

Exhibit 10: Parts List

External Radio Frequency Power Amplifier ACOM 1200S

Model 1200S

ACOM 1200S PARTS LIST

AMP UNIT

Designator	Description	Value	Volts/Watts	Comment	Case/Package	Layer
A1	Jack Straight				SMB	Тор
A2	Jack Straight				SMA	Тор
А3	Jack Straight				SMB	Тор
ATT1	High Power Attenuator	10dB	100W	Flange Mount	FA10975	Тор
C1	High Q Cap.	180pF	1kV	NP0/C0G	1111	Тор
C4	Capacitor	10nF	100V	X7R	1206	Тор
C5	Capacitor	10nF	100V	X7R	1206	Top
C6	Capacitor	22nF	250V	X7R	1205	Top
C7	Capacitor	22nF	250V	X7R	1205	Top
C8	Capacitor	1nF	200V	X7R	1206	Top
C10	Capacitor	100nF	250V	X7R	1206	Top
C12	High Q Cap.	180pF	1kV	NP0/C0G	1111	Top
C14	Capacitor	100nF	100V	X7R	1206	Top
C15	Capacitor	10nF	100V	X7R	1206	Top
C16	Capacitor	10nF	100V	X7R	1206	Top
C17	Capacitor	10nF	100V	X7R	1206	Тор
C18	Capacitor	10nF	100V	X7R	1206	Тор
C19	Capacitor	10nF	100V	X7R	1206	Тор
C20	Capacitor	10nF	100V	X7R	1206	Тор
C21	Capacitor	10nF	100V	X7R	1206	Top
C22	Capacitor	10nF	100V	X7R	1206	Top
C23	Capacitor	10nF	100V	X7R	1206	Тор
C24	Capacitor	10nF	250V	X7R	1206	Тор
C25	Capacitor	1nF	200V	X7R	1206	Тор
C26	Capacitor	1nF	200V	X7R	1206	Тор
C27	Capacitor	100nF	250V	X7R	1206	Тор
C28	Capacitor	100nF	250V	X7R	1206	Bottom
C29	Capacitor	100nF	250V	X7R	1206	Тор
C30	Tantalum Capacitor	1uF	25V		CASE A	Top
C31	Capacitor	100nF	100V	X7R	1206	Top
C32	Capacitor	100nF	100V	X7R	1206	Top
C33	Capacitor	100nF	100V	X7R	1206	Top
C34	Capacitor	100nF	100V	X7R	1206	Top
C35	Capacitor	Capacitor	100nF	250V	X7R	1206
C36	Capacitor	Capacitor	100nF	250V	X7R	1206
C37 C38	Capacitor	100nF 10nF	100V 100V	X7R X7R	1206 1206	Top Top
	Capacitor		100V	FK	16mm x 16.5mm	Тор
C39 C40	Electrol. Capacitor Capacitor	150uF 100nF	250V	X7R	1206	Тор
C40	Capacitor	100nF	250V	X7R	1206	Тор
C41	Capacitor	100nF	250V	X7R	1206	Тор
C42	Capacitor	100nF	250V	X7R X7R	1206	Тор
C45	Capacitor	10nF	100V	X7R	1206	Тор
C46	Capacitor	100nF	250V	X7R	1206	Bottom
C50	Capacitor	10nF	630V	NP0	1206	Тор
C51	Capacitor	10nF	630V	NP0	1206	Тор
C52	Capacitor	10nF	630V	NP0	1206	Тор
C53	Capacitor	10nF	630V	NP0	1206	Тор
C54	Capacitor	10nF	630V	NP0	1206	Тор
C55	Capacitor	10nF	630V	NP0	1206	Тор
C56	Capacitor	10nF	630V	NP0	1206	Тор
C57	Capacitor	10nF	630V	NP0	1206	Тор
C58	Capacitor	10nF	630V	NP0	1206	Тор
C59	Capacitor	10nF	630V	NP0	1206	Тор
C60	Capacitor	10nF	200V	X7R	1206	Тор
C61	Capacitor	1nF	50V	X7R	1206	Тор
C62	Capacitor	1nF	50V	X7R	1206	Тор
D1	Diode	FDLL4448	100V	200mA	SOD-80	Тор
D2	Schottky Diode	BAS70-04	70V		SOT-23	Тор

D3	Diode	S1B	100V		DO-214AC	Тор
D3	Diode	S1B	100V		DO-214AC DO-214AC	Тор
D5	Diode	S1B	100V		DO-214AC	Top
D6	Diode	FDLL4448	100V	200mA	SOD-80	Тор
D7	Transient Voltage Suppressor	SMBJ30CA	600W		DO-214AA	Тор
D8	Schottky Diode	BAS70-04	70V		SOT-23	Тор
D9	Schottky Diode	BAS70-04	70V		SOT-23	Тор
D10	Diode	FDLL4448	100V	200mA	SOD-80	Top
D11	Diode	FDLL4448	100V	200mA	SOD-80	Тор
D12	Diode	FDLL4448	100V	200mA	SOD-80	Top
D13	Diode	FDLL4448	100V	200mA	SOD-80	Bottom
D14	Diode	FDLL4448	100V	200mA	SOD-80	Bottom
D15	Diode	FDLL4448	100V	200mA	SOD-80	Bottom
D16	Diode	FDLL4448	100V	200mA	SOD-80	Top
D17 D18	Diode Diode	FDLL4448 FDLL4448	100V 100V	200mA 200mA	SOD-80 SOD-80	Top
D18	Diode	FDLL4448 FDLL4448	100V	200mA 200mA	SOD-80 SOD-80	Top Bottom
D19 D20	Diode	FDLL4448 FDLL4448	100V	200mA	SOD-80	Bottom
D21	Diode	FDLL4448	100V	200mA	SOD-80	Bottom
D22	Transient Voltage	SMCJ120AC	1500W	200111A	DO-214AB	Top
D23	Transient Voltage Transient Voltage	SMCJ120AC	1500W		DO-214AB	Bottom
D24	Schottky Diode	BAS70-04	70V		SOT-23	Top
D25	Schottky Diode	BAS70-04	70V		SOT-23	Top
D26	Diode	FDLL4448	100V	200mA	SOD-80	Тор
D27	Diode	FDLL4448	100V	200mA	SOD-80	Тор
D28	Diode	FDLL4448	100V	200mA	SOD-80	Тор
D29	Diode	FDLL4448	100V	200mA	SOD-80	Bottom
D30	Diode	FDLL4448	100V	200mA	SOD-80	Bottom
D31	Diode	FDLL4448	100V	200mA	SOD-80	Bottom
D32	Diode	FDLL4448	100V	200mA	SOD-80	Top
D33	Diode	FDLL4448	100V	200mA	SOD-80	Тор
D34	Diode	FDLL4448	100V	200mA	SOD-80	Тор
D35	Diode	FDLL4448	100V	200mA	SOD-80	Bottom
D36	Diode	FDLL4448	100V	200mA	SOD-80	Bottom
D37	Diode	FDLL4448	100V	200mA	SOD-80	Bottom
D38 D39	Transient Voltage Transient Voltage	SMCJ120AC SMCJ120AC	1500W 1500W		DO-214AB DO-214AB	Top Bottom
J1	Connector, 3-Pin	SIVICUTZUAC	130000		MTA100 3p	Top
J2	Pin Header, 10-Pin				2.54mm pich	Тор
J3	Pin Header, 2-Pin				2.54mm pich	Top
J4	2 wires				2.0 p.o	Bottom
J5	Terminal				K14	Тор
J6	Terminal				K14	Тор
K1	Relay	G6K-2F 24DC	24V		G6K-2F	Тор
K2	Relay	G6K-2F 24DC	24V		G6K-2F	Top
L1	Inductor	22uH		100mA	L1210	Тор
L2	Inductor	22uH		100mA	L1210	Top
L3	Air Coil	60nH		4 turns, Ø0.8mm,		Top
L9	Power Choke	0.1uH		0.6		Top
L10	Air Coil	33nH		2 turns, Ø1.3mm,		Top
L11	Air Coil RF Mosfet LDMOS	33nH BLF188XRU	105\/	2 turns, Ø1.3mm,	SULESUA	Top
Q1 Q2	MOSFET N-CH	NDT3055L	135V 60V		SOT539A SOT-223-4	Top Top
R1	Metal Film Resistor	22	3W		AXIAL-Ø5.5 x 16mm	Тор
R2	Metal Film Resistor	22	3W		AXIAL-Ø5.5 x 16mm	Тор
R5	Resistor	1M	1/4W		1206	Тор
			1/ TVV	.		, JP
			3W		AXIAL-Ø5.5 x 16mm	Top
R6	Metal Film Resistor Metal Film Resistor	4.7 4.7	3W 3W		AXIAL-Ø5.5 x 16mm AXIAL-Ø5.5 x 16mm	Top Top
	Metal Film Resistor	4.7				
R6 R7	Metal Film Resistor Metal Film Resistor	4.7 4.7	3W		AXIAL-Ø5.5 x 16mm	Top
R6 R7 R8	Metal Film Resistor Metal Film Resistor Metal Film Resistor	4.7 4.7 8.2	3W 3W		AXIAL-Ø5.5 x 16mm AXIAL-Ø5.5 x 16mm	Top Top
R6 R7 R8 R9 R10 R11	Metal Film Resistor Metal Film Resistor Metal Film Resistor Metal Film Resistor	4.7 4.7 8.2 8.2 160 270	3W 3W 3W 1W		AXIAL-Ø5.5 x 16mm AXIAL-Ø5.5 x 16mm AXIAL-Ø5.5 x 16mm	Top Top Top Top Top
R6 R7 R8 R9 R10 R11 R12	Metal Film Resistor Resistor	4.7 4.7 8.2 8.2 160 270	3W 3W 3W 1W 1W 2W		AXIAL-Ø5.5 x 16mm AXIAL-Ø5.5 x 16mm AXIAL-Ø5.5 x 16mm AXIAL-Ø2.5 x 6.5mm AXIAL-Ø2.5 x 6.5mm 2512	Top Top Top Top Top Top Top
R6 R7 R8 R9 R10 R11 R12 R13	Metal Film Resistor Resistor Resistor	4.7 4.7 8.2 8.2 160 270 10	3W 3W 3W 1W 1W 2W		AXIAL-Ø5.5 x 16mm AXIAL-Ø5.5 x 16mm AXIAL-Ø5.5 x 16mm AXIAL-Ø2.5 x 6.5mm AXIAL-Ø2.5 x 6.5mm 2512 1206	Top Top Top Top Top Top Top Top
R6 R7 R8 R9 R10 R11 R12 R13	Metal Film Resistor Resistor Resistor Resistor	4.7 4.7 8.2 8.2 160 270 10 47	3W 3W 3W 1W 1W 2W 1/4W		AXIAL-Ø5.5 x 16mm AXIAL-Ø5.5 x 16mm AXIAL-Ø5.5 x 16mm AXIAL-Ø2.5 x 6.5mm AXIAL-Ø2.5 x 6.5mm 2512 1206 1206	Top
R6 R7 R8 R9 R10 R11 R12 R13 R14	Metal Film Resistor Resistor Resistor Resistor Resistor Resistor	4.7 4.7 8.2 8.2 160 270 10 47 10k 240	3W 3W 3W 1W 1W 2W 1/4W 1/4W	1%	AXIAL-Ø5.5 x 16mm AXIAL-Ø5.5 x 16mm AXIAL-Ø5.5 x 16mm AXIAL-Ø2.5 x 6.5mm AXIAL-Ø2.5 x 6.5mm 2512 1206 1206 1206	Top
R6 R7 R8 R9 R10 R11 R12 R13 R14 R15	Metal Film Resistor Resistor Resistor Resistor Resistor Resistor Resistor Resistor	4.7 4.7 8.2 8.2 160 270 10 47 10k 240 1.1k	3W 3W 3W 1W 1W 2W 1/4W 1/4W 1/4W	1% 1%	AXIAL-Ø5.5 x 16mm AXIAL-Ø5.5 x 16mm AXIAL-Ø5.5 x 16mm AXIAL-Ø2.5 x 6.5mm AXIAL-Ø2.5 x 6.5mm 2512 1206 1206 1206 1206	Top
R6 R7 R8 R9 R10 R11 R12 R13 R14	Metal Film Resistor Resistor Resistor Resistor Resistor Resistor	4.7 4.7 8.2 8.2 160 270 10 47 10k 240	3W 3W 3W 1W 1W 2W 1/4W 1/4W		AXIAL-Ø5.5 x 16mm AXIAL-Ø5.5 x 16mm AXIAL-Ø5.5 x 16mm AXIAL-Ø2.5 x 6.5mm AXIAL-Ø2.5 x 6.5mm 2512 1206 1206 1206	Top

R19	Resistor	1k	1/4W		1206	Top
R20	Resistor	1k	1/4W		1206	Тор
R21	Resistor	27k	1/4W		1206	Тор
R22	Resistor	2.2k	1/4W		1206	Тор
R23	Resistor	1k	1/4W		1206	Тор
R25	Resistor	10k	1/4W		1206	Тор
R26	Resistor	5.1k	1/4W	1%	1206	Тор
R27	Resistor	6.8k	1/4W	1%	1206	Тор
R28	Metal Film Resistor	2.2	3W		AXIAL-Ø5.5 x 16mm	Тор
R29	Resistor	22k	1/4W	1%	1206	Тор
R30	Resistor	1.1k	1/4W	1%	1206	Top
R31	Metal Film Resistor	39k	3W		AXIAL-Ø5.5 x 16mm	Top
R32	High Power Resistor	50	250W	Flange Mount	FR10975	Top
R33	Resistor	1M	1/4W	_	1206	Top
R34	Resistor	4.7k	1/4W		1206	Top
R35	Resistor	22k	1/4W	1%	1206	Тор
R36	Resistor	0	1/4W		1206	Top
R37	Resistor	0	1/4W		1206	Тор
R38	Resistor	510	1/4W		1206	Тор
R39	Resistor	510	1/4W		1206	Тор
R40	Resistor	0	1/4W		1206	Top
R41	Resistor	47	1/4W		1206	Тор
R42	Resistor	10к	1/4W		1206	Top
R43	Resistor	47	1/4W		1206	Top
R44	Resistor	10к	1/4W		1206	Top
RP1	Potentiometer	1к	250mW		3314J-1	Top
RT1	Thermistor	10k	15mW		Radial	Top
T1	Input Transformer	1:4				Top
T2	Output Transformer				D12A-R1B	Top
T3	Balun Transformer					Top
T4	Output Transformer				D12A-R1B	Тор
T5	Double Choke					Bottom
U1	Operational Amplifier	LM358			SO8	Тор
U2	Operational Amplifier	LM358			SO8	Top
U3	Current Sensor IC	ACS723LLCTR-		40A	SO8	Тор
VR1	Voltage Regulator	78L05		100mA	SOT89	Top
ZD1	Zener Diode	BZX84C5V1	0.3W		SOT-23	Тор

AMP UNIT

Designator	Description	Value	Volts/Watts	Comment	Case/Package	Layer
C1	Capacitor	1nF	250V	X7R	1206	Тор
C2	Tantalum Capacitor	1uF	35V		CASE A	Тор
C3	Capacitor	100nF	100V	X7R	1206	Тор
C4	Capacitor	100nF	100V	X7R	1206	Тор
C5	Capacitor	1nF	250V	X7R	1206	Тор
C6	Capacitor	1nF	250V	X7R	1206	Тор
C7	Capacitor	100nF	100V	X7R	1206	Тор
C8	Capacitor	10nF	100V	X7R	1206	Тор
C9	Capacitor	10nF	100V	X7R	1206	Тор
C10	Capacitor	10nF	100V	X7R	1206	Тор
C11	Capacitor	100nF	100V	X7R	1206	Тор
C12	Capacitor	100nF	100V	X7R	1206	Тор
C13	Capacitor	10nF	100V	X7R	1206	Тор
C14	Capacitor	10nF	100V	X7R	1206	Тор
C15	Capacitor	10nF	100V	X7R	1206	Тор
C16	Capacitor	10nF	100V	X7R	1206	Тор
C17	Capacitor	10nF	100V	X7R	1206	Тор
C18	Capacitor	10nF	100V	X7R	1206	Тор

C19	Capacitor	100nF	50V	X7R	1206	Тор
C20	Capacitor	100nF	50V	X7R	1206	Тор
C21	Capacitor	100nF	50V	X7R	1206	Тор
C22	Capacitor	100nF	50V	X7R	1206	Тор
C23	Capacitor	1nF	50V	X7R	1206	Тор
C24	Capacitor	2.2uF	50V	Y5V	1206	Тор
C25	Capacitor	100nF	50V	X7R	1206	Тор
C26	Capacitor	1nF	250V	X7R	1206	Тор
C27	Capacitor	1nF	50V	X7R	1206	Тор
C28	Capacitor	2.2uF	50V	Y5V	1206	Тор
C29	Capacitor	100nF	50V	X7R	1206	Тор
C30	Capacitor	10nF	100V	X7R	1206	Тор
C31	Capacitor	22nF	50V	X7R	1206	Тор
C32	Capacitor	2.2uF	50V	Y5V	1206	Тор
C33	Capacitor	NA	NA	NA	1206	Тор
C34	Capacitor	1nF	50V	X7R	1206	Тор
C35	Capacitor	100nF	50V	X7R	1206	Тор
C36	Capacitor	2.2uF	50V	Y5V	1206	Тор
C37	Capacitor	1nF	50V	X7R	1206	Тор
D1	LED	GREEN	2.6V	20mA	0805	Тор
D2	LED	RED	2.6V	20mA	0805	Тор
D3	LED	YELLOW	2.6V	20mA	0805	Тор
D4	LED	BLUE	2.6V	20mA	0805	Тор
J1	Female Header, 10-Pin				2.54mm pich	Bottom
J2	Female Header, 2-Pin				2.54mm pich	Bottom
J3	Connector, 2-Pin				MTA100 2p	Тор
J4	Connector, 2-Pin				MTA100 2p	Тор
J5	Connector, 10-Pin				MTA100 10p	Тор
J6	Connector, 2-Pin				MTA100 2p	Тор
J7	Connector, 4-Pin				MTA100 4p	Тор
L1	Inductor	22uH		100mA	1210	Тор
L2	Inductor	2.2uH		320mA	1210	Тор
L3	Inductor	2.2uH		320mA	1210	Тор
L4	Inductor	22uH		100mA	1210	Тор
L5	Inductor	22uH		100mA	1210	Тор
L6	Inductor	2.2uH		320mA	1210	Тор
L7	Inductor	22uH		100mA	1210	Тор
L8	Inductor	22uH		100mA	1210	Тор
L9	Inductor	22uH		100mA	1210	Тор
L10	Inductor	22uH		100mA	1210	Тор
L11	Inductor	22uH		100mA	1210	Тор
L12	Inductor	22uH		100mA	1210	Тор
L13	Inductor	22uH		100mA	1210	Тор
Q1	NPN Transistor	BC817-40	45V		SOT-23	Тор
Qı	INI IN TIATISISIO					
Q2	MOSFET N-CH	2N7002	60V		SOT-23	Тор
					SOT-23 SOT-23	Top Top

Q5	MOSFET N-CH	2N7002	60V		SOT-23	Тор
R1	Resistor	6.8k	1/4W		1206	Тор
R2	Resistor	39k	1/4W		1206	Тор
R3	Metal Film Resistor	10k	1W		AXIAL-Ø2.5 x 6.5mm	Тор
R4	Resistor	10k	1/4W		1206	Тор
R5	Metal Film Resistor	33	3W		AXIAL-Ø5.5 x 16mm	Тор
R6	Metal Film Resistor	68	3W		AXIAL-Ø5.5 x 16mm	Тор
R7	Resistor	221k	1/4W	1%	1206	Тор
R8	Resistor	10k	1/4W		1206	Тор
R9	Resistor	470	1/4W		1206	Тор
R10	Resistor	100	1/4W		1206	Тор
R11	Resistor	511k	1/4W	1%	1206	Тор
R12	Resistor	1M	1/4W		1206	Тор
R13	Resistor	221k	1/4W	1%	1206	Тор
R14	Resistor	2.2k	1/4W		1206	Тор
R15	Resistor	470	1/4W	1	1206	Тор
R16	Potentiometer	10k	250mW	1	3314J-1	Тор
R17	Resistor	5.62k	1/4W	1%	1206	Тор
R18	Resistor	33	1/4W		1206	Тор
R19	Resistor	53.6k	1/4W	1%	1206	Тор
R20	Resistor	22k	1/4W		1206	Тор
R21	Resistor	221k	1/4W	1%	1206	Тор
R22	Resistor	2.2k	1/4W		1206	Тор
R23	Resistor	470	1/4W		1206	Тор
R24	Potentiometer	10k	250mW		3314J-1	Тор
R25	Resistor	3.32k	1/4W	1%	1206	Тор
R26	Resistor	0	1/4W	1	1206	Тор
R27	Resistor	22k	1/4W		1206	Тор
R28	Resistor	0	1/4W	1%	1206	Тор
R29	Resistor	1M	1/4W		1206	Тор
R30	Resistor	221k	1/4W	1%	1206	Тор
R31	Resistor	2.2k	1/4W		1206	Тор
R32	Resistor	470	1/4W		1206	Тор
R33	Potentiometer	10k	250mW		3314J-1	Тор
R34	Resistor	33	1/4W		1206	Тор
R35	Resistor	10k	1/4W	1%	1206	Тор
R36	Resistor	10k	1/4W		1206	Тор
R37	Resistor	22k	1/4W		1206	Тор
R38	Resistor	10k	1/4W		1206	Тор
U1	Darlington	ULN2003			SO16	Тор
	Dual Precision					
U3	Dual Differential	LM393			SO8	Тор
U4	Dual 4-Input NOR	CD74HC40			SO14	Тор
	Dual Precision					
U6	Dual Differential	LM393		1	SO8	Тор
VR1	Voltage Regulator	78L05		100mA	SOT89	Тор
ZD1	Zener Diode		0.3W	1	SOT-23	Тор
ZD2	Zener Diode		0.3W		SOT-23	Тор

