

3D printing NOW

## THE ULTIMATE 3D PRINTER CONTROLLER

# **System on Board**

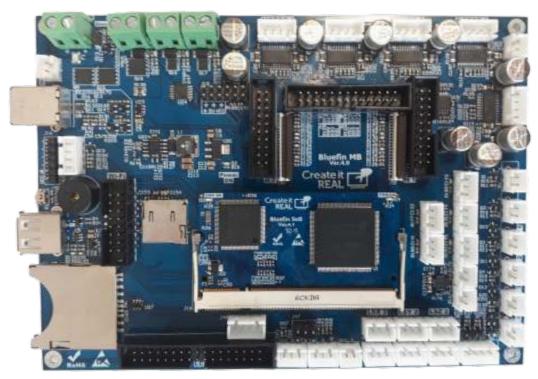


## **Customizable**



## **Fast printing**

With the System on Board you get all the flexibility you need, as well as powerful features such as 2 times faster printing. The board contains Create it REAL's proprietary dual processor technology. The real time processor controls the motors with nanosecond precision, while the front end processor handles all interactions with the touch screen. You can either use the System on Board with our Bluefin motherboard, or you can design your own system around it.



## **Bluefin Motherboard**

The Bluefin Motherboard contains the ideal features for a modern 3D printer. With protections against electrical failures as well as possibilities for extensions enabling WiFi and additional motors, the Bluefin motherboard is flexible and ready for you to get the most out of your printer. You can easily configure the board using our Slicing software REALvision. Get in touch to know more



WiFi



**Electrical Protection** 

#### KEEP IN TOUCH



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# TECHNICAL SPECIFICATIONS





Bluefin System on board

Bluefin Motherboard

Accessible Using our slicing software, REALvision, you can communicate directly with the board in the following ways. No extra drivers or software necessary.	<ul> <li>Support for WiFi extension</li> <li>Support for USB memory stick</li> <li>Support for SD card</li> <li>Support for USB-B connection</li> <li>Support for 3.2 inch touch screen</li> <li>Secure printing: End to end encryption of print files. Get in touch to know more.</li> </ul>	<ul> <li>Print from USB memory stick</li> <li>Print from SD card</li> <li>Print from PC (USB-B connection)</li> <li>Print over WiFi (With extension board)</li> <li>3.2 inch touch screen</li> <li>Secure printing: End to end encryption of print files. Get in touch to know more.</li> </ul>
Safe:	<ul> <li>3.3 V input voltage,</li> <li>Firmware protection features from</li> <li>Thermal runaway</li> <li>Over current conditions</li> </ul>	12-24 V input voltage  De-coupled power control – low current buttons can be used  Firmware and hardware protection from:  Reverse polarity Back EMF Over voltage Over current - Software Configured Shortcut protection - fuse ESD protection
High performance	10 fully parallel stepper motor driver outputs  Up to 25.000.000 steps per second  Software controlled Motor reference  Current (requires specific chip)  Motor driver fault inputs for diagnostics  Decay mode control	5 built-in stepper motor drivers (up to 10 total with extension board)  • Up to 2.2A - software controlled  • 1/32 Step  • Up to 250.000 steps/sec  • No cooling required up to 1.7A
Heat control	Up to 5 temperature controllers	3 temperature controllers 100K Thermistors and K-Type thermocouple.