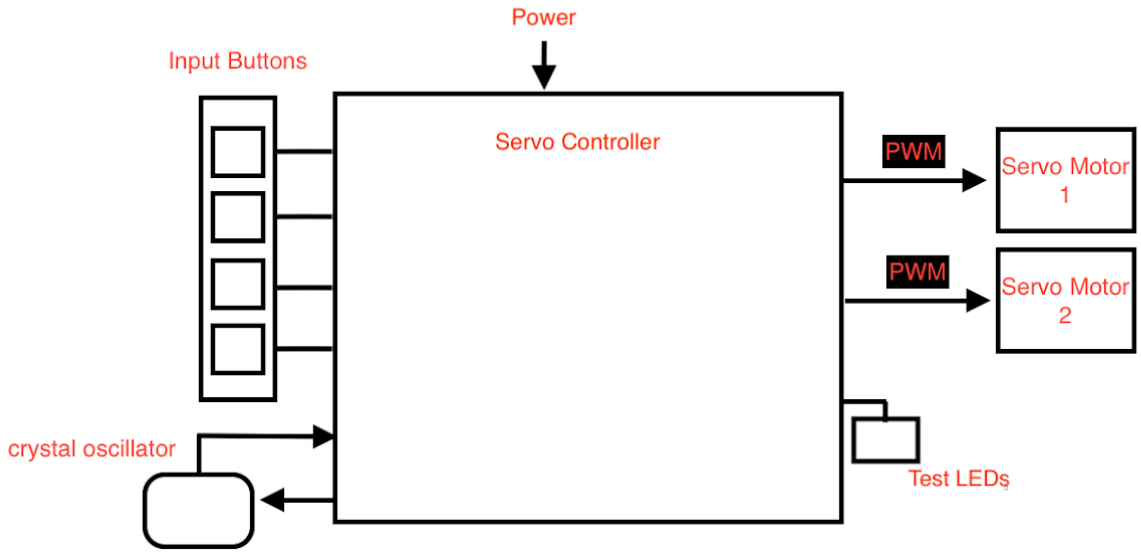
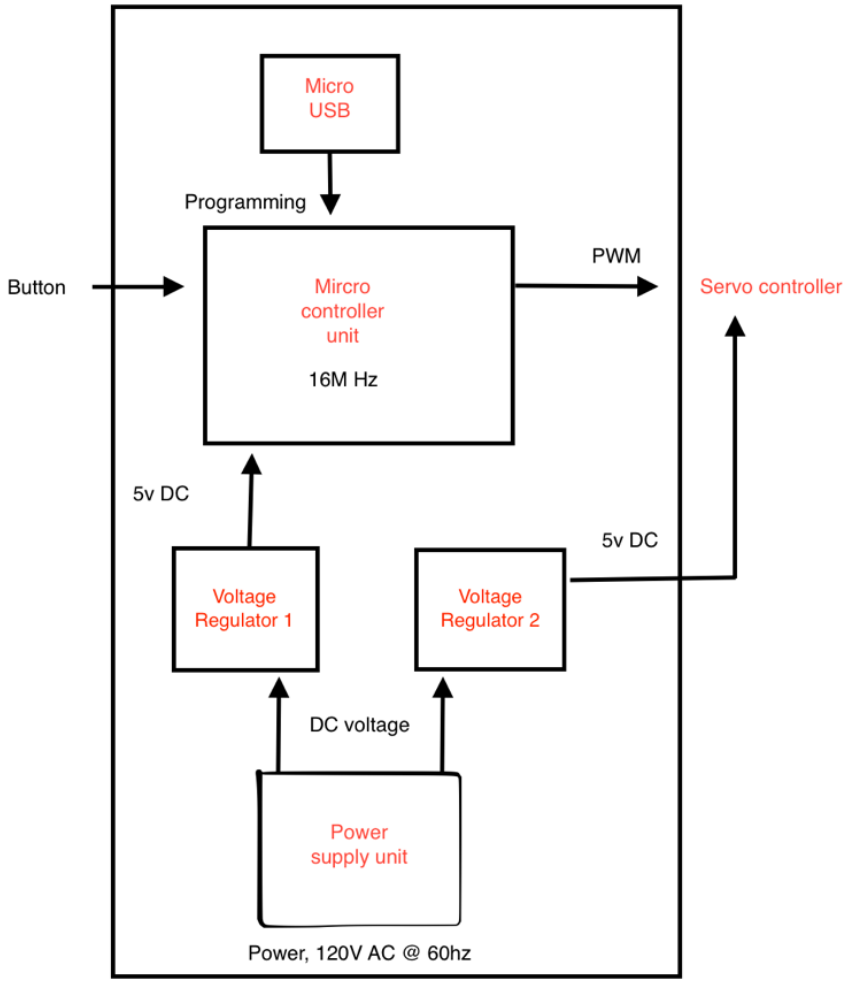
ECE411
Group 14
Ammar Khan, Abdullah Barghouti, Travis Hermant, Josh Davis

