CURTAIN CONTROL BLOCK DIAGRAM

WEBCAM
'SEES' AREA IN FRONT OF WINDOW

LAPTOP
DETECTS POSITION OF PEOPLE AND SENDS TARGET POSITION AS BYTE VALUE; RECEIVES REAL CURTAIN POSITION AS BYTE VALUE

MICROCONTROLLER
PID-CONTROLS DC GEARMOTOR

H-BRIDGE
DRIVES DC GEARMOTOR

END SWITCH
ROTARY ENCODER
DC GEARMOTOR

CONNECTED MECHANICALLY

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CURTAIN CONTROL SCHEMATIC

POSITION FEEDBACK

PHOTOINTERRUPTER [1]

[ROTARY ENCODER DISC]

PHOTOINTERRUPTER [2]

END SWITCH

Pulse Width Modulation (PWM) Input [A: IN-A, B: IN-B]

ADC0, ADC1, ADC2

INT0, INT1

PD4

100N

22pF

16MHz

ATMEGA8

SCK, MISO, MOSI

PB0, PB2

D-ADJUST, I-ADJUST, P-ADJUST

PID ADJUSTMENT POTIS

PHOTOINTERRUPTER [1]

PHOTOINTERRUPTER [2]

[ROTARY ENCODER DISC]

POSITION FEEDBACK

S-CURVE CONTROL SCHEMATIC

CONNECTION TO DC GEAR MOTOR VIA H-BRIDGE [CHIP: VNH3SP30]

I'VE USED THIS VERY RELIABLE KIT:

DOCUMENTATION:

www.robotikhardware.de
RNMINIHBRIDGE

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