

13.1 120-150-300-500W RF AMPLIFIER BOARD (200-000149) - PART LIST

N.	Disegnator	Part Code	Descrizione	U.M.	Q.tà
1		001-000149-00	CIRCUITO STAMPATO	PZ	1
2	Q1	MRFE6VP5600H -NON FLANGIATO-	TRANSISTOR -NON FLANGIATO-	PZ	1
3	D3	ZENER 3V3	DIODO SMD	PZ	1
4	D1, D2	LL4148	DIODO SMD	PZ	2
5	FB1	BEAD SMD	FERRITE SMD	PZ	1
6	RT1	10K	TRIMMER MULTI SMD	PZ	1
7	R1	2K	RESISTENZA 1206	PZ	1
8	R2	0R	RESISTENZA 1206	PZ	1
9	C4	1 NF	CONDENSATORE HQ	PZ	1
10	C7	33 PF	CONDENSATORE HQ	PZ	1
11	C17, C18	22 PF	CONDENSATORE HQ	PZ	2
12	C8, C9	100NF	CONDENSATORE 1206	PZ	2
13	R3, R4, R5, R6	180R	RESISTENZA 1206	PZ	4
14	C16	100UF/63V	CONDENSATORE SMD	PZ	1
15	C15	1UF/63V	CONDENSATORE POLY	PZ	1
16	C12, C13, C14	100NF/250V	CONDENSATORE 2220	PZ	3
17	L1	BOBINA INPUT	RAME SMALTATO 1MM	PZ	1
		4 SPIRE AVVOLTE	SU 4MM		
18	T1	TRASFORMATORE INPUT	FERRITE A DUE FORI	PZ	1

7.2 CONTROL BOARD (200-000166) – PART LIST

Designator	Comment	Value	CODICE FORNITORE	Quantity
BT1	CR2032 litio +3V			NC
	PORTABATTERIA CR2032			1
C1, C7	C0805	10pF		2
C2	C0805	12pF		1
C3, C5, C6, C8, C9, C10, C79, C93, C94, C95	C0805	220nF		10
C4	C0805	100pF		1
C11, C12, C13, C14, C15, C16, C17, C18, C19, C20,	C0805	100nF		47
C21, C24, C25, C26, C27, C28, C29, C32, C33, C46, C47				
C56, C57, C58, C59, C60, C61, C62, C66, C67, C68, C69				
C70, C71, C72, C76, C77, C78, C85, C86, C87, C88, C89				
C96, C97, C98, C99				
C22, C23, C34, C37, C40, C90, C91, C92	CAPACITOR E.SMD 5x6	10uF / 35V		8
C30, C31	C0805	39pF		2
C35, C36, C38, C39	C0805	2u2		4
C41	CAPACITOR E.SMD 8,2 x 9,6mm	220uF / 35V		1
C42, C43	C0805	NC		2
C44, C45, C48, C49, C50, C51, C52, C53, C54, C55	C0805	1nF		10
C63, C64, C65, C73, C74, C75, C80, C81, C82, C83, C84, C102	C0805	10nF		12
C100	C0805	1uF		1
C101	C0805	10uF / 10V		1
CN1, CN2, CN5, CN8	FLAT10 a VASCHETTA			4
CN3	FLAT34 a VASCHETTA			1
CN4	AMP-16			1
CN6	FLAT 14 a VASCHETTA			1
CN7, CN9	FLAT 10 a VASCHETTA			2

