

FPS LINE

 **symmetric** amplifier



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FPS 2160

 **symmetric** amplifier



product N° 950300100767

mainboard FPS 2160 SMT+DIP

unit PCS

version N°

level	material No	material name	material specification	amount of sub-parts	unit	drawing locations
1	920304700337	main board	FPS 2160(A)	1	PCS	FR-42A(Double sided all-wave Double sided blue oil spray tin 1.6T
2	920300600069	chip capacitor 0805	22P/50V ±5% ROHS	8	PCS	C3, C4, C5, C6, C26, C27, C28,C29
3	920300600082	chip capacitor 0805	104P/50V ±5% ROHS	8	PCS	C14, C18,C1, C2, C8, C15, C30, C31
4	920300600092	chip capacitor 0805	103P/50V ±5% ROHS	4	PCS	C11, C12, C21, C22
5	920300600106	chip capacitor 0805	102P/100V ±5% ROHS	2	PCS	C7, C25
6	920300600107	chip capacitor 0805	471P/50V ±5% ROHS	2	PCS	C10, C24
7	920300600108	chip capacitor 0805	472P/50V ±5% ROHS	1	PCS	C17
8	920300600109	chip capacitor 0805	821P/50V ±5% ROHS	2	PCS	C9, C23
9	920301100036	SMD Aluminium 0550	22UF/25V	12	PCS	E3, E4, E5, E6, E7, E9, E16,E18, E19, E21, E22, E24
10	920301100044	SMD Aluminium 0550	47UF/16V ROHS	4	PCS	E12, E13,E2, E25
11	920301100049	SMD Aluminium 0670	220UF/16V ROHS	1	PCS	E20
12	920302100158	chip resistor 0805	75KΩ ±1% ROHS	1	PCS	R97
13	920302100159	chip resistor 0805	100KΩ ±1% ROHS	4	PCS	R20, R96, R106, R154
14	920302100191	chip resistor 0805	20KΩ ±1% ROHS	2	PCS	R32, R144
15	920302100194	chip resistor 0805	5.1K +1% ROHS	1	PCS	R85
16	920302100198	chip resistor 0805	1.8KΩ ±1% ROHS	4	PCS	R42, R51, R125, R130
17	920302700016	SMD zener diodes S0D-323	5.1V	1	PCS	D8
18	920302700031	chip diode S0D-323	20V ROHS	6	PCS	D1, D4, D5, D11, D12, D15
19	920303000009	chip diode S0D-323	1N4148	7	PCS	D2, D3, D9, D13, D14, D16, D17
20	920303000083	chip diode S0D-214	1N5401 ROHS	3	PCS	D7,D6, D10

21	920303100006	SMD double diode SOT-23	BAV99/S	17	PCS	Q5, Q6, Q13, Q15, Q16, Q17, Q22, Q33, Q34, Q39, Q49, Q52, Q54, Q56, Q57, Q64, Q66
22	920303200088	SMD transistors SOT-223	A1013 ROHS	1	PCS	Q29
23	920303200089	SMD transistors SOT-223	C2383 ROHS	6	PCS	Q2, Q3, Q4, Q68, Q69, Q70
24	920303200102	SMD transistors SOT-23	2N5401 ROHS	13	PCS	Q8, Q14, Q18, Q19, Q20, Q21, Q48, Q50, Q51, Q53, Q55, Q63, Q44
25	920303200103	SMD transistors SOT-23	2N5551 ROHS	12	PCS	Q7, Q12, Q23, Q24, Q25, Q45, Q46, Q47, Q61, Q62, Q10, Q59
26	920303200108	SMD transistors SOT-23	2N4401 ROHS	11	PCS	Q28, Q30, Q31, Q32, Q35, Q36, Q41, Q42, Q43, Q65, Q67
27	920303200109	SMD transistors SOT-23	2N4403 ROHS	8	PCS	Q9, Q11, Q27, Q37, Q38, Q40, Q58, Q60
28	920303500332	SMD IC S0-8	LM393	1	PCS	IC2
29	920303500449	SMD IC S0-16	TL494I ROHS[125]	1	PCS	IC1
30	920306600004	chip resistor 0805	10K Ω $\pm$ 1%	25	PCS	R25, R26, R27, R33, R53, R54, R68, R71, R75, R76, R80, R82, R84, R86, R102, R103, R104, R109, R127, R128, R14, R150, R152, R153, R151
31	920306600005	chip resistor 0805	8.2K Ω $\pm$ 1%	1	PCS	R93
32	920306600007	chip resistor 0805	1.5K Ω $\pm$ 1%	5	PCS	R16, R37, R142, R164, R47
33	920306600009	chip resistor 0805	0 Ω $\pm$ 1%	1	PCS	R155
34	920306600011	chip resistor 0805	1K Ω $\pm$ 1% ROHS	20	PCS	R14, R19, R21, R35, R38, R43, R44, R45, R66, R100, R110, R112, R131, R132, R134, R135, R140, R156, R161, R166
35	920306600015	chip resistor 0805	3.3K Ω $\pm$ 1% ROHS	9	PCS	R28, R31, R57, R78, R81, R107, R119, R146, R149
36	920306600016	chip resistor 0805	4.7K Ω $\pm$ 1% ROHS	10	PCS	R40, R67, R69, R73, R79, R89, R91, R94, R95, R137
37	920306600017	chip resistor 0805	5.6K Ω $\pm$ 1% ROHS	3	PCS	R22, R98, R157
38	920306600024	chip resistor 0805	15K Ω $\pm$ 1% ROHS	1	PCS	R77
39	920306600025	chip resistor 0805	2.2K Ω $\pm$ 1% ROHS	5	PCS	R46, R59, R105, R121, R133
40	920306600026	chip resistor 0805	22K Ω $\pm$ 1% ROHS	9	PCS	R56, R58, R92, R99, R108, R111, R113, R120, R123
41	920306600029	chip resistor 0805	3.9K Ω $\pm$ 1% ROHS	4	PCS	R9, R10, R170, R171
42	920306600030	chip resistor 0805	47K Ω $\pm$ 1% ROHS	5	PCS	R23, R36, R136, R158, R87

43	920306600031	chip resistor 0805	470K Ω $\pm$ 1% R0HS	1	PCS	R74
44	920306600035	chip resistor 0805	220 Ω $\pm$ 1% R0HS	10	PCS	R1, R3, R4, R5, R17, R159,R174, R175, R176, R177
45	920306600037	chip resistor 0805	100 Ω $\pm$ 1% R0HS	4	PCS	R18, R48, R90, R160
46	920306600041	chip resistor 0805	220K Ω $\pm$ 1% R0HS	2	PCS	R24, R148
47	920306600044	chip resistor 0805	6.2K Ω $\pm$ 1% R0HS	1	PCS	R101
48	920306600053	chip resistor 0805	68 Ω $\pm$ 1% R0HS	8	PCS	R62, R63, R64, R65, R114, R115,R116, R117
49	920306600057	chip resistor 0805	13K Ω $\pm$ 1% R0HS	4	PCS	R50, R52, R124, R126
50	920306600058	chip resistor 0805	150 Ω $\pm$ 1% R0HS	2	PCS	R55, R129
51	920306600059	chip resistor 0805	1.2K Ω $\pm$ 1% R0HS	2	PCS	R41, R138
52	920306600060	chip resistor 0805	270 Ω $\pm$ 1% R0HS	2	PCS	R39, R141
53	920306600061	chip resistor 0805	330K Ω $\pm$ 1% R0HS	4	PCS	R15, R167, R173,R2
54	920306600062	chip resistor 0805	33K Ω $\pm$ 1% R0HS	1	PCS	R83
55	920306600063	chip resistor 0805	3.6K Ω $\pm$ 1% R0HS	2	PCS	R70, R72
56	920306600064	chip resistor 0805	43K Ω $\pm$ 1% R0HS	1	PCS	R88
57	920306600065	chip resistor 0805	470 Ω $\pm$ 1% R0HS	2	PCS	R34, R145
58	920306900038	chip resistor 0805	10 Ω $\pm$ 1% R0HS	4	PCS	R60, R61, R118, R122
59	920306900039	chip resistor 0805	1K Ω $\pm$ 1% R0HS	1	PCS	R49
60	920306900041	chip resistor 0805	5.6 Ω $\pm$ 1% R0HS	2	PCS	R6, R162
61	920306900042	chip resistor 0805	220 Ω $\pm$ 1% R0HS	2	PCS	R29, R139
62	920304700338	main board	FPS 2160(B)	1	PCS	FR-42A(1.6T)
63	920300600069	chip capacitor 0805	22P/50V $\pm$ 5% R0HS	4	PCS	C62, C63, C66, C67
64	920300600090	chip capacitor 0805	33P/50V $\pm$ 5% R0HS	2	PCS	C68, C69