FILTER UNIT

Designator	Description	Value	Volts/Watts	Comment	Case/Package	Layer
C1	High Q Cap.	33pF	1.5kV	NP0/C0G	1111	Тор
C2	High Q Cap.	27pF	1.5kV	NP0/C0G	1111	Тор
C3	High Q Cap.	33pF	1.5kV	NP0/C0G	1111	Тор
C4	High Q Cap.	56pF	1.5kV	NP0/C0G	1111	Тор
C5	High Q Cap.	56pF	1.5kV	NP0/C0G	1111	Тор
C6	High Q Cap.	39pF	1.5kV	NP0/C0G	1111	Тор
C7	High Q Cap.	39pF	1.5kV	NP0/C0G	1111	Тор
C8	High Q Cap.	39pF	1.5kV	NP0/C0G	1111	Тор
C9	High Q Cap.	56pF	1.5kV	NP0/C0G	1111	Top
C10	High Q Cap.	56pF	1.5kV	NP0/C0G	1111	Тор
C11	High Q Cap.	33pF	1.5kV	NP0/C0G	1111	Top
C12	High Q Cap.	27pF	1.5kV	NP0/C0G	1111	Top
C13	High Q Cap.	82pF	1.5kV	NP0/C0G	1111	Top
C14	High Q Cap.	82pF	1.5kV	NP0/C0G	1111	Top
C15	High Q Cap.	68pF	1.5kV	NP0/C0G	1111	Top
C16	High Q Cap.	68pF	1.5kV	NP0/C0G	1111	Top
C17	High Q Cap.	47pF	1.5kV	NP0/C0G	1111	Top
C18	High Q Cap.	82pF	1.5kV	NP0/C0G	1111	Top
C19	High Q Cap.	68pF	1.5kV	NP0/C0G	1111	Top
C20	High Q Cap.	82pF	1.5kV	NP0/C0G	1111	Top
C21	High Q Cap.	150pF	1kV	NP0/C0G	1111	Top
C22	High Q Cap.	120pF	1kV	NP0/C0G	1111	Top
C23	High Q Cap.	100pF	1kV	NP0/C0G	1111	Тор
C24	High Q Cap.	100pF	1kV	NP0/C0G	1111	Тор
C25	High Q Cap.	120pF	1kV	NP0/C0G	1111	Тор
C26	High Q Cap.	120pF	1kV	NP0/C0G	1111	Тор
C27	High Q Cap.	82pF	1.5kV	NP0/C0G	1111	Тор
C28	High Q Cap.	100pF	1kV	NP0/C0G	1111	Тор
C29	High Q Cap.	150pF	1kV	NP0/C0G	1111	Тор
C30	High Q Cap.	180pF	1kV	NP0/C0G	1111	Тор
C31	High Q Cap.	150pF	1kV	NP0/C0G	1111	Тор
C32	High Q Cap.	120pF	1kV	NP0/C0G	1111	Тор
C33	High Q Cap.	100pF	1kV	NP0/C0G	1111	Тор
C34	High Q Cap.	150pF	1kV	NP0/C0G	1111	Тор
C35	High Q Cap.	120pF	1kV	NP0/C0G	1111	Тор
C36	High Q Cap.	150pF	1kV	NP0/C0G	1111	Тор
C37	High Q Cap.	200pF	630V	NP0/C0G	1111	Тор
C38	High Q Cap.	200pF	630V	NP0/C0G	1111	Top
C40	High Q Cap.	200pF	630V	NP0/C0G	1111	Тор
C41	High Q Cap.	200pF	630V	NP0/C0G	1111	Тор
C43	High Q Cap.	200pF	630V	NP0/C0G	1111	Top
C44	High Q Cap.	200pF	630V	NP0/C0G	1111	Top
C45	High Q Cap.	180pF	1kV	NP0/C0G	1111	Top
C46	High Q Cap.	100pF	1kV	NP0/C0G	1111	Top
C47	High Q Cap.	100pF	1kV	NP0/C0G	1111	Top
C48	High Q Cap.	300pF	630V	NP0/C0G	1111	Top
C49	High Q Cap.	240pF	630V	NP0/C0G	1111	Top
C52	High Q Cap.	300pF	630V	NP0/C0G	1111	Top
C53	High Q Cap.	300pF	630V	NP0/C0G	1111	Top
C56	High Q Cap.	240pF	630V	NP0/C0G	1111	Top
C58	High Voltage Cap.	220pF	1kV	NP0/C0G	1812	Top
C59	High Voltage Cap.	220pF	1kV	NP0/C0G	1812	Top
C60	High Voltage Cap.	150pF	1kV	NP0/C0G	1812	Top
C61	High Voltage Cap.	100pF	1kV	NP0/C0G	1812	Top
C62	High Voltage Cap.	100pF	1kV	NP0/C0G	1812	Top
C63	High Voltage Cap.	100pF	1kV	NP0/C0G	1812	Top
C64	High Voltage Cap.	100pF	1kV	NP0/C0G	1812	Top
C65	High Voltage Cap.	100pF	1kV	NP0/C0G	1812	Top
C66	High Voltage Cap.	100pF	1kV	NP0/C0G	1812	Top
C67	High Q Cap.	390pF	630V	NP0/C0G	1111	Top
C67A	High Q Cap.	390pF	630V	NP0/C0G	1111	Top
C67B	High Q Cap.	390pF	630V	NP0/C0G	1111	Top
C68	High Q Cap.	390pF	630V	NP0/C0G	1111	Top
C68A	High Q Cap.	390pF	630V	NP0/C0G	1111	Top

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C68B C69	High Q Cap. High Voltage Cap.	390pF 150pF	630V 1kV	NP0/C0G NP0/C0G	1111 1812	Top Top
C70	High Voltage Cap.	150pF	1kV	NP0/C0G	1812	Тор
C71	High Voltage Cap.	220pF	1kV	NP0/C0G	1812	Тор
C72	High Voltage Cap.	390pF	1kV	NP0/C0G	1812	Тор
C73	High Voltage Cap.	390pF	1kV	NP0/C0G	1812	Тор
C74	High Voltage Cap.	220pF	1kV	NP0/C0G	1812	Тор
C75	High Voltage Cap.	220pF	1kV	NP0/C0G	1812	Top
C76	High Voltage Cap.	220pF	1kV	NP0/C0G	1812	Top
C77	High Voltage Cap.	220pF	1kV	NP0/C0G	1812	Тор
C78	High Voltage Cap.	220pF	1kV	NP0/C0G	1812	Тор
C79	High Voltage Cap.	220pF	1kV	NP0/C0G	1812	Top
C80	High Voltage Cap.	100pF	1kV	NP0/C0G	1812	Top
C81	High Q Cap.	390pF	630V	NP0/C0G	1111	Top
C81A C81B	High Q Cap.	390pF	630V 630V	NP0/C0G NP0/C0G	1111 1111	Top Top
C82	High Q Cap. High Q Cap.	390pF 390pF	630V	NP0/C0G NP0/C0G	1111	Тор
C82A	High Q Cap.	390pF 390pF	630V	NP0/C0G	1111	Тор
C82B	High Q Cap.	390pF	630V	NP0/C0G	1111	Тор
C83	High Q Cap.	390pF	630V	NP0/C0G	1111	Тор
C83A	High Q Cap.	390pF	630V	NP0/C0G	1111	Тор
C83B	High Q Cap.	390pF	630V	NP0/C0G	1111	Тор
C84	High Q Cap.	390pF	630V	NP0/C0G	1111	Тор
C84A	High Q Cap.	390pF	630V	NP0/C0G	1111	Тор
C84B	High Q Cap.	390pF	630V	NP0/C0G	1111	Тор
C85	High Voltage Cap.	330pF	1kV	NP0/C0G	1812	Top
C86	High Voltage Cap.	330pF	1kV	NP0/C0G	1812	Тор
C87	High Voltage Cap.	330pF	1kV	NP0/C0G	1812	Тор
C88	Capacitor	100nF	50V	X7R	0805	Bottom
C89	Capacitor	100nF	50V	X7R	0805	Bottom
C90 C91	Capacitor	100nF 100nF	50V 50V	X7R X7R	0805 0805	Bottom
C92	Capacitor Capacitor	100nF 100nF	50V	X7R X7R	0805	Bottom Bottom
C92	Capacitor	100nF	50V	X7R	0805	Bottom
C94	Capacitor	100nF	50V	X7R	0805	Bottom
C95	Capacitor	100nF	50V	X7R	0805	Bottom
C96	Capacitor	100nF	50V	X7R	0805	Bottom
C97	Capacitor	100nF	50V	X7R	0805	Bottom
C98	Capacitor	100nF	50V	X7R	0805	Bottom
C99	Capacitor	100nF	50V	X7R	0805	Bottom
C100	Capacitor	100nF	50V	X7R	0805	Bottom
C101	Capacitor	100nF	50V	X7R	0805	Bottom
C102	Capacitor	100nF	50V	X7R	0805	Bottom
C103	Capacitor	100nF	50V	X7R	0805	Bottom
C104 C105	Capacitor Capacitor	100nF 100nF	50V 50V	X7R X7R	0805 0805	Bottom
C106	Capacitor	100nF	50V	X7R	0805	Bottom Bottom
C100	Capacitor	100nF	50V	X7R	0805	Bottom
C108	Capacitor	100nF	50V	X7R	0805	Bottom
C109	Capacitor	100nF	50V	X7R	0805	Bottom
C110	Capacitor	100nF	50V	X7R	0805	Bottom
C111	Capacitor	100nF	50V	X7R	0805	Bottom
C112	Capacitor	100nF	50V	X7R	0805	Bottom
C113	Capacitor	100nF	50V	X7R	0805	Bottom
C114	Capacitor	100nF	50V	X7R	0805	Bottom
C115	Capacitor	100nF	50V	X7R	0805	Bottom
C116	Capacitor	100nF	50V	X7R	0805	Bottom
C117	Capacitor	100nF	50V	X7R V7D	0805	Bottom
C118 C119	Capacitor Capacitor	100nF 100nF	50V 50V	X7R X7R	0805 0805	Bottom Bottom
C120	Capacitor	100F	500V	NP0	1206	Bottom
C120	Capacitor	2.2nF	630V	U2J	1210	Bottom
C122	Capacitor	2.2nF	630V	U2J	1210	Bottom
C123	Capacitor	2.2nF	630V	U2J	1210	Bottom
C124	Capacitor	2.2nF	630V	U2J	1210	Bottom
C125	Capacitor	2.2nF	630V	U2J	1210	Bottom
C126	Capacitor	39nF	250V	X7R	1206	Bottom
C127	Capacitor	3.3pF	630V	NP0	1206	Bottom

C128	Capacitor	33pF	630V	NP0/C0G	1206	Bottom
C129	Capacitor	10nF	50V	X7R	0805	Bottom
C130	Capacitor	1nF	50V	C0G	0805	Bottom
C132	Capacitor	1nF	50V	C0G	0805	Bottom
C133	Capacitor	1nF	50V	C0G	0805	Bottom
C134	Capacitor	2,7pF	5kV	NP0	disc Ø8mm	Тор
C135	Capacitor	1nF	50V	C0G	0805	Bottom
C136	Capacitor	47nF	50V	X7R	0805	Bottom
C137	Capacitor	1nF	50V	C0G	0805	Bottom
C138	Capacitor	1nF	50V	C0G	0805	Bottom
C139	Capacitor	1nF	50V	C0G	0805	Bottom
C140	Capacitor	1nF	50V	C0G	0805	Bottom
C141	Trim Cap	9-120pF	200V	DAU	Ø9.5mm	Тор
C142	Capacitor	56pF	50V	C0G	1206	Bottom
C143	Capacitor	56pF	50V	C0G	1206	Bottom
C144	Capacitor	56pF	50V	C0G	1206	Bottom
C145	Capacitor	1nF	50V	C0G	0805	Bottom
C146	Capacitor	47nF	50V	X7R	0805	Bottom
C147	Capacitor	220nF	100V	X7R	1206	Bottom
C148	Electrol. Capacitor	10uF	35V	RK	Ø5mm x 11mm	Тор
C149	Capacitor	100nF	200V	X7R	1206	Bottom
C150	Capacitor	47nF	50V	X7R	0805	Bottom
C151	Capacitor	47nF	50V	X7R	0805	Bottom
C152	Capacitor	47nf	50V	X7R	0805	Bottom
C153	Capacitor	47nF	50V	X7R	0805	Bottom
C154	Capacitor	100nF	50V	X7R	0805	Bottom
C155	Capacitor	100nF	50V	X7R	0805	Bottom
C156	Capacitor	100nF	50V	X7R	0805	Bottom
C157	Capacitor	100nF	50V	X7R	0805	Bottom
C158	Capacitor	220nF	100V	X7R	1206	Bottom
C159	High Voltage Ceramic	10pF	6.3kV	SL	disc Ø7mm	Bottom
C160	High Voltage Ceramic	18pF	6.3kV	SL	disc Ø7mm	Bottom
C161	High Voltage Ceramic	15pF	6.3kV	SL	disc Ø7mm	Bottom
C162	High Voltage Ceramic	27pF	6.3kV	SL	disc Ø7mm	Bottom
C163	High Voltage Ceramic	22pF	6.3kV	SL	disc Ø7mm	Bottom
C164	High Voltage Ceramic	39pF	6.3kV	SL	disc Ø7mm	Bottom
D1 D2	Diode	S1G	400V		DO-214AC	Bottom
	Diode	S1G	400V		DO-214AC	Bottom
D3	Diode	S1G	400V		DO-214AC	Bottom
D4 D5	Diode Diode	S1G S1G	400V 400V		DO-214AC DO-214AC	Bottom
D6	Diode	S1G S1G	400V 400V			Bottom
D7	Diode	S1G S1G	400V 400V		DO-214AC DO-214AC	Bottom Bottom
D8		\$1G	400V 400V			
	Diode				DO-214AC	Bottom
D9 D10	Diode Diode	S1G S1G	400V 400V		DO-214AC DO-214AC	Bottom Bottom
D10	Diode	S1G S1G	400V 400V		DO-214AC DO-214AC	Bottom
D11	Diode	S1G S1G	400V 400V		DO-214AC DO-214AC	Bottom
D12	Diode	\$1G	400V		DO-214AC DO-214AC	Bottom
D13	Diode	\$1G	400V		DO-214AC DO-214AC	Bottom
D14	Diode	S1G S1G	400V 400V		DO-214AC DO-214AC	Bottom
D15	Diode	\$1G	400V 400V		DO-214AC DO-214AC	Bottom
D16	Diode	\$1G	400V		DO-214AC DO-214AC	Bottom
D18	Diode	S1G	400V		DO-214AC	Bottom
D18	Diode	\$1G	400V		DO-214AC DO-214AC	Bottom
D19	Diode	S1G	400V		DO-214AC DO-214AC	Bottom
D20	Diode	S1G	400V		DO-214AC	Bottom
D21	Diode	S1G	400V		DO-214AC DO-214AC	Bottom
D23	Diode	S1G	400V		DO-214AC	Bottom
D24	Diode	S1G	400V		DO-214AC	Bottom
D25	Schottky Diode	BAS70-04	70V		SOT-23	Bottom
D26	Zener Diode	BZX84C4V	0.3W		SOT-23	Bottom
D27	Schottky Diode	BAS70-04	70V		SOT-23	Bottom
D28	Schottky Diode	BAS70-04	70V		SOT-23	Bottom
D29	Schottky Diode	BAS70-04	70V		SOT-23	Bottom
D30	Diode	S1G	400V		DO-214AC	Bottom
D31	Diode	S1G	400V		DO-214AC	Bottom
J1	Connector Jack	1-1337482-	.00 1		SMB	Top
	COLLIDOROL DUON	. 1007 702			0	٧٠.

10	0	5 404 4000			0144	T
J2	Connector Jack	5-1814832-			SMA	Top
J3	Connector Jack	1-1337482-			SMB	Top
J4	Hollow Rivet	4.4007400			DIN7340A	Top
J5	Connector Jack	1-1337482-			SMB	Top
J6	Hollow Rivet	4 4007400			DIN7340A SMB	Top
J7	Connector Jack	1-1337482-			MTA-100 8P	Top
J8	Connector, 8-Pin					Top
J9	Connector, 10-Pin				MTA-100 10P	Top
J10	Connector, 5-Pin	TO0 40V	40)/		MTA-100 5P	Top
K1	Relay	TQ2-12V	12V		TQ2	Top
K2 K3	Relay Relay	RTE24024 RTE24024	24V 24V		RT2 RT2	Top
	-	TQ2-12V	12V		TQ2	Top
K4 K5	Relay	RTE24024	24V		RT2	Top
K6	Relay Relay	RTE24024 RTE24024	24 V 24 V		RT2	Top
K7	Relay	TQ2-12V	12V		TQ2	Top Top
			24V		RT2	
K8 K9	Relay Relay	RTE24024 RTE24024	24 V 24 V		RT2	Top Top
K10	Relay	TQ2-12V	12V		TQ2	Тор
	7					
K11	Relay	RTE24024	24V		RT2	Top
K12	Relay	RTE24024	24V		RT2	Top
K13	Relay	TQ2-12V RTE24024	12V		TQ2	Top
K14 K15	Relay Relay	RTE24024 RTE24024	24V 24V		RT2 RT2	Top Top
K15 K16		TQ2-12V	12V		TQ2	Тор
	Relay					<u> </u>
K17 K18	Relay Relay	RTE24024 RTE24024	24V 24V		RT2 RT2	Top Top
K18	Relay Relav	TQ2-12V	12V		TQ2	
	7	RTE24024	24V			Top
K20 K21	Relay	RTE24024 RTE24024	24 V 24 V		RT2 RT2	Top Top
K22	Relay Relay	TQ2-12V	12V		TQ2	Тор
K23	Relay	RTE24024	24V		RT2	Тор
K24	Relay	RTE24024	24V 24V		RT2	Тор
K25	Relay	TQ2-12V	12V		TQ2	Тор
K26	Relay	RTE24012	12V		RT2	Тор
L1	Air Coil	170nH	12 V	5.5 turns, Ø1.6mm,	NIZ	Тор
L2	Air Coil	67nH		2.5 turns, Ø1.6mm,		Тор
L3	Air Coil	64nH		2.5 turns, Ø1.6mm,		Тор
L4	Air Coil	180nH		2.5 turns, Ø2mm,		Тор
L5	Air Coil	220nH		3.5 turns, Ø2mm,		Тор
L6	Air Coil	180nH		3.5 turns, Ø2mm,		Тор
L7	Air Coil	290nH		7.5 turns, Ø1.2mm.		Тор
L8	Air Coil	110nH		4.5 turns, Ø1.6mm,		Тор
L9	Air Coil	110nH		4.5 turns, Ø1.6mm,		Тор
L10	Air Coil	340nH		4.5 turns, Ø2mm,		Тор
L11	Air Coil	410nH		3.5 turns, Ø2mm,		Тор
L12	Air Coil	330nH		3.5 turns, Ø2mm,		Тор
L13	Air Coil	400nH		9.5 turns, Ø1.2mm,		Тор
L14	Air Coil	160nH		5.5 turns, Ø1.2mm,		Тор
L15	Air Coil	150nH		5.5 turns, Ø1.6mm,		Тор
L16	Air Coil	440nH		4.5 turns, Ø2mm,		Тор
L17	Air Coil	530nH		5.5 turns, Ø2mm,		Top
Designator	Description	Value	Volts/Watts	Comment	Case/Package	Layer
L18	Air Coil	420nH		4.5 turns, Ø2mm,	- 2 -	Тор
L19	Toroidal Coil	620nH		11 turns, Ø1.2mm	T80- 6	Тор
L20	Toroidal Coil	230nH		5 turns, Ø1.2mm	T80- 6	Тор
L21	Toroidal Coil	210nH		6 turns, Ø1.2mm	T80- 6	Тор
L22	Toroidal Coil	610nH		7 turns, Ø1.6mm	T130- 6	Тор
L23	Toroidal Coil	730nH		8 turns, Ø1.6mm	T130- 6	Тор
L24	Toroidal Coil	530nH		7 turns, Ø1.6mm	T130- 6	Top
L25	Toroidal Coil	890nH		14 turns, Ø1.2mm	T80- 6	Тор
L26	Toroidal Coil	320nH		8 turns, Ø1.2mm	T80- 6	Тор
L27	Toroidal Coil	300nH		8 turns, Ø1.2mm	T80- 6	Тор
L28	Toroidal Coil	870nH		9 turns, Ø1.6mm	T130- 6	Тор
	—	4		10 turns, Ø1.6mm	T130- 6	Top
L29	Toroidal Coil	1uH		10 tari	100 0	. 0 p
	Toroidal Coil Toroidal Coil	790nH		9 turns, Ø1.6mm	T130- 6	Тор
L29 L30 L31						
L29 L30	Toroidal Coil	790nH		9 turns, Ø1.6mm	T130- 6	Тор

				1		
L33	Toroidal Coil	390nH		9 turns, Ø1.2mm	T80- 6	Top
L34	Toroidal Coil	1.1uH 1.4uH		12 turns, Ø1.6mm	T130- 6	Top
L35	Toroidal Coil			13 turns, Ø1.6mm	T130- 6	Top
<u>L36</u> L37	Toroidal Coil Toroidal Coil	1.1uH 1.85uH		10 turns, Ø1.6mm 20 turns, Ø1.2mm	T130- 6 T80- 6	Top Top
L38	Toroidal Coil	810nH		13 turns, Ø1.2mm	T80- 6	Тор
L39	Toroidal Coil	780nH		13 turns, Ø1.2mm	T80- 6	Тор
L40	Toroidal Coil	2.3uH		14 turns, Ø1.6mm	T130- 6	Тор
L41	Toroidal Coil	2.7uH		15 turns, Ø1.6mm	T130- 6	Тор
L42	Toroidal Coil	2.3uH		15 turns, Ø1.6mm	T130- 6	Тор
L43	Toroidal Coil	3.6uH		28 turns, Ø1.2mm	T80- 6	Top
L44	Toroidal Coil	1.5uH		18 turns, Ø1.2mm	T80- 6	Top
L45	Toroidal Coil	1.5uH		18 turns, Ø1.2mm	T80- 6	Top
L46	Toroidal Coil	4.4uH		20 turns, Ø1.6mm	T130- 6	Top
L47	Toroidal Coil	5uH		22 turns, Ø1.6mm	T130- 6	Тор
L48	Toroidal Coil	4.4uH		21 turns, Ø1.6mm	T130- 6	Тор
L49	Inductor	56uH		190mA	1812	Bottom
L50	Inductor	56uH		190mA	1812	Bottom
L51	Inductor	56uH		190mA	1812	Bottom
L52	Inductor	56uH		190mA	1812	Bottom
L53	Inductor	56uH		190mA	1812	Bottom
L54	Inductor	56uH		190mA	1812	Bottom
L55	Inductor	56uH		190mA	1812	Bottom
L56	Inductor	56uH		190mA	1812	Bottom
L57	Inductor	56uH		190mA	1812	Bottom
L58	Inductor	56uH		190mA	1812	Bottom
L59	Inductor	56uH		190mA	1812	Bottom
L60	Inductor	56uH		190mA	1812	Bottom
L61	Inductor	56uH		190mA	1812	Bottom
L62	Inductor	56uH		190mA	1812	Bottom
L63	Inductor	56uH		190mA	1812	Bottom
L64	Inductor	56uH		190mA	1812	Bottom
L65	Choke Toroidal	47uH		33 turns, Ø0.53mm	Fair-Rite 596- 7000-	Тор
L66	Choke Ferrite	47uH		30 turns, Ø0.53mm	8x31mm u80	Тор
L67	Inductor	820uH		30mA	1812	Bottom
L69	Inductor	10uH		250mA	1812	Bottom
L70	Inductor	56uH		190mA	1812	Bottom
L71	Inductor	56uH		190mA	1812	Bottom
L72	Inductor	56uH		190mA	1812	Bottom
L73	Inductor	56uH		190mA	1812	Bottom
L74	Inductor	56uH		190mA	1812	Bottom
L75	Inductor	<u>56uH</u> 56uH		190mA	1812	Bottom
<u>L76</u> L77	Inductor Inductor	56uH		190mA	1812 1812	Bottom Bottom
				190mA		
<u>L78</u> L79	Inductor Inductor	56uH 56uH		190mA 190mA	1812 1812	Bottom Bottom
L80	Inductor	56uH		190mA	1812	Bottom
L81	Inductor	56uH	+	190mA	1812	Bottom
L82	Inductor	56uH	+	190mA	1812	Bottom
L83	Inductor	56uH	+	190mA	1812	Bottom
L84	Inductor	56uH	+	190mA	1812	Bottom
R1	Resistor	1k	1/4W	10011174	1206	Bottom
R2	Resistor	1k	1/4VV 1/4W		1206	Bottom
R3	Resistor	1k	1/4W		1206	Bottom
R4	Resistor	1k	1/4W		1206	Bottom
R5	Resistor	1k	1/4W		1206	Bottom
R6	Resistor	1k	1/4W		1206	Bottom
R7	Resistor	1k	1/4W		1206	Bottom
R8	Resistor	1k	1/4W		1206	Bottom
R9	Resistor	100	1/4W	1%	1206	Bottom
R10	Metal Oxide Film	1M	1W		AXIAL-Ø4.5mm	Top
	Resistor	4.7k	1W	1%	2512	Bottom
R11			1/4W	1%	1206	Bottom
R11 R12	Resistor	470				
		470 62k	1/8W	1%	0805	Bottom
R12	Resistor			1% 1%	0805 0805	Bottom Bottom
R12 R13	Resistor Resistor	62k	1/8W			
R12 R13 R14	Resistor Resistor Resistor	62k 33k	1/8W 1/8W		0805	Bottom