6.2 LEFT AND RIGHT BOARD (200-000168) – PART LIST

Designator	Comment	CodiceFornitore	Footprint	Value	Quantity
C1, C14	0805		0805	150p NPØ	2
C2, C5, C6, C13, C15, C18, C19, C26, C30, C31, C32, C34, C35, C40, C43, C44, C45, C51, C52, C53, C54, C61, C62, C63, C64, C65, C66, C67, C77, C78, C79, C157, C158, C165, C168, C170	0805		0805	100nF	36
C3, C4, C7, C8, C9, C10, C11, C16, C17, C20, C21, C22, C23, C24, C68, C72, R29, R58	0805		0805	2n2 1%	18
C27	0805		0805	10nF	1
C28, C82, C83, C84	0805		0805	39pF	4
C29	0805		0805	220pF	1
C33, C42, C56, C60	0805		0805	10pF	4
C36, C39, C57, C59	1210		1210	10uF	4
C37, C47, C85, C86, C163, C164, R83, R92, R122, R129, R134, R153, R154, R189, R190, R191, R220	0805		0805	NC	17
C38, C46, C48, C49, C50, C58, C70, C71, C74, C75, C159, C160, C161, C162	0805		0805	1uF	14
C41, C55	0805		0805	2p2	2
C69, C73	0805		0805	47pF 1%	2
C76, C81	CAPACITOR E. SMD		6.3X7.7mm	100uF / 35V	2
C80, C166, C167	CAPACITOR E. SMD		C.E 5.5x5.5	10uF / 50V	3
C171	CAPACITOR E. SMD		6.3X6.3	22uF / 35V	1
CN1	BNC_DOPPIO		BNC_RA CON		1
CN2, CN12	PIN STRIP FEM. 6 POLI		HDR1X6		2
CN3, CN4, CN6	XLR_FEM		XLR	XLR_FEM	3
CN5	PIN STRIP FEM. 4 POLI		HDR1X4		1
CN7, CN11	PIN STRIP FEM. 12 POLI		HDR1X12, HDR1X12a		2
CN8	PIN STRIP MALE 90°5X2		SM-PHD3210-10P		1

CN9	PIN STRIP MALE 90° 17X2		SM-PHD3210-34P		1
CN10	PIN STRIP MALE 90° 13X2		SM-PHD3210-26P		1
D2, D3, D4, D7, D8, D9, D10, D11, D12, D13, D14, D15, D16	SOT23		SOT23	BAS 40-04	13
FL1, FL2, FL3, FL4, FL5	EMI FILTER	RS: 725-7458	EMI_FILTER	NFW31SP106X1E4L	5
L1	ELC08D100E		ELC08D470E	10uH	1
L2	RESISTENZA			0.47R 1W	1
L3	1812		1812	10uH	1
LD1, LD2	LED SMD VERDE		LED_0805		2
R1, R2, R30, R31	0805		0805	10K 1%	4
R3, R18, R19, R20, R32, R47, R48, R49, R119, R123, R126, R127, R130, R131	0805		0805	4K7 1%	14
R4, R34	0805		0805	6K19 1%	2
R5, R35	0805		0805	360R 1%	2
R6, R36, R56, C12, C25	0805		0805	5K62 1%	5
R7, R9, R24, R25, R26, R37, R39, R53, R54, R55	0805		0805	665R 1%	10
R8, R14, R38, R43	0805		0805	3K6 1%	4
R10, R33	0805		0805	3K3 1%	2
R11, R40	0805		0805	2K7 1%	2
R12, R15, R41, R44	0805		0805	270K 1%	4
R13, R42	0805		0805	0R 1%	2
R16, R45, R84, R95, R111, R112	0805		0805	100K 1%	6
R17, R46	0805		0805	750R 1%	2
R21, R22, R23, R50, R51, R52	0805		0805	4K02 1%	6
R27	0805		0805	5K62K 1%	1
R28, R57	0805		0805	3K9 1%	2
R59, R70, R81, R97, R104, R151	0805		0805	1K 1%	6
R60, R63	1206		1206	1K	2
R61	0805		0805	39K	1

