





karabas-pro-revD

BT1,	Ref	Q-ty	Value	Footprint
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, C46, C47, C49, C51, C2 2 10uF C0805 C1, C2 2 10uF C0805 C3, 10 21uF C0805 C6 11nF C0805 C6 11nF C0805 C7, C8, C9, 310uF Tantalum D C4, C5, 2 22p C0805 C6 11nF C0805 C7, C8, C9, 310uF Tantalum D C50 C1, C2 C1 C20uG CP, Radial D8, 0mm_P3,80mm C50 1220uG CP, Radial D7, 0mm_P2,50mm C50 1220uG CP, Radial D8, 0mm_P3,80mm C50 C0N1, 1VGA DSUB-19, Male C0N2, 1SD SD_TE_2041021 C0N3, 1VGA DSUB-19-Female C0N4, 1Juystick DSUB-9, Male C0N5, 1Keyboard MDIN06SS C0N6, 1Mouse MDIN06SS C0N7, 1Audio Jack_3.5mm_CUI_SJ1-3535NG C0N8, 15V DC BarrelJack, Wuerth, 6941xx301002 C0N9, 1Micro-SD Molex MicroSD (mirrored) D1, D2, D4, D6, D7, D8, D9 7 LED L0805 D5 11N5820 D.D0-201AD_P15.24mm_Horizont D3 1BAT54C S07-23 FB1 1Fepty IDC-Header_2x17 J2, 1FPCA_JTAG IDC-Header_2x05, angled J1, 1Floppy SV PinHeader_1x04 J4, 1Bus PinHeader_1x04 J5, 1AVR_JTAG IDC-Header_2x05, angled J6, 1AVR_JTAG IDC-Header_2x05, angled J7, 1ESP_BUS PinHeader_1x04 J6, 1AVR_UART PinHeader_1x03 L1, 1SP_R3, 32H -68H L_12x12mm R1, R2, R3, 39, R40, R41, R42, R48, R49, R48, R47, R48, R49, R48, R47, R48, R49, R41, R42, R43, R44, R45, R46, R47, R48, R49, R41, R42, R43, R44, R45, R46, R47, R48, R49, R41, R41, R41, R41, R41, R41, R41, R41	BT1,	1	3V	-
C47, C49, C51,	C25, C26, C27, C28, C29, C30, C31, C32, C33, C34, C35, C36, C37, C38,			
C1, C2 C3, 10 C1, C2 C3, 10 C1, C5 C3, 10 C1, C5 C4, C5, C6 C6 C7, C8, C9, C8 C7, C8, C9, C8 C8 C8 C8 C9 C8 C9 C8 C9 C8 C9 C8 C9 C8 C8 C7 C8 C8 C9 C8		20	1000	00005
C3, 10 C4, C5, C5, C8 C1, 1nF C0805 C7, C8, C9, C3 10uF Tantalum D Tantalum D C50 C7, C8, C9, C8 C1 C7, C8, C9, C8 C1 C8 C1 C8 C1 C7, C8, C9, C8 C8 C1 C8 C1 C8 C7, C8, C9, C8 C8 C8 C8 C8 C8 C9 C8 C8 C8 C9 C8 C8 C9 C8 C8 C9 C9 C8 C8 C9 C9 C8 C8 C1 C9 CP C8 C1 C9 CP C8 C0 CP C9 C8 C0				
C4, C5, C6 C6 C7, C8, C9, C9, C1				
C6 1 1nF C0805 C7, C8, C9, 3 10uF Tantalum D C48 1 470uF CP_Radial_D8.0mm_P3.80mm C50 1 220uG CP_Radial_D7.5mm_P2.50mm CON1, 1 CF-CARD TE_1734451-1 TE_1734451-1 CON2, 1 SD SD_TE_2041021 SD_TE_2041021 CON3, 1 VGA DSUB-15-HD_Female SUB-9_Male CON4, 1 Joystick DSUB-9_Male SUB-9_Male CON5, 1 Keyboard MDIN06SS MDIN06SS CON6, 1 Mouse MDIN06SS MDIN06SS CON7, 1 Audio Jack_3.5mm_CUI_SJ1-3535NG MOLONGOS CON8, 1 Mouse MDIN06SS MDIN06SS CON8, 1 Micro-SD Molex MicroSD (mirrored) MOLONGOSD (mirrored) CON9, 1 Micro-SD Molex MicroSD (mirrored) MIRRORDOSD (mirrored) D1, D2, D4, D6, D7,D8, D9 7 LED L0805 L0805 D1, D2, D4, D6, D7,D8, D9 7 LED L0805 L0805 J1, S1 <				