Resistor Resistor Resistor Resistor Resistor Resistor Resistor	100 100 100 100 100	1/4W 1/4W 1/4W	1% 1% 1%	1206 1206	Bottom Bottom
Resistor Resistor Resistor	100 100	1/4W			Bottom
Resistor Resistor	100		1%		
Resistor		1/4\//		1206	Bottom
	100		1%	1206	Bottom
Resistor		1/4W	1%	1206	Bottom
	100	1/4W	1%	1206	Bottom
Resistor	390	1/8W	1%	0805	Bottom
Resistor	1k	1/8W		0805	Bottom
Resistor	62k	1/8W	1%	0805	Bottom
Resistor	43k	1/8W	1%	0805	Bottom
Resistor	82k	1/8W	1%	0805	Bottom
Resistor	8.2k	1/8W	1%	0805	Bottom
Resistor	1k	1/8W		0805	Bottom
Resistor	43k	1/8W	1%	0805	Bottom
Resistor	1k	1/8W		0805	Bottom
Resistor	16k	1/8W	1%	0805	Bottom
Resistor	0R	1/8W		0805	Bottom
Metal Oxide Film	330	1W		AXIAL-Ø4.5mm	Тор
Resistor	1k	1/4W		1206	Bottom
Resistor	0R	1/8W		0805	Bottom
Resistor	1M	1/8W		0805	Bottom
Resistor	10k	1/8W		0805	Bottom
Resistor	14k	1/8W	1%	0805	Bottom
Resistor	8.2k	1/8W	1%	0805	Bottom
Resistor	47	1/8W		0805	Bottom
Resistor	43k	1/8W	1%	0805	Bottom
rimmer Potentiometer	10k	1/10W		7.50mm x 6.40mm x	Тор
rimmer Potentiometer	10k	1/10W		7.50mm x 6.40mm x	Тор
Description	Value	Volts/Watts	Comment	Case/Package	Layer
rimmer Potentiometer	10k	1/10W		7.50mm x 6.40mm x	Тор
rimmer Potentiometer	10k	1/10W		7.50mm x 6.40mm x	Тор
			HSF-141-50-FEP,		•
			SF250-FEP 50		
Transformer (Coupled	ATU signal		23 turns- Ø0.53mm,		
	LM393			SO8	Bottom
	Resistor	Resistor 62k Resistor 43k Resistor 82k Resistor 1k Resistor 43k Resistor 16k Resistor 0R Metal Oxide Film 330 Resistor 0R Resistor 1M Resistor 10k Resistor 14k Resistor 47 Resistor 43k Trimmer Potentiometer 10k Trimmer Potentiometer 10k	Resistor 62k 1/8W Resistor 43k 1/8W Resistor 82k 1/8W Resistor 8.2k 1/8W Resistor 1k 1/8W Resistor 43k 1/8W Resistor 1k 1/8W Resistor 0R 1/8W Resistor 0R 1/8W Resistor 1k 1/4W Resistor 0R 1/8W Resistor 1M 1/8W Resistor 10k 1/8W Resistor 14k 1/8W Resistor 47 1/8W Resistor 43k 1/8W Resistor 43k 1/8W Resistor 43k 1/8W Resistor 47 1/8W Resistor 43k 1/8W Trimmer Potentiometer 10k 1/10W Trimmer Potentiometer 10k 1/10W Trimmer Potentiometer 10k 1/10W </td <td>Resistor 62k 1/8W 1% Resistor 43k 1/8W 1% Resistor 82k 1/8W 1% Resistor 8.2k 1/8W 1% Resistor 1k 1/8W 1% Resistor 43k 1/8W 1% Resistor 1k 1/8W 1% Resistor 0R 1/8W 1% Resistor 0R 1/8W 1/8W Resistor 1k 1/4W 1/8W Resistor 0R 1/8W 1/8W Resistor 10k 1/8W 1% Resistor 14k 1/8W 1% Resistor 47 1/8W 1% Resistor 43k 1/8W 1%</td> <td>Resistor 62k 1/8W 1% 0805 Resistor 43k 1/8W 1% 0805 Resistor 82k 1/8W 1% 0805 Resistor 8.2k 1/8W 1% 0805 Resistor 1k 1/8W 0805 0805 Resistor 43k 1/8W 1% 0805 Resistor 1k 1/8W 0805 0805 Resistor 16k 1/8W 0805 0805 Resistor 16k 1/8W 0805 0805 Resistor 0R 1/8W 0805 0805 Resistor 1k 1/4W 1206 0805 Resistor 1k 1/4W 1206 0805 Resistor 1k 1/8W 0805 0805 Resistor 10k 1/8W 0805 0805 Resistor 10k 1/8W 1% 0805 Resistor 47 1/8W</td>	Resistor 62k 1/8W 1% Resistor 43k 1/8W 1% Resistor 82k 1/8W 1% Resistor 8.2k 1/8W 1% Resistor 1k 1/8W 1% Resistor 43k 1/8W 1% Resistor 1k 1/8W 1% Resistor 0R 1/8W 1% Resistor 0R 1/8W 1/8W Resistor 1k 1/4W 1/8W Resistor 0R 1/8W 1/8W Resistor 10k 1/8W 1% Resistor 14k 1/8W 1% Resistor 47 1/8W 1% Resistor 43k 1/8W 1%	Resistor 62k 1/8W 1% 0805 Resistor 43k 1/8W 1% 0805 Resistor 82k 1/8W 1% 0805 Resistor 8.2k 1/8W 1% 0805 Resistor 1k 1/8W 0805 0805 Resistor 43k 1/8W 1% 0805 Resistor 1k 1/8W 0805 0805 Resistor 16k 1/8W 0805 0805 Resistor 16k 1/8W 0805 0805 Resistor 0R 1/8W 0805 0805 Resistor 1k 1/4W 1206 0805 Resistor 1k 1/4W 1206 0805 Resistor 1k 1/8W 0805 0805 Resistor 10k 1/8W 0805 0805 Resistor 10k 1/8W 1% 0805 Resistor 47 1/8W

CPU UNIT

Designator	Description	Value	Volts/Watts	Comment	Case/Package	Layer
C1	Capacitor	100nF	50V	X7R	0805	Bottom
C2	Capacitor	100nF	50V	X7R	0805	Bottom
C3	Capacitor	100nF	50V	X7R	0805	Bottom
C4	Capacitor	100nF	50V	X7R	0805	Bottom
C5	Capacitor	100nF	50V	X7R	0805	Bottom
C6	Capacitor	100nF	50V	X7R	0805	Bottom
C7	Capacitor	100nF	50V	X7R	0805	Bottom
C101	Capacitor	100nF	50V	X7R	0805	Тор
C102	Capacitor	1uF	50V	X7R	0805	Top
C103	Capacitor	10nF	50V	X7R	0805	Top
C104	Capacitor	10nF	50V	X7R	0805	Top
C105	Capacitor	10nF	50V	X7R	0805	Top
C106	Capacitor	1uF	50V	X7R	0805	Тор
C107	Capacitor	100nF	50V	X7R	0805	Top
C108	Capacitor	100nF	50V	X7R	0805	Top
C109	Capacitor	4.7uF	25V	X7R	0805	Top
C110	Capacitor	4.7uF	25V	X7R	0805	Тор
C111	Capacitor	100nF	50V	X7R	0805	Тор
C201	Capacitor	100nF	50V	X7R	0805	Top
C202	Capacitor	100nF	50V	X7R	0805	Top
C203	Capacitor	100nF	50V	X7R	0805	Тор
C204	Capacitor	100nF	50V	X7R	0805	Bottom
C205	Capacitor	1uF	50V	X7R	0805	Bottom
C206	Capacitor	1uF	50V	X7R	0805	Top
C207	Capacitor	1uF	50V	X7R	0805	Bottom
C208	Capacitor	1uF	50V	X7R	0805	Тор
C209	Capacitor	1uF	50V	X7R	0805	Тор
C210	Capacitor	100nF	50V	X7R	0805	Top

C211	Capacitor	10nF	50V	X7R	0805	Bottom
C212	Capacitor	Not placed	30 V	XIIX	0805	Top
C213		Not placed			0805	Top
C214	Capacitor	4.7uF	25V	X7R	0805	Тор
C215	Capacitor	100nF	50V	X7R	0805	Bottom
C216	·	Not placed			0805	Тор
C217	Trimmer Capacitor	4.2-20pF	100V	N750	TZ03	Bottom
C218	Capacitor	18pF	50V	C0G	0805	Тор
C219	Capacitor	18pF	50V	C0G	0805	Тор
C301	Capacitor	10nF	50V	X7R	0805	Тор
C302	Capacitor	10nF	50V	X7R	0805	Тор
C303	Capacitor	10nF	50V	X7R	0805	Тор
C304	Capacitor	10nF	50V	X7R	0805	Тор
C305	Capacitor	10nF	50V	X7R	0805	Тор
C306	Capacitor	10nF	50V	X7R	0805	Тор
C307	Capacitor	10nF	50V	X7R	0805	Тор
C308	Capacitor	10nF	50V	X7R	0805	Тор
C309	Capacitor	10nF	50V	X7R	0805	Тор
C310	Capacitor	10nF	50V	X7R	0805	Тор
C311	Capacitor	4.7uF	50V	X7R	1206	Bottom
C401	Capacitor	100nF	50V	X7R	0805	Тор
C402	Capacitor	10nF	50V	X7R	0805	Top
C403	Capacitor	1nF	50V	X7R	0805	Top
C404	Capacitor	100nF	50V	X7R	0805	Top
C405	Capacitor	1nF	50V	X7R	0805	Bottom
C406	Capacitor	1nF 1nF	50V	X7R	0805	Bottom
C407 C408	Capacitor	10nF	50V 50V	X7R X7R	0805 0805	Bottom
C408	Capacitor	Not placed	507	A/K	0805	Top Top
C409	Capacitor	10nF	50V	X7R	0805	Тор
C410	Capacitor	10nF	50V	X7R	0805	Bottom
C501	Сарасноі	Not placed	30 V	ATIX	0805	Top
C502	Capacitor	10nF	50V	X7R	0805	Bottom
C503	Capacitor	100nF	50V	X7R	0805	Top
C504	Capacitor	100nF	50V	X7R	0805	Тор
C505	Capacitor	100nF	50V	X7R	0805	Top
C506	Capacitor	100nF	50V	X7R	0805	Top
C507	Capacitor	10nF	50V	X7R	0805	Тор
C508	Capacitor	10nF	50V	X7R	0805	Тор
C509	Capacitor	10nF	50V	X7R	0805	Тор
C510	Capacitor	10nF	50V	X7R	0805	Top
C511	Capacitor	10nF	50V	X7R	0805	Тор
C512	Capacitor	10nF	50V	X7R	0805	Тор
C513	Capacitor	10nF	50V	X7R	0805	Тор
C514	Capacitor	10nF	50V	X7R	0805	Тор
C515	Capacitor	100nF	50V	X7R	0805	Тор
C516	Capacitor	10nF	50V	X7R	0805	Тор
C517	Capacitor	10nF	50V	X7R	0805	Тор
C518	Capacitor	10nF	50V	X7R	0805	Bottom
C519	Capacitor	10nF	50V	X7R	0805	Top
C520	Capacitor	10nF	50V	X7R	0805	Top
C521	Capacitor	10nF	50V	X7R	0805	Тор
C522	Capacitor	10nF	50V	X7R	0805	Тор
C523	Capacitor	10nF	50V	X7R	0805	Bottom
C601	Capacitor	1uF	50V	X7R	0805	Bottom
C602	Capacitor	1uF	50V	X7R	0805	Top
C603	Capacitor	1uF	50V	X7R	0805	Top
C604	Capacitor	1uF	50V	X7R	0805	Bottom
C605	Capacitor	1uF	50V	X7R	0805	Top
C606 C607	Capacitor Capacitor	4.7uF 1uF	25V 50V	X7R X7R	0805 0805	Top Top
	Сарасног		30 V	۸۱۲		Тор
C608		Not placed			0805	
C609 C610		Not placed Not placed			0805 0805	Top Top
C611		Not placed			0805	Тор
		Not placed			0805	Тор
(617)						100
C612 C613		Not placed			0805	Тор

D1 D101 D102	Camaaitan	40±F	F0\/	VZD	0005	Dattana
D101 D102	Capacitor	10nF Not placed	50V	X7R	0805 DO-214AB	Bottom Top
D102	Schottky Diode	1N5819HW-7-F	40V	1A	SOD-123	Тор
	Schottky Diode	1N5819HW-7-F	40V	1A	SOD-123	Bottom
D103	Schottky Diode	1N5819HW-7-F	40V	1A	SOD-123	Top
D104	Schottky Diode	1N5819HW-7-F	40V	1A	SOD-123	Bottom
D105	Schottky Diode	1N5819HW-7-F	40V	1A	SOD-123	Bottom
D106	Schottky Diode	1N5819HW-7-F	40V	1A	SOD-123	Тор
D107	Schottky Diode	1N5819HW-7-F	40V	1A	SOD-123	Тор
D201	Zener Diode	BZX84C4V7	0.3W		SOT-23	Top
D202	Diode	LL4148	100V		SOD-123	Bottom
D203	Diode	LL4148	100V		SOD-123	Bottom
D204	Diode	LL4148	100V		SOD-123	Bottom
D205		Not placed			SOD-123	Тор
D206	Zener Diode	BZX84C4V7	0.3W		SOT-23	Bottom
D301		Not placed			0805	Bottom
D302		Not placed			0805	Bottom
D303		Not placed			0805	Bottom
D304		Not placed			0805	Bottom
D305		Not placed			0805	Bottom
D306		Not placed			0805	Bottom
D307		Not placed			0805	Bottom
D308		Not placed			0805	Bottom
D309		Not placed			0805	Bottom
D310	Description :	Not placed	40017		0805	Bottom
D401	Dual Series	BAV99	100V		SOT-23	Bottom
D402	Diode	LL4148	100V		SOD-123	Top
D601	Diode Diode	LL4148	100V 100V		SOD-123 SOD-123	Top
D602 J1	Female Header, 3-Pin,	LL4148	1007		100" pich	Top Top
J201	Pin Header, 6-Pin				100 pich	Bottom
J501	Connector, 6-Pin				MTA100 6p	Bottom
J502	Connector, 4-Pin				MTA100 dp	Bottom
J503	Connector, 12-Pin				MTA100 4p	Bottom
J504	Jack Straight				SMA	Top
J505	Jack Straight				SMA	Тор
J506	Connector, 8-Pin				MTA100 8p	Тор
J507	Connector, 5-Pin				MTA100 5p	Bottom
J508		Not placed			100" pich	Тор
J509	Connector, 12-Pin,				MTA100 12p	Тор
J510		Not placed			100" pich	Тор
J511		Not placed			100" pich	Bottom
J516	Connector, 2-Pin				MTA100 2p	Тор
J517	Female Header, 8-Pin				100" pich	Top
J518	Female Header, 10-Pin				100" pich	Top
L201	Inductor	22uH		100mA	0805	Top
L301	Inductor	22uH		100mA	0805	Top
L302	Inductor	22uH		100mA	0805	Top
L303	Inductor	22uH		100mA	0805	Top
L304	Inductor	22uH		100mA	0805	Top
L305	Inductor	22uH		100mA	0805	Top
L306 L307	Inductor Inductor	22uH 22uH		100mA	0805 0805	Top
		22uH 22uH		100mA		Top
	Inductor			100mA 100mA	0805	Тор
L308	Inductor	つつ∵□			NONE	Ton
L308 L309	Inductor	22uH			0805 0805	Top
L308 L309 L310	Inductor	22uH		100mA	0805	Тор
L308 L309 L310 L401		22uH 22uH			0805 0805	Top Bottom
L308 L309 L310 L401 L402	Inductor Inductor	22uH 22uH Not placed		100mA 100mA	0805 0805 0805	Top Bottom Bottom
L308 L309 L310 L401 L402 L501	Inductor Inductor Inductor	22uH 22uH Not placed 22uH	50V	100mA	0805 0805 0805 0805	Top Bottom Bottom Bottom
L308 L309 L310 L401 L402 L501 Q301	Inductor Inductor Inductor Dual Transistor PNP	22uH 22uH Not placed 22uH DDA114YU	50V 50V	100mA 100mA	0805 0805 0805 0805 SOT-363	Top Bottom Bottom Bottom Top
L308 L309 L310 L401 L402 L501 Q301 Q302	Inductor Inductor Inductor Dual Transistor PNP Dual Transistor PNP	22uH 22uH Not placed 22uH DDA114YU DDA114YU	50V	100mA 100mA	0805 0805 0805 0805 0805 SOT-363 SOT-363	Top Bottom Bottom Bottom Top Top
L308 L309 L310 L401 L402 L501 Q301 Q302 Q303	Inductor Inductor Inductor Dual Transistor PNP Dual Transistor PNP Dual Transistor NPN	22uH 22uH Not placed 22uH DDA114YU DDA114YU DDC114YU	50V 50V	100mA 100mA	0805 0805 0805 0805 0805 SOT-363 SOT-363	Top Bottom Bottom Bottom Top Top Top
L308 L309 L310 L401 L402 L501 Q301 Q302 Q303 Q304	Inductor Inductor Inductor Unductor Dual Transistor PNP Dual Transistor NPN Dual Transistor NPN Dual Transistor NPN	22uH 22uH Not placed 22uH DDA114YU DDA114YU DDC114YU DDC114YU	50V 50V 50V	100mA 100mA	0805 0805 0805 0805 SOT-363 SOT-363 SOT-363	Top Bottom Bottom Bottom Top Top Top Top
L308 L309 L310 L401 L402 L501 Q301 Q302 Q303	Inductor Inductor Inductor Dual Transistor PNP Dual Transistor PNP Dual Transistor NPN	22uH 22uH Not placed 22uH DDA114YU DDA114YU DDC114YU	50V 50V	100mA 100mA	0805 0805 0805 0805 SOT-363 SOT-363 SOT-363 SOT-363	Top Bottom Bottom Bottom Top Top Top
L308 L309 L310 L401 L402 L501 Q301 Q302 Q303 Q304 Q305	Inductor Inductor Inductor Dual Transistor PNP Dual Transistor NPN Dual Transistor NPN Dual Transistor NPN Dual Transistor NPN Dual Transistor PNP	22uH 22uH Not placed 22uH DDA114YU DDA114YU DDC114YU DDC114YU DDC114YU DDA114YU DDA114YU DDA114YU	50V 50V 50V 50V	100mA 100mA	0805 0805 0805 0805 SOT-363 SOT-363 SOT-363 SOT-363 SOT-363	Top Bottom Bottom Bottom Top Top Top Top Top Top Top
L308 L309 L310 L401 L402 L501 Q301 Q302 Q303 Q304 Q305 Q306	Inductor Inductor Inductor Dual Transistor PNP Dual Transistor NPN Dual Transistor NPN Dual Transistor NPN Dual Transistor NPN Dual Transistor PNP Dual Transistor PNP Dual Transistor PNP	22uH 22uH Not placed 22uH DDA114YU DDA114YU DDC114YU DDC114YU DDC114YU DDC114YU	50V 50V 50V 50V 50V	100mA 100mA	0805 0805 0805 0805 SOT-363 SOT-363 SOT-363 SOT-363	Top Bottom Bottom Bottom Top