R62, R69, R78, R80, R88, R99, R103, R105, R124, R125, R132, R133, R135, R144, R145, R146, R147, R148, R149, R150, R152, R192, R193, R194, R195, R196	0805		0805	10K	26
R64	1206		1206	150R	1
R65, R74, R90, R100	1206		1206	100R	4
R66, R72, R91, R101	0805		0805	100R	4
R67, R93	0805		0805	20K 1%	2
R68, R75, R94, R102, R136, R137, R138, R139	0805		0805	3K32 1%	8
R71, R98, R118, R120	1206		1206	20K 1%	4
R73, R96	1206		1206	68R 1%	2
R76, R86	2512		2512	560R	2
R77, R85	0805		0805	56K2 1%	2
R79, R87	0805		0805	220R	2
R82, R89	TRIMMER MULT. REG. V		TRIMMER3	2K	2
R106, R117, R121, R128	0805		0805	1K5	4
R107, R116	0805		0805	820R 1%	2
R108, R115	0805		0805	24K 1%	2
R109, R114	0805		0805	13K3 1%	2
R110, R113	0805		0805	220K 1%	2
R142, R143	0805		0805	2K 1%	2
R140, R141, R155, R156, R197, R198, R199, R200	0805		0805	0R	8
R205, R206	0805		0805	2K7	2
RL1, RL2, RL3	DIP8		DIP8	ASSR4128	3
U1, U2, U3, U4	SO-14		SO-14	LF347	4
U5, U16	SO-8		SO-8	INA137	2
U6, U7, U17	SO-8		SO-8	OPA2134	3
U8, U14	SO-8		SO-8	AD8066	2
U9, U19, U22	SO-16		SO-16	DG409	3
U10, U15	TSOP-8		TSOP-8	AD5452	2
U11	DPAK		dpak	78M05	1
U12	D2PAK		d2pak	7812	1

U13	D2PAK		D2PAK	7912	1
U18	SO-8		SO-8	LF353	1
U20, U23	SO-14		SO-14	TL074	2
CS: 001-000168-01					331

CN10, CN13	AMP-6			2
CN11	AMP-16			1
CN12	AMP-2			1
D1, D2, D3, D20, D21, D22, D23, D24, D25, D26, D30, D31	SOT143B	BAS40-07		14
D41, D42				
D4, D5, D6, D7, D8, D9, D10, D12, D17, D18	SOD80	LL4148		23
D19, D27, D28, D29, D32, D33, D34, D35, D36, D37				
D38, D39, D40				
D11	SOD80	NC		1
D13, D14, D15, D16		BAS16		4
J1	STRIP MASCHIO	2 POLI		1
L1	FBR0805/600R/200mA/201209-601	600R 200mA		1
L2	PANASONIC 'ELC08D470E	10uH		1
P1	STRIP MASCHIO 8pin	NC		1
Q1, Q2, Q3, Q4, Q5, Q6, Q7, Q8, Q9, Q10, Q11	SOT23	BC847		11
Q12	SOT23	BC817		1
R1, R2, R14, R15, R21, R59, R61, R62, R63, R86	R0805	10K		27
R93, R107, R108, R109, R135, R146, R147, R166				
R167, R168, R169, R170, R171, R176, R177, R178, R186				
R5, R8, R11	R0805	20K 1%		3
R3, R4, R9, R10	R0805	22K		4
R6, R34, R35, R36, R37, R38, R39, R40, R41, R67	R0805	1K		24
R68, R69, R71, R72, R73, R89, R103, R104, R105				
R106, R113, R115, R131, R175				
R7, R19, R20, R42, R44, R85, R87, R94, R99, R100	R0805	4K7		13
R101, R102, R182				
R12, R22, R24, R26, R29, R31, R33, R45, R47, R49	R0805	NC		27
R51, R53, R55, R58, R77, R88, R91, R95, R96, R97, R185				
R98, R114, R116, R118, R148, R150				