65	920302100191	chip resistor 0805	20K Ω $\pm$ 1% ROHS	4	PCS	R188, R189, R190, R191
66	920302100198	chip resistor 0805	1.8K Ω $\pm$ 1% ROHS	2	PCS	R200, R201
67	920303500131	SMD IC S0-8	NE5532	3	PCS	IC3, IC5, IC9
68	920303500404	SMD IC T0-252	ST7815 ROHS	1	PCS	IC7
69	920303500471	SMD IC T0-252	ST7915 ROHS	1	PCS	IC6
70	920306600004	chip resistor 0805	10K Ω $\pm$ 1%	8	PCS	R180, R184, R185, R186, R195,R196, R197, R198
71	920306600009	chip resistor 0805	0 Ω $\pm$ 1%	2	PCS	R181, R192
72	920306600024	chip resistor 0805	15K Ω $\pm$ 1% ROHS	2	PCS	R204, R205
73	920306600026	chip resistor 0805	22K Ω $\pm$ 1% ROHS	2	PCS	R182, R183
74	920306600066	chip resistor 0805	27K Ω $\pm$ 1% ROHS	2	PCS	R207, R208
75	920304700339	main board	FPS 2160[C]	1	PCS	FR-42A(Double sided all wave Double sided blue oil spray tin 1.6T
76	920300600082	chip capacitor 0805	104P/50V $\pm$ 10% ROHS	4	PCS	C70, C71,C64, C65
77	920302100159	chip resistor 0805	100K Ω $\pm$ 1% ROHS	2	PCS	R209, R210
78	920303500131	SMD IC S0-8	NE5532	2	PCS	IC4, IC8
79	920306600015	chip resistor 0805	3.3K Ω $\pm$ 1% ROHS	2	PCS	R202, R203
80	920306600044	chip resistor 0805	6.2K Ω $\pm$ 1% ROHS	4	PCS	R187, R193, R194, R199
81	920306600067	chip resistor 0805	11K Ω $\pm$ 1% ROHS	2	PCS	R206,R211

product N° 5509215010001

car amplifier FPS 2160(France)

unit PCS

version N°

level	material No	material name	material specification	Amount of sub-parts	unit	drawing locations	change/remark
PCB PLUG-IN UNIT							
1	5103391060036	cable	FPS2160 ROHS	1	SET		
2	5103440010061		2P neisbed ROHS	2	PCS	with fans,light time	
3	5103440010114		7P neisbed(2.0 space) ROHS	1	PCS		
4	5103440010162		4P neisbed (2.0 space) ROHS	1	PCS		
5	5103440010163	0	11P neisbed (2.0 space) ROHS	1	PCS		
6	5103530070001	black single extension	16#	0.13	M	L=130mm 1PCS including part of the tin at both ends to open online (2mm)	must be black
7	5103531190001	orange single extension	16#	0.148	M	L=148mm 1PCS (sets of yellow wax tube,including some of the tin at both ends to open online 4mm)	
8	5103540030001	2P red and white cable	26# one with an open line of Block	0.28	M	L=280mm 1PCS light for spare parts requisitioned from the store insert heat-shrink tube 1 L=15mm 2PCS	
9	5103540120008	4P red and white cable (space 2.0mm)	26# one with the seat belt pin	0.04	M	L=40mm 1PCS connect the small plate	
10	5103540230005	7P red and white cable (space 2.0mm)	26# one with the seat belt pin	0.04	M	L=40MM connect the small plate	
11	5103540430004	11P red and white cable	26# one with the seat belt pin (3Pshielding wire +5P shielding wire +3P red and white cable)	0,145	M	L=145mm 1pcs	
12	5302000060039	PCB plug-in	FPS2160 chip semi-finished panels	1	PCS	SMT:950300100767	
13	5304000060001	PCB SMD	FPS2160(A) ROHS	1	PCS		
14	5103111010017	non inductive resistance	5w0.1Ω(A) cylindrical	8	PCS	R8,R11,R12,R13,R163,R165,R168,R169	
15	5103131140023	electrolytic capacitor	25v2200uf Black 105 16*25(A)XL high frequence low resistor	4	PCS	E10, E11, E14, E15	
16	5103131340035	electrolytic capacitor	50V4700UF Black 105 25*25(A)	4	PCS	E1, E8, E17, E23	with explosion-proof lid
17	5103200060053	Terylene Capacitor	yellow CL23/100V/224 Rail Cover ROHS	1	PCS	C19	

14	5103111010017	non inductive resistance	5w0.1Ω(A) cylindrical	8	PCS	R8, R11, R12, R13, R163, R165, R168, R169	
15	5103131140023	electrolytic capacitor	25v2200uf Black 105 16*25(A)XL high frequency low resistor	4	PCS	E10, E11, E14, E15	
16	5103131340035	electrolytic capacitor	50V4700UF Black 105 25*25(A)	4	PCS	E1, E8, E17, E23	with explosion-proof lid
17	5103200060053	Terylene Capacitor	yellow CL23/100V/224 Rail Cover R0HS	1	PCS	C19	
18	5103240030018	porcelain capacitor	104P R0HS	3	PCS	C13, C20, C16	
19	5103250080003	audion	2N5551 Rail Cover	2	PCS	Q1, Q71 Heat-shrink tube 0.6 L=4mm 6PCS	
20	5103250080011	audion	A1013 Rail Cover	1	PCS	Q26 Heat-shrink tube 0.6 L=4mm 3PCS	
21	5103440030001	adjustable resistance	1K	2	PCS	VR1, VR2	
22	5304000060002	PCB SMD	FPS2160(B) R0HS	1	PCS		
23	5103100230002	wire-wound resistor	5W220ΩT=71mm Rail Cover(trumpet) 6*17mm green R0HS	2	PCS	R178, R179	
24	5103131030002	electrolytic capacitor	16v22U Black 85 Rail Cover 5*11(A)	6	PCS	C32, C33, C34, C36,C46, C47	
25	5103131120005	electrolytic capacitor	25v220uf Black 85 Rail Cover 8*12(A)	2	PCS	C43, C48	
26	5103131320012	electrolytic capacitor	50V47uf Black 85 Rail Cover 6.3*11(A)	2	PCS	C52, C59	
27	5103240030018	porcelain capacitor	104P R0HS	2	PCS	C58, C61	
28	5304000060003	PCB SMD	FPS2160(C) R0HS	1	PCS		
29	5103131120004	electrolytic capacitor	25v100uf Black 85 Rail Cover 6*11(A)	2	PCS	C38, C50	
30	5103200060024	Terylene Capacitor	yellow CL23/100V/273 Rail Cover R0HS	2	PCS	C49, C53	
31	5103200060041	Terylene Capacitor	yellow CL23/100V/103 Rail Cover R0HS	2	PCS	C51, C54	
32	5103200060042	Terylene Capacitor	yellow CL23/100V/333 Rail Cover R0HS	2	PCS	C44, C45	
33	5103200060047	Terylene Capacitor	yellow CL23/100V/104 Rail Cover R0HS	4	PCS	C35, C42, C55, C60	
34	5103200060051	Terylene Capacitor	yellow CL23/100V/392 Rail Cover R0HS	2	PCS	C40, C41	
35	5103200060052	Terylene Capacitor	yellow CL23/100V/822 Rail Cover R0HS	2	PCS	C37, C39	
36	5103200060054	Terylene Capacitor	yellow CL23/100V/272 Rail Cover R0HS	2	PCS	C56, C57	