	T = .=					
Q310	Dual Transistor NPN	DDC114YU	50V		SOT-363	Тор
Q401	Dual Transistor PNP	DDA114YU	50V		SOT-363	Тор
Q402		Not placed			SOT-363	Top
Q403	Dual Transistor NPN	DDC114YU	50V		SOT-363	Top
Q404		Not placed			SOT-363	Тор
Q501	NPN Transistor	BC847	50V		SOT-23	Bottom
Q601	NPN Transistor	BC847	50V		SOT-23	Top
R101	Resistor	220k	1/8W		0805	Top
R102	Resistor	3.3k	1/8W		0805	Top
R103	Resistor	47k	1/8W		0805	Top
R104	Resistor	10k	1/8W		0805	Top
R105	Resistor	1k	1/8W		0805	Top
R106	Resistor	1k	1/8W		0805	Top
R107	Resistor	3.3k	1/8W		0805	Top
R108	Resistor	1k	1/8W	40/	0805	Top
R109	Resistor	1k 3.3k	1/8W	1%	0805	Top
R110	Resistor		1/8W	1%	0805	Top
R201	Resistor	10k	1/8W		0805	Top
R202	Resistor	10k	1/8W		0805	Bottom
R203 R204	Resistor	4.7k 330	1/8W 1/8W		0805 0805	Top
R204 R205	Resistor		1/8W			Top
R205 R206	Resistor	10k 330			0805	Top Top
R206 R207	Resistor Array	330	4 x 1/16W 4 x 1/16W		1206 1206	Bottom
	Resistor Array		4 X 1/16VV		0805	
R208 R209	Resistor	Not placed 10k	1/8W		0805	Bottom Top
R209 R210	Resistor	10k	1/8W		0805	Тор
R210	Resistor	10k	1/8W		0805	Тор
R212	Kesisioi	Not placed	1/000		0805	Bottom
R212		Not placed			0805	Bottom
R214		Not placed			0805	Top
R215	Resistor Array	330	4 x 1/16W		1206	Тор
R216	Resistor Array	Not placed	4 X 1/10VV		0805	Bottom
R217		Not placed			0805	Bottom
R218		Not placed			0805	Top
R219	Resistor	4.7k	1/8W	1%	0805	Тор
R220	Resistor	330	1/8W	1 70	0805	Тор
R221	Resistor	330	1/8W		0805	Тор
R222	Resistor	330	1/8W		0805	Тор
R223	Resistor	2k	1/8W	1%	0805	Тор
R224	Resistor	100	1/8W	170	0805	Bottom
R225	110010101	Not placed	17011		0805	Top
R226	Resistor	100	1/8W		0805	Bottom
R227	Resistor	1k	1/8W		0805	Top
R228	Resistor	47k	1/8W		0805	Top
R301	. 100.0101	Not placed	., 5.,		0805	Тор
R302		Not placed			0805	Top
R303		Not placed			0805	Тор
R304		Not placed			0805	Тор
R305		Not placed			0805	Тор
R306		Not placed			0805	Тор
R307		Not placed			0805	Тор
R308		Not placed			0805	Тор
R309		Not placed			0805	Тор
R310		Not placed			0805	Тор
R401	Resistor	100k	1/8W		0805	Тор
R402	Resistor	47	1/8W		0805	Тор
R403	Resistor	47	1/8W		0805	Тор
R404	Resistor	47	1/8W		0805	Тор
R405	Resistor	10k	1/8W		0805	Тор
R407	Resistor	220k	1/8W		0805	Тор
R408	Resistor	1k	1/8W		0805	Bottom
R409	Resistor	2k	1/8W		0805	Тор
R410	Resistor	2k	1/8W		0805	Тор
R411	Resistor	2k	1/8W		0805	Тор
R412	Resistor	2k	1/8W		0805	Bottom
R413	Resistor	47	1/8W		0805	Тор
R414	Resistor	47	1/8W		0805	Тор

R415 R501 R502	Resistor	510	1/4W		1206	Bottom
	Resistor	1k	1/8W		0805	Bottom
11302	Resistor	Not placed	1/000		0805	Top
R503	Resistor	10k	1/8W		0805	Bottom
R504	Resistor	2k	1/8W		0805	Bottom
R505	Resistor	2k	1/8W		0805	Bottom
R506	Resistor	220	1/4W		1206	Top
R507	Resistor	2k	1/8W		0805	Bottom
R508	Resistor	2k	1/8W		0805	Bottom
R509	Resistor	2k	1/8W		0805	Bottom
R510	Resistor	220	1/4W		1206	Top
R511	Resistor	2k	1/8W		0805	Bottom
R512	Resistor	2k	1/8W		0805	Bottom
R513	Resistor	2k	1/8W		0805	Bottom
R514	Resistor	220	1/4W		1206	Top
R515	Resistor	2k	1/8W		0805	Bottom
R516	Resistor	2k	1/8W		0805	Bottom
R517	Resistor	2k	1/8W		0805	Bottom
R517	Resistor	2k	1/8W		0805	Bottom
R519	Resistor	2k	1/8W		0805	Bottom
	Resistor	2k	1/8W		0805	
R520 R521	Resistor	∠ĸ 10k	1/8W	1%	0805	Bottom Bottom
R521	Resistor		1/8W	1%		
R522 R523		1k 1k	1/8W		0805 0805	Bottom
R523 R524	Resistor	1k 2k	1/8W	1% 1%	0805	Bottom
	Resistor	Not placed	I/OVV	170	0805	Bottom
R601a	Desistan		4 /0\4/			Bottom
R601b R602a	Resistor	0 Not placed	1/8W		0805 0805	Bottom
	Decistor	Not placed	1/8W			Bottom
R602b	Resistor	0			0805	Bottom
R603a R603b	Resistor	1k	1/8W		0805	Top
	Desistan	Not placed	4 /0\4/		0805	Top
R604	Resistor	150	1/8W		0805	Top
R605	Resistor	1k	1/8W		0805	Top
R606	Resistor	10k	1/8W		0805	Тор
R607		Not placed			0805	Bottom
R608		Not placed			0805	Bottom
R609		Not placed			0805	Bottom
R610		Not placed			0805	Bottom
R611		Not placed			0805	Bottom
R612		Not placed			0805	
PK12						Bottom
R613		Not placed			0805	Тор
R614		Not placed			0805 0805	Top Top
R614 R615		Not placed Not placed			0805 0805 0805	Top Top Top
R614 R615 R616		Not placed Not placed Not placed			0805 0805 0805 0805	Top Top Top Top
R614 R615 R616 R617		Not placed Not placed Not placed Not placed			0805 0805 0805 0805 0805	Top Top Top Top Top
R614 R615 R616 R617 R618	Davids	Not placed Not placed Not placed Not placed Not placed Not placed	4/04/		0805 0805 0805 0805 0805 0805	Top Top Top Top Top Top Top
R614 R615 R616 R617 R618 R619	Resistor	Not placed Not placed Not placed Not placed Not placed Not placed 330	1/8W		0805 0805 0805 0805 0805 0805 0805	Top Top Top Top Top Top Top Top Top
R614 R615 R616 R617 R618 R619 R620	Resistor	Not placed Not placed Not placed Not placed Not placed Not placed	1/8W 1/8W		0805 0805 0805 0805 0805 0805 0805 0805	Top
R614 R615 R616 R617 R618 R619 R620 TP201	Resistor Test Point	Not placed Not placed Not placed Not placed Not placed Not placed 330 330			0805 0805 0805 0805 0805 0805 0805 0805	Top
R614 R615 R616 R617 R618 R619 R620 TP201 U1	Resistor Test Point Microcontroller	Not placed Not placed Not placed Not placed Not placed Not placed 330 330 MCP120T-475			0805 0805 0805 0805 0805 0805 0805 0805	Top
R614 R615 R616 R617 R618 R619 R620 TP201 U1	Resistor Test Point Microcontroller Monostable	Not placed Not placed Not placed Not placed Not placed Not placed 330 330 MCP120T-475 CD4047			0805 0805 0805 0805 0805 0805 0805 0805 0805 Keystone 5006 SOT-23 SO14	Top
R614 R615 R616 R617 R618 R619 R620 TP201 U1 U101	Resistor Test Point Microcontroller Monostable Voltage Regulator	Not placed Not placed Not placed Not placed Not placed Not placed 330 330 MCP120T-475 CD4047 LM317MDT			0805 0805 0805 0805 0805 0805 0805 0805	Top
R614 R615 R616 R617 R618 R619 R620 TP201 U1 U101 U102 U201	Resistor Test Point Microcontroller Monostable Voltage Regulator D-Type Transparent	Not placed Not placed Not placed Not placed Not placed Not placed 330 330 MCP120T-475 CD4047 LM317MDT 74HC573			0805 0805 0805 0805 0805 0805 0805 0805	Top
R614 R615 R616 R617 R618 R619 R620 TP201 U1 U101 U102 U201 U202	Resistor Test Point Microcontroller Monostable Voltage Regulator D-Type Transparent D-Type Transparent	Not placed Not placed Not placed Not placed Not placed Not placed 330 330 MCP120T-475 CD4047 LM317MDT 74HC573 74HC573			0805 0805 0805 0805 0805 0805 0805 0805	Top
R614 R615 R616 R617 R618 R619 R620 TP201 U1 U101 U102 U201 U202 U203	Resistor Test Point Microcontroller Monostable Voltage Regulator D-Type Transparent D-Type Transparent D-Type Transparent	Not placed Not placed Not placed Not placed Not placed Not placed 330 330 MCP120T-475 CD4047 LM317MDT 74HC573 74HC573 74HC573			0805 0805 0805 0805 0805 0805 0805 0805	Top
R614 R615 R616 R617 R618 R619 R620 TP201 U1 U101 U102 U201 U202 U203 U204	Resistor Test Point Microcontroller Monostable Voltage Regulator D-Type Transparent D-Type Transparent D-Type Transparent D-Type Transparent	Not placed Not placed Not placed Not placed Not placed Not placed 330 330 MCP120T-475 CD4047 LM317MDT 74HC573 74HC573 74HC573			0805 0805 0805 0805 0805 0805 0805 0805	Top
R614 R615 R616 R617 R618 R619 R620 TP201 U1 U101 U102 U201 U201 U202 U203 U204 U205	Resistor Test Point Microcontroller Monostable Voltage Regulator D-Type Transparent D-Type Transparent D-Type Transparent	Not placed Not placed Not placed Not placed Not placed Not placed 330 330 MCP120T-475 CD4047 LM317MDT 74HC573 74HC573 74HC573 74HC573 dsPIC30F6014A			0805 0805 0805 0805 0805 0805 0805 0805	Top
R614 R615 R616 R617 R618 R619 R620 TP201 U1 U101 U102 U201 U202 U203 U203 U204 U205 U206	Resistor Test Point Microcontroller Monostable Voltage Regulator D-Type Transparent D-Type Transparent D-Type Transparent D-Type Transparent	Not placed Not placed Not placed Not placed Not placed Not placed 330 330 330 MCP120T-475 CD4047 LM317MDT 74HC573 74HC573 74HC573 74HC573 dsPIC30F6014A Not placed			0805 0805 0805 0805 0805 0805 0805 0805	Top
R614 R615 R616 R617 R618 R619 R620 TP201 U1 U101 U102 U201 U202 U203 U203 U204 U205 U206 U207	Resistor Test Point Microcontroller Monostable Voltage Regulator D-Type Transparent D-Type Transparent D-Type Transparent D-Type Transparent D-Type Transparent D-Type Transparent Digital Signal Controller	Not placed Not placed Not placed Not placed Not placed Not placed 330 330 330 MCP120T-475 CD4047 LM317MDT 74HC573 74HC573 74HC573 74HC573 dsPIC30F6014A Not placed Not placed			0805 0805 0805 0805 0805 0805 0805 0805	Top
R614 R615 R616 R617 R618 R619 R620 TP201 U1 U101 U102 U201 U202 U203 U203 U204 U205 U206	Resistor Test Point Microcontroller Monostable Voltage Regulator D-Type Transparent D-Type Transparent D-Type Transparent D-Type Transparent D-Type Transparent D-Type Transparent Digital Signal Controller Adjustable CMOS LDO	Not placed Not placed Not placed Not placed Not placed Not placed 330 330 330 MCP120T-475 CD4047 LM317MDT 74HC573 74HC573 74HC573 74HC573 dsPIC30F6014A Not placed			0805 0805 0805 0805 0805 0805 0805 0805	Top
R614 R615 R616 R617 R618 R619 R620 TP201 U1 U101 U102 U201 U202 U203 U203 U204 U205 U206 U207 U208	Resistor Test Point Microcontroller Monostable Voltage Regulator D-Type Transparent D-Type Transparent D-Type Transparent D-Type Transparent D-Type Transparent D-Type Transparent Digital Signal Controller Adjustable CMOS LDO Dual D-Type Positive	Not placed Not placed Not placed Not placed Not placed Not placed 330 330 MCP120T-475 CD4047 LM317MDT 74HC573 74HC573 74HC573 74HC573 dsPIC30F6014A Not placed Not placed TC1187			0805 0805 0805 0805 0805 0805 0805 0805	Top
R614 R615 R616 R617 R618 R619 R620 TP201 U1 U101 U102 U201 U202 U203 U203 U204 U205 U206 U207 U208	Resistor Test Point Microcontroller Monostable Voltage Regulator D-Type Transparent D-Type Transparent D-Type Transparent D-Type Transparent D-Type Transparent D-Type Transparent Digital Signal Controller Adjustable CMOS LDO Dual D-Type Positive Hex Inverter IC	Not placed Not placed Not placed Not placed Not placed Not placed 330 330 330 MCP120T-475 CD4047 LM317MDT 74HC573 74HC573 74HC573 74HC573 dsPIC30F6014A Not placed Not placed TC1187			0805 0805 0805 0805 0805 0805 0805 0805	Top
R614 R615 R616 R617 R618 R619 R620 TP201 U1 U101 U102 U201 U202 U203 U203 U204 U205 U206 U207 U208	Resistor Test Point Microcontroller Monostable Voltage Regulator D-Type Transparent D-Type Transparent D-Type Transparent D-Type Transparent D-Type Transparent D-Type Transparent Digital Signal Controller Adjustable CMOS LDO Dual D-Type Positive	Not placed Not placed Not placed Not placed Not placed Not placed 330 330 330 MCP120T-475 CD4047 LM317MDT 74HC573 74HC573 74HC573 74HC573 dsPIC30F6014A Not placed Not placed TC1187 74AC04 74HC4051			0805 0805 0805 0805 0805 0805 0805 0805	Top
R614 R615 R616 R617 R618 R619 R620 TP201 U1 U101 U102 U201 U202 U203 U204 U205 U206 U207 U208	Resistor Test Point Microcontroller Monostable Voltage Regulator D-Type Transparent D-Type Transparent D-Type Transparent D-Type Transparent D-Type Transparent D-Type Transparent Digital Signal Controller Adjustable CMOS LDO Dual D-Type Positive Hex Inverter IC 8-Channel Analog	Not placed Not placed Not placed Not placed Not placed Not placed 330 330 330 MCP120T-475 CD4047 LM317MDT 74HC573 74HC573 74HC573 74HC573 dsPIC30F6014A Not placed Not placed TC1187 74AC04 74HC4051 Not placed			0805 0805 0805 0805 0805 0805 0805 0805	Top
R614 R615 R616 R617 R618 R619 R620 TP201 U1 U101 U102 U201 U202 U203 U204 U205 U206 U207 U208 U402 U501 U502 U503	Resistor Test Point Microcontroller Monostable Voltage Regulator D-Type Transparent D-Type Transparent D-Type Transparent D-Type Transparent D-Type Transparent D-Type Transparent Digital Signal Controller Adjustable CMOS LDO Dual D-Type Positive Hex Inverter IC 8-Channel Analog 8-Channel Analog	Not placed Not placed Not placed Not placed Not placed Not placed 330 330 MCP120T-475 CD4047 LM317MDT 74HC573 74HC573 74HC573 dsPIC30F6014A Not placed Not placed TC1187 74AC04 74HC4051 Not placed 74HC4051			0805 0805 0805 0805 0805 0805 0805 0805	Top
R614 R615 R616 R617 R618 R619 R620 TP201 U1 U101 U102 U201 U202 U203 U204 U205 U206 U207 U208 U402 U501 U502 U503 U601	Resistor Test Point Microcontroller Monostable Voltage Regulator D-Type Transparent Digital Signal Controller Adjustable CMOS LDO Dual D-Type Positive Hex Inverter IC 8-Channel Analog Dual EIA-232 Driver	Not placed Not placed Not placed Not placed Not placed Not placed 330 330 330 MCP120T-475 CD4047 LM317MDT 74HC573 74HC573 74HC573 dsPIC30F6014A Not placed Not placed TC1187 74AC04 74HC4051 Not placed 74HC4051 Not placed	1/8W		0805 0805 0805 0805 0805 0805 0805 0805	Top
R614 R615 R616 R617 R618 R619 R620 TP201 U1 U101 U102 U201 U202 U203 U204 U205 U206 U207 U208 U402 U501 U502 U503	Resistor Test Point Microcontroller Monostable Voltage Regulator D-Type Transparent D-Type Transparent D-Type Transparent D-Type Transparent D-Type Transparent D-Type Transparent Digital Signal Controller Adjustable CMOS LDO Dual D-Type Positive Hex Inverter IC 8-Channel Analog 8-Channel Analog	Not placed Not placed Not placed Not placed Not placed Not placed 330 330 MCP120T-475 CD4047 LM317MDT 74HC573 74HC573 74HC573 dsPIC30F6014A Not placed Not placed TC1187 74AC04 74HC4051 Not placed 74HC4051			0805 0805 0805 0805 0805 0805 0805 0805	Top

Int Board A UNIT

Designator	Description	Value	Volts/Wats	Comment	Case/Package	Layer
C1	Capacitor	2.2nF	50V	X7R	0805	Bottom
C2	Capacitor	2.2nF	50V	X7R	0805	Bottom
C3	Capacitor	1uF	50V	X7R	0805	Bottom
C4	Capacitor	1uF	50V	X7R	0805	Bottom
C5	Capacitor	2.2nF	50V	X7R	0805	Bottom
C6	Capacitor	2.2nF	50V	X7R	0805	Bottom
<u>C7</u>	Capacitor	1uF	50V	X7R	0805	Bottom
<u>C8</u>	Capacitor	100nF	50V	X7R	0805	Bottom
C9	Capacitor	1uF 1uF	50V 50V	X7R	0805	Bottom
C10 C11	Capacitor Capacitor		50V 50V	X7R X7R	0805 0805	Bottom Bottom
C12	Capacitor	10nF 10nF	50V 50V	X7R X7R	0805	Bottom
C12	Capacitor	100nF	50V	X7R	0805	Bottom
C14	Capacitor	100nF	50V	X7R	0805	Bottom
C15	Capacitor	100nF	50V	X7R	0805	Bottom
C16	Capacitor	100nF	50V	X7R	0805	Bottom
C17	Capacitor	10nF	50V	X7R	0805	Top
C18	Capacitor	10nF	50V	X7R	0805	Тор
C19	Capacitor	10nF	50V	X7R	0805	Тор
C20	Capacitor	10nF	50V	X7R	0805	Тор
C21	Capacitor	10nF	50V	X7R	0805	Bottom
C22	Capacitor	10nF	50V	X7R	0805	Bottom
C23	Capacitor	100nF	50V	X7R	0805	Bottom
C24	Capacitor	10nF	50V	X7R	0805	Bottom
C25	Capacitor	10nF	50V	X7R	0805	Bottom
C26	Capacitor	10nF	50V	X7R	0805	Bottom
CON1	Connector D-Sub, 15p			Right Angle	3313	Тор
CON2	RCA Jack Mono				Keystone 901	Тор
CON3	Header	1x10		Right Angle	100" pich	Тор
CON4	RCA Jack Mono	-		<u> </u>	Keystone 901	Тор
CON5	Header	1x8		Right Angle	100" pich	Тор
D1	Zener Diode	BZX84C12	0.25W		SOT-23	Bottom
D2	Zener Diode	BZX84C4V7	0.3W		SOT-23	Bottom
D3	Zener Diode	BZX84C4V7	0.3W		SOT-23	Bottom
D4	Zener Diode	BZX84C4V7	0.3W		SOT-23	Bottom
D5	Zener Diode	BZX84C4V7	0.3W		SOT-23	Bottom
D6	Diode	LL4148	100V		SOD-123	Bottom
D7	Zener Diode	BZX84C12	0.25W		SOT-23	Bottom
D8	Schottky Diode	1N5819HW-7-F	40V	1A	SOD-123	Bottom
K1	Relay	TQ2-12V	12V		TQ2	Тор
L1	Inductor	22uH		100mA	0805	Bottom
L2	Inductor	22uH		100mA	0805	Bottom
L3	Inductor	22uH		100mA	0805	Bottom
L4	Inductor	22uH		100mA	0805	Bottom
L5	Inductor	22uH		100mA	0805	Bottom
L6	Inductor	22uH	F0\/	100mA	0805	Bottom
Q1	MOSFET N-CH	BSS138 BSS138	50V 50V		SOT-23	Bottom
Q2	MOSFET N-CH MOSFET N-CH		50V 50V		SOT-23 SOT-23	Bottom
Q3 Q4	MOSFET N-CH	BSS138 BSS138	50V 50V		SOT-23	Top Bottom
R1	Resistor	4.7k	1/8W		0805	Bottom
R2	Resistor	10k	1/8W		0805	Bottom
R3	Resistor	10k	1/8W		0805	Bottom
R4	Resistor	1k	1/8W		0805	Bottom
R5	Resistor	10k	1/8W		0805	Bottom
R6	Resistor	10k	1/8W	1%	0805	Bottom
R7	Resistor	10k	1/8W	1%	0805	Bottom
R8	Resistor	4.7k	1/8W	. , ,	0805	Top
R9	Resistor	4.7k	1/8W		0805	Тор
R10	Resistor	4.7k	1/8W		0805	Тор
R11	Resistor	4.7k	1/8W		0805	Тор
R12	Resistor	100k	1/8W		0805	Тор
R13	Resistor	100k	1/8W		0805	Тор
R14	Resistor	100k	1/8W		0805	Тор

R15	Resistor	100k	1/8W	0805	Top
R16a	Resistor	1k	1/4W	1206	Тор
R16b		Not placed		0805	Тор
R17	Resistor	1k	1/8W	0805	Тор
R18	Resistor	4.7k	1/8W	0805	Bottom
R19	Resistor	10k	1/8W	0805	Bottom
R20	Resistor	1k	1/8W	0805	Bottom
R21	Resistor	39	1/8W	0805	Bottom
R22	Resistor	39	1/8W	0805	Bottom
R23	Resistor	1k	1/8W	0805	Bottom
R24	Resistor	4.7k	1/8W	0805	Тор
R25	Resistor	10k	1/8W	0805	Bottom
R26	Resistor	10k	1/8W	0805	Тор
R27	Resistor	4.7k	1/8W	0805	Bottom
U1	Quad buffer/line driver	74HC125		SO14	Тор
U2	Dual EIA-232 Driver	MAX232D		SO16	Тор
U3	Exclusive OR IC	74HC86		SO14	Top

Int Board B UNIT

Designator	Description	Value	Volts/Watts	Comment	Case/Package	Layer
C1	Capacitor	100nF	50V	X7R	0805	Bottom
C2	Capacitor	100nF	50V	X7R	0805	Bottom
C3	Capacitor	1uF	25V	X7R	0805	Bottom
C4	Capacitor	1uF	25V	X7R	0805	Bottom
C5	Capacitor	1uF	25V	X7R	0805	Bottom
C6	Capacitor	2.2nF	50V	X7R	0805	Bottom
C7	Capacitor	2.2nF	50V	X7R	0805	Bottom
C8	Capacitor	1uF	25V	X7R	0805	Bottom
C9	Capacitor	1uF	25V	X7R	0805	Bottom
C10	Capacitor	1uF	25V	X7R	0805	Bottom
C11	Capacitor	10nF	50V	X7R	0805	Bottom
C12	Capacitor	10nF	50V	X7R	0805	Bottom
C13	Electrol. Capacitor	100uF	16V	RK	Ø5mm x 11mm	Тор
C14		Not placed			0805	Bottom
C15		Not placed			0805	Bottom
C16		Not placed			0805	Bottom
C17		Not placed			0805	Bottom
C18		Not placed			0805	Bottom
C19		Not placed			0805	Bottom
C20		Not placed			0805	Top
C21		Not placed			0805	Top
C22		Not placed			0805	Top
C23		Not placed			0805	Bottom
C24		Not placed			0805	Bottom
C25		Not placed			Ø5mm x 11mm	Тор
C26		Not placed			0805	Тор
C27		Not placed			0805	Bottom
C28		Not placed			0805	Bottom
C29		Not placed			0805	Bottom
C30		Not placed			0805	Bottom
C31		Not placed			0805	Bottom
C32		Not placed			0805	Bottom
C33		Not placed			0805	Bottom
C34		Not placed			Ø5mm x 11mm	Тор
CON1	Connector D-Sub, 9p			Right Angle		Тор
CON2	Header	1x6		Right Angle	100" pich	Тор
CON3	Header	1x8		Right Angle	100" pich	Тор
CON4		Not placed				Тор
CON5		Not placed				Тор
D1	Schottky Diode	1N5819HW-7-F	40V	1A	SOD-123	Bottom
D2	Schottky Diode	1N5819HW-7-F	40V	1A	SOD-123	Bottom
D3	Zener Diode	BZX84C4V7	0.3W		SOT-23	Тор
L1	Inductor	22uH		100mA	0805	Bottom
L2	Inductor	22uH		100mA	0805	Bottom
L3	Inductor	22uH		100mA	0805	Bottom
L4	Inductor	22uH	·	100mA	0805	Bottom