R13	R0805	560K 1%		1
R16	R0805	62K 1%		1
R156, R157, R158	R0805	30K1		3
R17, R18	R0805	5K11		2
R23, R30, R46, R52	R0805	120R		4
R25, R27, R28, R32, R48, R50, R54, R56	R0805	470R		8
R43, R57	R0805	47R		2
R60	R0805	3K9		1
R64, R65, R66, R70	R0805	15K		4
R74	R0805	33K		1
R75	R0805	470K		1
R76, R110, R112, R128, R129, R130, R149, R151	R0805	1M		8
R78	R0805	1K8		1
R79, R80	R0805	18K		2
R81	R0805	1K2		1
R82, R83	R0805	12K		2
R84	R0805	6K8		1
R90, R117, R184	R0805	0R		3
R92	R.TRADIZIOANALE	33R 2W		1
R111, R119, R120, R121, R139, R141	R0805	8K2		9
R142, R159, R163				
R122, R123, R124, R143, R144, R145, R164, R165	R0805	3K16		8
R125, R126, R127	R0805	2K2		3
R132, R133, R134, R136, R137, R138, R181	R0805	1K 1%		7
R140, R172, R173, R174	R0805	100K		4
R152, R153	R0805	4K64		2
R154, R155	R0805	24K 1%		2
R160, R161, R162	R0805	1K91		3
R179, R180, R183	R0805	100R		3

R187	R0805	330K		1
R188	R0805	180K		1
RL1, RL2, RL3	G6K-2F-Y	G6K-2F-Y		3
RT1, RT5, RT7	TRIMMER MULT. REG. VERT	10K		3
RT2, RT3, RT4, RT6, RT8, RT9	TRIMMER MULT. REG. VERT	NC		6
U1	SO8	MCP7940N		1
U2, U4, U17	SO8	TL082S		3
U3	SO8	24LC128		1
U5, U6, U8, U9	SO8	SN65HVD12		4
U7	TQFP-100	PIC32MX795F512L-80I/PT		1
U10	SOT223	LM1117-3.3		1
U11, U12	PW(R-PDSO-G24)	SN74LVCC4245APW		2
U13, U15, U19	SO-14	TL084		3
U14, U16	SO-16	74LV4051A		2
U18, U20, U21	SO-8	TL082S		3
Y1	SMD 3,2 x 1,5 mm	32.768 Khz		1
Y2	HC49/SMD	8MHz		1
CIRCUITO STAMPATO	CS 001-000166-01			1

8.2 PLL & VCO BOARD (200-000181) – PART LIST

Designator	Comment	Footprint	Value	Quantity
C1, C5, C25, C28, C31, C33, C34, C40, C41, C44, C61, C62		0805	100nF	12
C2, C4, C9, C30, C65, C66	CAPACITOR 10uF 25V X7R	1210	10uF / 25V	6
C7	CAPACITOR 2u2 25V X7R	1206	2u2 25V	1
C29	CAPACITOR E. SMD	C.E 5x5.3	10uF / 35V	1
C63	CAPACITOR E. SMD	C.E 4,3x5	10uF / 16V	1
C27, C32, C64	CAPACITOR E. SMD	C.E 6.2x7.5	100uF / 35V	3
C11	CAPACITOR E. SMD	C.E 10x11	470uF / 35V	1
C10, C16, C58, C59		0805	100pF NP0	4
C6, C18, C46, C54		0805	NC	NC
C21	CAPACITOR 10uF 16V X7R o X5R	0805	10uF / 16V	1
C26	CAPACITOR 10uF 16V X7R o X5R	0805	10uF / 16V	NC
C22, C23, C24, C36, C37, C42, C43, C47, C49, C50, C51, C52, C55, C56, C57, C60, C67		0805	1nF	17
C45		0805	22nF	NC
C3, C19, C20		0805	10nF	3
C39		0805	33pF NP0	1
C48		0805	200pF NP0 1%	1
C53		0805	82pF NP0	1
C12, C68		0805	15pF NP0	2
C14, C15, C69, C70		0805	47pF NP0	4
C8, C13, C17, C35		0805	1uF	4
C38		0805	2u2 / 16V	1
R1, R4, R9, R14, R22, R26, R40		0805	NC	NC
R3, R10, R28		0805	100K	3
R11, R52		0805	3K3 1%	2
R12		0805	301R 1%	1
R13, R35, R44		0805	100R 1%	3