product N° 5509215010001

car amplifier FPS 2160 (France)

unit PCS

version N°

level	material No	material name	material specification	Amount of sub-parts	unit	drawing locations
PCB SPARE PART						
1	5101280340035	screw	PM3*10 white ROHS	6	PCS	
2	5103030010004	half-bridge	F12C20A	2	PCS	DL2, DL3
3	5103030010005	half-bridge	F12C20C	2	PCS	DL1, DL4
4	5103120010004	thermal resistor	B50K without cable ROHS	2	PCS	TH1, TH2
5	5103120010044	thermal resistor	insert directly B50K (MF56A) ROHS	2	PCS	RT1, RT2 set Heat Shrink Tubing 0.6 L=7mm 2PCS
6	5103260050058	mosfet	FQP50N06	8	PCS	IRF2, IRF4, IRF7, IRF10, IRF1, IRF3, IRF6, IRF9
7	5103260050076	power tube	MSGT2810	8	PCS	IRF5, IRF8, IRF11, IRF12, IRF13, IRF14, IRF15, IRF16
8	5103270060069	WH9011potentiometer	C50K*2-17mm stepping black axis with cross(green) ROHS	1	PCS	VR1
9	5103270060071	WH9011potentiometer	C50K*4-17mm stepping black axis with cross(green) ROH	1	PCS	VR2 inequality Distance
10	5103270060072	WH9011potentiometer	C100K*4-17mm stepping black axis with cross(green) ROH	1	PCS	VR3 inequality Distance
11	5103280100008	Lotus seat cap	AV-8.4-21 black core with gilding ROHS	2	PCS	AV1, AV2 with a black pad, golden husuke, golden screw nut
12	5103300020113	luminotron	ZA35B-Rg red and green(green down and ren up, lefr positive and right nagetive) ROHS	1	PCS	LED2 over 3.5mm
13	5103300020110	Acrylic Backlight panel	LED backlight white light illuminated red 46*46*2 1 light focal	1	PCS	
14	5103310020007	safety disc	30A ROHS	2	PCS	FUSE1, FUSE2
15	5103330050060	Toggle switch	SK43D03G6 ROHS	1	PCS	SW1
16	5103440010164	power socket	power socket (5557-04WA)4P black SIRUBA ROHS	2	PCS	
17	5103330070022	self-locking switch	PS-909L-22(grey) ROHS	1	PCS	SK1
18	5103330070025	self-locking switch	PS-909L-42(grey) ROHS	2	PCS	SK2, SK3
19	5103380020002	Fuse holder	1 add fiber 0.5mm red copper holes of screw left up and right down ROHS	2	PCS	FUSE1, FUSE2

20	5103440010001	others	4.2 soldering ROHS	1	PCS	
21	5103450010002	current-limiting resistor	20W 0.01Ω	2	PCS	R27, R28 Line Diameter 1.5{with locator card}
22	5104140020001	RUBBER MAT	30*16*3 ROHS	2	PCS	
23	5105190040161	SAJ157Z cast parts speaker terminals ROHS	big 1 reverse black shell gold castings hexagon screw (JSZ1-52)	4	PCS	
24	5105190040162	SAJ163Z cast parts speaker terminals ROHS	big 3 reverse black shell gold castings hexagon screw (JSZ3-56)	1	PCS	
25	5105200010003	Transparent plastic pillars	L=26MM with taping ROHS	6	PCS	
26	5105220020053	sheet copper	L=52.5MM{overall length} thick 1.2 four feet ROHS	2	PCS	
27	5105220020054	feet copper	L=52.5mm{overall length} thick 1.2 Gold Plated ROHS	7	PCS	
28	5212000000003	Heat Shrink Tubing	2 Heat Shrink Tubing	0.268	M	L=12mm 24PCS
29	5212010000003	Heat Shrink Tubing	0.6 Heat Shrink Tubing ROHS	0.12	M	L=10mm 12PCS
30	5213000000005	Yellow Wax Tube	3 Yellow Wax Tube	0.2	M	L=200mm For the magnetic ring
31	5213000000009	Yellow Wax Tube	4 Yellow Wax Tube	0.2	M	L=200mm For the magnetic ring
32	5215070010010	tin bar	there are lead(Anson) SnPb63/37	0.038	KG	
33	5301000070077	Magnet	36 6:13[0.8*6/0.8*4]	2	PCS	
34	5104010010013	magnetic core	36*15*23 ROHS	2	PCS	
35	5204110010006	enamelled wire	QA-1 0.8 red	0.0514	KG	Subprime :13circles /0.8*4
36	5204110010028	enamelled wire	QZ-2 0.8 natural color	0.05	KG	Subprime :6citics/0.8*6

product N° 5509215010001

car amplifier FPS 2160 (France)

unit PCS

version N°

level	material No	material name	material specification	Amount of sub-parts	unit	drawing locations
MOUNT						
1	5101210010020	IC Tube Tablet	punching large tabletingt ROHS	4	PCS	fixed power tube
2	5101210010021	IC Tube Tablet	punching small tabletingt ROHS	2	PCS	
3	5101210010055	IC Tube Tablet	26*11*2 4.3hole ROHS	4	PCS	
4	5101280050028	screw	BM3*6 white ROHS	7	PCS	fixedPCB,thermal,soldering pads
5	5101280050051	screw	BM4*14 white ROHS	6	PCS	fixed tube
6	5101280340035	screw	PM3*10 white ROHS	6	PCS	fixed little tube
7	5101280140049	screw	CM4*10 BNI(BN)ROHS	6	PCS	fixed adjusted surface
8	5101280140050	screw	CM4*4 BNI BN ROHS	3	PCS	fixed adjusted base
9	5101280230018	screw	KB3*6 white ROHS	3	PCS	fixed backlight panel
10	5101280240015	screw	KM3*6 black ROHS	4	PCS	fixed fan top cover
11	5101280240049	screw	KM4*14 white ROHS	4	PCS	fixed mosfet
12	5101280240050	screw	KM3*30 white ROHS	4	PCS	fixed fan blacket
13	5101280300027	screw	PA2*10 BN ROHS	4	PCS	fixed fuse
14	5101300010016	star washer	3 ROHS	1	PCS	soldering pads
15	5101300010017	flat-mediated	3whiteROHS	2	PCS	thermal
16	5101300020007	bomb-mediated	4white ROHS	10	PCS	fixed tube
17	5101300020011	bomb-mediated	3whiteROHS	2	PCS	thermal
18	5103340020045	fan	8025 with cable L=80MM Neilsbed ROHS	1	PCS	change for 1500RPM (with Focal logo)
19	5208000000014	sheet mica	with hole 40*22 Focal	4	PCS	

20	5208000000015	sheet mica	with hole 26*16 Focal	6	PCS	
21	5105200020038	Fan strengthen the cushion cover	L=16.9mm ROHS PFS series	4	PCS	
22	5105250020013	left-down rubber feet	PFS GM ROHS	2	PCS	
23	5105250020014	right-down rubber feet	PFS GM ROHS	2	PCS	
24	5105250020015	right-up rubber top	PFS GM ROHS	2	PCS	
25	5105250020016	left-up rubber top	PFS GM ROHS	2	PCS	
26	5106170390001	illuminated plastic logo	SAL00097S	1	PCS	
27	5211000000001	Belting(tie wire)	Belting 3*60	2	PCS	
28	5214000000014	Switch sponge	16*7*1.5 ROHS	1	PCS	for cable
29	5106260010129	blister	1 cast part blister	4	PCS	
30	5106260010130	blister	3 cast part blister	1	PCS	
31	5214000000172	sponge	FPS series 1 cast part sponge-rubber pad ROHS	4	PCS	
32	5214000000173	sponge	FPS series 3 cast part sponge-rubber pad ROHS	1	PCS	
33	5216000000186	other accessory	single side gummed corduroy	0.0005	M2	25*20
34	5401080010062	front cover	Focal General fan cover ANODIZED	1	PCS	
35	5105410040001	others	RED INSULATOR	2	PCS	for fan top cover
36	5401260010013	supporting plate	FPS GE fan cover blacket board ANODIZED	1	PCS	
37	5402010160164	aluminium cover	FPS2160 with hair 7C L=301MM	1	PCS	
38	5402010060035	die-casting heatsink	FPS2160/1500 ANODIZED	1	PCS	
39	5402270010006	aluminium adjusting plate	FPS2160 aluminium adjusting plate with little hair	1	PCS	
40	5405450020041	plastic square knob	4.5*4.5*12.5MM black ROHS	2	PCS	
41	5405450020042	plastic square knob	4.5*4.5*12.5MM red ROHS	1	PCS	for direct mode switch

