

Part List

Main Controller

Source Data From:

MainController.SchDoc

Project:

PrintingProjectAllDocs.PrjPCB

Variant:

U of U Computer Engineering

Report Date: 9/13/2012 4:30:50 PM

Print Date: 13-Sep-12 4:31:04 PM

Designator	Value	Comment	Vendor	Description	Quantity	Price	Total Parts Price
R1, R2, R3, R4, R5	1K	Res1	Taydaelectronics	Resistor	5	0.01	\$0.05
D1, D2, D3, D4, D5, D6, D7	1N4001	1N4001	Taydaelectronics	1.0 Ampere General Purpose Rectifier, 1 Amp General Purpose Rectifier	7	0.01	\$0.07
C5, C6, C7, C8, C9	1uF	Cap	Taydaelectronics	Capacitor	5	0.03	\$0.15
Q1, Q2, Q3, Q4, Q5	2N3904	2N3904	Taydaelectronics	NPN General Purpose Amplifier	5	0.01	\$0.05
C2, C4	4.7uF	Cap	Taydaelectronics	Capacitor	2	0.03	\$0.06
C1, C3	470uF	Cap	Taydaelectronics	Capacitor	2	0.03	\$0.06
J1, J2, J3, J4, J5	D Connector 9	D Connector 9	Taydaelectronics	Receptacle Assembly, 9 Position, Right Angle	5	0.48	\$2.40
P3, P9, P12	Header 2	Header 2	Taydaelectronics	Header, 2-Pin	3	0.02	\$0.06
P11	Header 3	Header 3	Taydaelectronics	Header, 3-Pin	1	0.03	\$0.03
P1	Header 4	Header 4	Taydaelectronics	Header, 4-Pin	1	0.04	\$0.04
P2, P5, P8, P14, P16, P17, P18, P19	Header 5	Header 5	Taydaelectronics	Header, 5-Pin	8	0.05	\$0.40
P10	Header 6	Garage_HVAC	Taydaelectronics	Header, 6-Pin	1	0.06	\$0.06
P4	Header 6	Header 6	Taydaelectronics	Header, 6-Pin	1	0.06	\$0.06
P6	Header 7	Header 7	Taydaelectronics	Header, 7-Pin	1	0.07	\$0.07
P13, P15	Header 9	TempSenseBoard1	Taydaelectronics	Header, 9-Pin	2	0.09	\$0.18
VR2	L7805CP	L7805CP	Taydaelectronics	Positive Voltage Regulator	1	0.24	\$0.24
VR1	L7812CP	L7812CP	Taydaelectronics	Positive Voltage Regulator	1	0.24	\$0.24
P7	Plug	Spare	Taydaelectronics	Plug	1	0.00	\$0.00
U3	SN74HC154NT	SN74HC154NT	Digi-Key	4-Line to 16-Line Decoder / Demultiplexer	1	3.70	\$3.70
U1, U2, U5	SN7416N	SN7416N	Taydaelectronics	Hex Inverter Buffer / Driver with High-Voltage Outputs	3	0.18	\$0.54
U4	Teensy2.0++	Teensy2.0++	Taydaelectronics	The teensy 2.0 from w w w .PJRC.com	1	24.0	\$24.00
						Total	\$32.46

HVAC & Garage Control

Source Data From:

HeatingAC_Garage.SchDoc

Project:

PrintingProjectAllDocs.PrjPCB

Variant:

U of U Computer Engineering

Report Date:	9/13/2012	4:32:02 PM					
Print Date:	13-Sep-12	4:32:15 PM					
Designator	Value	Comment	Vendor	Description	Quant	Price	Total Parts Price
C1, C4	0.1uF	Cap	Taydaelectronics	Capacitor	2	0.03	\$0.06
C2	1uF	Cap	Taydaelectronics	Capacitor	1	0.03	\$0.03
C3	100uF	Cap	Taydaelectronics	Capacitor	1	0.03	\$0.03
D1, D2, D3, D4	LED0	LED_White	Taydaelectronics	Typical INFRARED GaAs LED	4	0.04	\$0.16
D5, D6, D7, D8, D9, D10, D11	1N4001	1N4001	Taydaelectronics	1.0 Ampere General Purpose Rectifier	7	0.01	\$0.07
J1	D Connector 9	D Connector 9	Taydaelectronics	Receptacle Assembly, 9 Position, Right Angle	1	0.48	\$0.48
K1, K2, K3, K4, K5, K6, K7	SPDT	SPDT	Taydaelectronics		7	0.64	\$4.48
P1	Header 2	Header 2	Taydaelectronics	Header, 2-Pin	1	0.02	\$0.02
P2	Header 3	Header 3	Taydaelectronics	Header, 3-Pin	1	0.03	\$0.03
P3	Header 7	Header 7	Taydaelectronics	Header, 7-Pin	1	0.07	\$0.07
Q1, Q2, Q3, Q4, Q5, Q6, Q7	2N3904	2N3904	Taydaelectronics	NPN General Purpose Amplifier	7	0.01	\$0.07
R1, R2, R3, R5	510	Res1	Taydaelectronics	Resistor	4	0.01	\$0.04
R4, R6, R7, R8, R9, R10, R11, R12, R13, R20, R21, R22, R23	3.3k	Res1	Taydaelectronics	Resistor	13	0.01	\$0.13
R14, R15, R16, R17, R18, R19	10k	Res1	Taydaelectronics	Resistor	6	0.01	\$0.06
U1, U3, U4	OptoCoupler	OptoCoupler	Taydaelectronics		3	0.3	\$0.90
U2	SN7416N	SN7416N	Taydaelectronics	Hex Inverter Buffer / Driver with High-Voltage Outputs	1	0.18	\$0.18
VR1		L78L05ACZ	Taydaelectronics	Voltage Regulator	1	0.24	\$0.24
						Total	\$7.05

Part List

Bi-Polar Motor driver BOM 2 For Schematic Document [MotorController.SchDoc]

Source Data From:

MotorController.SchDoc

Project:

PrintingProjectAllDocs.PrjPCB

Variant:

U of U Computer Engineering

Report Date: 9/13/2012 4:32:51 PM

Print Date: 13-Sep-12 4:33:05 PM

Designator	Value	Comment	Vendor	Description	Quant	Price	Total Parts Price
C1	1uF	Cap	Taydaelectronics	Capacitor	1	\$0.03	\$0.03
C2	4.7uF	Cap	Taydaelectronics	Capacitor	1	\$0.03	\$0.03
D1, D2, D3, D4, D5, D6, D7, D8	Diode 1N5408	Diode 1N5408	Taydaelectronics	3 Amp Medium Power Silicon Rectifier Diode	8	\$0.03	\$0.24
D9	LED0	LED0	Taydaelectronics	Typical INFRARED GaAs LED	1	\$0.04	\$0.04
D10	Diode 1N4148	Diode 1N4148	Taydaelectronics	High Conductance Fast Diode	1	\$0.01	\$0.01
P1	Header 6	Header 6	Taydaelectronics	Header, 6-Pin	1	\$0.06	\$0.06
P2	Header 4	Header 4	Taydaelectronics	Header, 4-Pin	1	\$0.04	\$0.04
Q1, Q2, Q3, Q4, Q5, Q6, Q7, Q8, Q9, Q10	2N3904	2N3904	Taydaelectronics	NPN General Purpose Amplifier	10	\$0.01	\$0.10
R1, R2, R3, R5	1K	Res1	Taydaelectronics	Resistor	4	\$0.01	\$0.04
R4, R6, R7, R8, R9, R10, R17, R18, R19, R20, R22	10k	Res1	Taydaelectronics	Resistor	11	\$0.01	\$0.11
R11, R13, R14, R15, R21	3.3k	Res1	Taydaelectronics	Resistor	5	\$0.01	\$0.05
R12, R16	470	Res1	Taydaelectronics	Resistor	2	\$0.01	\$0.02
U1, U2, U3, U4	TIP126	TIP126	Taydaelectronics	TIP126 -PNP	4	\$0.35	\$1.40
U5, U6, U7, U8	TIP120	TIP120	Taydaelectronics	NPN 60V -5A TO-220	4	\$0.26	\$1.04
U9	LM555CN	LM555CN	Taydaelectronics	Timer	1	\$0.14	\$0.14
U10	MC74HC194N	MC74HC194N	Digi-Key	4-Bit Bidirectional Universal Shift Register	1	\$0.68	\$0.68
U11	SN754410NE	SN754410NE	U of U	Quadruple Half-H Driver	1	\$0.00	\$0.00
						Total	\$4.03