R15		0805	22K	1
R16		0805	4M7	1
R17, R20, R24, R32		0805	470R 1%	4
R18, R34, R36, R38		0805	47R 1%	4
R19		0805	56K	1
R2, R55, R58, R61		0805	220R	4
R21	TRIMMER MULT. REG. VERT. SMD	TRIMMER3	10K SMD	1
R25		0805	8K2	1
R33, R65		0805	15K 1%	2
R37, R45, R46		0805	49R9 1%	3
R39, R42		2512	330R	2
R5, R6, R31, R48, R56, R62, R66		0805	10K 1%	7
R41		0805	180R	1
R47		0805	47K	1
R49		0805	18R	1
R50, R53, R54, R57		0805	330R 1%	4
R60		0805	56R 1%	1
R59		0805	22R	1
R63		0805	27R	1
R7, R23, R43, R67, R68		0805	0R	5
R8, R27, R29, R30		0805	1K 1%	4
R51, R64		0805	2K2 1%	2
R69		0805	0R	NC
L1, L9		1210	47nH	2
L2, L8		1812	100uH	2
L3		1812	10uH	1
L4		1210	680nH	1
L5	COILCRAFT B07TGLC o L_API_DELEVAN2 fino esaurimento scorte	B07TGLC	22nH	1
L6		1210	220nH	1

L7	COILCRAFT B08TGLC o L_API_DELEVAN2 fino esaurimento scorte	B08TGLC	28nH	1
D1, D8, D9	BAS 40-04	SOT23	BAS 40-04	3
D2	BAS 16	SOT23	BAS 16	1
D3	ZENER SMD 9V1	D1806	SOD80 - 9V1	1
D4, D5, D6	DIODO VARICAP BB153	1206	BB153	3
D7	DIODO VARICAP BB153	1206	BB153	NC
Q1	FDV304P	SOT23	FDV304P	NC
Q4	FDV304P	SOT23	FDV304P	1
Q2, Q3	BCW72	SOT23	BCW72	2
Q5, Q6, Q9	BFR93A	SOT23	BFR93A	3
Q7, Q8	MMBFJ310	SOT23	MMBFJ310	2
Q10	BC817	SOT23	BC817	1
U1	LM358	SO8	LM358	1
U2	ADF4110	TSSOP16	ADF4110	1
U3	LP3985IBP-3,3	SOT23-5	LP3985IBP-3,3	NC
U4	Gali 05+	SOT89 - GALI	GALI-5	1
U6	78L05	SO8	78L05	1
Y1	VCTCX0 5x3.2 SMD	VCTCXO	10MHz 5V	1
CN1	VASCHETTA 14 PIN	HDR2X7 - VASCHETTA		1
CN2	SMB DRITTO CS	SMB	FORI LIBERI	NC
CN3	SMB DRITTO CS	SMB		1
Perimetro scatola	Scatola Alpaca			1
CS: 001-000181-01	Circuito stampato			1