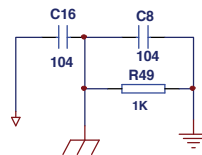
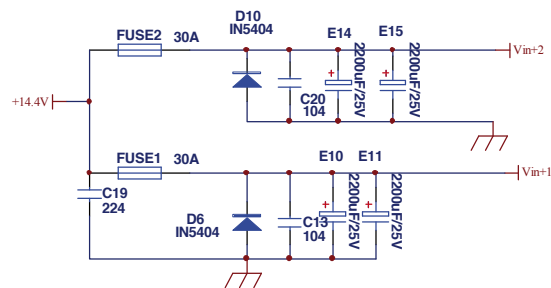
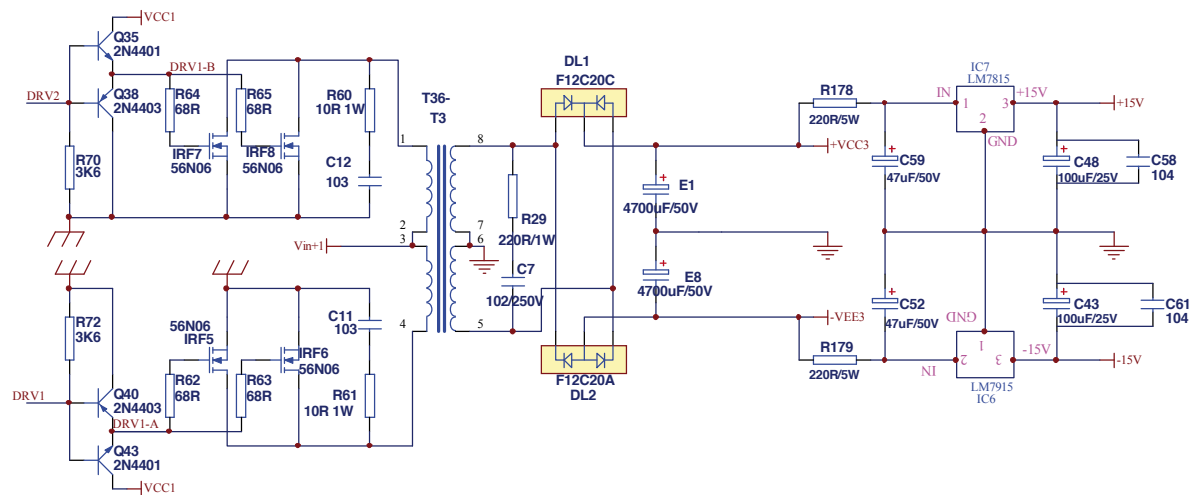
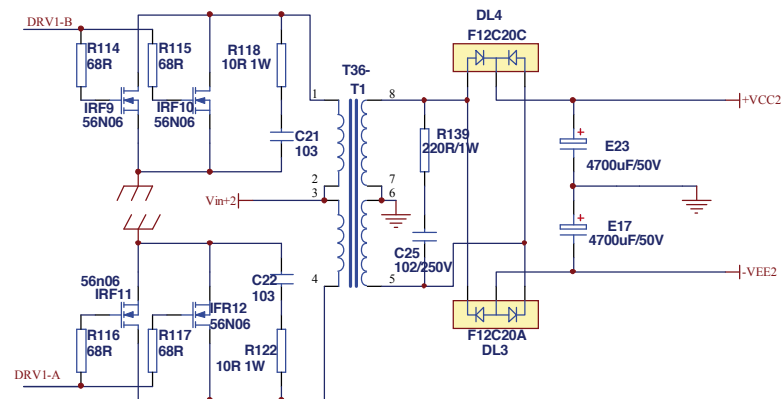
product N° 5509215010001

car amplifier FPS 2160 (France)

unit PCS

version N°

level	material No	material name	material specification	Amount of sub-parts	unit	Drawing locations
PACKING						
1	5101270020002	Accessory key	hexagon key 3 ROHS	1	PCS	
2	5101280530007	screw	TA4*50 darker black ROHS	4	PCS	
3	5101300010009	flat-mediated	4blackROHS	4	PCS	
4	5101300020005	bomb-mediated	4blackROHS	4	PCS	
5	5103310020007	fuse lever	30A ROHS	2	PCS	
6	5105370010001	Lotus seat cap ROHS		2	PCS	
7	5106010060044	Carton	FPS2160	0,5	PCS	2PCS/box
8	5106030060075	gift box	FPS2160	1	PCS	
9	5106260010128	pearl wool	No.52 three-piece suit	1	SET	
10	5106150011642	carton sticker	FPS2160 black and yellow 50*102 a duplicate(see note No.jump)	2	PCS	
11	5106150011647	body code sticker	FPS2160 duplex black 26*11.5mm (No.jump see remarks)	1	PCS	
12	5106150011658	gift box sticker	FPS2160 duplex black	1	PCS	
13	5106210010096	environmental bags	46*36CM Thinken[Focal dedicated printing]	1	PCS	
14	5106220010001	Zip-lock bag	7*11	1	PCS	mount spare part
15	5106220010005	Zip-lock bag	manual plastic bag(Focal dedicated printing)	1	PCS	Packaging Manual
16	5210000000001	adhesive sealing	transparent adhesive tape 48*100Y	0.04	PCS	
17	5216000000147	other accessories	10g desiccan(ROHS)	1	PCS	

