ReprapWorld.com

- One to replicate them all -

Electronics - Mechanical - Filaments

Welcome to our forth newsletter! We are getting nice feedback on these newsletter from you guys, thanks! Starting September 24th I'll be off on vacation for a few weeks, so techsupport will be closed until the 12th of October. If you have feedback regarding the newsletter or you like to share your own news that is interesting for our audience, please feel free to drop a email at: info@reprapworld.com.

Tech blog: Gcode tricks

```
M109 S200 ; wait for temperature to be reac,
G90 ; use absolute coordinates
G92 E0
M82 ; use absolute distances for extrusion
G1 F7200.000 E-2.00000
G92 E0
G1 Z0.300 F12000.000
G1 X80.873 Y85.111 F12000.000
G1 E2.00000 F7200.000
G1 X83.414 Y83.144 E2.20044 F2880.000
```

Ever printed an object taking 16 hours to print, finding out that after the 14th hour the cooling settings in Slic3r were not adequate enough, causing melted towers and you wishing you had adjusted the print speed Slic3r? Fear not, even while printing you can tweak thing using G-code!

So what is G-code? Most of you probably already know this, but for non-technical people this is often still hard to grasp. While printing, your computer will send a lot of commands to your 3D printer. These commands are G-code. For example: to move the X axis to position 100, G1 X100 is send. G1 is the move command, while X100 defines the end position of the move. The firmware on the electronics (Marlin for example), will translate this to actual movement (steps) of the stepper motor. Once the command is executed, the printer will be ready to handle the next G-code command. While printing you can enter G-codes in Pronterface in the box on the right. Other software may have comparable features.

How can G-code help you saving your 16-hour print? Well you can adjust for example the speed of the print during the print. Using M220, you can set the speed factor of the print. For example M220 S50 will reduce the speed to 50% of the original sliced G-code. If you want to hurry your print to the finish in time for dinner, use M220 S200, to print twice as fast (200%). Other cool G-codes are M221 to increase/decrease the extruder output, M106 to set the fan on or M107 to set it off. Also while calibrating your proint G-codes may become in handy. The M92 code will override the steps_per_unit setting in the firmware. So M92 E100 will set the extruder to 100 steps per mm for example.

For a complete list of available G-codes see http://reprap.org/wiki/G-code

3D printer news

Introducing wireprints a new and faster way to print.
Instead of printing layer by layer, the traditional way. It is now possible to print a skeleton of your print and after that you can fill it in.

3D printed car!
Finally a 3D printed car, it is made by a company named local motors. The car was made in 44 hours, and it made it's test run shortly after!

3D bot, a 3D printing robot
This robot can create 3D prints anywhere it is. Even though this is still in testing phase, it may have great potential.

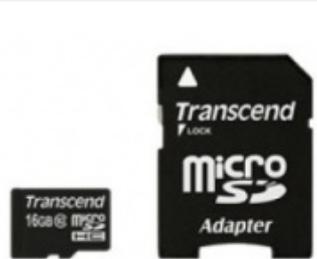## Microsoft updates 3D builder app
Microsoft will update their 3D builder app to easier designing. For those who don't own a 3D printer there will be a special option where you can buy the 3D print you have created, this will be printed and shipped to your home.
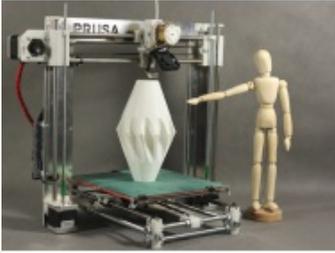
100K thermistor pre-crimped

This is our [100K thermistor pre-crimped](#) on a wire. This wire can handle up to 280 degrees, so you can print either ABS or PLA with it. It has a molex connector which fits nicely on Minitronics

16 GB - microSDHC

The [16 GB - microSDHC](#) can be used in our external SD card reader as well ass directly on board of the megatronics using the microSD slot.

Prusa I3 kits

Our [Prusa I3 kits](#) are available with Megatronics and Minitronics electronics. Starting at € 449.99!

3D Lac (NL,BE,LU,DE only)

Great for printing ABS directly on glass: [3D Lac](#). Just spray, wait till it dries and start printing without warping! Works even at temperatures as low as 50 degrees C. Unfortunatly only for customers in NL,BE,LU,DE, due to shipping restrictions.

* Prices are exluding VAT and subject to change without notice