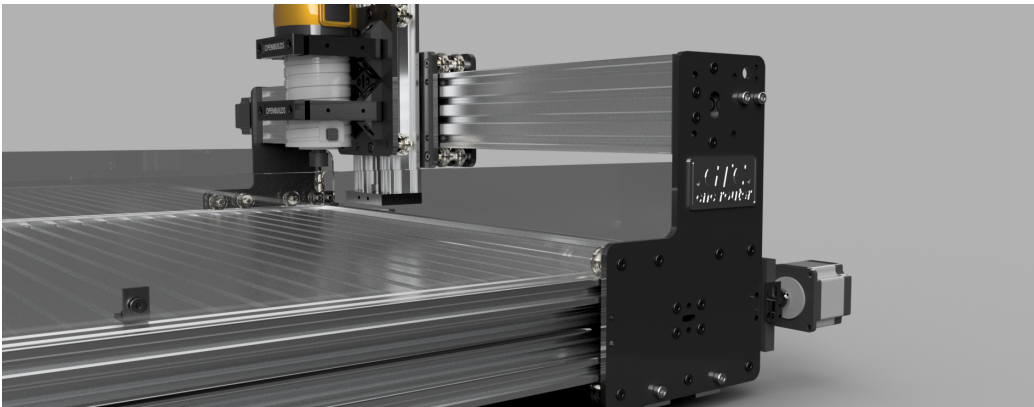


# C-BEAM GTC

Cartesian Style CNC

SPECS SHEET  
12.03.2017



*This document is prepared to provide information on technical specifications, hardware and capabilities of C-BEAM GTC Ver.2.40 (upgraded version)*

## Technical Specs

### Overall Dimensions <sup>(1)</sup>

1100mm X 850mm X 350mm

### Travel Distances

Y: 760 mm

X: 660 mm

X: 70 mm

### Movement

2x Y Gantries with 7 extreme wheels moving on 8 mm metric acme lead screw through double anti backlash nut blocks

X gantry with 6 extreme wheels moving on 8 mm metric acme lead screw through double anti backlash nut blocks

Z gantry with 6 extreme wheels & 4 mini wheels moving on 8 mm metric acme lead screw through double anti backlash nut blocks

## Electronics

### Operating System

- Raspbian Pixel
- Raspberry Pi 3B
- 7" Touchscreen

### Control

- CNC XPro V2
- 2X 25 Amps Solid State Relays
- 3X 22 mm momentary switches
- 1X 22 mm on/off switch
- 1X 22 mm eStop switch
- 2X 3 way toggle switches
- 3x mechanical limit switches

### Motors

4x Nema23 motors

### Power

24V 14.6 A PSU

### Software

Grbl 9j<sup>(2)</sup>  
Universal Gcode Sender <sup>(3)</sup>  
Grbl Controller  
Chilipeppr grbl workspace  
bCNC (not tested fully)

## Capabilities

- \* Auto spindle & vacuum/coolant on and off through gcode in auto mode
- \* Manual spindle & vacuum/coolant activation in manual mode through toggle switches
- \* Full aluminum vslot bed with enhanced clamping system
- \* Z-Probing
- \* Enhanced Y gantry support
- \* Enhanced EMI protection
- \* Efficient cooling
- \* Standalone operation without additional PC/laptop
- \* Remote operation through VNC server
- \* Browser based control over Serial Port Json Server <sup>(4)</sup>
- \* Browser based GPIO control over GPIO Json Server <sup>(4)</sup>

<sup>(1)</sup> Including motors

<sup>(2)</sup> grbl 1.1 tested successfully

<sup>(3)</sup> Visualization inoperative on Raspberry Pi 3

<sup>(4)</sup> Through chilipeppr grbl workspace

Visit <http://www.openbuilds.com/builds/c-beam-gtc.3250/> for further details.