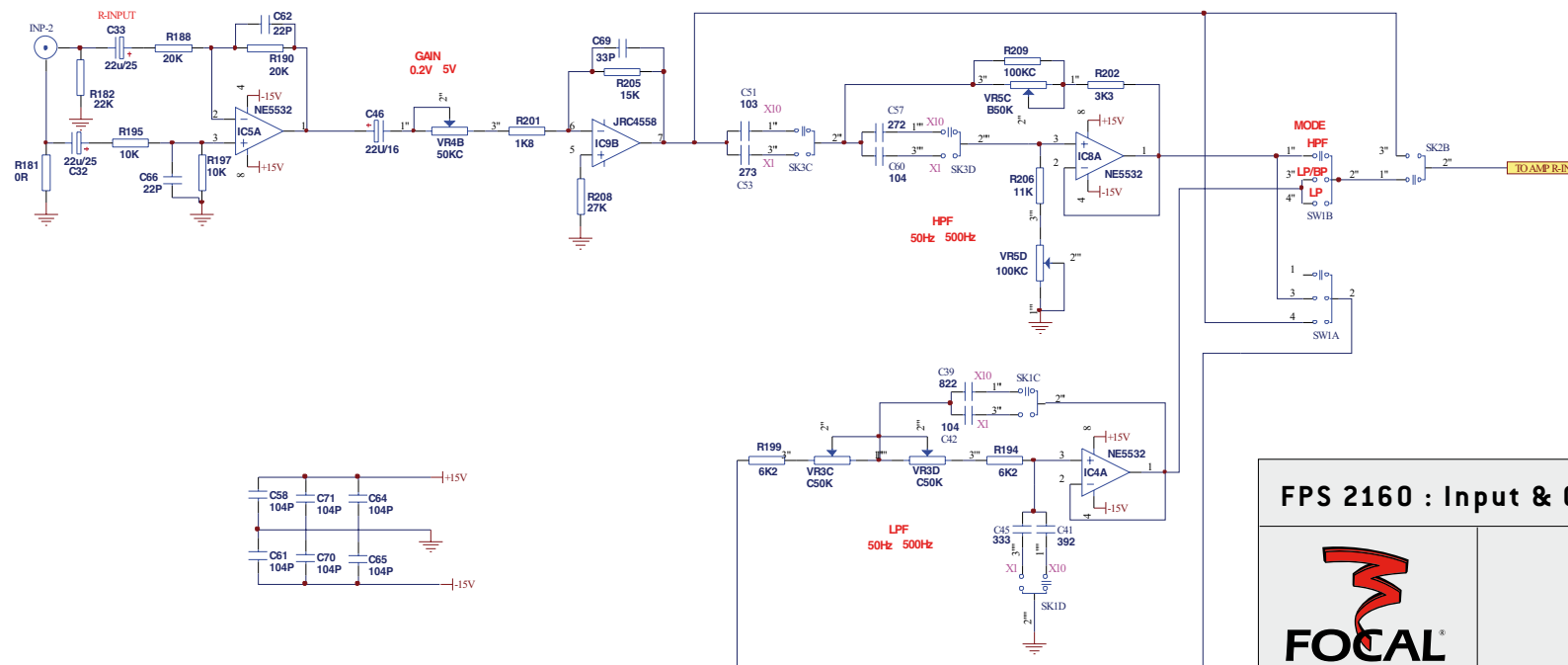
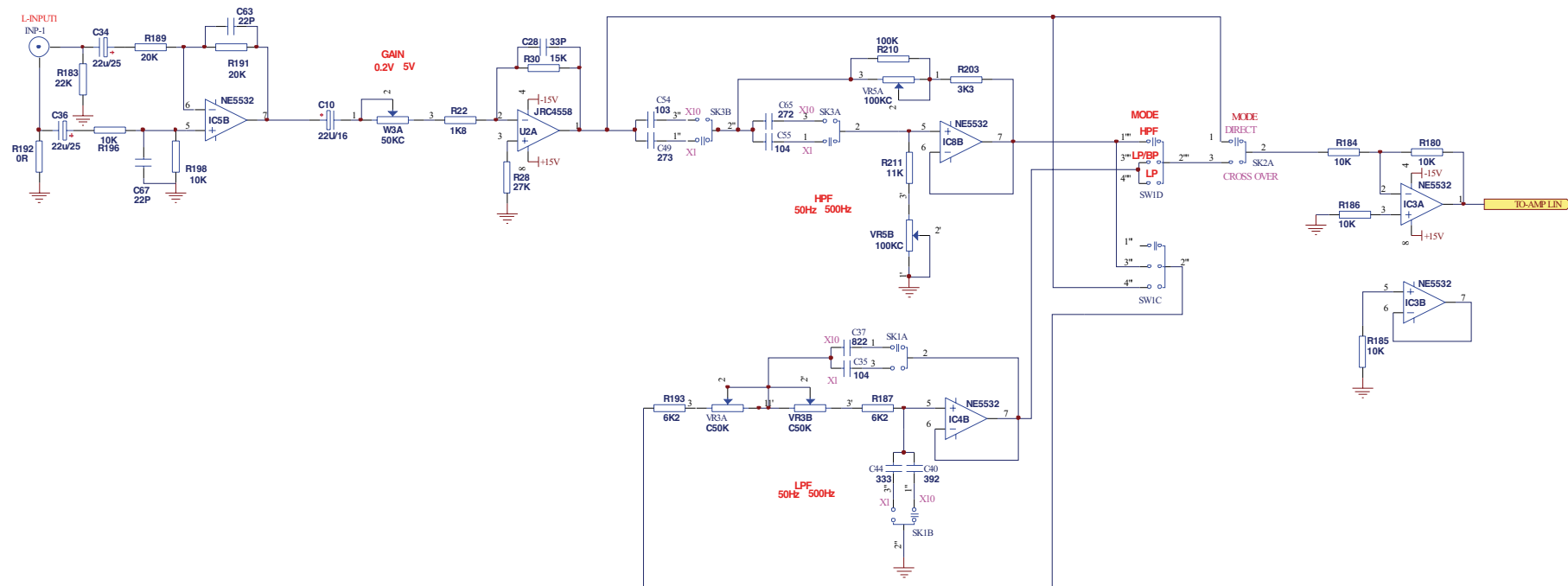


