

Specifications requirements for MCU

For my whiteboard writer I require a microcontroller board that will be responsible for the control of the system. For the operation it has to drive four stepper motors and one servo. For the homing of the stepper motors some analog sensors are planned. The system requirements are divided in to four categories:

Must

1. Connect to four stepper controllers (TMC2208) via UART.
2. Have debugging capabilities.
3. Read read four analog sensor signals.

Should

1. Connect to each of the four stepper controllers directly. Preferred over a switching solution.
2. RIOT-OS support.
3. have UART-baud $> 200k$

Could

1. have a FPU.

Wont

1. force me to work with MBED.
2. run on dieselfuel.