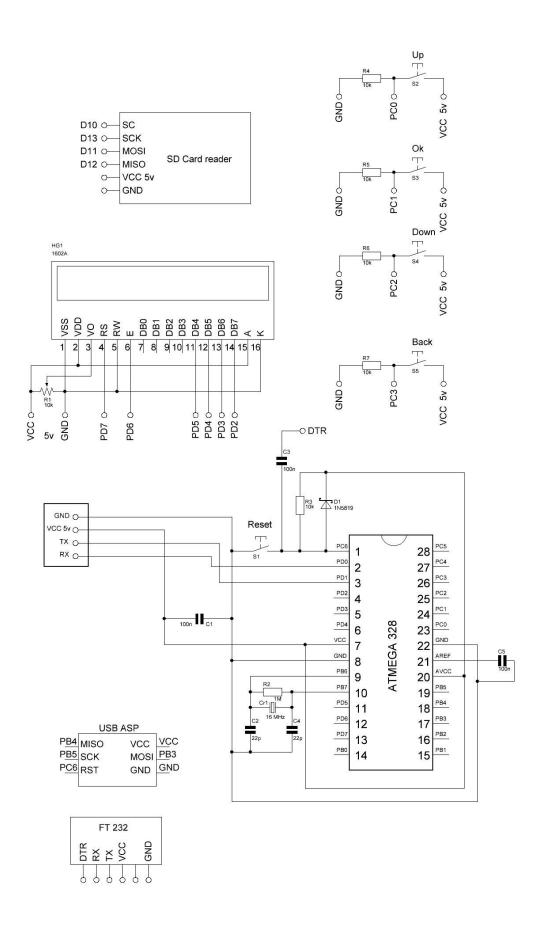
## **ERK CNC V3**



- 1.SD card file system FAT32
- 2.Please use short names while creating file names, file system is available only for 8.3 format. Use maximum 8 characters for file names and 3 characters for extensions. For example; woodcnc.nc here 7 characters used for file name and 2 characters for extension.

ATTENTION: use only 8.3 file name format, otherwise system wont read file.

3. Creating folders, copying files directly to memory card.

Note: In case of high number of files in memory card late response will occure while selecting SD card menu. We suggest to wait 1-5 seconds to let system load files.

- 4. Four buttons used for menu navigation:
  - 1."Up" button
  - 2."Down" button
  - 3."Ok" button
  - 4. "Back" button

## 5.Menu

- 1.Move
- 2.SD card
- 3.Grbl setting
- 4. Grbl commands

1.Move - Move X

Move Y

Move Z

Speed

Reset zero

Returun to zero

**Move X,Y,Z:** use "up" or "down" buttons to move through given numbers .(100, -50, -10, -5, -1, -0.1, 0, 0.1, 1, 5, 10, 50, 100) and then press "Ok" button to select.

Note: In case of crash or no return please check the rx-tx cables, or reset arduino used for grbl.

**Speed**: use "up" and "down" buttons. The ascension will be by 10 till 100 and by 100 after reaching 100.

Note:speed control is used only for manual XYZ move commands.

**Reset zero:** resets (x,y,z) coordinate axes.

Returun to zero: returns stated zero point

Command approval will be shown on upper right corner of display. (ok ,aprox 200 mseconds).

2.SD card: opens and executes files

3.Grbl settings – Stepper on

Stepper off

Laser mode

Cnc mode

**Stepper on:** Activates stepper motors.

**Stepper off:** Deactivates stepper motors.

Laser mode: Use this mode for laser cutting or engraving .

**Cnc mode:** Activates cnc mode.

While activating cnc mode the laser mode automatically deactivates and same vise versa.

Command approval will be shown on upper right corner of display. (ok ,aprox 200 mseconds).

## 4.Grbl commands - \$H Home

## **\$X Kill alarm lock**

**\$H Home, \$X Kill alarm lock:** Sends only **\$H, \$X** commands to grbl.

Command approval will be shown on upper right corner of display. (ok ,aprox 200 mseconds).

The erkcncV3.hex file can be uploaded by Xloader software.

Note: for more about this commands please visit grbl commands webpage. https://github.com/gnea/grbl/wiki