FPS 2160 : Power Supply



le 19 Mars 2010

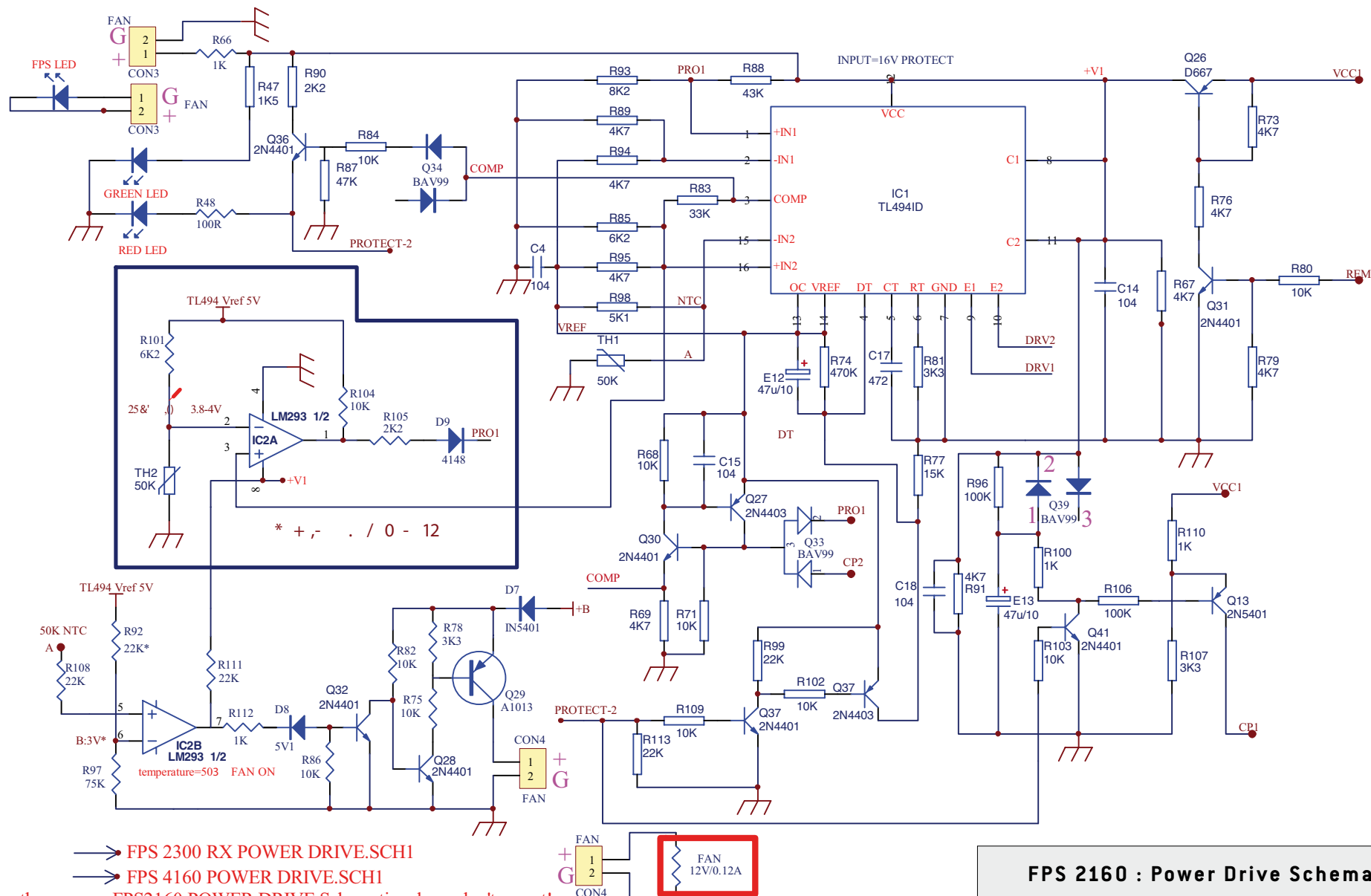




FPS 2160 : Input & Crossover Schematic



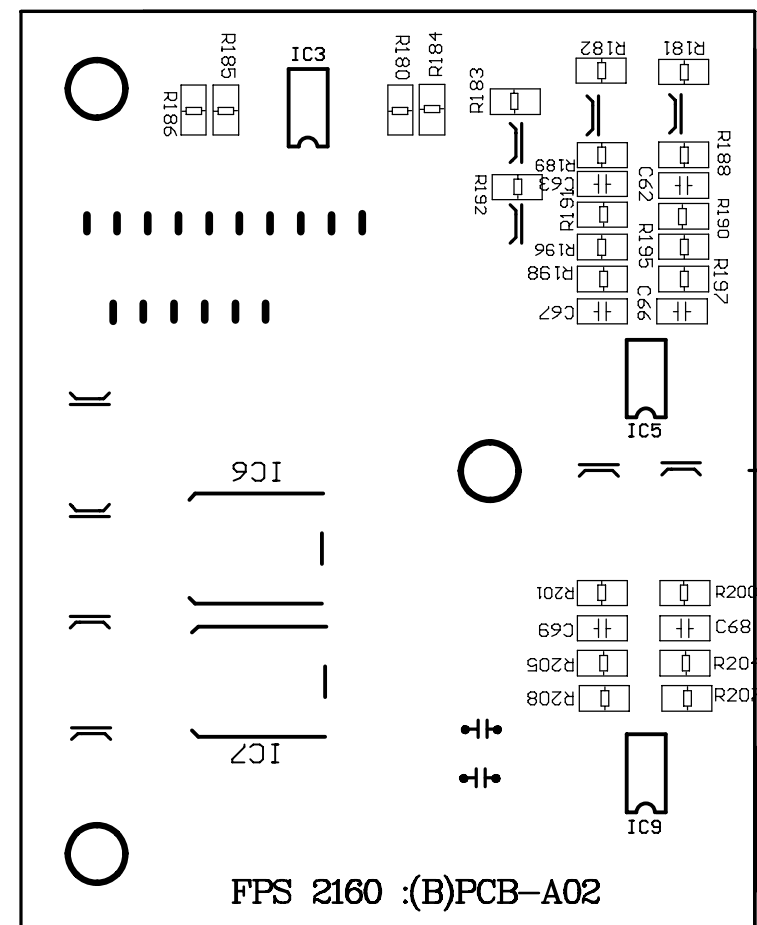
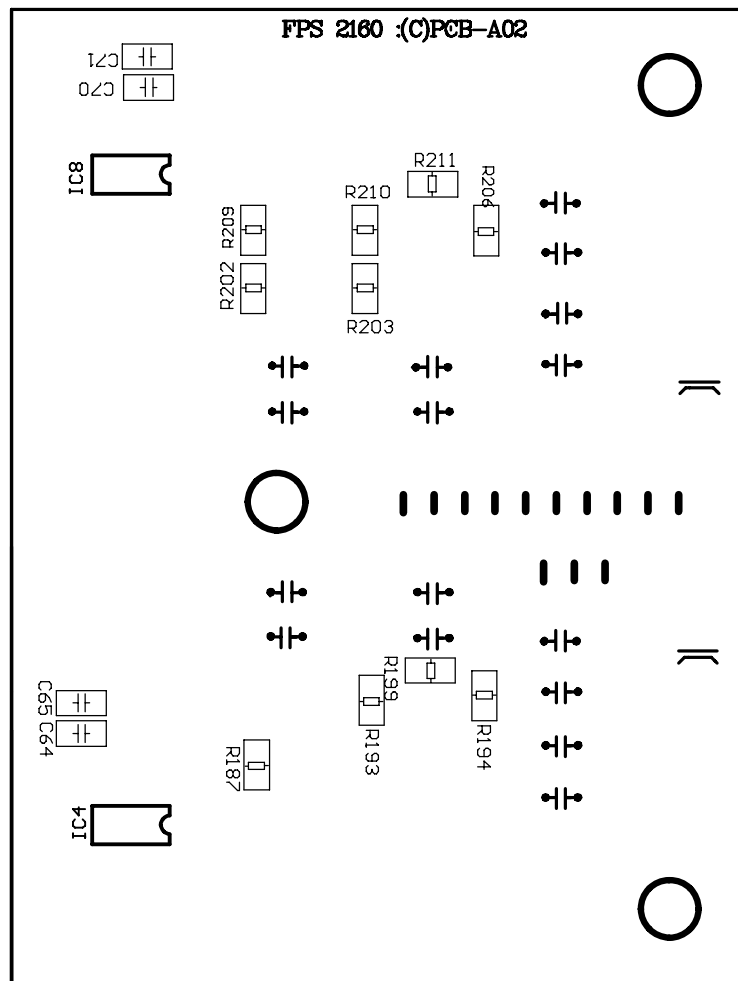
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FPS 2160 : Power Drive Schematic



le 19 Mars 2010



Declaration of Conformity



Reference No.: WT09113954-F-E-E

Applicant: Focal-JMlab

Address: ZI MOLINA LA CHAZOTTE - 108, rue de l'avenir - BP37442353 LA TALAUDIERE CEDEX

Manufacturer: SAGA AUDIO EQUIPMENT CO., LTD.

Address: No.1 Saga Road, Shashui District, Songgang Town, Nanhai, Foshan City, Guangdong, P.R.China

Product: CAR AUDIO

Model No.: FPS2160

Technical Data: 10-15VDC, 200W

Test Standards:

EN 55013: 2001+A1: 2003+A2: 2006

EN 55020: 2007

The above product has been tested by us with the listed standards and found in compliance with the European Electromagnetic Compatibility Directive 2004/108/EC. It is possible to use CE marking to demonstrate the compliance with this EMC Directive.

EN 55013: Sound and television broadcast receivers and associated equipment- Radio disturbance characteristics - Limits and methods of measurement
EN 55020: Sound and television broadcast receivers and associated equipment - Immunity characteristics - Limits and methods of measurement

The referred test report shows that the product complies with standards recognized as giving presumption of compliance with the essential requirements in the above listed EU Directive. Other relevant Directives have to be observed.

After preparation of the necessary technical documentation as well as the conformity declaration, the CE marking as shown below can be affixed on the equipment.



Date: January 1, 2010

CE

The statement is based on a single evaluation of the sample of above mentioned products. It does not imply an assessment of the whole production.

WALTEK SERVICES CO., LTD.

Add: 128, West Tower, Audi Building, No.2003 Binhe Rd., Futian District, Shenzhen, China.
Tel: 86-755-83551033 Fax: 86-755-83552400
Http://www.waltek.com.cn E-mail: info@waltek.com.cn

