True

True

False

False

False

True

False

No

No

Yes

Yes

True

Execute normal command

Command == MSG\_PING, MSG\_RST or MSG\_TURNXX

Exit

Is response ACK?

Write 4b command to bus

**Hardware design:**

Wait for bus to reset

**Hardware design:**

Read response from bus

Is response ACK?

Command == Exit

Set value to 1 (only important for strobe)

Set direction

**Hardware design:**

Export pin

**Hardware design:**

Initialize GPIO pins

Command == MSG\_GET?

Prompt user for command

print adc value

Execute adc prompt

Read response from bus

Wait for bus to reset

**Hardware design:**

I -= 4

adc\_value += (receive\_msg << i)

Read response from bus into receive\_msg

I < 0

I = 8,

receive\_msg = 0,

adc\_value = 0;

**Hardware design:**

Wait for bus to reset.

**Hardware design:**

Write MSG\_GET to bus

**Hardware design:**