In order to operate the desired hardware, something like the PIC18F24K40 would be recommended due to its

* 64MHz internal clock
* 28 pins
* 1kB of RAM
* 16kB of Program Memory
* UART

This should be enough for us to have 13 outputs for motors and 9 inputs for sensors

* With a different microcontroller (with different clock frequency), we would have to change the number of available motor states (for servos for example) as well as the lower and upper bounds for the parts (which could also vary per build/ruppet). There would also be advantages to set these bounds via the combination of two-way communication and sensory inputs (automatic calibration mechanism).

Could we make communication wireless…? Could we run ruppet off of a raspberry pi?