C7, C8, C9, C48 1 470uF CP_Radial_D8.0mm_P3.80mm C50 C50 C50 C7, Radial_D8.0mm_P2.50mm C50 C50 C7, Radial_D8.0mm_P3.80mm C50				
C48 1 470uF CP_Radial_D8.0mm_P3.80mm C50 1 220uG CP_Radial_D7.5mm_P2.50mm CON1, 1 CF-CARD TE_1734451-1 CON2, 1 SD SD_TE_2041021 CON3, 1 VGA DSUB-15-HD_Female CON4, 1 Joystick DSUB-9_Male CON5, 1 Keyboard MDIN06SS CON6, 1 Mouse MDIN06SS CON7, 1 Audio Jack_3.5mm_CUI_SJ1-3535NG CON8, 1 5V DC BarrelJack_Wuerth_6941xx301002 CON8, 1 Micro-SD Molex MicroSD (mirrored) D1, D2, D4, D6, D7,D8, D9 7 LED L0805 D5 1 1NS820 D_DO-201AD_P15.24mm_Horizont D3 1 BAT54C SOT-23 FB1 1 Ferrite Bead F0805 J1, 1 Floppy IDC-Header_2x17 J2, 1 FPGA JTAG IDC-Header_2x05, angled			I .	
C50 CON1, 1 220uG CP_Radia_D7.5mm_P2.50mm CON1, 1 CF-CARD TE_1734451-1 CF-CARD TE_1734451-1 CON2, 1 SD SD_TE_2041021 SD SD SD_TE_2041021 SD_TE_2041021 SD SD_TE_2041021 SD_TE_20410				
CON1,				
CON2,				
CON3, 1 VGA DSUB-15-HD_Female CON4, 1 Joystick DSUB-9_Male CON5, 1 Keyboard MDIN06SS CON6, 1 Mouse MDIN06SS CON7, 1 Audio Jack_3.5mm_CUI_SJ1-3535NG CON8, 15V DC BarrelJack_Wuerth_6941xx301002 CON9, 1 Micro-SD Molex MicroSD (mirrored) D1, D2, D4, D6, D7,D8, D9 7 LED L0805 D5 1 1N5820 D_DO-201AD_P15.24mm_Horizont D3 1 BAT54C SOT-23 FB1 1 Ferrite Bead F0805 J1, 1 Floppy IDC-Header_2x17 J2, 1 FPGA JTAG IDC-Header_2x05, angled J3, 1 Floppy 5V PinHeader_1x04 J4, 1 uBus PinHeader_2x04 J5, 1 AVR JTAG IDC-Header_2x04 J6, 1 AVR JTAG IDC-Header_2x03, angled J7, 1 ESP-BUS PinHeader_1x04 J7, 1 ESP-BUS PinHeader_1x03 L1, 1 SJAH - 68uH L_12x12mm L1, 2x12mm R1, R2, R3, 32k4 R0805 R4, R57 227 R0805 R5, R9, R30, R31, R32, R33, R34, R35, R36, R37, R38, R39, R40, R41, R42, R44, R45, R46, R47, R48, R49, R50, R51, R52, R58, R59, R60, R6, R11, R14, R17, R7, R8, R21, R22, R23, R24, R6, R47, R48, R49, R50, R51, R52, R58, R59, R60, R6, R11, R14, R17, R7, R8, R21, R22, R23, R24, R64, R7, R48, R49, R50, R51, R52, R58, R59, R60, R61, R13, R16, R64, R65, R66, R67, R68, R69, R53 R19, R20, 275 R0805 R19, R20, 275 R0805 R19, R20, 275 R0805 R19, R20, 275 R0805				_
CON4,				
CON5, CON6, 1 Mouse MDIN06SS CON6, 1 Mouse MDIN06SS CON7, 1 Audio Jack_3.5mm_CUI_SJ1-3535NG CON8, 1 5V DC BarrelJack_Wuerth_6941xx301002 CON9, 1 Micro-SD Molex MicroSD (mirrored) D1, D2, D4, D6, D7,D8, D9 7 LED L0805 D5 1 1 N5820 D_DO-201AD_P15.24mm_Horizont D3 1 BAT54C SOT-23 FB1 1 Ferrite Bead F0805 J1, 1 Floppy IDC-Header_2x17 J2, 1 FPGA JTAG IDC-Header_2x05, angled J3, 1 Floppy 5V PinHeader_1x04 J4, 1 UBUS PinHeader_1x04 J5, 1 AVR JTAG IDC-Header_2x03, angled J6, 1 AVR JTAG IDC-Header_2x03, angled J7, 1 