

BOM										
Client :										Finnix
Project Name :	Secure appliance disabling system									
PCB File:	00001-2-HAR-A-01.PrjPcb									
PCB Ref:	1-2-HAR-A-									
Project Code :	1-2-H									
Rev Number :	A-									
Date:	9/20/2024								Tel :	
Engineer :	Varun								Fax :	
									Web :	
Designator	Description	Distributor 1	Distributor 1 Part no.	FIT/NFIT	Footprint	Manufacturer	Manufacturer Part no.	Quantity	Value	Notes
C1, C2, C3, C4	1 μ F \pm 10% 10V Ceramic Capacitor X7R 0805 (2012 Metric)	digikey	490-1695-1-ND	FIT	CAP0805	Murata Electronics	GRM21BR71A105KA01L	4	1uF 10V	
C5	100 μ F 6.3 V Aluminum Electrolytic Capacitors Radial, Can 2000 Hrs @ 85°C	Digikey	478-08056D104KAT2ACT-ND	FIT	EC-A_PAN	Panasonic Electronic Components	ECA-0JM101	1	100uF 6.3V	
C6	2.2 μ F 35 V Aluminum Electrolytic Capacitors Radial, Can 20000 Hrs @ 105°C	Digikey	493-15889-ND	FIT	CAP_RN_10X12 P5_NCH	Nichicon	UPX1V2R2MPD	1	2.2uF 35V	
C7, C11, C12, C13	0.1 μ F \pm 10% 6.3V Ceramic Capacitor X5R 0805 (2012 Metric)	digikey	478-08056D104KAT2ACT-ND	FIT	CAP0805	KYOCERA AVX	08056D104KAT2A	4	0.1 μ F 6.3 V	
C8	1000 pF \pm 10% 10V Ceramic Capacitor X7R 0805 (2012 Metric)	Digikey	399-C0805C102K8RAC7800CT-ND	FIT	CAP0805	KEMET	C0805C102K8RAC7800	1	1nF 10 V	
C9, C10	22 μ F \pm 10% 6.3V Ceramic Capacitor X5R 0805 (2012 Metric)	digikey	478-08056D104KAT2ACT-ND	FIT	CAP0805	Samsung Electro-Mechanics	CL21A226KQCLRNC	2	22 μ F 6.3 V	
D1	Remote Receiver Sensor 38.0kHz 20m Through Hole	Digikey	497-5550-1-ND	FIT	SOT-323_2P2X1P35 X1P3_STM-M	STMicroelectronics	BAT30CWFILM	1	SCHOT 30V 300MA	
IR1	Remote Receiver Sensor 38.0kHz 20m Through Hole	digikey	751-1227-ND	FIT	TSOP382	KYOCERA AVX	TSOP38238	1	SENSOR REMOTE REC 38.0KHZ 20M	
J1	Connector Header Through Hole, Right Angle 2 position 0.049" (1.25mm)	Digikey	WM1742-ND	FIT	MOLEX_530480 210	Molex		1		
J2, J3, J4, J5	2 Position Wire to Board Terminal Block Horizontal with Board 0.138" (3.50mm) Through Hole	Digikey	277-1721-ND	FIT	PHOENIX_1984 617	Phoenix Contact	1984617	4	TERM BLK 2POS SIDE ENT 3.5MM PCB	
J6	Connector Header Through Hole 3 position 0.100" (2.54mm)	Digikey	S1011EC-03-ND	FIT	CONN_PRPC00 3SAAN-RC_SUL	Sullins Connector Solutions	PRPC003SAAN-RC	1		

