

Layers: 4
 Dimensions: 100x100mm
 Thickness: 1.6mm
 Min clearance: 0.2mm
 Min track: 0.2mm
 Min hole: 0.3mm
 Min annular ring: 0.15mm

Eugene Lozovsky

Sheet:
 File: kharon386_main.kicad_pcb

Title: PC-KHARON-386-MAIN

Size: A4 Date: 2023-02-22
 \${KICAD_VERSION}

Rev: A1
 Id: 1/1

A

B

C

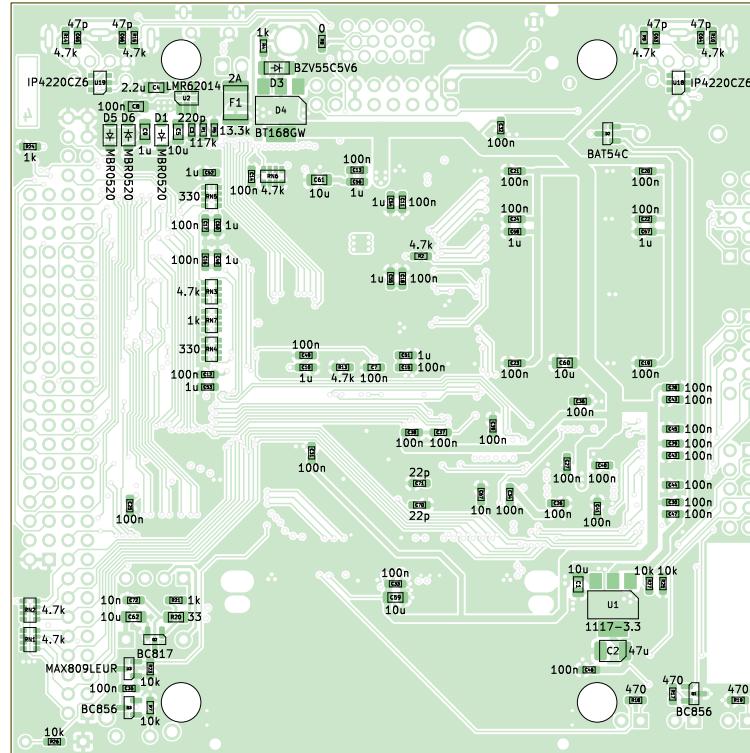
D

A

B

C

D



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Bill Of Materials

References	Value	Footprint	Qty
BT1	1775485-1 or S8401-46	my:CR2032V	1
C1 C5 C59 C60 C61 C62	10u	Capacitor_SMD:C_0805_2012Metric_Pad1.1 8x1.45mm_HandSolder	6
C2	47u	Capacitor_Tantalum_SMD:CP_EIA-3528-21_ Kemet-B_Pad1.50x2.35mm_HandSolder	1
C3	220p	Capacitor_SMD:C_0603_1608Metric_Pad1.0 8x0.95mm_HandSolder	1
C4	2.2u	Capacitor_SMD:C_0805_2012Metric_Pad1.1 8x1.45mm_HandSolder	1
C48 C49 C50 C51 C52 C53 C54 C55 C56 C57 C58	1u	Capacitor_SMD:C_0603_1608Metric_Pad1.0 8x0.95mm_HandSolder	11
C6	220u	Capacitor_Tantalum_SMD:CP_EIA-7343-31_ Kemet-D_Pad2.25x2.55mm_HandSolder	1
C63 C64 C65 C66	47p	Capacitor_SMD:C_0603_1608Metric_Pad1.0 8x0.95mm_HandSolder	4
C67 C72	10n	Capacitor_SMD:C_0603_1608Metric_Pad1.0 8x0.95mm_HandSolder	2
C68 C69	15p	Capacitor_SMD:C_0603_1608Metric_Pad1.0 8x0.95mm_HandSolder	2
C10 C11 C12 C13 C14 C15 C16 C17 C18 C19 C20 C21 C22 C23 C24 C25 C26 C27 C28 C29 C30 C31 C32 C33 C34 C35 C36 C37 C38 C39 C40 C41 C42 C43 C44 C45 C46 C47 C7	100n	Capacitor_SMD:C_0603_1608Metric_Pad1.0 8x0.95mm_HandSolder	39
C70 C71	22p	Capacitor_SMD:C_0603_1608Metric_Pad1.0 8x0.95mm_HandSolder	2
C73 C74	10u	Capacitor_Tantalum_SMD:CP_EIA-3528-21_ Kemet-B_Pad1.50x2.35mm_HandSolder	2
C8	100n	Capacitor_SMD:C_0805_2012Metric_Pad1.1 8x1.45mm_HandSolder	1
C9	1u	Capacitor_SMD:C_0805_2012Metric_Pad1.1 8x1.45mm_HandSolder	1
CON1	CF-CARD-cfcard	my:TE_1734451-1-LONG	1
D1 D5 D6	MBR0520	Diode_SMD:D_SOD-123	3
D2	BAT54C	Package_TO_SOT_SMD:SOT-23	1
D3	BZV55C5V6	Diode_SMD:D_MiniMELF	1
D4	BT168GW	Package_TO_SOT_SMD:SOT-223-3_TabPin 2	1
D7	LED_Blue	LED_THT:LED_D3.0mm_Horizontal_O1.27m m_Z6.0mm	1
