INPUTS

- X, Y & Z end stops for min and max are in their standard place too,
- Axis 4 & 5 end stops are on those pins on Aux-2,
  - Axis 4 min end stop is on D42,
  - Axis 4 max end stop is on D40,
  - Axis 5 min end stop is on D44,
  - Axis 5 max end stop is on D59,
- Probe switch or sensor is on A15,
- Reset switch (soft reset) is on A9,
- Feed hold switch is on A10,
- Cycle start switch is on A11,
- Safety door switch is on A12,

Axis	Pin min	Pin max
AXIS_1 (X)	D3	D2
AXIS_2 (Y)	D14	D15
AXIS_3 (Z)	D18	D19
AXIS_4	D42	D40
AXIS_5	D44	D59
AXIS_6	D57	D58

Location of ports on RAMPS by their name is here : Arduinomega1-4connectors.png
See also the ATmega2560-Arduino pin mapping.

OUTPUTS

- X, Y & Z motors are in their standard place of the RAMPS shield board,

Axis number	Program index	Default axis name	Step pin	Direction pin	Disable pin
1	axis[0]	X	A0	A1	D38
2	axis[1]	Y	A6	A7	A2
3	axis[2]	Z	D46	D48	A8
4	axis[3]	A	D26	D28	D24
5	axis[4]	B	D36	D34	D30
6	axis[5]	C	D49	D51	D53

- Axis 4 (default to A) motor is at the E0 place and axis 5 (default to B) motor is at the E1 place,
- Spindle enable is on D4
- Spindle direction is on D5
- Spindle PWM is on D8 (0-12v on RAMPS by default), it can be moved to D6 or D11 (0-5v) by editing config.h
- Coolant mist is on D9
- Coolant flood is on D10
- There is 4 digital output controlled by tht M62 to M65 GCode commands on D16, D17, D23 and D25

To activate the homing of 2 simultaneous axes, necessary in particular when using cloned axes, for example 5 axes including X and Y clones defined as follows:

```
#define N_AXIS 5            // Number of axes
#define N_AXIS_LINEAR 5     // Number of linear axes
```

(...)

```
#define AXIS_1 0        // Axis indexing value. Must start with 0 and be continuous.
#define AXIS_1_NAME 'X' // Axis names must be in X, Y, Z, A, B, C, U, V & W.
#define AXIS_2 1
#define AXIS_2_NAME 'Y'
#define AXIS_3 2
#define AXIS_3_NAME 'Z'

#if N_AXIS <3
  #error "N_AXIS must be >= 3. N_AXIS < 3 is not implemented."
#endif
#if N_AXIS > 3
  #define AXIS_4 3
  #define AXIS_4_NAME 'X' // Letter of axis number 4
#endif
#if N_AXIS > 4
  #define AXIS_5 4
  #define AXIS_5_NAME 'Y' // Letter of axis number 5
#endif
```