L5		Not placed		0805	Bottom
L6		Not placed		0805	Bottom
L7		Not placed		0805	Bottom
Q1	PNP Transistor	BC857	50V	SOT-23	Bottom
Q2	MOSFET N-CH	BSS138	50V	SOT-23	Top
R1	Resistor	10k	1/8W	0805	Bottom
R2	Resistor	1k	1/8W	0805	Bottom
R3	Resistor	10k	1/8W	0805	Bottom
R4	Resistor	3.3k	1/8W	0805	Bottom
R5	Resistor	3.3k	1/8W	0805	Bottom
R6	Resistor	3.3k	1/8W	0805	Тор
R7		Not placed		0805	Bottom
R8		Not placed		0805	Bottom
R9		Not placed		0805	Тор
R10		Not placed		0603	Bottom
R11		Not placed		0603	Bottom
R12		Not placed		0805	Top
R13		Not placed		0603	Bottom
R14		Not placed		0603	Bottom
R15		Not placed		0805	Top
R16		Not placed		0805	Top
R17		Not placed		0805	Bottom
R18		Not placed		0805	Тор
R19		Not placed		0805	Bottom
R20		Not placed		0805	Bottom
R21		Not placed		0805	Bottom
R22		Not placed		0805	Bottom
R23		Not placed		0805	Bottom
R24		Not placed		0805	Bottom
R25		Not placed		0805	Bottom
U1	Dual EIA-232 Driver	MAX232D		SO16	Тор
U2		Not placed		SOT-23-6	Bottom
U3		Not placed		SOT-223	Тор
U4		Not placed		SO14	Bottom
U5		Not placed		SSOP28	Bottom

ATU Interface UNIT

Designator	Description	Value	Volts/Watts	Comment	Case/Package	Layer
C1	Capacitor	100nF	50V	X7R	0805	Bottom
C2	Electrol. Capacitor	47uF	35V		Ø6.3mm x 11mm	Top
C3	Capacitor	4.7uF	25V	X7R	0805	Bottom
C4	Capacitor	10nF	50V	X7R	0805	Bottom
C5	Capacitor	22pF	50V	C0G	0805	Bottom
C6	Capacitor	22pF	50V	C0G	0805	Bottom
C7	Capacitor	220pF	50V	C0G	0805	Bottom
C8	Capacitor	22pF	50V	C0G	0805	Bottom
C9	Capacitor	15pF	50V	C0G	0805	Bottom
C10	Capacitor	1uF	50V	X7R	0805	Bottom
C11	Capacitor	470pF	50V	C0G	0805	Bottom
C12	Capacitor	220pF	50V	C0G	0805	Bottom
C13	Capacitor	10nF	50V	X7R	0805	Top
C14	Capacitor	47nF	50V	X7R	0805	Top
C15	Capacitor	10nF	50V	X7R	0805	Bottom
C16a	Capacitor	33nF	50V	X7R	0805	Top
C16b	Capacitor	33nF	50V	X7R	0805	Top
C17	Electrol. Capacitor	47uF	35V		Ø6.3mm x 11mm	Top
C18	Capacitor	100nF	50V	X7R	0805	Bottom
C19	Capacitor	100nF	50V	X7R	0805	Bottom
C20	Electrol. Capacitor	47uF	35V		Ø6.3mm x 11mm	Top
C21	Capacitor	4.7uF	50V	X7R	1206	Bottom
C22	Capacitor	4.7uF	50V	X7R	1206	Bottom
CON1	Header	1x8			2.54mm pich	Bottom
CON2	Header	1x10			2.54mm pich	Bottom
D1	Dual Schottky Diode	BAT54S	30V		SOT-23	Bottom

D2	Dual Schottky Diode	BAT54S	30V		SOT-23	Bottom
JP1	Resistor	10k	1/8W		0805	Bottom
L1	Inductor	150uH		50mA	1210	Top
L2	Inductor	100uH		50mA	1210	Top
L3	Inductor	10uH		50mA	1210	Bottom
R1	Resistor	4.7	1/8W		0805	Bottom
R2	Resistor	22.6k	1/8W	1%	0805	Bottom
R3	Resistor	5.11k	1/8W	1%	0805	Bottom
R4	Resistor	18.7k	1/8W	1%	0805	Bottom
R5	Resistor	2.74k	1/8W	1%	0805	Bottom
R6	Resistor	56.2k	1/8W	1%	0805	Bottom
R7	Resistor	1k	1/8W		0805	Bottom
R8	Resistor	1.78k	1/8W	1%	0805	Bottom
R9	Resistor	10	1/8W		0805	Bottom
R10	Resistor	3.9k	1/8W		0805	Bottom
R11	Resistor	4.7k	1/8W		0805	Bottom
R12	Resistor	13k	1/8W		0805	Bottom
R13	Resistor	36.5	1/8W	1%	0805	Bottom
R14	Resistor	24	1/8W		0805	Bottom
R15	Resistor	100	1/8W		0805	Тор
R16	Resistor	10k	1/8W		0805	Bottom
R17	Resistor	10k	1/8W		0805	Bottom
R18	Resistor	1k	1/8W		0805	Bottom
R19	Resistor	301k	1/8W	1%	0805	Bottom
R20	Carbon Film Resistor	68	2W		AXIAL-Ø5.5 x 16mm	Тор
U1	FSK Power Line Transceiver	ST7540			HTSSOP28	Тор
U2	Current Protection Load Switch	FPF2700MX			SO8	Тор
U3	Voltage Regulator	78M12		500mA	TO-252	Тор
Y1	Quartz Crystal	16.000 MHz			HC-49	Тор

ATU Interface UNIT

Designator	Description	Value	Volts/Watts	Comment	Case/Package	Layer
BC1	Ferrite Bead	BLM21AG601SH1		600mA	0805	Bottom
BC2	Ferrite Bead	BLM21AG601SH1		600mA	0805	Bottom
BC3	Ferrite Bead	BLM21AG601SH1		600mA	0805	Bottom
BC4	Ferrite Bead	BLM21AG601SH1		600mA	0805	Bottom
BD1	Bridge Rectifier	GBJ3506	600V		GBJ	Тор
C1	Capacitor	10nF	275VAC	X1	13x5x10	Тор
C2	Capacitor	100pF	400VAC	Y1	disc Ø6.5mm	Тор
C3	Capacitor	100pF	400VAC	Y1	disc Ø6.5mm	Тор
C4	Polyester Capacitor	2.2uF	275VAC	X2	32 x 20 x 33mm	Тор
C5	Capacitor	100nF	50V	X7R	0805	Bottom
C7	Capacitor	3.3nF	400VAC	Y1	disc Ø11mm	Тор
C8	Capacitor	3.3nF	400VAC	Y1	disc Ø11mm	Тор
C9	Polyester Capacitor	2.2uF	275VAC	X2	32 x 20 x 33mm	Тор
C10	Polyester Capacitor	2.2uF	400V	MKS4	11 x 21 x 31.5mm	Тор
C11	Capacitor	1nF	400VAC	Y1	disc Ø8mm	Тор
C12	Polyester Capacitor	2.2uF	400V	MKS4	11 x 21 x 31.5mm	Тор
C13	Capacitor	100nF	50V	X7R	0805	Bottom
C14	Capacitor	680pF	3kV	Y5P	disc Ø7.5mm	Тор
C15	Capacitor	1nF	50V	X7R	0805	Bottom
C16	Electrol. Capacitor	470uF	400V	Low ESR	Ø30mm x 47mm	Тор
C17	Electrol. Capacitor	470uF	400V	Low ESR	Ø30mm x 47mm	Тор
C18	Electrol. Capacitor	470uF	400V	Low ESR	Ø30mm x 47mm	Тор
C21	Polyester Capacitor	100nF	630V	MKS4	6 x 12.5 x 18mm	Тор
C22	Electrol. Capacitor	47uF	25V	RK	Ø5mm x 11mm	Тор
C23	Capacitor	1uF	50V	X7R	0805	Bottom
C24	Capacitor	1uF	50V	X7R	0805	Bottom
C25	Capacitor	100nF	50V	X7R	0805	Bottom
C26	Capacitor	100nF	50V	X7R	0805	Bottom
C27	Capacitor	2.2nF	1kV	Y5P	disc Ø7.5mm	Тор
C28	Capacitor	100nF	50V	X7R	0805	Bottom

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C29	Electrol. Capacitor	47uF	25V	RK	Ø5mm x 11mm	Тор
C30	Electrol. Capacitor	330uF	25V	Low ESR	Ø8mm x 12mm	Тор
C31	Electrol. Capacitor	330uF	25V	Low ESR	Ø8mm x 12mm	Тор
C32	Capacitor	10nF	50V	X7R	0805	Bottom
C33	Capacitor	10nF	50V	X7R	0805	Bottom
C34	Capacitor	100nF	50V	X7R	0805	Bottom
C35	Capacitor	1uF	50V	X7R	0805	Bottom
C36	Capacitor	3.3nF	400VAC	Y1	disc Ø11mm	Тор
C37	Electrol. Capacitor	220uF	35V	Low ESR	Ø8mm x 12mm	Тор
C38	Capacitor	100nF	50V	X7R	0805	Bottom
C39	Capacitor	2.7nF	50V	X7R	0805	Bottom
C40	Capacitor	33nF	50V	X7R	0805	Bottom
C41	Capacitor	100nF	50V	X7R	0805	Bottom
C42	Electrol. Capacitor	470uF	35V	Low ESR	Ø10mm x 20mm	Top
C43	Electrol. Capacitor	470uF	16V		Ø8mm x 12mm	Тор
C44	Capacitor	100nF	50V	X7R	0805	Bottom
C45	Electrol. Capacitor	470uF	16V	7	Ø8mm x 12mm	Top
C46	Capacitor	100nF	50V	X7R	0805	Bottom
C53	Capacitor	100nF	50V	X7R X7R	0805	Bottom
C54	Capacitor	100nF	50V	X7R X7R	0805	Bottom
C55	Capacitor	100nF	50V	X7R	0805	Bottom
C56	Capacitor	100nF	50V	X7R	0805	Bottom
C60	Capacitor	100nF	50V	X7R	0805	Bottom
C61	Capacitor	100nF	50V	X7R	0805	Bottom
C63	Capacitor	100nF	50V	X7R X7R	0805	Bottom
C63	Capacitor	100nF	50V	X7R X7R	0805	Bottom
C70	Polyester Capacitor	1uF	630V	MKS4	11 x 21 x 31.5mm	Top
C71	Capacitor	1uF	50V	X7R	0805	Bottom
C72	Capacitor	1uF	50V	X7R X7R	0805	Bottom
C73	Capacitor	100nF	50V	X7R	0805	Bottom
C74	Electrol. Capacitor	330uF	25V	Low ESR	Ø8mm x 12mm	Top
C75	Capacitor	1uF	50V	X7R	0805	Bottom
C76	Electrol. Capacitor	10uF	35V	RK	Ø5mm x 11mm	Тор
	· · · · · · · · · · · · · · · · · · ·				-	
C77	Capacitor Polyester Multilayer	1uF	50V	X7R	0805	Bottom
C78		2.2uF	630V	TS02	30 x 16 x 26mm	Тор
	Capacitor Polyester Multilayer					
C79		2.2uF	630V	TS02	30 x 16 x 26mm	Тор
000	Capacitor	4	400)/	VZD	4000	Dettern
C80	Capacitor	1nF	100V	X7R	1206	Bottom
C81	Capacitor	1nF	100V	X7R	1206	Bottom
C82	Capacitor	1nF	100V	X7R	1206	Bottom
C83	Electrol Capacitor	470uF	63V 63V	Low ESR	Ø12.5mm x 25mm Ø12.5mm x 25mm	Top
C84 C85	Electrol Capacitor	470uF	63V	Low ESR Low ESR	Ø12.5mm x 25mm	Top
	Electrol Capacitor	470uF 470uF			Ø12.5mm x 25mm	Top
C86 C87	Electrol. Capacitor Capacitor	1nF	63V 100V	Low ESR X7R	1206	Top Bottom
		100nF	200V	X7R	1206	
C88 C89	Capacitor				1200	Bottom
		4./()n⊢	100\/DC	MKT	2824	Bottom
Cas	Polyester Capacitor Flectrol Capacitor	470nF 470uF	100VDC	MKT Low ESR	2824 Ø12 5mm v 25mm	Bottom
C93	Electrol. Capacitor	470uF	63V	Low ESR	Ø12.5mm x 25mm	Тор
C94	Electrol. Capacitor Electrol. Capacitor	470uF 470uF	63V 63V	Low ESR Low ESR	Ø12.5mm x 25mm Ø12.5mm x 25mm	Top Top
C94 C95	Electrol. Capacitor Electrol. Capacitor Capacitor	470uF 470uF 1nF	63V 63V 100V	Low ESR Low ESR X7R	Ø12.5mm x 25mm Ø12.5mm x 25mm 1206	Top Top Bottom
C94 C95 C96	Electrol. Capacitor Electrol. Capacitor Capacitor Electrol. Capacitor	470uF 470uF 1nF 470uF	63V 63V 100V 63V	Low ESR Low ESR X7R Low ESR	Ø12.5mm x 25mm Ø12.5mm x 25mm 1206 Ø12.5mm x 25mm	Top Top Bottom Top
C94 C95 C96 C97	Electrol. Capacitor Electrol. Capacitor Capacitor Electrol. Capacitor Electrol. Capacitor	470uF 470uF 1nF 470uF 470uF	63V 63V 100V 63V 63V	Low ESR Low ESR X7R Low ESR Low ESR	Ø12.5mm x 25mm Ø12.5mm x 25mm 1206 Ø12.5mm x 25mm Ø12.5mm x 25mm	Top Top Bottom Top Top
C94 C95 C96 C97 C98	Electrol. Capacitor Electrol. Capacitor Capacitor Electrol. Capacitor Electrol. Capacitor Polyester Capacitor	470uF 470uF 1nF 470uF 470uF 470nF	63V 63V 100V 63V 63V 100VDC	Low ESR Low ESR X7R Low ESR Low ESR MKT	Ø12.5mm x 25mm Ø12.5mm x 25mm 1206 Ø12.5mm x 25mm Ø12.5mm x 25mm Ø12.5mm x 25mm 2824	Top Top Bottom Top Top Bottom
C94 C95 C96 C97 C98	Electrol. Capacitor Electrol. Capacitor Capacitor Electrol. Capacitor Electrol. Capacitor Electrol. Capacitor Polyester Capacitor Capacitor	470uF 470uF 1nF 470uF 470uF 470nF 100nF	63V 63V 100V 63V 63V 100VDC 200V	Low ESR Low ESR X7R Low ESR Low ESR MKT X7R	Ø12.5mm x 25mm Ø12.5mm x 25mm 1206 Ø12.5mm x 25mm Ø12.5mm x 25mm Ø12.5mm x 25mm 2824 1206	Top Top Bottom Top Top Bottom Bottom Bottom
C94 C95 C96 C97 C98 C99	Electrol. Capacitor Electrol. Capacitor Capacitor Electrol. Capacitor Electrol. Capacitor Polyester Capacitor Capacitor Capacitor Capacitor	470uF 470uF 1nF 470uF 470uF 470nF 100nF	63V 63V 100V 63V 63V 100VDC 200V 50V	Low ESR Low ESR X7R Low ESR Low ESR MKT X7R X7R	Ø12.5mm x 25mm Ø12.5mm x 25mm 1206 Ø12.5mm x 25mm Ø12.5mm x 25mm Ø12.5mm x 25mm 2824 1206 0805	Top Top Bottom Top Top Bottom Bottom Bottom Bottom
C94 C95 C96 C97 C98 C99 C101	Electrol. Capacitor Electrol. Capacitor Capacitor Electrol. Capacitor Electrol. Capacitor Polyester Capacitor Capacitor Capacitor Capacitor Capacitor Capacitor	470uF 470uF 1nF 470uF 470uF 470nF 100nF 100nF	63V 63V 100V 63V 63V 100VDC 200V 50V	Low ESR Low ESR X7R Low ESR Low ESR MKT X7R X7R X7R	Ø12.5mm x 25mm Ø12.5mm x 25mm 1206 Ø12.5mm x 25mm Ø12.5mm x 25mm Ø12.5mm x 25mm 2824 1206 0805	Top Top Bottom Top Top Bottom Bottom Bottom Bottom Bottom Bottom
C94 C95 C96 C97 C98 C99 C101 C102	Electrol. Capacitor Electrol. Capacitor Capacitor Electrol. Capacitor Electrol. Capacitor Electrol. Capacitor Polyester Capacitor Capacitor Capacitor Capacitor Capacitor Capacitor Capacitor	470uF 470uF 1nF 470uF 470uF 470nF 100nF 100nF 100nF	63V 63V 100V 63V 63V 100VDC 200V 50V 50V	Low ESR Low ESR X7R Low ESR Low ESR MKT X7R X7R X7R X7R X7R	Ø12.5mm x 25mm Ø12.5mm x 25mm 1206 Ø12.5mm x 25mm Ø12.5mm x 25mm Ø12.5mm x 25mm 2824 1206 0805 0805	Top Top Bottom Top Top Bottom Bottom Bottom Bottom Bottom Bottom Bottom Bottom
C94 C95 C96 C97 C98 C99 C101 C102 C214	Electrol. Capacitor Electrol. Capacitor Capacitor Electrol. Capacitor Electrol. Capacitor Electrol. Capacitor Polyester Capacitor Capacitor Capacitor Capacitor Capacitor Capacitor Capacitor Capacitor Capacitor	470uF 470uF 1nF 470uF 470uF 470nF 100nF 100nF 100nF 100nF	63V 63V 100V 63V 63V 100VDC 200V 50V 50V 50V	Low ESR Low ESR X7R Low ESR Low ESR MKT X7R X7R X7R X7R X7R X7R	Ø12.5mm x 25mm Ø12.5mm x 25mm 1206 Ø12.5mm x 25mm Ø12.5mm x 25mm Ø12.5mm x 25mm 2824 1206 0805 0805 0805	Top Top Bottom Top Top Bottom
C94 C95 C96 C97 C98 C99 C101 C102 C214 C215 C216	Electrol. Capacitor Electrol. Capacitor Capacitor Electrol. Capacitor Electrol. Capacitor Polyester Capacitor	470uF 470uF 1nF 470uF 470uF 470nF 100nF 100nF 100nF 100nF 100nF	63V 63V 100V 63V 63V 100VDC 200V 50V 50V 50V 50V 50V	Low ESR Low ESR X7R Low ESR Low ESR MKT X7R X7R X7R X7R X7R X7R X7R X7R X7R	Ø12.5mm x 25mm Ø12.5mm x 25mm 1206 Ø12.5mm x 25mm Ø12.5mm x 25mm Ø12.5mm x 25mm 2824 1206 0805 0805 0805 0805	Top Top Bottom Top Top Bottom
C94 C95 C96 C97 C98 C99 C101 C102 C214 C215 C216 C217	Electrol. Capacitor Electrol. Capacitor Capacitor Electrol. Capacitor Electrol. Capacitor Electrol. Capacitor Polyester Capacitor	470uF 470uF 1nF 470uF 470uF 470nF 100nF 100nF 100nF 100nF 100nF 100nF	63V 63V 100V 63V 63V 100VDC 200V 50V 50V 50V 50V 50V 50V	Low ESR Low ESR X7R Low ESR Low ESR MKT X7R	Ø12.5mm x 25mm Ø12.5mm x 25mm 1206 Ø12.5mm x 25mm Ø12.5mm x 25mm Ø12.5mm x 25mm 2824 1206 0805 0805 0805 0805 0805	Top Top Bottom Top Top Bottom
C94 C95 C96 C97 C98 C99 C101 C102 C214 C215 C216 C217 C218	Electrol. Capacitor Electrol. Capacitor Capacitor Electrol. Capacitor Electrol. Capacitor Polyester Capacitor	470uF 470uF 1nF 470uF 470uF 470nF 100nF 100nF 100nF 100nF 100nF 100nF 10nF 10nF	63V 63V 100V 63V 63V 100VDC 200V 50V 50V 50V 50V 50V 50V 50V 50V	Low ESR Low ESR X7R Low ESR Low ESR MKT X7R	Ø12.5mm x 25mm Ø12.5mm x 25mm 1206 Ø12.5mm x 25mm Ø12.5mm x 25mm Ø12.5mm x 25mm 2824 1206 0805 0805 0805 0805 0805 0805	Top Top Bottom Top Top Bottom
C94 C95 C96 C97 C98 C99 C101 C102 C214 C215 C216 C217 C218 C219	Electrol. Capacitor Electrol. Capacitor Capacitor Electrol. Capacitor Electrol. Capacitor Electrol. Capacitor Polyester Capacitor	470uF 470uF 1nF 470uF 470uF 470nF 100nF 100nF 100nF 100nF 100nF 10nF 10nF 10nF	63V 63V 100V 63V 63V 100VDC 200V 50V 50V 50V 50V 50V 50V 50V 50V 50V	Low ESR Low ESR X7R Low ESR Low ESR MKT X7R	Ø12.5mm x 25mm Ø12.5mm x 25mm 1206 Ø12.5mm x 25mm Ø12.5mm x 25mm Ø12.5mm x 25mm 2824 1206 0805 0805 0805 0805 0805 0805 0805	Top Top Bottom Top Top Bottom
C94 C95 C96 C97 C98 C99 C101 C102 C214 C215 C216 C217 C218 C219 C220	Electrol. Capacitor Electrol. Capacitor Capacitor Electrol. Capacitor Electrol. Capacitor Electrol. Capacitor Polyester Capacitor	470uF 470uF 1nF 470uF 470uF 470nF 100nF 100nF 100nF 100nF 100nF 10nF 1	63V 63V 100V 63V 63V 100VDC 200V 50V 50V 50V 50V 50V 50V 50V 50V 50V	Low ESR Low ESR X7R Low ESR Low ESR MKT X7R	Ø12.5mm x 25mm Ø12.5mm x 25mm 1206 Ø12.5mm x 25mm Ø12.5mm x 25mm Ø12.5mm x 25mm 2824 1206 0805 0805 0805 0805 0805 0805 0805 08	Top Top Bottom Top Top Bottom
C94 C95 C96 C97 C98 C99 C101 C102 C214 C215 C216 C217 C218 C219 C220 C222	Electrol. Capacitor Electrol. Capacitor Capacitor Electrol. Capacitor Electrol. Capacitor Electrol. Capacitor Polyester Capacitor	470uF 470uF 1nF 470uF 470uF 470nF 100nF 100nF 100nF 100nF 10nF 10nF 10	63V 63V 100V 63V 63V 100VDC 200V 50V 50V 50V 50V 50V 50V 50V 50V 50V	Low ESR Low ESR X7R Low ESR Low ESR MKT X7R	Ø12.5mm x 25mm Ø12.5mm x 25mm 1206 Ø12.5mm x 25mm Ø12.5mm x 25mm Ø12.5mm x 25mm 2824 1206 0805 0805 0805 0805 0805 0805 0805 0805 0805 0805 0805	Top Top Bottom Top Top Bottom
C94 C95 C96 C97 C98 C99 C101 C102 C214 C215 C216 C217 C218 C219 C220 C222 C224	Electrol. Capacitor Electrol. Capacitor Capacitor Electrol. Capacitor Electrol. Capacitor Electrol. Capacitor Polyester Capacitor	470uF 470uF 1nF 470uF 470uF 470nF 100nF 100nF 100nF 100nF 100nF 10nF 1	63V 63V 100V 63V 63V 100VDC 200V 50V 50V 50V 50V 50V 50V 50V 50V 50V	Low ESR Low ESR X7R Low ESR Low ESR MKT X7R	Ø12.5mm x 25mm Ø12.5mm x 25mm 1206 Ø12.5mm x 25mm Ø12.5mm x 25mm Ø12.5mm x 25mm 2824 1206 0805 0805 0805 0805 0805 0805 0805 0805 0805 0805 0805 0805	Top Top Bottom Top Top Bottom
C94 C95 C96 C97 C98 C99 C101 C102 C214 C215 C216 C217 C218 C219 C220 C222	Electrol. Capacitor Electrol. Capacitor Capacitor Electrol. Capacitor Electrol. Capacitor Electrol. Capacitor Polyester Capacitor	470uF 470uF 1nF 470uF 470uF 470nF 100nF 100nF 100nF 100nF 10nF 10nF 10	63V 63V 100V 63V 63V 100VDC 200V 50V 50V 50V 50V 50V 50V 50V 50V 50V	Low ESR Low ESR X7R Low ESR Low ESR MKT X7R	Ø12.5mm x 25mm Ø12.5mm x 25mm 1206 Ø12.5mm x 25mm Ø12.5mm x 25mm Ø12.5mm x 25mm 2824 1206 0805 0805 0805 0805 0805 0805 0805 0805 0805 0805 0805	Top Top Bottom Top Top Bottom