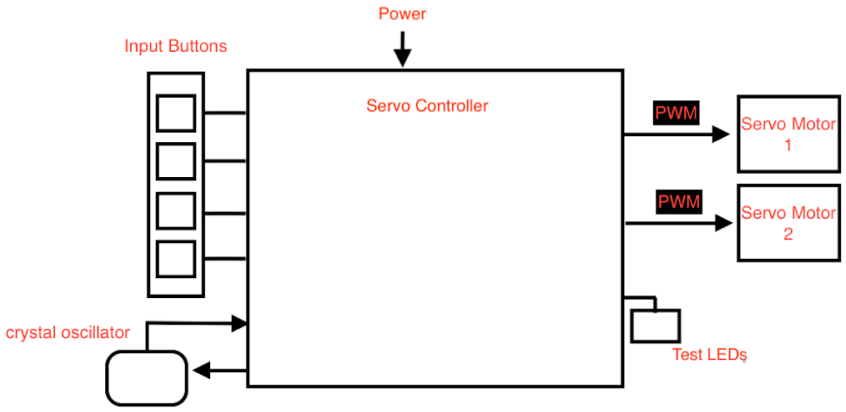
Level 0



Level 1



ECE411
Group 14
Ammar Khan, Abdullah Barghouti, Travis Hermant, Josh Davis

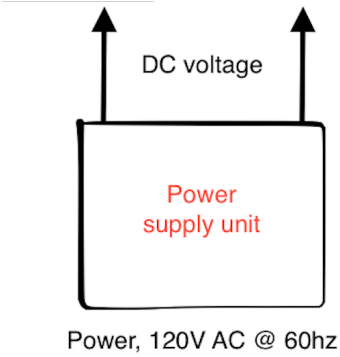


Module	Servo Controller
Inputs	4 Button Pad: Switch Power: 120V A/C, regulated to 5VDC
Outputs	Servo Control 1: PWM (20Hz) Servo Control 2: PWM (20Hz) LED: Used for debugging
Functionality	Based on button inputs, the attached servos will pan and tilt the camera residing on its mount

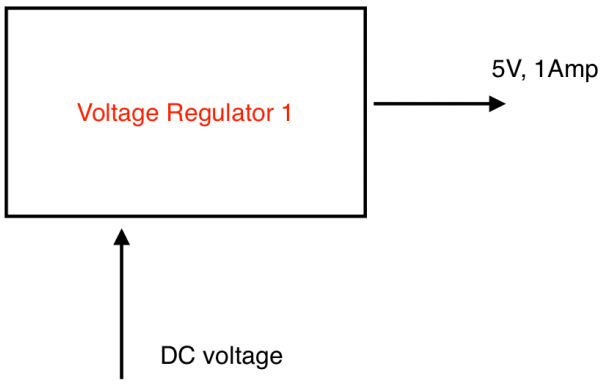
Module	Microcontroller
Inputs	4 Button Pad: Switch Power: 5V/1A DC from VR1
Outputs	Servo Control 1: PWM (20 Hz control signal) Servo Control 2: PWM (20 Hz control signal)

ECE411
Group 14
Ammar Khan, Abdullah Barghouti, Travis Hermant, Josh Davis

Functionality	Utilizes arduino libraries and bootloader to determine how PWM signals should be altered for the servo control, depending on which buttons are pressed



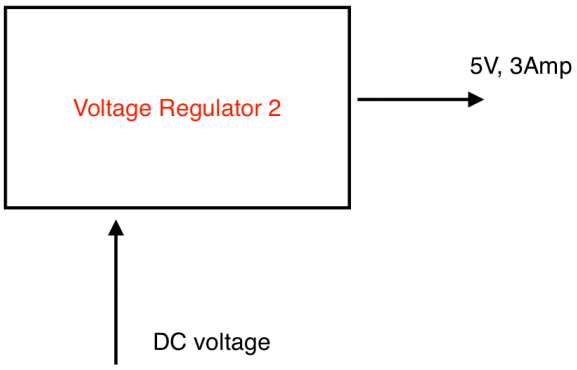
Module	Power Supply Unit
Inputs	120V A/C @ 60Hz
Outputs	12V/3A DC
Functionality	Converts 120V A/C



Module	Voltage Regulator 1

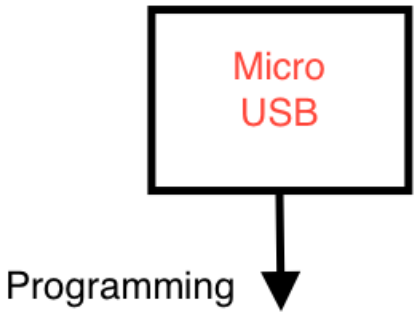
ECE411
Group 14
Ammar Khan, Abdullah Barghouti, Travis Hermant, Josh Davis

Inputs	12V/3A
Outputs	5V, up to 1A
Functionality	Step down voltage level from 120V to 5V Limit current output to 1 Amp



Module	Voltage Regulator 2
Inputs	12V/3A
Outputs	5V, up to 3A
Functionality	Step down voltage level from 120V to 5V limit current output to 3 Amp

ECE411
Group 14
Ammar Khan, Abdullah Barghouti, Travis Hermant, Josh Davis



Module	USB
Inputs	USB connection to computer/ programming machine
Outputs	Sends instructions to ATMeg processor using the USB protocol
Functionality	Program servo controller chip