Damper Section

PrintingProjectAllDocs.PrjPCB

U of U Computer Engineering

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4:34:07 PM

Designator	Value	Comment	Vendor	Description	Quant	Price	Total Parts Price
D1, D2, D5, D6	1N4001	1N4001	Taydaelectronics	1.0 Ampere General Purpose Rectifier	4	\$0.01	\$0.04
D3, D4, D7, D8	LED0	LED_White	Taydaelectronics	Typical INFRARED GaAs LED	4	\$0.04	\$0.16
J1, J2, J3, J4	D Connector 9	D Connector 9	Taydaelectronics	Receptacle Assembly, 9 Position, Right Angle	4	\$0.48	\$1.92
K1, K2, K3, K4, K5, K6, K7, K8, K9, K10, K11, K12, K13, K14, K15, K16	SPDT	SPDT	Taydaelectronics		16	\$0.64	\$10.24
P1	Header 4	Header 4	Taydaelectronics	Header, 4-Pin	1	\$0.04	\$0.04
P2	Header 2	Header 2	Taydaelectronics	Header, 2-Pin	1	\$0.02	\$0.02
P3	Header 7	Header 7	Taydaelectronics	Header, 7-Pin	1	\$0.07	\$0.07
Q1, Q2, Q3, Q4, Q5, Q6, Q7, Q8, Q9, Q10, Q11, Q12, Q13, Q14, Q15, Q16, Q17, Q18, Q19, Q20	2N3904	2N3904	Taydaelectronics	NPN General Purpose Amplifier	20	\$0.01	\$0.20
R1, R2, R3, R7, R19, R21, R25, R29	10k	Res1	Taydaelectronics	Resistor	8	\$0.01	\$0.08
R4, R8, R9, R10, R11, R14, R15, R16, R26, R27, R30, R31, R32, R34	1K	Res1	Taydaelectronics	Resistor	14	\$0.01	\$0.14
R5, R6, R12, R13, R20, R24, R28, R33	1M	Res1	Taydaelectronics	Resistor	8	\$0.01	\$0.08
R17, R18, R22, R23	500	Res1	Taydaelectronics	Resistor	4	\$0.01	\$0.04
						Total	\$13.03

Part List

Sprinkler Control BOM 2 For Schematic Document [SprinklerBoard.SchDoc]

Source Data From:

SprinklerBoard.SchDoc

Project:

PrintingProjectAllDocs.PrjPCB

Variant:

U of U Computer Engineering

Report Date: 9/13/2012 4:35:04 PM

Print Date: 13-Sep-12 4:35:18 PM

Designator	Value	Comment	Vendor	Description	Quant	Price	Total Parts Price
D1, D2, D3, D4, D5, D6	1N4001	1N4001	Taydaelectronics	1.0 Ampere General Purpose Rectifier	6	\$0.01	\$0.06
D7, D8, D9, D10, D11, D12	LED0	LED_White	Taydaelectronics	Typical INFRARED GaAs LED	6	\$0.04	\$0.24
J1	D Connector 9	D Connector 9	Taydaelectronics	Receptacle Assembly, 9 Position, Right Angle	1	\$0.48	\$0.48
K1, K2, K3, K4, K5, K6	SPDT	SPDT	Taydaelectronics		6	\$0.64	\$3.84
P1	Header 7	Header 7	Taydaelectronics	Header, 7-Pin	1	\$0.07	\$0.07
Q1, Q2, Q3, Q4, Q5, Q6	2N3904	2N3904	Taydaelectronics	NPN General Purpose Amplifier	6	\$0.01	\$0.06
R1, R2, R3, R4, R5, R6, R7, R8	1K	Res1	Taydaelectronics	Resistor	8	\$0.01	\$0.08
R9, R10, R11, R12, R13, R14	120	Res1	Taydaelectronics	Resistor	6	\$0.01	\$0.06
U1	SN7416N	SN7416N	Taydaelectronics	Hex Inverter Buffer / Driver with High-Voltage Outputs	1	\$0.18	\$0.18
U2	74AC138B	74AC138B	Taydaelectronics	3-to-8 Line Decoder Inverting	1	\$0.25	\$0.25
						Total	\$5.32

Part List

Temperature Sensor Control BOM 2 For Schematic Document [TemperatureSensorBloc

Source Data From:	TemperatureSensorBlock.SchDoc
Project:	PrintingProjectAllDocs.PrjPCB
Variant:	U of U Computer Engineering

Report Date:	9/13/2012	4:36:25 PM
Print Date:	13-Sep-12	4:36:39 PM

Designator	Value	Comment	Vendor	Description	Quant	Price	Total Parts Price
C1, C2, C4, C5	100pF	Cap	Taydaelectronics	Capacitor	4	0.03	\$0.12
C3	4.7uF	Cap	Taydaelectronics	Capacitor	1	0.03	\$0.03
P1, P2, P3, P4, P5, P6, P7, P8, P9, P10, P12, P13, P14, P15, P16, P17, P18, P19, P20, P21, P22, P23, P24, P25, P26, P27, P28, P29, P30, P31, P32, P33	Header 2	Header 2	Taydaelectronics	Header, 2-Pin	32	0.02	\$0.64
P11	Header 12	Header 12	Taydaelectronics	Header, 12-Pin	1	0.12	\$0.12
R1, R2, R3, R4, R5, R6, R7, R8, R9, R10, R11, R12, R13, R14, R15, R16, R17, R18, R19, R20, R21, R22, R23, R24, R25, R26, R27, R28, R29, R30, R31, R32	15k	Res1	Taydaelectronics	Resistor	32	0.01	\$0.32
U1, U2, U3, U4	CD4051BCN	CD4051BCN	Taydaelectronics	8-Channel Analog Multiplexer/Demultiplexer	4	0.23	\$0.92
						Total	\$2.15

Part List

Wireless Communication Controller BOM 2 For Schematic Document [WirelessCommur

Source Data From:	<u>WirelessCommunications.SchDoc</u>
Project:	<u>PrintingProjectAllDocs.PrjPCB</u>
Variant:	U of U Computer Engineering

Report Date:	9/13/2012	4:37:52 PM
Print Date:	13-Sep-12	4:38:17 PM

Designator	Value	Comment	Vendor	Description	Quant	Price	Total Parts Price
C1	0.1uF	Cap	Taydaelectronics	Capacitor	1	\$0.03	\$0.03
C2	1.0uF	Cap	Taydaelectronics	Capacitor	1	\$0.03	\$0.03
P1	Header 5	Header 5	Taydaelectronics	Header, 5-Pin	1	\$0.05	\$0.05
P2, P7, P8, P9	Header 2	Header 2	Taydaelectronics	Header, 2-Pin	4	\$0.02	\$0.08
P3, P4, P5	Header 10	Header 10	Taydaelectronics	Header, 10-Pin	3	\$0.10	\$0.30
P6	Header 7	Header 7	Taydaelectronics	Header, 7-Pin	1	\$0.07	\$0.07
R1	10k	Res1	Taydaelectronics	Resistor	1	\$0.01	\$0.01
T1	RFM12 transceiver	RFM12 transceiver	futurlec	w w w .futurlec.com 433 MHz transceiver	1	\$7.90	\$7.90
U1	Teensy2.0	Teensy	PJRC	The teensy 2.0 from w w w .PJRC.com, chang clock to 8MHz	1	\$16.00	\$16.00
						Total	\$24.47