J7	Connector Header Through Hole 4 position 0.100" (2.54mm)	Digikey	609-3255-ND	FIT	Amphenol_FCI_0_MFG	Amphenol ICC (FCI)	68000-204HLF	1	CONN HEADER VERT 4POS 2.54MM
LED1	Green 568nm LED Indication - Discrete 2.2V Radial	Digikey	732-5008-ND	FIT	WL-TMRC_D3.95H5.3_GREEN	Würth Elektronik	151031VS06000	1	2.2 V 20mA
LED2	Blue 470nm LED Indication - Discrete 2.8V Radial	Digikey	732-5008-ND	FIT	WL-TMRC_D3.95H5.3_BLUE	Würth Elektronik	151034BS03000	1	2.2 V 20mA
LED3	Standard LEDs - SMD Super Red, 633nm 224mcd, 20mA	Mouser	720-LSM676-Q2S1-1-Z	NFIT	LEDM2214X140N	ams OSRAM	LS M676-Q2S1-1-Z	1	2.3 V 30mA
Q1	P-Channel 20 V 2.5A (Ta) 800mW (Ta) Surface Mount SOT-23-3	Digikey	BC557ATACT-ND	FIT	TO-92-3L_5P33X5P2_ONS	onsemi	BC557ATA	1	BJT PNP 45V 0.1A
Q2	Bipolar (BJT) Transistor NPN 30 V 100 mA 300MHz 500 mW Through Hole TO-92-3	Digikey	2156-BC548-FS-ND	FIT	TO-92-3L_5P33X5P2_ONS	Fairchild Semiconductor	BC548	1	TRANS NPN 30V 0.1A
Q3, Q4	P-Channel 20 V 2.5A (Ta) 800mW (Ta) Surface Mount SOT-23-3	digikey	DMG2301U-7DICT-ND	FIT	SOT23_DMG2301U_DIO	Diodes Incorporated	DMG2301U-7	2	P-Channel 20 V 2.5A
R1	NTC Thermistor 10k Bead, Epoxy	Digikey	615-1054-ND	FIT	DC_USS	Panasonic Electronic Components	DC103G9G	1	10K
R2	383 Ohms $\pm 0.1\%$ 0.125W, 1/8W Chip Resistor 0805 (2012 Metric) Automotive AEC-Q200 Thin Film	Digikey	10-ERA-6AEB3830VCT-ND	FIT	RES0805	Panasonic Electronic Components	ERA-6AEB3830V	1	383
R3, R15	27 kOhms $\pm 5\%$ 0.125W, 1/8W Chip Resistor 0805 (2012 Metric) Automotive AEC-Q200 Thick Film	Digikey	P27KACT-ND	FIT	RES0805	Panasonic Electronic Components	ERJ-6GEYJ273V	2	27K
R4, R5	100 Ohms $\pm 5\%$ 0.125W, 1/8W Chip Resistor 0805 (2012 Metric) Automotive AEC-Q200 Thick Film	Digikey	P100ACT-ND	FIT	RES0805	Panasonic Electronic Components	ERJ-6GEYJ101V	2	100
R6	1 kOhms $\pm 5\%$ 0.125W, 1/8W Chip Resistor 0805 (2012 Metric) Automotive AEC-Q200 Thick Film	Digikey	10-ERA-6AEB3830VCT-ND	FIT	RES0805	Panasonic Electronic Components	P1.0KACT-ND	1	1K
R7, R11	560 Ohms $\pm 0.1\%$ 0.125W, 1/8W Chip Resistor 0805 (2012 Metric) Automotive AEC-Q200 Thin Film	Digikey	P560DACT-ND	FIT	RES0805	Panasonic Electronic Components	ERA-6AEB561V	2	560

R8	330 Ohms ±0.1% 0.125W, 1/8W Chip Resistor 0805 (2012 Metric) Automotive AEC-Q200 Thin Film	Digikey	P330DACT-ND	FIT	RES0805	Panasonic Electronic Components	ERA-6AEB331V	1	330	
R9	100 Ohms ±0.1% 0.125W, 1/8W Chip Resistor 0805 (2012 Metric) Automotive AEC-Q200 Thin Film	Digikey	P100DACT-ND	NFIT	RES0805	Panasonic Electronic Components	ERA-6AEB101V	1	100	
R10	510 Ohms ±0.1% 0.125W, 1/8W Chip Resistor 0805 (2012 Metric) Automotive AEC-Q200 Thin Film	Digikey	P510DACT-ND	FIT	RES0805	Panasonic Electronic Components	ERA-6AEB511V	1	510	
R12, R13, R16, R17, R18, R19, R20, R21, R22, R23, R24	10 kOhms ±0.1% 0.125W, 1/8W Chip Resistor 0805 (2012 Metric) Automotive AEC-Q200 Thin Film	Digikey	P10KDACT-ND	FIT	RES0805	Panasonic Electronic Components	ERA-6AEB103V	11	10K	
R14	33 kOhms ±5% 5W Chip Resistor 5329 (13573 Metric), J-Lead Flame Retardant Coating, Safety Metal Film	Digikey	A106035CT-ND	FIT	RES_SMF5_TYC O_TYC	TE Connectivity Passive Product	SMF533KJT	1	33K	
RL1, RL2	5V Trigger Relay Module	Winsource	340142-SRD- 05VDC-SL-C	FIT	RELAY_SRD- 05VDC-SL-C	SongLe	SRD-05VDC-SL-C	2		
SW1	Tactile Switch SPST-NO Top Actuated Through Hole	Digikey	450-1647-ND	FIT	SW4_1825910- E_TEC	TE Connectivity ALCOSWITCH Switches	1-1825910-8	1		
TP1, TP2					TEST_POINT			2		
U1	AC to DC Power Supply Module	ElectroncisComp	EC-4693	FIT	CONV_HLK- 10M05	Hi-link	HLK-10M05	1		
U2	800-MA LINEAR BATTERY CHARGER FO	Digikey	296- 8Q25170DSGR CT-ND	FIT	DSG0008A	Texas Instruments		1		
U3	Linear Voltage Regulator IC Positive Fixed 1 Output 300mA SOT-23-5	Digikey	2129- RP170N331D- TR-FECT-ND	FIT	SOT-23-5SC- 74A_PE-SOT- 23-5- 180326_NMD- M	Nisshinbo Micro Devices Inc.		1		
U4	Counter IC Counter, Decade 1 Element 10 Bit Positive, Negative 16-PDIP	digikey	296-2037-5-ND	FIT	N16	Texas Instruments	CD4017BE	1	IC DECADE COUNTER 10BIT 16DIP	
U5	Current Sensor 20A 1 Channel Hall Effect, Open Loop Bidirectional 8-SOIC (0.154", 3.90mm Width)	Digikey	620-1190-1-ND	FIT	SOIC127P600X 175-8N	onsemi	ACS712ELCTR-20A-T	1	SENSOR CURRENT HALL 20A AC/DC	