Da	Illtrafact Doctifier Diada	CTTU2006W/	6001/	1	DO 247	Ton
D3 D4	Ultrafast Rectifier Diode Rectifier Diode	STTH3006W 1N5406	600V 600V		DO-247 DO-201AD	Top Top
D5	Diode	BAS16	75V		SOT-23	Bottom
D6	Zener Diode	BZV55C6V2	500mW		SOD-80	Bottom
D7	Rectifier Diode	HER307	800V		DO-27	Top
D8	Ultrafast Diode	UF3GB	400V		DO-214AA	Bottom
D9	Ultrafast Diode	UF3GB	400V		DO-214AA	Bottom
D10	Diode	BAS16	75V		SOT-23	Bottom
D11	Hyperfast Diode	FFP08H60STU	600V		TO-220-2L	Тор
D12	Ultrafast Diode	UF3GB	400V		DO-214AA	Bottom
D13	Ultrafast Diode	UF3GB	400V		DO-214AA	Bottom
D14	Diode	BAS16	75V		SOT-23	Bottom
D15 D16	Diode Hyperfast Diode	BAS16 FFP08H60STU	75V 600V		SOT-23 TO-220-2L	Bottom
D16	Hyperfast Diode	FFP08H60STU	600V		TO-220-2L	Top Top
D17	Diode	BAS16	75V		SOT-23	Bottom
D19	Diode	BAS16	75V		SOT-23	Bottom
D20	Dual Schottky Diode	BAT54S	30V		SOT-23	Bottom
D21	Dual Schottky Diode	BAT54S	30V		SOT-23	Bottom
D22	Diode	BAS16	75V		SOT-23	Bottom
D23	Dual Schottky Diode	BAT54S	30V		SOT-23	Bottom
D24	Dual Schottky Diode	BAT54S	30V		SOT-23	Bottom
D25	Schottky Diode	SS14	40V		DO-214AC	Bottom
D26	Schottky Diode	SS14	40V		DO-214AC	Bottom
D27	Dual Schottky Diode	BAT54S	30V		SOT-23	Bottom
D28 D29	Dual Schottky Diode DIODE ARRAY	BAT54S STTH6003CW	30V 300V		SOT-23 TO247-3L	Bottom
D29 D30	DIODE ARRAY	STTH6003CW STTH6003CW	300V 300V		TO247-3L TO247-3L	Top Top
D30	DIODE ARRAY	STTH6003CW	300V		TO247-3L	Тор
D32	DIODE ARRAY	STTH6003CW	300V		TO247-3L	Тор
D208	Diode	LL4148	100V		SOD-80	Bottom
D209	Diode	LL4148	100V		SOD-80	Bottom
F1	Axial Lead Fuse	10A	250V	Fast Acting	5x20mm	Тор
F2	Axial Lead Fuse	0.2A	250V	Fast Acting	5x20mm	Тор
J1A	Connector, 8-Pin				MTA100 8p	Тор
J1B	Connector, 5-Pin				MTA100 5p	Top
J2	Connector, 2-Pin				MTA100 2p	Top
J3	QUICK-FIT Terminal				Keystone 1287	Top
J4 J5	QUICK-FIT Terminal QUICK-FIT Terminal				Keystone 1287 Keystone 1287	Top Top
	QUICK-FIT Terminal				Keystone 1287	Тор
J101	Connector, 3-Pin				MTA156 3p	Тор
J102	Connector, 2-Pin				MTA100 2p	Тор
J200	Plug				•	Тор
J201	Plug					Тор
J204	Connector, 4-Pin				MTA100 4p	Тор
J205	Connector, 6-Pin				MTA100 6p	Top
K202	Relay	RT334012	12V		RT1	Top
K203	Relay	RT334012	12V		RT1	Top
L1 L2	Choke Cumulative Choke Cumulative				ETD-39 ETD-39	Top Top
L2 L3	Power Inductor	68uH		1.5A	DBS135	Bottom
L4	Power Inductor	68uH		1.5A	DBS135	Bottom
L5	Inductor	22uH		370mA	1812	Bottom
L6	Inductor	22uH		370mA	1812	Bottom
L7	Inductor	22uH		370mA	1812	Bottom
L8	Inductor	2.2uH		410mA	1812	Bottom
L9	Inductor	22uH		370mA	1812	Bottom
L10	Inductor	22uH		370mA	1812	Bottom
L11	Inductor	22uH		370mA	1812	Bottom
L12	Inductor	22uH		370mA	1812	Bottom
L13 L14	Inductor	22uH		370mA	1812 ETD 20	Bottom
L14 L15	Choke Output Choke	0.012mH 130uH			ETD-29 TOROID	Top Top
L16	Output Choke	130uH			TOROID	Тор
L17	Output Choke	130uH			TOROID	Тор
L18	Output Choke	130uH			TOROID	Тор
L19	Inductor	22uH		370mA	1812	Bottom
L20	Inductor	2.2uH		410mA	1812	Bottom
L21	Inductor	2.2uH		410mA	1812	Bottom
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1.101	Toroidal Coil	240		00 0mm 20 turns	TOPOID 22 5v14v9 4	Тор
L101 L203	Toroidal Coil Inductor	340uH 22uH		Ø0.9mm, 30 turns 370mA	TOROID 22.5x14x8.4 1812	Bottom
L204	Inductor	22uH		370mA	1812	Bottom
L205	Inductor	22uH		370mA	1812	Bottom
L206	Inductor	22uH		370mA	1812	Bottom
L209	Inductor	22uH		370mA	1812	Bottom
LF1	Toroidal Coil	3mH			TOROID	Тор
LF2	Toroidal Coil	3mH		CO 40.51	TOROID	Top
LF3	Ferrite Coil	DOVEE 40	001/	Ø2mm, 12.5 turns	Ferrite Ø8x31	Top
Q1 Q2	NPN Transistor PNP Transistor	BCX55-16 BCX52-16	60V 60V		SOT89 SOT89	Bottom Bottom
Q3	PNP Transistor	BCX52-16	60V		SOT89	Bottom
Q4	PNP Transistor	BCX52-16	60V		SOT89	Bottom
Q5	PNP Transistor	BCX52-16	60V		SOT89	Bottom
Q6	MOSFET N-CH	20N60C3			TO247	Тор
Q7	MOSFET N-CH	20N60C3			TO247	Тор
Q8	MOSFET N-CH	20N60C3			TO247	Тор
Q9	MOSFET N-CH	20N60C3	201/		TO247	Тор
Q10	PNP Transistor	MMBT2907	60V		SOT-23	Bottom
Q11 Q12	NPN Transistor MOSFET N-CH	BCX55-16 2N7002	60V 60V		SOT89 SOT-23	Bottom Bottom
Q12 Q13	MOSFET N-CH	FQA24N50	6U V		TO247-AD	Top
Q14	MOSFET N-CH	FQA24N50			TO247-AD	Тор
Q15	MOSFET N-CH	FQA24N50			TO247-AD	Тор
Q16	MOSFET N-CH	FQA24N50			TO247-AD	Top
Q17	NPN Transistor	BCX55-16	60V		SOT89	Bottom
Q18	NPN Transistor	BCX55-16	60V		SOT89	Bottom
Q19	NPN Transistor	BCX55-16	60V		SOT89	Bottom
Q200	MOSFET N-CH	2N7002	60V		SOT-23	Bottom
R1	Metal Film Resistor	390k	1W	40/	AXIAL-Ø2.5 x 6.5mm	Тор
R2 R3	Resistor Resistor	47 0	1/4W 1/4W	1%	1206 1206	Bottom Bottom
R4	Resistor	47	1/4W	1%	1206	Bottom
R5	Resistor	47	1/4W	1%	1206	Bottom
R6	Resistor	47	1/4W	1%	1206	Bottom
R7	Resistor	47	1/4W	1%	1206	Bottom
R8	Resistor	10	1/4W		1206	Bottom
R9	Resistor	10	1/4W		1206	Bottom
R10	Resistor	10	1/4W		1206	Bottom
R11	Resistor	10	1/4W	40/	1206	Bottom
R12	Resistor	10k	1/8W	1%	0805	Bottom
R13 R14	Resistor Resistor	10k 10k	1/8W 1/8W	1% 1%	0805 0805	Bottom Bottom
R15	Resistor	10k	1/8W	1%	0805	Bottom
R16	Carbon Film Resistor	15R	2W	170	AXIAL-Ø5.5 x 16mm	Top
R17	Resistor	16.5	1/8W	1%	0805	Bottom
R18	Resistor	16.5	1/8W	1%	0805	Bottom
R19	Resistor	1.2k	1/8W	1%	0805	Bottom
R20	Resistor	510	1/8W	1%	0805	Bottom
R21	Resistor	8.25k	1/8W	1%	0805	Bottom
R22	Resistor	100k 47	1/8W 1/8W	1%	0805 0805	Bottom
R23 R24	Resistor Resistor	270k	1/8VV 1/4W	1%	1206	Bottom Bottom
R25	Resistor	270k	1/4W	1%	1206	Bottom
R26	Resistor	270k	1/4W	1%	1206	Bottom
R27	Resistor	270k	1/4W	1%	1206	Bottom
R28	Resistor	390k	1/4W	1%	1206	Bottom
R29	Resistor	390k	1/4W	1%	1206	Bottom
R30	Resistor	390k	1/4W	1%	1206	Bottom
R31	Resistor	390k	1/4W	1%	1206	Bottom
R32	Resistor	22k	1/8W	1%	0805	Bottom
R33 R34	Resistor Metal Film Resistor	1.5 33k	3/4W 3W		2010 AXIAL-Ø5.5 x 16mm	Bottom Top
R35	Resistor	12	3/4W		2010	Bottom
R36	Resistor	6.8	1/8W		0805	Bottom
R37	Resistor	8.2	1/4W		1206	Bottom
R38	Resistor	2.7k	1/8W	1%	0805	Bottom
R39	Resistor	24.9k	1/8W	1%	0805	Bottom
R40	Resistor	332k	1/4W	1%	1206	Bottom
R41	Resistor	332k	1/4W	1%	1206	Bottom