FPS 2300RX

 symmetric amplifier



product N° 950300100772

main board FPS 2300RX SMT+DIP

unit PCS

version N°

level	material No	material name	material specification	Amount of sub-parts	unit	Drawing locations
1	920304700345	main board	FPS 2300RX(A)	1	PCS	FR-42A, 1.6T
2	920300600069	chip capacitor 0805	22P/50V ±5% ROHS	8	PCS	C10, C13, C16, C17, C21, C22,C24, C25
3	920300600082	chip capacitor 0805	104P/50V ±10% ROHS	8	PCS	C9, C19,C14, C15, C23, C27, C28, C29
4	920300600092	chip capacitor 0805	103P/50V ±5% ROHS	4	PCS	C2, C3, C5, C6
5	920300600106	chip capacitor 0805	102P/100V ±5% ROHS	2	PCS	C1, C4
6	920300600107	chip capacitor 0805	471P/50V ±5% ROHS	2	PCS	C11, C12
7	920300600108	chip capacitor 0805	472P/50V ±5% ROHS	1	PCS	C8
8	920300600109	chip capacitor 0805	821P/50V ±5% ROHS	2	PCS	C18, C20
9	920301100036	SMD Aluminium 0550	22UF/25V	12	PCS	E17,E18,E19,E20,E21,E22,E24,E25,E26,E27,E28,E29
10	920301100044	SMD Aluminium 0550	47UF/16V ROHS	4	PCS	E23, E30,E15, E16
11	920301100049	SMD Aluminium 0670	220UF/16V ROHS	1	PCS	E31
12	920302100159	chip resistor 0805	100KΩ ±1% ROHS	4	PCS	R90, R102, R196, R197
13	920302100191	chip resistor 0805	20KΩ ±1% ROHS	6	PCS	R129, R133, R134, R136, R142,R156
14	920302100198	chip resistor 0805	1.8KΩ ±1% ROHS	4	PCS	R113, R114, R118, R119
15	920302700016	SMD zener diodes SOD-323	5.1V	1	PCS	D2
16	920302700031	chip diode SOD-323	20V ROHS	6	PCS	D6, D7, D8, D9, D10, D11
17	920303000009	chip diode SOD-323	1N4148	8	PCS	D3, D12, D13, D14, D15, D16,D17, D18
18	920303000083	chip diode SOD-214	1N5401 ROHS	3	PCS	D1,D4, D5
19	920303100006	SMT double diode SOT-23	BAV99/S	17	PCS	Q7,Q8,Q11,Q14,Q17,Q21,Q23,Q28,Q31,Q34,Q36,Q45,Q49,Q56,Q60,Q61,Q66
20	920303200088	SMD transistors SOT-223	A1013 ROHS	1	PCS	Q1
21	920303200089	SMD transistors SOT-223	C2383 ROHS	6	PCS	Q10, Q35, Q43, Q44, Q64, Q67
22	920303200102	SMD transistors SOT-23	2N5401 ROHS	13	PCS	Q25, Q12, Q15, Q16, Q29, Q30, Q33,Q48, Q50, Q51, Q54, Q55, Q57
23	920303200103	SMD transistors SOT-23	2N5551 ROHS	12	PCS	Q47, Q58,Q6, Q9, Q18, Q19, Q26, Q27,Q46, Q52, Q53, Q59
24	920303200108	SMD transistors SOT-23	2N4401 ROHS	11	PCS	Q2, Q3, Q5, Q20, Q22, Q24, Q37,Q40, Q42, Q69, Q70

25	920303200109	SMD transistors SOT-23	2N4403 ROHS	8	PCS	Q4, Q13, Q32, Q38, Q39, Q41, Q62, Q65
26	920303500332	SMD IC S0-8	LM393	1	PCS	IC2
27	920303500449	SMD IC S0-16	TL494I ROHS(125)	1	PCS	IC1
28	920306600004	chip resistor 0805	10K Ω $\pm$ 1%	25	PCS	R57, R58, R59, R61, R62, R77, R87, R91, R97, R99, R108, R115, R124, R139, R140, R146, R150, R152, R158, R159, R170, R175, R181, R186, R199
29	920306600005	chip resistor 0805	8.2K Ω $\pm$ 1%	1	PCS	R80
30	920306600007	chip resistor 0805	1.5K Ω $\pm$ 1%	5	PCS	R128, R144, R155, R163, R202
31	920306600009	chip resistor 0805	0 Ω $\pm$ 1%	1	PCS	R198
32	920306600011	chip resistor 0805	1K Ω $\pm$ 1% ROHS	20	PCS	R78, R93, R101, R107, R126, R130, R131, R132, R135, R145, R153, R162, R169, R174, R182, R187, R193, R195, R33, R35
33	920306600015	chip resistor 0805	3.3K Ω $\pm$ 1% ROHS	9	PCS	R51, R68, R92, R141, R157, R171, R177, R179, R185
34	920306600016	chip resistor 0805	4.7K Ω $\pm$ 1% ROHS	10	PCS	R71, R72, R73, R86, R89, R98, R143, R148, R149, R154
35	920306600017	chip resistor 0805	5.6K Ω $\pm$ 1% ROHS	3	PCS	R70, R138, R160
36	920306600024	chip resistor 0805	15K Ω $\pm$ 1% ROHS	1	PCS	R67
37	920306600025	chip resistor 0805	2.2K Ω $\pm$ 1% ROHS	5	PCS	R76, R109, R112, R120, R122
38	920306600026	chip resistor 0805	22K Ω $\pm$ 1% ROHS	9	PCS	R60, R63, R81, R83, R84, R147, R151, R176, R180
39	920306600029	chip resistor 0805	3.9K Ω $\pm$ 1% ROHS	8	PCS	R36, R46, R47, R54, R55, R104, R105, R167
40	920306600030	chip resistor 0805	47K Ω $\pm$ 1% ROHS	5	PCS	R106, R125, R172, R183, R88
41	920306600031	chip resistor 0805	470K Ω $\pm$ 1% ROHS	1	PCS	R66
42	920306600035	chip resistor 0805	220 Ω $\pm$ 1% ROHS	18	PCS	R6, R7, R8, R9, R10, R23, R25, R31, R39, R43, R49, R53, R65, R95, R127, R166, R168, R188
43	920306600037	chip resistor 0805	100 Ω $\pm$ 1% ROHS	4	PCS	R100, R137, R161, R201
44	920306600041	chip resistor 0805	220K Ω $\pm$ 1% ROHS	2	PCS	R178, R189
45	920306600044	chip resistor 0805	6.2K Ω $\pm$ 1% ROHS	2	PCS	R74, R75
46	920306600053	chip resistor 0805	68 Ω $\pm$ 1% ROHS	12	PCS	R1, R2, R3, R4, R5, R14, R18, R24, R26, R27, R29, R40
47	920306600058	chip resistor 0805	150 Ω $\pm$ 1% ROHS	2	PCS	R111, R121

48	920306600059	chip resistor 0805	1.2K Ω $\pm$ 1% ROHS	2	PCS	R110, R123
49	920306600060	chip resistor 0805	270 Ω $\pm$ 1% ROHS	2	PCS	R173, R184
50	920306600061	chip resistor 0805	330K Ω $\pm$ 1% ROHS	4	PCS	R32, R34, R56, R64
51	920306600062	chip resistor 0805	33K Ω $\pm$ 1% ROHS	1	PCS	R69
52	920306600063	chip resistor 0805	3.6K Ω $\pm$ 1% ROHS	2	PCS	R116, R117
53	920306600064	chip resistor 0805	43K Ω $\pm$ 1% ROHS	1	PCS	R79
54	920306600065	chip resistor 0805	470 Ω $\pm$ 1% ROHS	2	PCS	R96, R103
55	920306600073	chip resistor 0805	82K Ω $\pm$ 1% ROHS	1	PCS	R82
56	920306900038	chip resistor 0805	10 Ω $\pm$ 1% ROHS	5	PCS	R11, R12, R41, R42, R48
57	920306900039	chip resistor 0805	1K Ω $\pm$ 1% ROHS	1	PCS	R200
58	920306900041	chip resistor 0805	5.6 Ω $\pm$ 1% ROHS	2	PCS	R192, R194
59	920306900042	chip resistor 0805	220 Ω $\pm$ 1% ROHS	2	PCS	R13, R15
60	920304700346	main board	FPS 2300RX(B)	1	PCS	FR-42A, 1.6T
61	920300600067	chip capacitor 0805	101P/50V $\pm$ 5% ROHS	4	PCS	C54, C55, C63, C64
62	920300600069	chip capacitor 0805	22P/50V $\pm$ 5% ROHS	6	PCS	C50, C53, C58, C59, C60, C61
63	920301100004	SMD Aluminium 0650	47UF/35V	2	PCS	E34, E36
64	920301100044	SMD Aluminium 0550	47UF/16V ROHS	2	PCS	E42, E43
65	920301100045	SMD Aluminium 0450	22UF/16V ROHS	6	PCS	E44, E45, E38, E39, E40, E41
66	920301100049	SMD Aluminium 0670	220UF/16V ROHS	2	PCS	E35, E37
67	920302100191	chip resistor 0805	20K Ω $\pm$ 1% ROHS	12	PCS	R216, R217, R219, R227, R228, R230, R236, R237, R240, R243, R244, R249
68	920303500131	SMD IC S0-8	NE5532	5	PCS	IC7, IC8, IC9, IC11, IC12
69	920303500508	SMD IC S0-16	SSM2164 ROHS	1	PCS	IC10
70	920306600004	chip resistor 0805	10K Ω $\pm$ 1%	7	PCS	R241, R242, R245, R248, R226, R232, R233

