P Acceleration
 * M204 R Retract Acceleration
 * M204 T Travel Acceleration
 */
#define DEFAULT_ACCELERATION 800 // X, Y, Z and E acceleration for printing
moves
#define DEFAULT_RETRACT_ACCELERATION 3000 // E acceleration for retracts
#define DEFAULT_TRAVEL_ACCELERATION 1000 // X, Y, Z acceleration for travel (non
printing) moves
```

7. Dle navodu zde http://reprap.org/wiki/PID_Tuning, jsem sputil Gcode

a. Pro extruder

i. M303 E0 S200 C8 a opsal hodnoty:

```
READ: bias: 49 d: 49 min: 198.18 max: 201.67 Ku: 35.81 Tu: 26.74
READ: Classic PID
READ: Kp: 21.48 Ki: 1.61 Kd: 71.80
READ: PID Autotune finished! Put the last Kp, Ki and Kd constants from below
into Configuration.h
READ: #define DEFAULT_Kp 21.48
READ: #define DEFAULT_Ki 1.61
READ: #define DEFAULT_Kd 71.80
```

Prepsat do nastaveni Configuration.h:

```
#define DEFAULT_Kp 26.70
#define DEFAULT_Ki 2.34
#define DEFAULT_Kd 76.11
```

a. Pro bed

i. M303 E-1 S60 C8

1. Vysledkem je vypis:

```
READ: Kp: 314.26 Ki: 34.01 Kd: 725.99
READ: PID Autotune finished! Put the last Kp, Ki and Kd constants
from below into Configuration.h
READ: #define DEFAULT_bedKp 314.26
READ: #define DEFAULT_bedKi 34.01
READ: #define DEFAULT_bedKd 725.99
```

2. Do Configuration.h dam:

```
#define DEFAULT_bedKp 314.26
```

```
#define DEFAULT_bedKi 34.01  
#define DEFAULT_bedKd 725.99
```

Vadí mi, že SD kartu nepřechte 16GB (repetier s tím problém neměl). 8GB karta je OK.