ESP-BUS PinHeader_1x04 J7, 1 ESP-BUS PinHeader_1x04 J7, 1 ESP-BUS PinHeader_1x05 JP2 1 Jumper PinHeader_1x05 JP2 1 Jumper PinHeader_1x05 JR1, R2, R3, 32k4 R0805 Q1, Q2, 1 BC656 SOT-23 R4, R57 R5, R9, R30, R31, R32, R33, R34, R35, R36, R37, R38, R39, R40, R41, R42, R43, R44, R45, R46, R47, R48, R49, R50, R51, R52, R58, R59, R60, R6, R11, R14, R17, R7, R8, R21, R22, R23, R24, R64, R7, R48, R49, R50, R51, R52, R58, R59, R60, R61, R12, R13, R16, R13, R16, R12, R13, R16, R14, R46, R47, R68, R69, R53 LX* (see schematics) R0805 R19, R20, 2 75 R0805				
CON6, CON7, 1 Audio Jack_3.5mm_CUI_SJ1-3535NG CON8, 1 5V DC BarrelJack_Wuerth_6941xx301002 CON9, 1 Micro-SD Molex MicroSD (mirrored) D1, D2, D4, D6, D7,D8, D9 7 LED L0805 D5 1 1N5820 D_DO-201AD_P15.24mm_Horizont D3 1 Ferrite Bead F0805 J1, 1 Ferrite Bead F0805 J1, 1 Floppy IDC-Header_2x17 J2, 1 FPGA JTAG IDC-Header_2x05, angled J3, 1 Floppy V PinHeader_1x04 J4, 1 UBUS PinHeader_2x05, angled J5, 1 AVR JTAG IDC-Header_2x03, angled J6, 1 AVR JTAG IDC-Header_2x03, angled J7, 1 ESP-BUS PinHeader_1x04 J7, JP2 1 ESP-BUS PinHeader_1x04 J7, JP2 1 SP-BUS PinHeader_1x03 J1 Jumper PinHeader_1x03 J2 J2 J2 J2 PinHeader_1x03 J3 J2 J2 J2 PinHeader_1x03 J4	,		ļ	_
CON7,	,			
CON8,	·			
CON9, 1 Micro-SD Molex MicroSD (mirrored) D1, D2, D4, D6, D7,D8, D9 7 LED L0805 D5 11,115820 D_DO-201AD_P15.24mm_Horizon D3 1 BAT54C SOT-23 FB1 1 Ferrite Bead F0805 J1, 1 Floppy IDC-Header_2x17 J2, 1 FPGA JTAG IDC-Header_2x05, angled J3, 1 Floppy 5V PinHeader_1x04 J4, 1 JuBus PinHeader_2x04 J5, 1 AVR JTAG IDC-Header_2x03, angled J6, 1 AVR JTAG IDC-Header_2x03, angled J6, 1 AVR JTAG IDC-Header_2x03, angled J7, 1 ESP-BUS PinHeader_1x04 J7, 1 Jumper PinHeader_1x03 L1, 1 33uH - 68uH L_12x12mm R1, R2, R3, 3 2k4 R0805 R4, R57 2 27 R0805 R6, R11, R14, R17,				
D1, D2, D4, D6, D7, D8, D9 D5 D5 D1 D1 D1, D2, D4, D6, D7, D8, D9 D5 D5 D5 D6 D7 D8 D8 D8 D8 D9	,			
D5 11 1N5820 D_DO-201AD_P15.24mm_Horizont D3 1 BAT54C SOT-23 FB1 1 Ferrite Bead F0805 J1, 1 Floppy IDC-Header_2x17 J2, 1 Floppy 5V PinHeader_1x04 J3, 1 Floppy 5V PinHeader_1x04 J4, 1 UBUS PinHeader_2x05, angled J5, 1 AVR JTAG IDC-Header_2x03, angled J6, 1 AVR UART PinHeader_1x04 J7, 1 ESP-BUS PinHeader_1x03 L1, 1 Jumper PinHeader_1x03 L1, 1 Jumper PinHeader_1x03 L1, 1 SC856 SOT-23 R4, R57 2 27 R0805 R5, R9, R30, R31, R32, R33, R34, R35, R36, R37, R38, R39, R40, R41, R42, R42, R43, R44, R45, R46, R47, R48, R49, R50, R51, R52, R58, R59, R60, 28 10k R0805 R6, R11, R14, R17, 4 1k R0805 R6, R11, R14, R17, 4 1k R0805 R10, R13, R16, 3 2k R0805 R12, R15, R18, R28, R29, R54, R55, R56, R62, R63 10 470 (510) R0805				` ,
