**A picture containing text, electronic engineering, electronics, electronic component

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Acts as a motion control

Acts as a Brain

Master Sends an array of raw angles

Slave sends a confirmation cod that the motors moved to that position.

PROBLEMS ENCOUNTERED:

1. Address conflicts on the I2C of S5600 magnetic encoder (an example of I2c device)

Solution:

* Use TCA9548A and switch on channels using arduino’s built in library called Wire.h .

1. Slave Arduino doesn’t know the current angle of the motors.

Possible Solutions:

* Move the motor every 0.5 seconds then reads the current angle. If the target and current angle matches, sends a command to slave Arduino to stop the sequence of the motor states. (NOT A RELIABLE OPTIONS BECAUSE IT TAKES A LOT OF PROCESSING)
* The slave should be able to access the AS5600 magnetic sensors and reads the current angle from them. (BEST POSSIBLE CHOICE)
  + One Arduino should act as a master at a given time.