

Id		Designator	Footprint	Quantity	Value	Type	
1		C1,C2,C3,C4,C5,C6,C7,C8,C11,C12,C13,C14,C15,C16,C17,C18,C19,C20,C32,C31	D4.3mm_W1.9mm_P5.00mm	20	100nF	Ceramic MMLC, 50V, Y5V	
2		C21, C22, C25,C26	D4.3mm_W1.9mm_P5.00mm	4	100nF	Poly	WIMA
3		C23,C28,C29,C30	D4.3mm_W1.9mm_P5.00mm	4	4.7nF	Ceramic MMLC, 50V, X7R	
4		C24,C27	D4.3mm_W1.9mm_P5.00mm	2	220pF	Poly	WIMA
5		C9,C10	CP_Radial_D6.3mm_P2.50mm	2	10uF	Electrolitic, >36V	
6		D1,D2,D3,D4,D5,D6,D7,D8	D_DO-35_SOD27_P7.62mm_Horizontal	8	1N4148		
7		D9,D10,D11,D12,D13,D14	LED_D3.0mm	6	Green Led	forward voltage 2.1V (1.8±2.6)	
8		M1, M2, M3, M4, M5, M6, M7, M8, M9, M10, M11, M12	thonkiconn-WQP-PJ301M-12_JACK	12		Mono jack with switch	Thonk
9		Q1,Q3,Q4,Q6,Q7	TO-92_Inline_Wide	5	2N3904		
10		Q2,Q5	TO-92_Inline_Wide	2	BC547A		
11		R1,R2,R3,R5,R18,R22,R37,R38,R84,R85,R86,R87,R88,R89,R102,R103,R104,R105,R106,R107	R_Axial_DIN0207_L6.3mm_D2.5mm_P2.54mm_Vertical	20	47k	Metal Film, 1%, 0.6W	
12		R4,R6,R7,R8,R9,R11,R13,R19,R24,R26,R27,R28,R29,R31,R32,R33,R34,R36,R39,R40,R41,R42,R43,R44,R45,R46,R48,R49,R50,R52,R53,R54,R57,R58,R60,R61,R62,R65,R66,R67,R69,R70,R71,R72,R73,R74,R77,R78,R83,R91,R92,R93,R94,R95,R96,R97,R98,R112,R14,R51,R111,R10,R109	R_Axial_DIN0207_L6.3mm_D2.5mm_P2.54mm_Vertical	63	10k	Metal Film, 1%, 0.6W	
13		R12,R15,R21,R56,R90	R_Axial_DIN0207_L6.3mm_D2.5mm_P2.54mm_Vertical	5	100k	Metal Film, 1%, 0.6W	
14		R16,R17,R113,R114	R_Axial_DIN0207_L6.3mm_D2.5mm_P2.54mm_Vertical	4	15k	Metal Film, 1%, 0.6W	
15		R20,R55	R_Axial_DIN0207_L6.3mm_D2.5mm_P2.54mm_Vertical	2	330r	Metal Film, 1%, 0.6W	
16		R23,R25	R_Axial_DIN0207_L6.3mm_D2.5mm_P2.54mm_Vertical	2	3.3k	Metal Film, 1%, 0.6W	
17		R30,R35,R59,R63,R64,R68,R75,R76,R79,R80,R81,R82,R99,R100	R_Axial_DIN0207_L6.3mm_D2.5mm_P2.54mm_Vertical	14	20k	Metal Film, 1%, 0.6W	
18		R101,R108	R_Axial_DIN0207_L6.3mm_D2.5mm_P2.54mm_Vertical	2	1k	Metal Film, 1%, 0.6W	
19		R116,R115	R_Axial_DIN0207_L6.3mm_D2.5mm_P2.54mm_Vertical	2	4.7k	Metal Film, 1%, 0.6W	
20		R110,R47	R_Axial_DIN0207_L6.3mm_D2.5mm_P2.54mm_Vertical	2	2.2k	Metal Film, 1%, 0.6W	
21		CH1-FREQ-CV1,CH1-FREQ-CV2, CH1-RES1, CH1-RES-CV1, CH2-RES1, CH-RES-CV1, CH1-FREQ1, CH2-FREQ-CV1, CH2-FREQ-CV2, CH2-MODE1, CH2-MODE-CV1 CH1-MODE1, CH1-MODE-CV1, CH2-FREQ1	Potentiometer_Alps_RK09K_Single_Vertical	14	B100k	Alpha 9mm Vertical, T18 6mm	
22		CH1-BP1, CH2-BP2	Potentiometer_Alps_RK09K_Single_Vertical	2	B10KD	Alpha 9mm Vertical, T18 6mm, Center Dented	
23		RV8,RV16	Potentiometer_Bourns_3296Y_Vertical	2	50k	25 turn trimmer	
24		U1,U2,U3,U4,U6,U7,U8	DIP-14	7	TL074	4ch Opamp	
25		U9,U10,U12	DIP-14	3	CD4013BE	D flip-flop	
26		U11	DIP-14	1	CD4081BE	4Ch AND port	
27		U14	TO-92_Inline_Wide	1	L78L05_TO92	5V voltage regulator 100mA	
28		U15	TO-92_Inline_Wide	1	L7905	-5V voltage regulator 100mA	
29		U16,U20,U21,U22	DIP-14	4	AS3360		Alfa
30		U17,U19	DIP-8	2	ICM7555IPAZ	Frequency, 1MHz or better	
31		U18	DIP-20	1	LTC1060CN#PBF		Analog Devices
32		U13,U5	DIP-8	2	TL072	2Ch Opamp	
33		SW1	SWITCH_NINIGI_ TSSM1022A2	1		On-on	
34		SW2	Rotary_NINIGI_SR17A1415F49N	1	SW_Rotary	SR17A1415F49N, 4 position rotary switch, 30°	NINIGI
35		J3	PinHeader_1x20_P2.54mm_Vertical	1	01x20 Female	Straight, 2,54mm	
36		J2	PinHeader_1x20_P2.54mm_Vertical	1	01x20 Male	Straight, 2,54mm	
37		J7, J5, J11,J13	PinHeader_1x05_P2.54mm_Vertical	4	01x05 Female	Straight, 2,54mm	
38		J10,J12, J4, J6	PinHeader_1x05_P2.54mm_Vertical	4	01x05 Male	Straight, 2,54mm	
39		J9	PinSocket_1x03_P2.54mm_Vertical	1	01x04 Female	Straight, 2,54mm	
40		J8	PinSocket_1x03_P2.54mm_Vertical	1	01x04 Male	Straight, 2,54mm	
41		J15	PinHeader_1x03_P2.54mm_Vertical	1	01x03 Female	Straight, 2,54mm	
42		J14	PinHeader_1x03_P2.54mm_Vertical	1	01x03 Male	Straight, 2,54mm	
43		J1	IDC-Header_2x05_P2.54mm_Vertical	1	IDC header 02x05 male	Keyed power header	
			Electrical Component count - Subtotal	238			
44		Spacer	M3, 11mm, screwed spacer, internal & external thread	4			
45		Spacer	M3, 11mm, screwed spacer, internal threaded hole on both ends	4			
46		Screws	M3x6mm	8			
47		Knobs	6mm, curled shaft knobs	16			
			Construction component count - Subtotal	32			
			Total component count	270			