D3 1 BAT54C SOT-23 FB1 1 Ferrite Bead F0805 J1, 1 Floppy IDC-Header_2x17 J2, 1 FPGA JTAG IDC-Header_2x05, angled J3, 1 Floppy 5V PinHeader_1x04 J4, 1 uBus PinHeader_2x04 J5, 1 AVR JTAG IDC-Header_2x03, angled J6, 1 AVR UART PinHeader_1x04 J7, 1 ESP-BUS PinHeader_2x05 Jumper PinHeader_1x03 PinHeader_1x03 L1, 1 33uH - 68uH L_12x12mm R1, R2, R3, 3 2k4 R0805 Q1, Q2, 1 BC856 SOT-23 R4, R57 2 27 R0805 R5, R9, R30, R31, R32, R33, R34, R35, R34, R44, R45, R46, R47, R48, R49, R50, R51, R52, R58, R59, R60, 28 10k R0805 R6, R11, R14, R17, 4 1k R0805 R6, R11, R14, R17, 4 1k R0805 <tr< td=""><td></td><td></td><td></td><td></td></tr<>				
Ferrite Bead Fo805 Ferrite Bead Fo805 Floppy IDC-Header_2x17 Floppy IDC-Header_2x05, angled IDC-Header_2x05, angled IDC-Header_2x04 IDC-Header_2x04 IDC-Header_2x04 IDC-Header_2x04 IDC-Header_2x04 IDC-Header_2x03, angled IDC-Header_2x05 IDC-Header_2x05 IDC-Header_2x05 IDC-Header_2x05 IDC-Header_2x05 IDC-Header_2x05 IDC-Header_2x05 IDC-Header_2x05 IDC-Header_2x05 IDC-Header_2x03, angled IDC-Header_2x03, angled IDC-Header_2x04 IDC-Header_2x05 IDC-Header_2x03, angled IDC-Header_2x03, angled IDC-Header_2x03, angled IDC-Header_2x03, angled IDC-Header_2x03, angled IDC-Header_2x03, angled IDC-Header_2x04 IDC-Header_2x03, angled IDC-Header_2x03, angled IDC-Header_2x04 IDC-Header			-	
J1, 1 Floppy IDC-Header_2x17 J2, 1 FPGA JTAG IDC-Header_2x05, angled J3, 1 Floppy 5V PinHeader_1x04 J4, 1 UBUS PinHeader_2x04 J5, 1 AVR JTAG IDC-Header_2x03, angled J6, 1 AVR UART PinHeader_1x04 J7, 1 ESP-BUS PinHeader_1x03 L1, 1 33uH - 68uH L_12x12mm R1, R2, R3, 32k4 R0805 Q1, Q2, 1 BC856 SOT-23 R4, R57 2 27 R0805 R5, R9, R30, R31, R32, R33, R34, R35, R36, R37, R38, R39, R40, R41, R42, R43, R44, R45, R46, R47, R48, R49, R50, R51, R52, R58, R59, R60, R6, R11, R14, R17, 4 1k R0805 R6, R11, R14, R17, 4 1k R0805 R10, R13, R16, R2, R58, R29, R54, R55, R56, R62, R63 R61, R64, R65, R66, R67, R68, R69, R53 R10, R20, 1 X* (see schematics) R0805 R10, R20, 1 R0805 R8005 R10, R40, R65, R66, R67, R68, R69, R69, R60, R61, R64, R65, R66, R67, R68, R69, R63 R10, R20, 1 R0805 R10, R40, R65, R66, R67, R68, R69, R60, R61, R64, R65, R66, R67, R68, R69, R63 R10, R20, R0805 R10, R40, R65, R66, R67, R68, R69, R63 R10, R64, R65, R66, R67, R68, R69, R63 R10, R64, R65, R66, R67, R68, R69, R63 R10, R20, R0805 R10, R805 R10, R805 R10, R805 R10, R805 R10, R805 R10, R8005				
J2,	J1,			IDC-Header 2x17