R80 R81 R82 R83 R84 R85 R86 R87 Me R88 R89 R90 Me R91 R92 R93 Me R201 R208 R210 R211 R212 RTH1 Pc	Resistor	332k 332k 4.87k 1k 2.4k 1k 270 100k 11k 1k 11k 2.4k 100 2.7k 330 1k 10k 10k 5.1 5.1 10k 10k 10k	1/4W 1/4W 1/8W 1/8W 1/8W 1/8W 1/8W 1/8W 1/8W 1/8	1% 1% 1% 1% 1% 1% 1% 1% 1% 1% 1% 1% 1% 1	1206 1206 0805 0805 0805 0805 0805 0805 0805 08	Bottom
R44 R45 R46 R47 R48 R49 R50 R51 R52 R53 R54 R55 R56 R57 R58 R59 R60 R61 R62 R63 R64 R65 R66 R67 R68 R69 R70 R71 R72 R73 R74 R75 R78 R79 R70 R71 R72 R73 R74 R75 R76 R77 R78 R79 R80 R81 R82 R83 R84 R85 R86 R87 R86 R87 R88 R89 R80 R81 R82 R83 R84 R85 R86 R87 R86 R87 R88 R89 R90 R90 R91 R92 R93 R92 R93 R90 R211 R212 RTH1 R212 RTH1 P0	Resistor	4.87k 1k 2.4k 1k 270 100k 11k 1k 11k 2.4k 100 2.7k 330 1k 10k 10k 710k 5.1 10k 10k	1/8W 1/8W 1/8W 1/8W 1/8W 1/8W 1/8W 1/8W	1% 1% 1% 1% 1% 1% 1% 1% 1% 1% 1% 1% 1% 1	0805 0805 0805 0805 0805 0805 0805 0805 1206 0805 0805 0805 0805 0805 0805	Bottom
R46 R47 R48 R49 R50 R51 R52 R53 R54 R55 R56 R57 R58 R59 R60 R61 R62 R63 R64 R65 R66 R67 R68 R69 R70 R71 R72 R73 R74 R75 R78 R79 R70 R71 R72 R73 R74 R75 R76 R77 R78 R79 R80 R80 R81 R82 R83 R84 R85 R86 R87 R86 R87 R88 R89 R90 R90 R91 R92 R93 Re201 R208 R210 R211 R212 RTH1 P0 RTH2 P0	Resistor	1k 2.4k 1k 270 100k 11k 1k 11k 2.4k 100 2.7k 330 1k 10k 710k 5.1 5.1 10k	1/8W 1/8W 1/8W 1/8W 1/8W 1/8W 1/4W 1/8W 1/8W 1/8W 1/8W 1/8W 1/8W 1/8W 1/8	1% 1% 1% 1% 1% 1% 1% 1% 1% 1% 1% 1% 1%	0805 0805 0805 0805 0805 0805 1206 0805 0805 0805 0805 0805 0805	Bottom
R47 R48 R49 R50 R51 R52 R53 R54 R55 R56 R57 R58 R59 R60 R61 R62 R63 R64 R65 R66 R67 R68 R69 R70 R71 R72 R73 R74 R75 R78 R79 R78 R79 R80 R81 R82 R83 R84 R85 R86 R87 R88 R89 R80 R81 R82 R83 R84 R85 R86 R87 R86 R87 R88 R89 R90 R91 R92 R93 R90 R211 R212 RTH1 R212 RTH1 P0 RTH2 P0	Resistor	1k 270 100k 11k 1k 11k 2.4k 100 2.7k 330 1k 10k 710k 5.1 5.1 10k	1/8W 1/8W 1/8W 1/8W 1/8W 1/4W 1/8W 1/8W 1/8W 1/8W 1/8W 1/8W 1/8W 1/8	1% 1% 1% 1% 1% 1% 1% 1% 1% 1% 1%	0805 0805 0805 0805 1206 0805 0805 0805 0805 0805 0805 0805	Bottom
R48 R49 R50 R51 R52 R53 R54 R55 R56 R57 R58 R59 R60 R61 R62 R63 R64 R65 R66 R67 R68 R69 R70 R71 R72 R73 R74 R75 R78 R79 R76 R77 R78 R79 R80 R81 R82 R83 R84 R85 R86 R87 R86 R87 R88 R89 R90 R90 R91 R92 R93 Re201 R208 R210 R211 R212 RTH1 P0 RTH2 P0	Resistor	270 100k 11k 1k 11k 2.4k 100 2.7k 330 1k 10k 10k 710k 5.1 5.1 10k	1/8W 1/8W 1/8W 1/4W 1/8W 1/8W 1/8W 1/8W 1/8W 1/8W 1/8W 1/8	1% 1% 1% 1% 1% 1% 1% 1% 1% 1%	0805 0805 0805 1206 0805 0805 0805 0805 0805 0805 0805	Bottom
R49 R50 R51 R52 R53 R54 R55 R56 R57 R58 R59 R60 R61 R62 R63 R64 R65 R66 R67 R68 R69 R70 R71 R72 R73 R74 R75 R78 R79 R74 R75 R78 R79 R80 R81 R82 R83 R84 R85 R86 R87 R86 R87 R88 R89 R80 R81 R82 R83 R84 R85 R86 R87 R86 R87 R88 R89 R90 R90 R91 R201 R208 R210 R211 R212 RTH1 P0 RTH2 P0	Resistor	100k 11k 11k 11k 2.4k 100 2.7k 330 1k 10k 10k 710k 5.1 10k 10k	1/8W 1/8W 1/4W 1/8W 1/8W 1/8W 1/8W 1/8W 1/8W 1/8W 1/8	1% 1% 1% 1% 1% 1% 1% 1% 1%	0805 0805 1206 0805 0805 0805 0805 0805 0805 0805	Bottom
R50 R51 R52 R53 R54 R55 R56 R57 R58 R56 R57 R58 R59 R60 R61 R62 R63 R64 R65 R66 R67 R68 R69 R70 R71 R72 R73 R74 R75 R78 R79 R78 R79 R78 R79 R80 R81 R82 R83 R84 R85 R86 R87 R86 R87 R88 R89 R80 R81 R82 R83 R84 R85 R86 R87 R86 R87 Me R88 R89 R90 Me R91 R92 R93 Me R201 R208 R210 R211 R212 RTH1 P0 RTH2 P0	Resistor	11k 11k 11k 2.4k 100 2.7k 330 1k 10k 10k 710k 5.1 10k 10k	1/8W 1/4W 1/8W 1/8W 1/8W 1/8W 1/8W 1/8W 1/8W 1/8	1% 1% 1% 1% 1% 1% 1% 1%	0805 1206 0805 0805 0805 0805 0805 0805 0805	Bottom Bottom Bottom Bottom Bottom Bottom Bottom Bottom Bottom
R51 R52 R53 R54 R55 R56 R57 R58 R56 R57 R58 R59 R60 R61 R62 R63 R64 R65 R66 R67 R68 R69 R70 R71 R72 R73 R74 R75 R78 R79 R74 R75 R76 R77 R78 R80 R81 R82 R83 R84 R85 R86 R87 R86 R87 R86 R87 R88 R89 R90 R90 R91 R92 R93 R92 R93 R91 R201 R211 R212 RTH1 P0 RTH2 P0 RTH2	Resistor	1k 11k 2.4k 100 2.7k 330 1k 10k 10k 710k 5.1 10k 10k	1/4W 1/8W 1/8W 1/8W 1/8W 1/8W 1/8W 1/8W 1/8	1% 1% 1% 1% 1% 1%	1206 0805 0805 0805 0805 0805 0805 0805	Bottom Bottom Bottom Bottom Bottom Bottom Bottom
R52 R53 R54 R55 R56 R57 R58 R59 R60 R61 R62 R63 R64 R65 R66 R67 R68 R69 R70 R71 R72 R73 R74 R75 R78 R79 R74 R75 R76 R77 R78 R80 R81 R82 R83 R84 R85 R86 R87 R86 R87 R86 R87 R88 R89 R90 Me R91 R92 R93 Me R201 R211 R212 RTH1 P0 RTH2 P0	Resistor	11k 2.4k 100 2.7k 330 1k 10k 10k 710k 5.1 10k 10k	1/8W 1/8W 1/8W 1/8W 1/8W 1/8W 1/8W 1/8W	1% 1% 1% 1% 1% 1%	0805 0805 0805 0805 0805 0805 0805	Bottom Bottom Bottom Bottom Bottom
R53 R54 R55 R56 R57 R58 R59 R60 R61 R62 R63 R64 R65 R66 R67 R68 R69 R70 R71 R72 R73 R74 R75 R78 R74 R75 R76 R77 R78 R79 R80 R81 R82 R83 R84 R85 R86 R87 R86 R87 R86 R87 R88 R89 R90 R91 R92 R93 R91 R201 R211 R212 RTH1 P0 RTH2 P0	Resistor	2.4k 100 2.7k 330 1k 10k 10k 710k 5.1 5.1 10k	1/8W 1/8W 1/8W 1/8W 1/8W 1/8W 1/8W 3/5W	1% 1% 1% 1% 1% 1%	0805 0805 0805 0805 0805 0805	Bottom Bottom Bottom Bottom
R54 R55 R56 R57 R58 R59 R60 R61 R62 R63 R64 R65 R66 R67 R68 R69 R70 R71 R72 R73 R74 R75 R76 R77 R78 R79 R80 R80 R81 R82 R83 R84 R85 R86 R87 R86 R87 R88 R89 R90 R90 R91 R92 R93 R90 R211 R212 RTH1 P0 RTH2 P0 RTH2 P0	Resistor	100 2.7k 330 1k 10k 10k 710k 5.1 5.1 10k	1/8W 1/8W 1/8W 1/8W 1/8W 1/8W 3/5W	1% 1% 1% 1% 1%	0805 0805 0805 0805 0805	Bottom Bottom Bottom
R56 R57 R58 R59 R60 R61 R62 R63 R64 R65 R66 R67 R68 R69 R70 R71 R72 R73 R74 R75 R76 R77 R78 R79 R88 R89 R80 R81 R82 R83 R84 R85 R86 R87 R86 R87 R88 R89 R90 R90 R91 R92 R93 R92 R93 R61 R211 R212 RTH1 P0 RTH2 P0	Resistor	330 1k 10k 10k 710k 5.1 5.1 10k	1/8W 1/8W 1/8W 1/8W 3/5W 1/4W	1% 1% 1%	0805 0805 0805	Bottom
R57 R58 R59 R60 R61 R62 R63 R64 R65 R66 R67 R68 R69 R70 R71 R72 R73 R74 R75 R76 R77 R78 R79 Me R80 R81 R82 R83 R84 R85 R86 R87 Me R88 R89 R90 R90 R91 R92 R93 Me R201 R211 R212 RTH1 P0 RTH2 P0 RTH2	Resistor	1k 10k 10k 710k 5.1 5.1 10k	1/8W 1/8W 1/8W 3/5W 1/4W	1% 1%	0805 0805	
R58 R59 R60 R61 R62 R63 R64 R65 R66 R67 R68 R69 R70 R71 R72 R73 R74 R75 R76 R77 R78 R79 Me R80 R81 R82 R83 R84 R85 R86 R87 Me R88 R89 R90 R90 R91 R92 R93 Me R201 R211 R212 RTH1 P0 RTH2 P0	Resistor	10k 10k 710k 5.1 5.1 10k	1/8W 1/8W 3/5W 1/4W	1% 1%	0805	Bottom
R59 R60 R61 R62 R63 R64 R65 R66 R67 R68 R69 R70 R71 R72 R73 R74 R75 R76 R77 R78 R79 Me R80 R81 R82 R83 R84 R85 R86 R87 Me R88 R89 R90 Me R91 R92 R93 Me R201 R211 R212 RTH1 P0 RTH2 P0	Resistor Resistor Resistor Resistor Resistor Resistor Resistor Resistor Resistor	10k 710k 5.1 5.1 10k	1/8W 3/5W 1/4W	1%		
R60 R61 R62 R63 R64 R65 R66 R67 R68 R69 R70 R71 R72 R73 R74 R75 R76 R77 R78 R79 Me R80 R81 R82 R83 R84 R85 R86 R87 Me R86 R87 Me R88 R89 R90 Me R91 R92 R93 Me R201 R208 R210 R211 R212 RTH1 P0 RTH2	Resistor Resistor Resistor Resistor Resistor Resistor Resistor Resistor	710k 5.1 5.1 10k 10k	3/5W 1/4W		0005	Bottom
R61 R62 R63 R64 R65 R66 R67 R68 R69 R70 R71 R72 R73 R74 R75 R76 R77 R78 R79 R80 R80 R81 R82 R83 R84 R85 R86 R87 Me R86 R87 Me R88 R89 R90 Me R91 R92 R93 Me R201 R208 R210 R211 R212 RTH1 P0 RTH2	Resistor Resistor Resistor Resistor Resistor Resistor Resistor	5.1 5.1 10k 10k	1/4W	1 70	0805 AXIAL-Ø2.5 x 6.8mm	Bottom Top
R62 R63 R64 R65 R66 R67 R68 R69 R70 R71 R72 R73 R74 R75 R76 R77 R78 R79 R80 R81 R82 R83 R84 R85 R86 R87 R86 R87 Me R88 R89 R90 R91 R91 R92 R93 Me R91 R92 R93 Me R201 R208 R210 R211 R212 RTH1 P0 RTH2	Resistor Resistor Resistor Resistor Resistor	5.1 10k 10k			1206	Bottom
R63 R64 R65 R66 R67 R68 R69 R70 R71 R72 R73 R74 R75 R76 R77 R78 R79 R80 R81 R82 R83 R84 R85 R86 R87 Me R88 R89 R90 R91 R92 R93 Me R201 R208 R210 R211 R212 RTH1 P0 RTH2	Resistor Resistor Resistor Resistor	10k 10k			1206	Bottom
R64 R65 R66 R67 R68 R69 R70 R71 R72 R73 R74 R75 R76 R77 R78 R79 R80 R81 R82 R83 R84 R85 R86 R87 R86 R87 R88 R89 R90 R91 R90 R91 R92 R93 R94 R94 R94 R95 R95 R97	Resistor Resistor Resistor	10k	1/8W	1%	0805	Bottom
R66 R67 R68 R69 R70 R71 R72 R73 R74 R75 R76 R77 R78 R79 R80 R81 R82 R83 R84 R85 R86 R87 Me R88 R89 R90 Me R91 R92 R93 Me R91 R92 R93 Me R91 R92 R93 R90 R91 R92 R93 R90 R91 R92 R93 R90 R91 R91 R92 R93 R90 R91 R92 R93 R94 R94 R95 R95 R95 R97	Resistor	10k	1/8W	1%	0805	Bottom
R67 R68 R69 R70 R71 R72 R73 R74 R75 R76 R77 R78 R79 R80 R81 R82 R83 R84 R85 R86 R87 Me R88 R89 R90 R91 R92 R93 Me R91 R92 R93 R94 R91 R92 R93 R90 R91 R91 R92 R93 R90 R91 R91 R92 R93 R90 R91 R92 R93 R90 R91 R91 R92 R93 R90 R91 R91 R92 R93 R90 R91 R92 R93 R94 R91 R92 R93 R90 R91 R92 R93 R91 R92 R93 R91 R92 R93 R94 R94 R95 R95 R97			1/8W	1%	0805	Bottom
R68 R69 R70 R71 R72 R73 R74 R75 R76 R77 R78 R79 R80 R81 R82 R83 R84 R85 R86 R87 Me R88 R89 R90 Me R91 R92 R93 Me R91 R92 R93 Me R91 R92 R93 R94 R91 R92 R93 R94 R95 R90 R91 R92 R93 R94 R95 R90 R91 R92 R93 R94 R91 R92 R93 R94 R94 R95 R95 R96 R97 R97 R97 R98		10k	1/8W	1%	0805	Bottom
R69 R70 R71 R72 R73 R74 R75 R76 R77 R78 R79 R80 R81 R82 R83 R84 R85 R86 R87 Me R88 R89 R90 Me R91 R91 R92 R93 Me R91 R91 R92 R93 Me R91 R91 R92 R93 R94 R95 R90 R91 R91 R92 R93 R90 R91 R92 R93 R94 R94 R95 R95 R95 R96 R97	Resistor	5.1	1/4W		1206	Bottom
R70 R71 R72 R73 R74 R75 R76 R77 R78 R79 R80 R81 R82 R83 R84 R85 R86 R87 Me R88 R89 R90 Me R91 R92 R93 Me R91 R92 R93 R94 R91 R92 R93 R90 R91 R90	Resistor	5.1	1/4W		1206	Bottom
R71 R72 R73 R74 R75 R76 R77 R78 R79 R80 R80 R81 R82 R83 R84 R85 R86 R87 Me R88 R89 R90 Me R91 R92 R93 Me R91 R92 R93 R90 R91 R92 R93 R90 R91 R92 R93 R90 R211 R208 R210 R211 R212 RTH1 P0 RTH2	Resistor Resistor	5.1 390	1/4W 3/4W		1206 2010	Bottom Bottom
R72 R73 R74 R75 R76 R77 R78 R79 R80 R80 R81 R82 R83 R84 R85 R86 R87 Me R88 R89 R90 Me R91 R92 R93 Me R201 R208 R210 R211 R212 RTH1 P0 RTH2 P0	Resistor	390	3/4W		2010	Bottom
R74 R75 R76 R77 R78 R78 R79 Me R80 R81 R82 R83 R84 R85 R86 R87 Me R88 R89 R90 Me R91 R92 R93 R92 R93 R90 R201 R208 R210 R211 R212 RTH1 P0 RTH2 P0	Resistor	390	3/4W		2010	Bottom
R75 R76 R77 R78 R79 Me R80 R81 R82 R83 R84 R85 R86 R87 Me R88 R89 R90 Me R91 R92 R93 R92 R93 R90 R201 R208 R210 R211 R212 RTH1 P0 RTH2 P0	Resistor	390	3/4W		2010	Bottom
R76 R77 R78 R79 Me R80 R81 R82 R83 R84 R85 R86 R87 Me R88 R89 R90 Me R91 R92 R93 Me R201 R208 R210 R211 R212 RTH1 P0 RTH2	Resistor	1.2k	1/8W	1%	0805	Bottom
R77 R78 R79 Me R80 R81 R82 R83 R84 R85 R86 R87 Me R88 R89 R90 R91 R92 R93 Me R201 R208 R210 R211 R212 RTH1 P0 RTH2	Resistor	1.2k	1/8W	1%	0805	Bottom
R78 R79 Me R80 R81 R82 R83 R84 R85 R86 R87 Me R88 R89 R90 Me R91 R92 R93 Me R201 R208 R210 R211 R212 RTH1 P0 RTH2	Resistor	1.2k	1/8W	1%	0805	Bottom
R79 Me R80 R81 R82 R83 R84 R85 R86 R87 Me R88 R89 R90 Me R91 R92 R93 Me R201 R208 R210 R211 R212 RTH1 Pc RTH2 Pc	Resistor	100	1/8W	1%	0805	Bottom
R80 R81 R82 R83 R84 R85 R86 R87 Me R88 R89 R90 Me R91 R92 R93 Me R201 R208 R210 R211 R212 RTH1 P0 RTH2 P0	Resistor etal Film Resistor	100 220	1/8W 3W	1%	0805 AXIAL-Ø5.5 x 16mm	Bottom Top
R81 R82 R83 R84 R85 R86 R87 Me R88 R89 R90 Me R91 R92 R93 Me R201 R208 R210 R211 R212 RTH1 P0 RTH2 P0	Resistor	5.1	1/4W		1206	Bottom
R82 R83 R84 R85 R86 R87 Me R88 R89 R90 Me R91 R92 R93 Me R201 R208 R210 R211 R212 RTH1 P0 RTH2 P0	Resistor	100	1/8W	1%	0805	Bottom
R84 R85 R86 R87 Me R88 R89 R90 Me R91 R92 R93 Me R201 R208 R210 R211 R212 RTH1 P0 RTH2 P0	Resistor	100	1/8W	1%	0805	Bottom
R85 R86 R87 Me R88 R89 R90 Me R91 R92 R93 Me R201 R208 R210 R211 R212 RTH1 P0 RTH2 P0	Resistor	22	3/4W		2010	Bottom
R86 R87 Me R88 R89 R90 Me R91 R92 R93 Me R201 R208 R210 R211 R212 RTH1 P0 RTH2 P0	Resistor	22	3/4W		2010	Bottom
R87 Me R88 R89 R90 Me R91 R92 R93 Me R201 R208 R210 R211 R212 RTH1 Pc RTH2 Pc	Resistor	22	3/4W		2010	Bottom
R88 R89 R90 Me R91 R92 R93 Me R201 R208 R210 R211 R212 RTH1 P0 RTH2 P0	Resistor	22	3/4W		2010	Bottom
R89 R90 Me R91 R92 R93 Me R201 R208 R210 R211 R212 RTH1 P0 RTH2 P0	etal Film Resistor Resistor	330 22	3W 3/4W		AXIAL-Ø5.5 x 16mm 2010	Top Bottom
R90 Me R91 R92 R93 Me R201 R208 R210 R211 R212 RTH1 P0 RTH2 P0	Resistor	22	3/4W		2010	Bottom
R91 R92 R93 Me R201 R208 R210 R211 R212 RTH1 P0 RTH2 P0	etal Film Resistor	330	3W		AXIAL-Ø5.5 x 16mm	Тор
R92 R93 Me R201 R208 R210 R211 R212 RTH1 P0 RTH2 P0	Resistor	22	3/4W		2010	Bottom
R93 Me R201 R208 R210 R211 R212 RTH1 Pc RTH2 Pc	Resistor	22	3/4W		2010	Bottom
R208 R210 R211 R212 RTH1 Pc	etal Film Resistor	220	3W		AXIAL-Ø5.5 x 16mm	Тор
R210 R211 R212 RTH1 Pc RTH2 Pc	Resistor	1k	1/8W	1%	0805	Bottom
R211 R212 RTH1 Pc RTH2 Pc	Resistor	4.7k	1/8W	1%	0805	Bottom
R212 RTH1 Pc RTH2 Pc	D	10k	1/8W	1%	0805	Bottom
RTH1 Pc	Resistor	10k 100	1/8W 1/8W	1% 1%	0805 0805	Bottom Bottom
RTH2 Pc	Resistor	SCK20150	1/000	4.5A	disc Ø21.5mm	Тор
	Resistor Resistor	SCK20150	 	4.5A	disc Ø21.5mm	Тор
10	Resistor Resistor Ower Thermistor	RT334012	12V		RT1	Тор
SRC1	Resistor Resistor	BT169D			TO-92-3	Тор
	Resistor Resistor Ower Thermistor Ower Thermistor Relay Thyristor	58.6mH		1:200	UU-9.8-2S	Тор
T2	Resistor Resistor Ower Thermistor Ower Thermistor Relay Thyristor Irrent Transformer	J0.0III	<u> </u>		B66208 Vert	Top
	Resistor Resistor Ower Thermistor Ower Thermistor Relay Thyristor Irrent Transformer Transformer		 		TO220-3L	Top
	Resistor Resistor Power Thermistor Relay Thyristor Irrent Transformer Transformer rlington Transistor	58.6MH TIP122				
	Resistor Resistor Power Thermistor Relay Thyristor Irrent Transformer Transformer Irlington Transistor Resistor		+			
	Resistor Resistor Resistor Resistor Resistor Resistor Relay Thyristor Irrent Transformer Transformer rlington Transistor Rete Transformer Rete Transformer Rete Transformer				E 111=3 [™]	
	Resistor Resistor Rower Thermistor Relay Thyristor Irrent Transformer Transformer Irlington Transistor Eate Transformer Utput Transformer Utput Transformer					1 ()()
U1 S	Resistor Resistor Resistor Resistor Resistor Resistor Relay Thyristor Irrent Transformer Transformer rlington Transistor Rete Transformer Rete Transformer Rete Transformer			1:100	ETD-39 UU-9.8-2S	Top Top
T5 Ga T6 Out T7 Out T8 Cur	Resistor Resistor Power Thermistor Relay Thyristor Irrent Transformer Transformer rlington Transistor		ı I		T1611 T1611 ETD-39	Top Top

U2	Integr. Off-line Switch	TOP244		TO-220-7C	Top
U3	Optocoupler	LTV817	35V	SMD4	Bottom
U4	Sistem Resetting IC	M51957		SO8	Bottom
U5	Shunt Regulator	TS431		SOT-23	Bottom
U6	Shunt Regulator	TS431		SOT-23	Bottom
U7	Step-Down Regulator	LM2575-5.0V		TO-220-5L	Top
U8	Optocoupler	LTV817	35V	SMD4	Bottom
U9	MOSFET Driver	UCC27424		SO8	Bottom
U10	MOSFET Driver	UCC27424		SO8	Bottom
U200	AC-DC Power Supply	IRM-03-12	12VDC	IRM-03	Тор
U201	Optocoupler	LTV817	35V	SMD4	Bottom
U202	Optocoupler	LTV817	35V	SMD4	Bottom
ZD1	Zener Diode	BZV55C62	500mW	SOD-80	Bottom
ZVR1	Varistor	ERZ-V20D431	275VAC	VARISTOR_20mm	Тор

PFC1500 CNTRL Board Unit

Designator	Description	Value	Volts/Watts	Comment	Case/Package	Layer
C40	Capacitor	100nF	100V	X7R	1206	Тор
C41	Capacitor	470nF	50V	X7R	0805	Тор
C42	Capacitor	680pF	16V	C0G	0805	Тор
C43	Capacitor	100nF	50V	X7R	0805	Тор
C44	Capacitor	1uF	50V	X7R	0805	Тор
C45	Capacitor	1nF	50V	X7R	0805	Тор
C50	Capacitor	33nF	50V	X7R	0805	Тор
C51	Capacitor	100nF	50V	X7R	0805	Тор
C52	Capacitor	33nF	50V	X7R	0805	Тор
C53	Capacitor	1uF	50V	X7R	0805	Тор
C54	Capacitor	100nF	50V	X7R	0805	Тор
C55	Capacitor	1uF	50V	X7R	0805	Тор
C57	Capacitor	220pF	50V	X7R	0805	Тор
C58	Capacitor	2.2nF	50V	X7R	0805	Тор
C59	Capacitor	680pF	16V	COG	0805	Тор
C60	Capacitor	680pF	16V	COG	0805	Тор
C66	Capacitor	4.7nF	50V	X7R	0805	Тор
C70		Not placed			0805	Тор
C71	Capacitor	100nF	50V	X7R	0805	Тор
D31	Diode	BAS16	75V		SOT-23	Тор
D32		Not placed			SMA	Тор
D33	Schottky Diode	SS14	40V		DO-214AC	Тор
J1	Header	1x5		Right Angle	100" pich	Тор
J2	Header	1x3		Right Angle	200" pich	Тор
Q24	PNP Transistor	2SC4116	60V		SOT-23	Тор
R32	Resistor	270k	1/8W	1%	0805	Тор
R33	Resistor	270k	1/8W	1%	0805	Тор
R34	Resistor	270k	1/8W	1%	0805	Тор
R35	Resistor	90.9k	1/8W	1%	0805	Тор
R36	Resistor	17.8k	1/8W	1%	0805	Тор
R37	Resistor	200k	1/8W	1%	0805	Тор
R38	Resistor	200k	1/8W	1%	0805	Тор
R39	Resistor	200k	1/8W	1%	0805	Тор
R40	Resistor	270k	1/8W	1%	0805	Тор

R41	Resistor	1k	1/8W	1%	0805	Тор
R48	Resistor	5.1k	1/8W	1%	0805	Тор
R49	Resistor	3.3k	1/8W	1%	0805	Тор
R50	Resistor	270k	1/8W	1%	0805	Тор
R51	Resistor	270k	1/8W	1%	0805	Тор
R52	Resistor	270k	1/8W	1%	0805	Тор
R53	Resistor	270k	1/8W	1%	0805	Тор
R54	Resistor	270k	1/8W	1%	0805	Тор
R55	Resistor	270k	1/8W	1%	0805	Тор
R56	Resistor	270k	1/8W	1%	0805	Тор
R57	Resistor	270k	1/8W	1%	0805	Тор
R58	Resistor	270k	1/8W	1%	0805	Тор
R59	Resistor	200k	1/8W	1%	0805	Тор
R60	Resistor	3.3k	1/8W	1%	0805	Тор
R61	Resistor	1.2M	1/8W	1%	0805	Тор
R62	Resistor	150k	1/8W	1%	0805	Тор
R63	Resistor	21.5k	1/8W	1%	0805	Тор
R64	Resistor	10k	1/8W	1%	0805	Тор
R65	Resistor	51	1/8W	1%	0805	Тор
R68	Resistor	100	1/8W	1%	0805	Тор
R69	Resistor	22k	1/8W	1%	0805	Тор
R76	Resistor	1k	1/8W	1%	0805	Тор
R77	Resistor	1k	1/8W	1%	0805	Тор
R78	Resistor	10k	1/8W	1%	0805	Тор
R79	Resistor	49.9k	1/8W	1%	0805	Тор
R80	Resistor	10k	1/8W	1%	0805	Тор
U2	IC PFC Control	UC3855BDW			SO20	Тор
U5	Operational Amplifier	LM358			SO8	Тор
ZD1	Zener Diode	BZX84C5V6	0.3W		SOT-23	Тор
ZD2		Not placed			SOT-23	Тор

DC1500 CNTRL Board Unit

Designator	Description	Value	Volts/Watts	Comment	Case/Package	Layer
C1	Capacitor	100nF	50V	X7R	0805	Тор
C2	Capacitor	10nF	50V	X7R	0805	Тор
C3	Capacitor	100nF	50V	X7R	0805	Тор
C4	Capacitor	10uF	6.3V	X7R	0805	Тор
C5	Capacitor	100nF	50V	X7R	0805	Тор
C6	Capacitor	4.7nF	50V	X7R	0805	Тор
C7	Capacitor	100nF	50V	X7R	0805	Тор
C8	Capacitor	10nF	50V	X7R	0805	Тор
C9	Capacitor	470pF	50V	X7R	0805	Тор
C10	Capacitor	100nF	50V	X7R	0805	Тор
C11	Capacitor	470pF	50V	X7R	0805	Тор
C12	Capacitor	10nF	50V	X7R	0805	Тор
C13	Capacitor	1uF	16V	X7R	0805	Тор
C14	Capacitor	100nF	50V	X7R	0805	Тор

C15	Capacitor	1uF	16V	X7R	0805	Тор
C16	Capacitor	100nF	50V	X7R	0805	Тор
C17	Capacitor	100nF	50V	X7R	0805	Тор
C18	Capacitor	100nF	50V	X7R	0805	Тор
C19	Capacitor	100nF	50V	X7R	0805	Тор
C20	Capacitor	100nF	50V	X7R	0805	Тор
C21	Capacitor	100nF	50V	X7R	0805	Тор
C22	Capacitor	100nF	50V	X7R	0805	Тор
C24	Capacitor	100nF	50V	X7R	0805	Тор
C25	Capacitor	100nF	50V	X7R	0805	Тор
C26	Capacitor	100nF	50V	X7R	0805	Тор
C27	Capacitor	100nF	50V	X7R	0805	Тор
C28	Capacitor	100nF	50V	X7R	0805	Тор
C29	Capacitor	100nF	50V	X7R	0805	Тор
C30	Capacitor	100nF	50V	X7R	0805	Тор
C31	Capacitor	100nF	50V	X7R	0805	Тор
C32	Capacitor	100nF	50V	X7R	0805	Тор
C33	Capacitor	100nF	50V	X7R	0805	Тор
C34	Capacitor	100nF	50V	X7R	0805	Тор
C35	Capacitor	100nF	50V	X7R	0805	Тор
C36	Capacitor	100nF	50V	X7R	0805	Тор
CN2	Connector, 2-Pin			Right Angle	MTA100 2p	Тор
CN3	Connector, 2-Pin			Right Angle	MTA100 2p	Тор
D1	Diode	BAS16	75V		SOT-23	Тор
D3	Schottky Diode	BAS70-04	70V		SOT-23	Тор
D4	Schottky Diode	BAS70-04	70V		SOT-23	Тор
D5	Schottky Diode	BAS70-04	70V		SOT-23	Тор
L4	Inductor	10uH		150mA	0805	Тор
L5	Inductor	10uH		150mA	0805	Тор
LED1	LED	Green- Deffused		20mA	3mm Round Standart	Тор
PCB1	Header	1x17		Right Angle	100" pich	Тор
Q1	NPN Transistor	BC847	45V		SOT-23	Тор
Q2	NPN Transistor	BC847	45V		SOT-23	Тор
R1	Resistor	40.2k	1/8W	1%	0805	Тор
R2	Resistor	1.5k	1/8W	1%	0805	Тор
R3	Resistor	10k	1/8W	1%	0805	Тор
R4	Resistor	1.5k	1/8W	1%	0805	Тор
R5	Resistor	1k	1/8W	1%	0805	Тор
R6	Resistor	1k	1/8W	1%	0805	Тор
R7	Resistor	1k	1/8W	1%	0805	Тор
R8	Resistor	1k	1/8W	1%	0805	Тор
R10	Resistor	30k	1/8W	1%	0805	Тор
R11	Resistor	10k	1/8W	1%	0805	Тор
R12	Resistor	100k	1/8W	1%	0805	Тор
R13	Resistor	100k	1/8W	1%	0805	Тор
R14	Resistor	102k	1/8W	1%	0805	Тор
R15	Resistor	10	1/8W	1%	0805	Тор