Microphone Mixer

MicMixer.SchDoc

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U of U Computer Engineering

Print Date: 13-Sep-12 4:40:29 PM

Designator	Value	Comment	Vendor	Description	Quant	Price	Total Parts Price
C1, C2, C3, C4, C5, C6, C7, C8, C9, C10, C?	4.7uF, 10uF, 22uF, 100pF	Cap	Taydaelectronics	Capacitor	13	0.03	\$0.39
L?	100uH	Inductor Iron	Taydaelectronics	Magnetic-Core Inductor	1		#VALUE!
MK1, MK2, MK3, MK4, MK5, MK6, MK7, MK8, MK9, MK10, MK11, MK12, MK13, MK14, MK15, MK16	Mic1	Mic1	Taydaelectronics	Microphone	16	0.25	\$4.00
P1	Header 9	Header 9	Taydaelectronics	Header, 9-Pin	1	0.09	\$0.09
P2, P3, P4, P5, P6, P7, P8, P9	Header 2	Header 2	Taydaelectronics	Header, 2-Pin	8	0.02	\$0.16
P10, P11	Header 3	Header 3	Taydaelectronics	Header, 3-Pin	2	0.03	\$0.06
Q1, Q2	BC548B	BC548B	Taydaelectronics	NPN General Purpose Amplifier	2	0.01	\$0.02
Q3, Q4	2N3904	2N3904	Taydaelectronics	NPN General Purpose Amplifier	2	0.01	\$0.02
R1, R2, R3, R4, R5, R6, R7, R8, R9, R10, R11, R12, R13, R14	1K, 5.6K, 10k, 100, 220K	Res1	Taydaelectronics	Resistor	15	0.01	\$0.15
U1, U2, U3, U4	CD4051BCN	CD4051BCN	Taydaelectronics	8-Channel Analog Multiplexer/Demultiplexer	4	0.23	\$0.92
						Total	#VALUE!

Part List

Speaker Mixer

Source Data From:

SpeakerMixer.SchDoc

Project:

PrintingProjectAllDocs.PrjPCB

Variant:

U of U Computer Engineering

Report Date: 9/13/2012 4:42:21 PM

Print Date:

13-Sep-12

4:42:46 PM

Designator	Value	Comment	Vendor	Description	Quantity	Price	Total Parts Price
D1, D2, D3, D4	LED0	LED_White	Taydaelectronics	Typical INFRARED GaAs LED	4	\$0.04	\$0.16
P1	Header 8	Header 8	Taydaelectronics	Header, 8-Pin	1	\$0.08	\$0.08
P2, P3, P4, P5, P6, P7, P8, P9, P10	Header 3	Header 3	Taydaelectronics	Header, 3-Pin	9	\$0.03	\$0.27
Q1, Q2, Q3, Q4	2N3904	2N3904	Taydaelectronics	NPN General Purpose Amplifier	4	\$0.01	\$0.04
R1, R2, R5, R6	100	Res1	Taydaelectronics	Resistor	4	\$0.01	\$0.04
R3, R4, R7, R8	8.2K	Res1	Taydaelectronics	Resistor	4	\$0.01	\$0.04
U1, U2	CD4051BCN	CD4051BCN	Taydaelectronics	8-Channel Analog Multiplexer/Demultiplexer	2	\$0.23	\$0.46
						Total	\$1.09