

3DPrinter

The 3DPrinter package supports fast project development with a 3D printer. It is equipped with the most important functions and can be expanded as desired. Standard features include 3 axes and 2 extruders. The example project is based on a 2-CPU solution, which means that the process and the visualization are divided over two separate stations. The Application Demo was constructed with hardware from the SSK 002 (SIGMATEK Starter Kit) to enable testing immediately after the initial upload.



FEATURES

- Loading G-code file / editing / operation / simulation / visualization
- Manual initial start-up
+ 3 axes and 2 extruders
+ 3 temperature ranges (heating bed / heating chamber / extruder)
- Extruder change and offset value are implemented for 2 extruders and very easily expandable
- Simple conversion to other kinematics, such as LinearDelta kinematics
- 1:1 importable into an SSK 002 (SIGMATEK Starter Kit)
- The ability to start at a specific line number allows an interrupted print job to continue
- The typical machine functions are already implemented and fully programmed
- An interface is integrated, through which G-code lines can be transmitted in ASCII format. Simplify3D or RepetierHost are 2 examples that were tested.

SOFTWARE VERSIONS

Design environment	LASAL CLASS 2, LASAL SCREEN
Operating system	RTOS, Salamander

SYSTEM REQUIREMENTS

Performance Index	A > B > C > D > E				
Visualization Memory Requirements					
Code Size [KB]	2.9				
User Heap [KB]	46				
LSE Project Size [KB]	17.8				
SRAM [bytes]	0				
Process Control Memory Requirements					
Code Size [KB]	3.4				
User Heap [KB]	8.6				
SRAM [bytes]	544				

COMPONENTS

Library 3DPRINTER

- Contains all classes of the package for importing or updating existing applications

Application Demo

- Shows the uses of classes based on an example with a Cartesian robot and 2 extruders
- Resolution 800x480

Documentation

- All class documentation, as well as user and program manual where required