R16	Resistor	7.5	1/8W	1%	0805	Тор
R17	Resistor	10k	1/8W	1%	0805	Тор
R18	Resistor	5.1k	1/8W	1%	0805	Тор
R19	Resistor	1k	1/8W	1%	0805	Тор
R20	Resistor	2.2k	1/8W	1%	0805	Тор
R21	Resistor	2.2k	1/8W	1%	0805	Тор
R22	Resistor	2.4k	1/8W	1%	0805	Тор
R23	Resistor	5.1k	1/8W	1%	0805	Тор
R24	Resistor	10	1/8W	1%	0805	Тор
R25	Resistor	23.7k	1/8W	1%	0805	Тор
R26	Resistor	2.4k	1/8W	1%	0805	Тор
R27	Resistor	5.1k	1/8W	1%	0805	Тор
R28	Resistor	10k	1/8W	1%	0805	Тор
R29	Resistor	10k	1/8W	1%	0805	Тор
R30	Resistor	100k	1/8W	1%	0805	Тор
R31	Resistor	10	1/8W	1%	0805	Тор
R32		Not placed		1%	0805	Тор
R33	Resistor	300	1/8W	1%	0805	Тор
R35	Resistor	1k	1/8W	1%	0805	Тор
R37	Resistor	5.1k	1/8W	1%	0805	Тор
R38	Resistor	100k	1/8W	1%	0805	Тор
R39	Resistor	560k	1/8W	1%	0805	Тор
R40	Resistor	2.2k	1/8W	1%	0805	Тор
R43	Resistor	2.2k	1/8W	1%	0805	Тор
R44	Resistor	120k	1/8W	1%	0805	Тор
R45	Resistor	100k	1/8W	1%	0805	Тор
R46	Resistor	750k	1/8W	1%	0805	Тор
R47	Resistor	820k	1/8W	1%	0805	Тор
R48	Resistor	30k	1/8W	1%	0805	Тор
R49	Resistor	30k	1/8W	1%	0805	Тор
R50	Resistor	30k	1/8W	1%	0805	Тор
R51	Resistor	180k	1/8W	1%	0805	Тор
R52	Resistor	30k	1/8W	1%	0805	Тор
R53	Resistor	510k	1/8W	1%	0805	Тор
R54	Resistor	150k	1/8W	1%	0805	Тор
R55	Resistor	100k	1/8W	1%	0805	Тор
R56	Resistor	100k	1/8W	1%	0805	Тор
R57	Resistor	200k	1/8W	1%	0805	Тор
R58	Resistor	2.2k	1/8W	1%	0805	Тор
R59	Resistor	2.2k	1/8W	1%	0805	Тор
R65	Resistor	5.1k	1/8W	1%	0805	Тор
R66	Resistor	10k	1/8W	1%	0805	Тор
R68	Resistor	33	1/4W		1206	Тор
R69	Resistor	300k	1/8W	1%	0805	Тор
R70	Resistor	33	1/4W		1206	Тор
R71	Resistor	2.2k	1/8W	1%	0805	Тор
R72	Resistor	2.2k	1/8W	1%	0805	Тор
		2.4k	1/8W	1%	0805	Тор

R74	Resistor	2.4k	1/8W	1%	0805	Тор
R75	Resistor	33	1/4W		1206	Тор
R76	Resistor	2.2k	1/8W	1%	0805	Тор
R77	Resistor	100	1/8W		0805	Тор
R78	Resistor	100	1/8W		0805	Тор
R79	Resistor	100	1/8W		0805	Тор
SVR1	Trimmer Resistor	1k	1/2W		Bourns- 3296X	Тор
U1	Shunt Regulator	TS431			SOT-23	Тор
U2	Operational Amplifier	LM358			SO8	Тор
U3	Shunt Regulator	TS431			SOT-23	Тор
U4	Phase-Shift PWM	UCC2895DW			SO20	Тор
U5	Dual Differential	LM393			SO8	Тор
U6	Single-Supply Quad	LM339			SO14	Тор
ZD1	Zener Diode	BZV55C75	500mW		SOD-80	Тор

LCD CNTRL Unit

Designator	Description	Value	Volts/Watts	Comment	Case/Package	Layer
B1		Not placed			Ø7mm BATT	Bottom
C1	Capacitor	1uF	16V	X7R	0805	Bottom
C2	Capacitor	100nF	50V	X7R	0805	Bottom
C3	Tantalum Capacitor	150uF	10V		CASE D	Bottom
C4	Capacitor	100nF	50V	X7R	0805	Bottom
C5	Tantalum Capacitor	150uF	10V		CASE D	Bottom
C6	Tantalum Capacitor	150uF	10V		CASE D	Bottom
C7	Capacitor	100nF	50V	X7R	0805	Bottom
C8	Capacitor	100nF	50V	X7R	0805	Bottom
C9	Capacitor	100nF	50V	X7R	0805	Bottom
C10	Capacitor	10uF	16V	X5R	0805	Bottom
C11	Capacitor	100nF	50V	X7R	0805	Bottom
C12	Capacitor	100nF	50V	X7R	0805	Bottom
C13	Electrol. Capacitor	100uF	35V		Ø6.3mm x 12mm	Bottom
C14	Capacitor	560pF	50V	C0G	0805	Bottom
C15	Capacitor	1uF	16V	X7R	0805	Bottom
C16	Capacitor	1uF	16V	X7R	0805	Bottom
C17	Capacitor	10uF	16V	X5R	0805	Bottom
C18	Capacitor	10uF	16V	X5R	0805	Bottom
C19	Capacitor	10uF	16V	X5R	0805	Bottom
C20	Capacitor	1uF	16V	X7R	0805	Bottom
C21	Capacitor	1nF	50V	X7R	0805	Bottom
C22	Capacitor	10uF	16V	X5R	0805	Bottom
C23	Capacitor	100nF	50V	X7R	0805	Bottom
C24	Capacitor	22pF	50V	C0G	0805	Bottom
C25	Capacitor	100nF	50V	X7R	0805	Bottom
C26	Capacitor	100nF	50V	X7R	0805	Bottom
C27	Capacitor	100nF	50V	X7R	0805	Bottom
C28	Tantalum Capacitor	150uF	10V		CASE D	Bottom
C29	Capacitor	1nF	50V	X7R	0805	Bottom
C30	Capacitor	100nF	50V	X7R	0805	Bottom
C31	Capacitor	100nF	50V	X7R	0805	Bottom
C32	Capacitor	10uF	16V	X5R	0805	Bottom
C33	Capacitor	100nF	50V	X7R	0805	Bottom
C34	Capacitor	22pF	50V	C0G	0805	Bottom
C35	Capacitor	100nF	50V	X7R	0805	Bottom
C36	Capacitor	100nF	50V	X7R	0805	Bottom
C37	Capacitor	100nF	50V	X7R	0805	Bottom
C38	Capacitor	100nF	50V	X7R	0805	Bottom
C39	Capacitor	100nF	50V	X7R	0805	Bottom
C40	Capacitor	100nF	50V	X7R	0805	Bottom
C41	Capacitor	100nF	50V	X7R	0805	Bottom
C42	Capacitor	100nF	50V	X7R	0805	Bottom

C43	Capacitor	100nF	50V	X7R	0805	Bottom
C44	Capacitor	10uF	16V	X5R	0805	Bottom
C45	Capacitor	100nF	50V	X7R	0805	Bottom
C46	Capacitor	100nF	50V	X7R	0805	Bottom
C47	Capacitor	100nF	50V	X7R	0805	Bottom
C48	Capacitor	100nF	50V	X7R	0805	Bottom
C49	Capacitor	100nF	50V	X7R	0805	Bottom
C50	Capacitor	100nF	50V	X7R	0805	Bottom
C51	Capacitor	100nF	50V	X7R	0805	Bottom
C52	Capacitor	10uF	16V	X5R	0805	Bottom
C53	Capacitor	100nF	50V	X7R	0805	Bottom
C54	Capacitor	100nF	50V	X7R	0805	Bottom
C55	Capacitor	100nF	50V	X7R	0805	Bottom
C56	Capacitor	1nF	50V	X7R	0805	Bottom
C58	Capacitor	100nF	50V	X7R	0805	Bottom
C59	Capacitor	100nF	50V	X7R X7R	0805	Bottom
C60 C61	Capacitor Capacitor	100nF 100nF	50V 50V	X7R X7R	0805 0805	Bottom
C62			50V 50V			Bottom
	Capacitor	100nF 100nF	50V	X7R X7R	0805 0805	Bottom
C63 C64	Capacitor Capacitor	33pF	50V	C0G	0805	Bottom Bottom
		33pr 150uF		COG		
C65 C66	Tantalum Capacitor Capacitor	100nF	10V 50V	X7R	CASE D 0805	Bottom Bottom
C67	Capacitor	100nF 100nF	50V	X7R X7R	0805	Bottom
C68	Capacitor	100nF	50V	X7R	0805	Bottom
C69	Capacitor	100nF	50V	X7R	0805	Bottom
C70	Capacitor	100nF	50V	X7R	0805	Bottom
C71	Capacitor	100nF	50V	X7R X7R	0805	Bottom
C72	Capacitor	33pF	50V	COG	0805	Bottom
C73	Capacitor	100nF	50V	X7R	0805	Bottom
C74	Capacitor	100nF	50V	X7R	0805	Bottom
C75	Capacitor	100nF	50V	X7R	0805	Bottom
C76	Capacitor	100nF	50V	X7R	0805	Bottom
C77	Capacitor	100nF	50V	X7R	0805	Bottom
C78	Capacitor	100nF	50V	X7R	0805	Bottom
C79	Capacitor	1nF	50V	X7R	0805	Bottom
C80	Capacitor	100nF	50V	X7R	0805	Bottom
D1	Schottky Diode	B0540W-7-F	40V	0.5A	SOD-123	Bottom
DL1	LÉD	GREEN	2.6V	20mA	0805	Bottom
DL2	LED	GREEN	2.6V	20mA	0805	Bottom
DL3	LED	RED	2.6V	20mA	0805	Bottom
DZ1	Zener Diode	BZX84C24	0.25W		SOT-23	Bottom
FB1	Ferrite Bead	330		100MHz	0805	Bottom
FB2	Ferrite Bead	330		100MHz	0805	Bottom
FB3	Ferrite Bead	330		100MHz	0805	Bottom
FB4	Ferrite Bead	330		100MHz	0805	Bottom
FB5	Ferrite Bead	330		100MHz	0805	Bottom
FB6	Ferrite Bead	330		100MHz	0805	Bottom
J601	Connector, 8-Pin				MTA100 8p	Bottom
J602	IDC BOX Header				2.54mm pich	Bottom
J603				· · · · · · · · · · · · · · · · · · ·	MTA100 6p	Bottom
	Connector, 6-Pin					
J604	Connector USB Mini				SMT	Bottom
J604 J605	Connector USB Mini Connector, 2-Pin				SMT MTA100 2p	Bottom Bottom
J604 J605 J606	Connector USB Mini	FH12A-40S-			SMT MTA100 2p 0.5mm, Top Contact	Bottom Bottom Bottom
J604 J605 J606 J607	Connector USB Mini Connector, 2-Pin	Not placed			SMT MTA100 2p 0.5mm, Top Contact 2.54mm pich	Bottom Bottom Bottom Bottom
J604 J605 J606 J607 J608	Connector USB Mini Connector, 2-Pin FPC Connector, 40p				SMT MTA100 2p 0.5mm, Top Contact 2.54mm pich 2.54mm pich	Bottom Bottom Bottom Bottom Bottom
J604 J605 J606 J607 J608 J609	Connector USB Mini Connector, 2-Pin FPC Connector, 40p Pin Header, 2-Pin	Not placed Not placed			SMT MTA100 2p 0.5mm, Top Contact 2.54mm pich 2.54mm pich 2.54mm pich	Bottom Bottom Bottom Bottom Bottom Bottom Bottom
J604 J605 J606 J607 J608 J609 L1	Connector USB Mini Connector, 2-Pin FPC Connector, 40p Pin Header, 2-Pin Inductor	Not placed Not placed 10uH		650mA	SMT MTA100 2p 0.5mm, Top Contact 2.54mm pich 2.54mm pich 2.54mm pich 1812	Bottom Bottom Bottom Bottom Bottom Bottom Bottom Bottom Bottom
J604 J605 J606 J607 J608 J609 L1 L2	Connector USB Mini Connector, 2-Pin FPC Connector, 40p Pin Header, 2-Pin Inductor Ferrite Bead	Not placed Not placed 10uH		100MHz	SMT MTA100 2p 0.5mm, Top Contact 2.54mm pich 2.54mm pich 2.54mm pich 1812 0805	Bottom
J604 J605 J606 J607 J608 J609 L1 L2 L3	Connector USB Mini Connector, 2-Pin FPC Connector, 40p Pin Header, 2-Pin Inductor Ferrite Bead Inductor	Not placed Not placed 10uH 1k 180uH		100MHz 190mA	SMT MTA100 2p 0.5mm, Top Contact 2.54mm pich 2.54mm pich 2.54mm pich 1812 0805 2220	Bottom
J604 J605 J606 J607 J608 J609 L1 L2 L3	Connector USB Mini Connector, 2-Pin FPC Connector, 40p Pin Header, 2-Pin Inductor Ferrite Bead Inductor Inductor	Not placed Not placed 10uH 1k 180uH 10uH		100MHz 190mA 150mA	SMT MTA100 2p 0.5mm, Top Contact 2.54mm pich 2.54mm pich 2.54mm pich 1812 0805 2220 0805	Bottom
J604 J605 J606 J607 J608 J609 L1 L2 L3 L4	Connector USB Mini Connector, 2-Pin FPC Connector, 40p Pin Header, 2-Pin Inductor Ferrite Bead Inductor Inductor Inductor Inductor	Not placed Not placed 10uH 1k 180uH 10uH 10uH		100MHz 190mA	SMT MTA100 2p 0.5mm, Top Contact 2.54mm pich 2.54mm pich 2.54mm pich 1812 0805 2220 0805 0805	Bottom
J604 J605 J606 J607 J608 J609 L1 L2 L3 L4 L5	Connector USB Mini Connector, 2-Pin FPC Connector, 40p Pin Header, 2-Pin Inductor Ferrite Bead Inductor Inductor Inductor Inductor NPN PRE-BIASED	Not placed Not placed 10uH 1k 180uH 10uH 10uH 10uH DDTC143XUA-7-	50V	100MHz 190mA 150mA	SMT MTA100 2p 0.5mm, Top Contact 2.54mm pich 2.54mm pich 2.54mm pich 1812 0805 2220 0805 0805 0805 SOT-323	Bottom
J604 J605 J606 J607 J608 J609 L1 L2 L3 L4 L5 Q1	Connector USB Mini Connector, 2-Pin FPC Connector, 40p Pin Header, 2-Pin Inductor Ferrite Bead Inductor Inductor Inductor Inductor NPN PRE-BIASED NPN PRE-BIASED	Not placed Not placed 10uH 1k 180uH 10uH 10uH DDTC143XUA-7- DDTC143XUA-7-	50V	100MHz 190mA 150mA	SMT MTA100 2p 0.5mm, Top Contact 2.54mm pich 2.54mm pich 2.54mm pich 1812 0805 2220 0805 0805 0805 SOT-323 SOT-323	Bottom
J604 J605 J606 J607 J608 J609 L1 L2 L3 L4 L5 Q1 Q2	Connector USB Mini Connector, 2-Pin FPC Connector, 40p Pin Header, 2-Pin Inductor Ferrite Bead Inductor Inductor Inductor Inductor NPN PRE-BIASED NPN PRE-BIASED	Not placed Not placed 10uH 1k 180uH 10uH 10uH DDTC143XUA-7- DDTC143XUA-7- DDTC143XUA-7-	50V 50V	100MHz 190mA 150mA	SMT MTA100 2p 0.5mm, Top Contact 2.54mm pich 2.54mm pich 2.54mm pich 1812 0805 2220 0805 0805 0805 SOT-323 SOT-323	Bottom
J604 J605 J606 J607 J608 J609 L1 L2 L3 L4 L5 Q1	Connector USB Mini Connector, 2-Pin FPC Connector, 40p Pin Header, 2-Pin Inductor Ferrite Bead Inductor Inductor Inductor Inductor NPN PRE-BIASED NPN PRE-BIASED	Not placed Not placed 10uH 1k 180uH 10uH 10uH DDTC143XUA-7- DDTC143XUA-7-	50V	100MHz 190mA 150mA	SMT MTA100 2p 0.5mm, Top Contact 2.54mm pich 2.54mm pich 2.54mm pich 1812 0805 2220 0805 0805 0805 SOT-323 SOT-323	Bottom

Q7	NPN Transistor	BC817-40	45V		SOT-23	Bottom
R1	Resistor	1k	1/8W		0805	Bottom
R2	Resistor	1k	1/8W		0805	Bottom
R3	Resistor	1k	1/8W		0805	Bottom
R4	Resistor	1k	1/8W		0805	Bottom
R5	Resistor	1k	1/8W		0805	Bottom
R6	Resistor	1k	1/8W		0805	Bottom
R7		Not placed	.,,		0805	Bottom
R8		Not placed			0805	Bottom
R9		Not placed			0805	Bottom
R10		Not placed			0805	Bottom
R11		Not placed			0805	Bottom
R12		Not placed			0805	Bottom
R13		Not placed			0805	Bottom
R14		Not placed			0805	Bottom
R15	Resistor	1k	1/8W		0805	Bottom
R16	Resistor	1k	1/8W		0805	Bottom
R17	Resistor	47k	1/8W		0805	Bottom
R18	Resistor	330k	1/8W		0805	Bottom
R19	Resistor	10k	1/8W		0805	Bottom
R20	Resistor	27k	1/8W		0805	Bottom
R21	Resistor	27	1/8W		0805	Bottom
R22	Resistor	330k	1/8W		0805	Bottom
R23	Resistor	27	1/8W		0805	Bottom
R24	Resistor	1k	1/8W		0805	Bottom
R25	Resistor	1k	1/8W		0805	Bottom
R26	Resistor	1k	1/8W		0805	Bottom
R27	Resistor	1k	1/8W		0805	Bottom
R28	Resistor	1k	1/8W		0805	Bottom
R29	Resistor	1k	1/8W		0805	Bottom
R30	Resistor	0	1/8W		0805	Bottom
R31		Not placed			0805	Bottom
R32	Resistor	10k	1/8W		0805	Bottom
R33	Resistor	100k	1/8W		0805	Bottom
R34		Not placed			0805	Bottom
R35	Resistor	100	1/8W		0805	Bottom
R36	Resistor	10k	1/8W		0805	Bottom
R37	Resistor	4.7k	1/8W		0805	Bottom
R38	Resistor	4.7k	1/8W		0805	Bottom
R39	Resistor	180	1/8W		0805	Bottom
R40	Resistor	0.47	1/4W	1%	1206	Bottom
R41	Resistor	100k	1/8W		0805	Bottom
R42	Resistor	4.7k	1/8W		0805	Bottom
R43	Resistor	560	1/8W		0805	Bottom
R44	Resistor	300	1/8W		0805	Bottom
R45	Resistor	1k	1/8W		0805	Bottom
R46	Resistor	560	1/8W		0805	Bottom
R47	Resistor	100k	1/8W		0805	Bottom
R48	Resistor	100k	1/8W		0805	Bottom
R49	Resistor	100k	1/8W		0805	Bottom
R50	Resistor	120	1/8W		0805	Bottom
SW1	Tactile Switch				6mm X 6mm SMT	Bottom
SW2	Tactile Switch	1441/2227			6mm X 6mm SMT	Bottom
U1	Dual EIA-232 Driver	MAX232D			SO16	Bottom
U2	Serial EEPROM	24LC512-I/SN			SO-8W	Bottom
<u>U3</u>	Microcontroller	MCP120T-475			SOT-23	Bottom
U4	Gate NAND IC	74HC00			SO14	Bottom
<u>U5</u>	Gate NAND IC	74HC30			SO14	Bottom
<u>U6</u>	AVR Microcontroller	ATMEGA128A-			TQFP64	Bottom
U7	D Type Transport	Not placed			TOCOD OO	Bottom
U8	D-Type Transparent	74HC573			TSSOP-20	Bottom
<u>U9</u>	CMOS Static RAM	IS62C1024AL-	0.017		SOP32	Bottom
U10	Voltage Regulator	LD1117S33TR	3.3V		SOT-223	Bottom
U11	EconoReset with	DS1818R-10+T/R			SOT-23	Bottom
U12	DC-DC converter	MC34063			SO8	Bottom Bottom
U13						HOTTOM
	Voltago Damilata	Not placed	4.0\/		SOT 222	
U14 U15	Voltage Regulator IC FLASH	LD1117S12TR AT45DB321D	1.2V		SOT-223 SO8	Bottom Bottom

U16	IC SDRAM	IS42S32800D-		TSOP-86 II	Bottom
U17	Amulet GEM Graphical	AGB75LC04-QU-		PQFP-208	Bottom
Y1	Quartz Crystal	16.000 MHz		HC-49S	Bottom
Y2	Quartz Crystal	12.000 MHz		HC-49S	Bottom
Y3		Not placed			Bottom

Keyboard Unit

Designator	Description	Value	Volts/Wats	Comment	Case/Package	Layer
J601	Connector, 8-Pin				MTA100 8p	Тор
SW1	Switch	MEC			5GTH965	Тор
SW2	Switch	MEC			5GTH965	Тор
SW3	Switch	MEC			5GTH965	Тор
SW4	Switch	MEC			5GTH965	Тор
SW5	Switch	MEC			5GTH965	Тор
SW6	Switch	MEC			5GTH965	Тор

ON/OFF Unit

Designator	Description	Value	Volts/Wats	Comment	Case/Package	Layer
SW1	Switch	MEC			5GTH965	Тор
J601	Connector, 4-Pin			Right Angle	MTA100 4p	Тор
LD1	LED	Red		20mA	5mm Round Standart	Тор