J3, 1 Floppy 5V PinHeader_1x04 J4, 1 uBus PinHeader_2x04 J5, 1 AVR JTAG IDC-Header_2x03, angled J6, 1 AVR UART PinHeader_1x04 J7, 1 ESP-BUS PinHeader_2x05 JP2 1 Jumper PinHeader_1x03 L1, 1 33uH - 68uH L_12x12mm R1, R2, R3, 3 2k4 R0805 Q1, Q2, 1 BC856 SOT-23 R4, R57 2 27 R0805 R5, R9, R30, R31, R32, R33, R34, R35, R36, R37, R38, R39, R40, R41, R42, R43, R44, R45, R46, R47, R48, R49, R50, R51, R52, R58, R59, R60, 28 10k R0805 R6, R11, R14, R17, 4 1k R0805 R7, R8, R21, R22, R23, R24, 4 k7 R0805 R10, R13, R16, 3 2k R0805 R12, R15, R18, R28, R29, R54, R55, R56, R62, R63 10 470 (510) R0805 R61, R64, R65, R66, R67, R68, R69, 7 330 R0805 R61, R64, R65, R66, R67, R68, R69, 7 330 R0805 R19, R20, 2 75 R0805			1	IDC-Header 2x05, angled
J4, 1 uBus PinHeader_2x04 J5, 1 AVR JTAG IDC-Header_2x03, angled J6, 1 AVR UART PinHeader_1x04 J7, 1 ESP-BUS PinHeader_2x05 JP2 1 Jumper PinHeader_1x03 L1, 1 33uH - 68uH L_12x12mm R1, R2, R3, 3 2k4 R0805 Q1, Q2, 1 BC856 SOT-23 R4, R57 2 27 R0805 R5, R9, R30, R31, R32, R33, R34, R35, R36, R37, R38, R39, R40, R41, R42, R43, R44, R45, R46, R47, R48, R49, R50, R51, R52, R58, R59, R60, 28 10k R0805 R6, R11, R14, R17, 4 1k R0805 R7, R8, R21, R22, R23, R24, 6 4k7 R0805 R10, R13, R16, 3 2k R0805 R12, R15, R18, R28, R29, R54, R55, R56, R62, R63 10 '470 (510) R0805 R61, R64, R65, R66, R67, R68, R69, 7 330 R0805 R53 1 X* (see schematics) R0805 R19, R20, 2 75 R0805		1	Floppy 5V	PinHeader 1x04
J6, 1 AVR UART PinHeader_tx04 J7, 1 ESP-BUS PinHeader_2x05 JP2 1 Jumper PinHeader_1x03 L1, 1 33uH - 68uH L_12x12mm R1, R2, R3, 3 2k4 R0805 Q1, Q2, 1 BC856 SOT-23 R4, R57 2 27 R0805 R5, R9, R30, R31, R32, R33, R34, R35, R34, R35, R34, R35, R36, R37, R38, R39, R40, R41, R42, R42, R44, R45, R46, R47, R48, R49, R50, R51, R52, R58, R59, R60, 28 10k R0805 R6, R11, R14, R17, 4 1k R0805 R7, R8, R21, R22, R23, R24, 6 4k7 R0805 R10, R13, R16, 3 2k R0805 R12, R15, R18, R28, R29, R54, R55, R56, R62, R63 10 '470 (510) R0805 R61, R64, R65, R66, R67, R68, R69, 7 330 R0805 R53 1 X* (see schematics) R0805 R19, R20, 2 75 R0805	J4,			PinHeader_2x04
J7, 1 ESP-BUS PinHeader_2x05 JP2 1 Jumper PinHeader_1x03 L1, 1 33uH - 68uH L_12x12mm R1, R2, R3, 3 2k4 R0805 Q1, Q2, 1 BC856 SOT-23 R4, R57 2 27 R0805 R5, R9, R30, R31, R32, R33, R34, R35, R36, R37, R38, R39, R40, R41, R42, R43, R44, R45, R46, R47, R48, R49, R50, R51, R52, R58, R59, R60, 28 10k R0805 R6, R11, R14, R17, 4 1k R0805 R7, R8, R21, R22, R23, R24, 6 4k7 R0805 R10, R13, R16, 3 2k R0805 R12, R15, R18, R28, R29, R54, R55, R56, R62, R63 10 '470 (510) R0805 R61, R64, R65, R66, R67, R68, R69, R69, R63 7 330 R0805 R53 1 X* (see schematics) R0805 R19, R20, 2 75 R0805	J5,	1	AVR JTAG	IDC-Header_2x03, angled