D8	LED_Red	LED_THT:LED_D3.0mm_Horizontal_O1.27m m_Z6.0mm	1
D9	LED_Green	LED_THT:LED_D3.0mm_Horizontal_O1.27m m_Z6.0mm	1
F1	2A	Fuse:Fuse_1812_4532Metric_Pad1.30x3.40 mm_HandSolder	1

H1 H2 H3 H4	Screw M3 dk=5mm L=4mm	my:MountingHole_3.2mm_M3_dk5.2mm_Mask	4
J1	USB_B_Micro	Connector_USB:USB_Micro-B_Molex-105017-0001	1
J10	COM2	Connector_PinHeader_2.54mm:PinHeader_2x05_P2.54mm_Vertical	1
J11	Conn_01x04	Connector_PinHeader_2.54mm:PinHeader_1x04_P2.54mm_Vertical	1
J12	ESP	Connector_PinHeader_2.54mm:PinHeader_2x05_P2.54mm_Vertical	1
J2	PC104_16	Connector_PinSocket_2.54mm:PinSocket_2x20_P2.54mm_Vertical	1
J3	PC104	Connector_PinSocket_2.54mm:PinSocket_2x32_P2.54mm_Vertical	1
J4	PJ-320	my:PJ-320A_D	1
J5	Conn_02x08_Odd_Even	Connector_PinSocket_2.54mm:PinSocket_2x08_P2.54mm_Vertical	1
J6	DB15_Female_HighDensity_MountingHoles	Connector_Dsub:DSUB-15-HD_Female_Horizontal_P2.29x1.98mm_EdgePinOffset3.03mm_Housed_MountingHolesOffset4.94mm	1
J7 J9	Mini-DIN-6	my:minidin-6	2
J8	COM1	Connector_PinHeader_2.54mm:PinHeader_2x05_P2.54mm_Vertical	1
L1	10u	Inductor_SMD:L_Taiyo-Yuden_NR-60xx_HandSoldering	1
LS1	Speaker	Buzzer_Beeper:Buzzer_12x9.5RM7.6	1
N1	G738 or G706	my:G738	1
Q1 Q3	BC856	Package_TO_SOT_SMD:SOT-23	2
Q2	BC817	Package_TO_SOT_SMD:SOT-23	1
R1	117k	Resistor_SMD:R_0603_1608Metric_Pad0.98x0.95mm_HandSolder	1
R16	10M	Resistor_SMD:R_0603_1608Metric_Pad0.98x0.95mm_HandSolder	1
R17 R18 R19	470	Resistor_SMD:R_0603_1608Metric_Pad0.98x0.95mm_HandSolder	3
R10 R13 R14 R15 R2 R9	4.7k	Resistor_SMD:R_0603_1608Metric_Pad0.98x0.95mm_HandSolder	6
R20	33	Resistor_SMD:R_0805_2012Metric_Pad1.20x1.40mm_HandSolder	1
R22	5.6k	Resistor_SMD:R_0603_1608Metric_Pad0.98x0.95mm_HandSolder	1
R3	51k	Resistor_SMD:R_0603_1608Metric_Pad0.98x0.95mm_HandSolder	1
R21 R24 R4	1k	Resistor_SMD:R_0603_1608Metric_Pad0.98x0.95mm_HandSolder	3
R5	13.3k	Resistor_SMD:R_0603_1608Metric_Pad0.98x0.95mm_HandSolder	1
R11 R12 R6	22	Resistor_SMD:R_0603_1608Metric_Pad0.98x0.95mm_HandSolder	3
R23 R25 R26 R27 R7	10k	Resistor_SMD:R_0603_1608Metric_Pad0.98x0.95mm_HandSolder	5