6.4 MPX IN BOARD (200-000167) - PART LIST

Designator	Comment	CodiceFornitore	Footprint	Value	Quantity
C1	CAPACITOR E. SMD		6.3X6.3	22uF/35V	1
C2, C13, C23, C32, C109	CAPACITOR E. SMD		C.E 5.5x5.5	10uF/50V	5
C5, C12, C15, C16, C18, C21, C26, C31, C34, C36, C42, C43, C46, C50, C52, C56, C57, C64, C70, C72, C82, C86, C91, C100, C104, C105, C107			0805	100nF	27
C8, C73	CAPACITOR E. SMD		C.E 5.5x5.5	4u7/35V	2
C10, C11, C35, C39, C41, C49, C95, C101			0805	1uF	8
C19, C24, C53, C84, C90, R6, R12, R13, R19, R20, R25, R32, R37, R47, R50, R51, R55, R64, R66, R76, R79, R87, R91, R121			0805	NC	24
C25			0805	2p2	1
C27, C29			0805	220nF	2
C33, C44, C45, C62, C65, C66, C77, C83, C93			0805	10nF	9
C37, C67, C89			0805	15pF	3
C68, C74			0805	22pF	2
C69, C92, C110	CAPACITOR E. SMD		6.3X7.7mm	100u/35V	3
C71			0805	100pF	1
C80			0805	47nF	1
C81			0805	1nF	1
C94			0805	10pF	1
C103			0805	220pF	1
CN1, CN6	VASCHETTA 5x2		hd10bp		2
CN2, CN4	SMB DRITTO CS		Amphenol-SMB		2
CN3	PHOENIX MALE 90 CS		FRONT2.5-H-SA-5-EX		1
CN5	AMP-6		MODU2/6VD		1
CN7, CN9	BNC_DOPPIO METALLICO		BNC_RA CON		2
CN10	STRIP FEM.90° 5x2		SM-PHD3210-10P-F		1
CN11	STRIP FEM.90° 13x2		SM-PHD3210-26P-F		1
CN12	STRIP FEM.90° 17x2		SM-PHD3210-34P-F		1
CN13	VASCHETTA 7x2		HD14bp		1
D1, D9, D14	LL4148		SOD80	LL4148	3
D2, D3, D4, D5, D6, D7, D8, D12, D13, D18, D19	BAS 40-04		SOT23	BAS 40-04	11
D15	BAS40-04		SOT23	NC	1
D16, D17	SOD80		SOD80	6V2	2
FL1, FL2, FL3	EMI FILTER SMD		EMI_FILTER		3
L3, L6, L10	ELC08D100E		ELC08D470E	10uH	3
L5	ELC08D470E		ELC08D470E	47uH	1
L7	1812		1812	10uH	1
LD1, LD2	LEDSMD VERDE		LED_0805		2

R1	TRIMMER MULT. REG. VERT		TRIMMER3	1k	1
R2, R17, R43	TRIMMER MULT. REG. VERT		TRIMMER3	10K	3
R3, R88			0805	100K	2
R4, R8, R9, R40, R48, R75, R80			0805	10R	7
R5, R7, R35, R36, R49, R77, R78			0805	100K 1%	7
R10, R90			0805	330K	2
R11, R31, R54			0805	4K7	3
R14, R72, R108, R111			0805	1K	4
R18, R21, R85, R109, R137, R138, R139			0805	0R	7
R24, R59, R60, R73, R89, R118			0805	39K	6
R28, R61			0805	22K	2
R29, R44, R62, R71, R92, R103, R107, R114			0805	10K	8
R33, R93			0805	1K5	2
R34, R42, R53, R81			0805	4K7 1%	4
R45, R63			1206	NC	2
R52			1206	6K8	1
R56			1206	820R	1
R65	TRIMMER MULT. REG. VERT		TRIMMER3	5K	1
R67			0805	56K	1
R68, R96			0805	100	2
R69, R70, R147, R148			0805	10K 1%	4
R82, R84, R116, R124			1206	1K	4
R83, R102, R119			0805	150K	3
R97, R104			0805	15K	2
R98			0805	120R	1
R99			0805	100R	1
R115	TRIMMER MULT. REG. VERT		TRIMMER3	NC	1
R120, R125			1206	620R	2
R123	TRIMMER MULT. REG. VERT		TRIMMER3	2K	1
R126, R132			0805	2K7	2
R131			1206	150R	1
U1	7805		D2PAK	7805	1
U3	DG409		SO-16	DG409	1
U4, U19	74HC595		so-16	74HC595	2
U5	AD5452		TSOT-8	AD5452	1
U7, U13	ADG1334		SSOP20	ADG1334	2
U8	AD8066		SO-8	AD8066	1
U9, U16, U18	LF347		SO-14	LF347	3
U10	TL082S		SO-8	TL082S	1
U11	TL074		SO-14	TL074	1
U12, U20	78M12		DPAK	78M12	2
U14	PIC18F6622		TQFP-PT64_N	PIC18F6622	1
U15	79M12		DPAK	79M12	1
U17	LM1973		SO-20	LM1973	1
Y2	HC49/SMD		QUARZO 20MHZ	20MHz	1
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