JP2 1 Jumper PinHeader_1x03 L1, 1 33uH - 68uH L_12x12mm R1, R2, R3, 3 2k4 R0805 Q1, Q2, 1 BC856 SOT-23 R4, R57 2 27 R0805 R5, R9, R30, R31, R32, R33, R34, R35, R36, R37, R38, R39, R40, R41, R42, R43, R44, R45, R46, R47, R48, R49, R50, R51, R52, R58, R59, R60, 28 10k R0805 R6, R11, R14, R17, 4 1k R0805 R7, R8, R21, R22, R23, R24, 6 4k7 R0805 R10, R13, R16, 3 2k R0805 R12, R15, R18, R28, R29, R54, R55, R56, R62, R63 10 '470 (510) R0805 R61, R64, R65, R66, R67, R68, R69, 7 330 R0805 R53 1 X* (see schematics) R0805 R19, R20, 2 75 R0805	J6,	1	AVR UART	PinHeader_1x04
L1,	J7,	1	ESP-BUS	PinHeader_2x05
R1, R2, R3, Q1, Q2, R4, R57 R5, R9, R30, R31, R32, R33, R34, R35, R36, R37, R38, R39, R40, R41, R42, R43, R44, R45, R46, R47, R48, R49, R50, R51, R52, R58, R59, R60, R6, R11, R14, R17, R7, R8, R21, R22, R23, R24, R10, R13, R16, R12, R15, R18, R28, R29, R54, R55, R56, R62, R63 R61, R64, R65, R66, R67, R68, R69, R19, R20, R19, R20, R10, R23, R24 R0805 R10, R40, R65, R66, R67, R68, R69, R10, R20, R24 R0805 R10, R40, R65, R66, R67, R68, R69, R10, R20, R25 R275 R26 R275 R275 R2805 R275 R2805 R275 R2805	JP2	1	Jumper	PinHeader_1x03
Q1, Q2, 1 BC856 SOT-23 R4, R57 2 27 R0805 R5, R9, R30, R31, R32, R33, R34, R35, R36, R37, R38, R39, R40, R41, R42, R43, R44, R45, R46, R47, R48, R49, R50, R51, R52, R58, R59, R60, 28 10k R0805 R6, R11, R14, R17, 4 1k R0805 R7, R8, R21, R22, R23, R24, 6 4k7 R0805 R10, R13, R16, 3 2k R0805 R12, R15, R18, R28, R29, R54, R55, R56, R62, R63 10 '470 (510) R0805 R61, R64, R65, R66, R67, R68, R69, 7 330 R0805 R53 1 X* (see schematics) R0805 R19, R20, 2 75 R0805	<u>L1,</u>	1	33uH – 68uH	L_12x12mm
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R19, R20, 2 75 R0805	R53			
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karabas-pro-revD

R26, R27,	750	R0805
SW1, SW2,	SW_Push	SPST_Angled_PTS645Vx58-2LFS
SW3	SW_DIP_x04	SPSTx04_Piano_CTS_Series
SW4	SW_SPST	Slider button switch
U1,	1 EP4CE6E22C8N	QFP-144
U2,	1 CY62167EV30 (ELL)	TSOP-I-48_18.4x12mm_P0.5mm
U3, U3"1	W25Q16 M25P16	SOIC-8_5.23x5.23mm_P1.27mm
U4,	1 EPM3128ATC100	LQFP-100_14x14mm_P0.5mm
U5,	1 ATMEGA328-AU	TQFP-32_7x7mm_P0.8mm
U6,	MB8877A	DIP-40_W15.24mm
U7, U8,	TXB0104PW	TSSOP-14_4.4x5mm_P0.65mm
U9,	DS1307Z+	SOIC-8_3.9x4.9mm_P1.27mm
U10,	I ESP-12E	ESP-12E
U11,	TDA1543 (A)	DIP-8_W7.62mm
U12,	1 1117-3.3	DPAK
U13,	1 1117-2.5	SOT-223-3
U14,	1 1117-1.2	SOT-223-3
U15,	1 LM2596S-5.0	TO-263-5
U17,	74LS06	DIP-14_W7.62mm
U18,	74LS38	DIP-14_W7.62mm
X1,	1 50MHz	SG8002CA-4Pin_7.0x5.0mm
Y1,	1 32768Hz	AT310_D3.0mm_L10.0mm
Y2,	1 16MHz	HC49-S