	PiGPIO Left	Pi GPIO Right	
Pin 16 on MCP3008	1. 3v Power	2. 5v Power	To 5v rail on breadboard
	3. GPIO 2 (I2C1 SDA)	4. 5v Power	
	5. GPIO 3 (I2C1 SCL)	6. Ground	
	7. GPIO 4 (GPCLK0)	8.GPIO 14 (UART TX)	
	9. Ground	10. GPIO 15 (UART RX)	
	11. GPIO 17	12. GPIO 18 (PCM CLK)	
	13. GPIO 27	14. Ground	
	15. GPIO 22	16. GPIO 23	
Pin 15 on MCP3008	17. 3v Power	18. GPIO 24	
Pin 11 on MCP3008	19. GPIO 10 (SPI0 MOSI)	20. Ground	To Ground rail on breadboard
Pin 12 on MCP3008	21. GPIO 9 (SPI0 MISO)	22. GPIO 25	
Pin 13 on MCP3008	23. GPIO 11 (SPI0 SCLK)	24. GPIO 8 (SPI0 CE0)	Pin 10 on MCP3008
	25. Ground	26. GPIO 7 (SPI0 CE1)	
	27. GPIO 0 (EEPROM SDA)	28. GPIO 1 (EEPROM SCL)	
	29. GPIO 5	30. Ground	Pin 9 on MCP3008
	31. GPIO 6	32. GPIO 12 (PWM0)	
	33. GPIO 13 (PWM1)	34. Ground	
	35. GPIO 19 (PCM FS)	36. GPIO 16	
	37. GPIO 26	38. GPIO 20 (PCM DIN)	IN 1 Relay Module
	39. Ground	40. GPIO 21 (PCM DOUT)	IN 2 Relay Module

Pi
(all logic and
logging)

Digital Out
Signal to start watering

MCP
3008

Relay

Analog In

Sensors

Pump

Water

Moisture readings

Plant