R8	0	Resistor_SMD:R_0603_1608Metric_Pad0.98x0.95mm_HandSolder	1
RN1 RN2 RN3 RN6	4.7k	Resistor_SMD:R_Array_Convex_4x0603	4
RN4 RN5	330	Resistor_SMD:R_Array_Convex_4x0603	2
RN7	1k	Resistor_SMD:R_Array_Convex_4x0603	1
SW1	Jumper / Pin header 1x2 Pitch=2.54mm	Connector_Molex:Molex_KK-254_AE-6410-0 2A_1x02_P2.54mm_Vertical	1
SW2	SW_Push	Button_Switch_THT:SW_Tactile_SPST_Angled PTS645Vx83-2LFS	1
SW3	SW_DIP_x01	Button_Switch_THT:SW_DIP_SPSTx01_Slide_6.7x4.1mm_W7.62mm_P2.54mm_LowProfile	1
U1	1117-3.3	Package_TO_SOT_SMD:SOT-223-3_TabPin2	1
U10	ST16C554D	Package_QFP:LQFP-64_10x10mm_P0.5mm	1
U12 U13	MSM5118160F-JS	my:SOJ-42	2
U14	39SF040	my:PLCC-32_11.4x14.0mm_P1.27mm-longpads	1
U15	TXS0104PW	Package_SO:TSSOP-14_4.4x5mm_P0.65mm	1
U16	ESP-12F	RF_Module:ESP-12E	1
U17	ICL7660A	Package_SO:SOIC-8_3.9x4.9mm_P1.27mm	1
U18 U19	IP4220CZ6	Package_SO:TSOP-6_1.65x3.05mm_P0.95mm	2
U2	LMR62014	Package_TO_SOT_SMD:SOT-23-5_HandSoldering	1
U3	MAX809LEUR	Package_TO_SOT_SMD:SOT-23	1
U4	M6117D	Package_QFP:PQFP-208_28x28mm_P0.5mm	1
U5	74HCT32PW	Package_SO:TSSOP-14_4.4x5mm_P0.65mm	1
U6 U7	74HCT138PW	Package_SO:TSSOP-16_4.4x5mm_P0.65mm	2
U11 U8	GD75232PW	Package_SO:TSSOP-20_4.4x6.5mm_P0.65mm	2
U9	CH340G	Package_SO:SOIC-16_3.9x9.9mm_P1.27mm	1
X1	14.318 MHz	my:Oscillator_SMD_7050_7.0x5.0mm	1
X2	80 MHz	my:Oscillator_SMD_7050_7.0x5.0mm	1
X3	1.8432 Mhz	my:Oscillator_SMD_7050_7.0x5.0mm	1
Y1	32768 Hz	Crystal:Crystal_SMD_SeikoEpson_MC306-4Pin_8.0x3.2mm_HandSoldering	1
Y2	12 MHz	Crystal:Crystal_SMD_SeikoEpson_TSX3225-4Pin_3.2x2.5mm_HandSoldering	1