71	920306600009	chip resistor 0805	0 Ω $\pm$ 1%	2	PCS	R222, R223
72	920306600026	chip resistor 0805	22K Ω $\pm$ 1% ROHS	2	PCS	R221, R224
73	920306600037	chip resistor 0805	100 Ω $\pm$ 1% ROHS	2	PCS	R246, R247
74	920306600038	chip resistor 0805	2K Ω $\pm$ 1% ROHS	2	PCS	R220, R225
75	920306600045	chip resistor 0805	7.5K Ω $\pm$ 1% ROHS	1	PCS	R250
76	920306600062	chip resistor 0805	33K Ω $\pm$ 1% ROHS	4	PCS	R215, R234, R238, R239
77	920306600066	chip resistor 0805	27K Ω $\pm$ 1% ROHS	2	PCS	R218, R229
78	920306600069	chip resistor 0805	30K Ω $\pm$ 1% ROHS	4	PCS	R231, R235, R251, R252
79	920304700347	main board	FPS 2300RX(C)	1	PCS	FR-42A,1.6T
80	920301100044	SMD Aluminium 0550	47UF/16V ROHS	2	PCS	E32, E33
81	920303500131	SMD IC S0-8	NE5532	2	PCS	IC3, IC4
82	920306600001	chip resistor 0805	100K Ω $\pm$ 1%	2	PCS	R208, R212
83	920306600015	chip resistor 0805	3.3K Ω $\pm$ 1% ROHS	2	PCS	R209, R211
84	920306600044	chip resistor 0805	6.2K Ω $\pm$ 1% ROHS	4	PCS	R204, R206, R207, R210
85	920306600067	chip resistor 0805	11K Ω $\pm$ 1% ROHS	2	PCS	R203, R205

product N°5509215010004

car amplifier FPS 2300RX (France)

unit PCS

level	material No	material name	material specification	Amount of sub-parts	unit	drawing locations	change/remark
PCB PLUG-IN UNIT							
1	5103391060039	cable	FPS2300RX ROHS	1	SET		
2	5103390270031	single extension	10#(70 core cable)red ROHS	0,292	M	L = 63MM 2PCS, L = 88MM 1PCS, L = 78MM 1PCS (including some of the tin at both ends to open online 4mm)	L = 63MM 2PCS, L = 88MM 1PCS,L = 78MM 1PCS (including some of the tin at both ends to open online 4mm)
3	5103440010061		2P neisbed ROHS	2	PCS	with fans,light time	plug-requisitioned
4	5103440010114		7P neisbed (2.0 space) ROHS	2	PCS		plug-requisitioned
5	5103440010155		5P neisbed (2.0 space) ROHS	1	PCS		plug-requisitioned
6	5103440010162		4P neisbed (2.0 space) ROHS	2	PCS		plug-requisitioned
7	5103530070001	black single extension	16#	0,122	M	L = 122mm 1PCS (including some of the tin at both ends to open online2mm)	must be black
8	5103531190001	orange single extension	16#	0,196	M	L = 196mm 1PCS (mat yellow wax tube,inclusing some of the tin at both ends to open online4mm)	
9	5103540030001	2P red and white cable	26# one with an open line of Block	0.28	M	L = 280mm 1PCS light for spare parts requisitioned from the store put heat shrinkable tube 1 L=15mm 2PCS	
10	5103540120008	4Pred and white cable {space 2.0mm}	26# one with the seat belt pin	0,26	M	L = 70MM 1PCS,L=190MM 1PCS connected small plate	
11	5103540230005	7Pred and white cable {space 2.0mm}	26# one with the seat belt pin	0.045	M	L=45MM connected small plate	
12	5103540230007	7Pred and white cable {space 2.0mm}	26# one with the seat belt pin {4P shielding wire +3P red and white cable row}	0,26	M	L=260MM connected small plate	
13	5103560120006	5P shielding wire {2.0space}	26# one with the seat belt pin	0,195	M	L=195MM connected small plate	
14	5302000060042	PCB splug-in	FPS2300RX chip semi-finished panels	1	PCS		
15	5304000060009	PCB SMD	FPS2300RX(A) ROHS	1	PCS	SMT:950300100772	
16	5103111010017	non inductive resistance	5w0.1Ω(A)cylindrical	16	PCS	R16, R17, R19, R20, R21, R22,R28, R30, R44, R45, R50, R52,R85, R94, R164, R165	
17	5103131140023	electrolytic capacitor	25v2200uf brack 105 16*25(A)XL high frequence low resistor	6	PCS	E5, E6, E7, E8, E9, E10	With explosion-proof lid

18	5103131340037	electrolytic capacitor	50V3300UF brack 105 25*25(A)[golden font on negative pole]	8	PCS	E1, E2, E3, E4, E11, E12, E13,E14	With explosion-proof lid
19	5103200060053	Terylene Capacitor	yellow CL23/100V/224 Rail Cover ROHS	1	PCS	C26	
20	5103240030018	porcelain capacitor	104P ROHS	1	PCS	C7	
21	5103250080003	audion	2N5551 Rail Cover	2	PCS	Q63,Q68 0.6 L=4mm 6PCS	
22	5103250080011	audion	A1013 Rail Cover	1	PCS	Q71	
23	5103440030001	adjustable resistance	1K	2	PCS	VR1, VR2	
24	5304000060010	PCB SMD	FPS2300RX(B) ROHS	1	PCS		
25	5103040010060	integrated package	KA7915	1	PCS	IC6	
26	5103040010062	integrated package	KA7815	1	PCS	IC5	
27	5103100230002	wire-wound resistor	5W220ΩT=71mm Rail Cover() 6*17mm green ROHS	2	PCS	R213, R214	
28	5103200060056	Terylene Capacitor	yellow CL23/100V/473 Rail Cover ROHS	4	PCS	C51, C52, C56, C57	
29	5103240030018	porcelain capacitor	104P ROHS	6	PCS	C48, C49, C62, C65, C66, C67	
30	5304000060011	PCB SMD	FPS2300RX(C) ROHS	1	PCS		
31	5103200060024	Terylene Capacitor	yellow CL23/100V/273 Rail Cover ROHS	2	PCS	C40, C47	
32	5103200060041	Terylene Capacitor	yellow CL23/100V/103 Rail Cover ROHS	2	PCS	C41, C46	
33	5103200060042	Terylene Capacitor	yellow CL23/100V/333 Rail Cover ROHS	2	PCS	C30, C37	
34	5103200060047	Terylene Capacitor	yellow CL23/100V/104 Rail Cover ROHS	4	PCS	C32, C35, C42, C45	
35	5103200060051	Terylene Capacitor	yellow CL23/100V/392 Rail Cover ROHS	2	PCS	C31, C36	
36	5103200060052	Terylene Capacitor	yellow CL23/100V/822 Rail Cover ROHS	2	PCS	C33, C34	
37	5103200060054	Terylene Capacitor	yellow CL23/100V/272 Rail Cover ROHS	2	PCS	C43, C44	
38	5103240030018	porcelain capacitor	104P ROHS	2	PCS	C38, C39	

product N° 5509215010004

car amplifier FPS 2300RX

unit PCS

level	material N°	material name	material specification	Amount of sub-parts	unit	drawing locations	change/remark
PCB SPARE PART							
1	5101280340035	screw	PM3*10 white ROHS	6	PCS		
2	5103030010004	half-bridge	F12C20A	2	PCS	DL1, DL4	
3	5103030010005	half-bridge	F12C20C	2	PCS	DL2, DL3	
4	5103064250080	fuse holder	FPS 2300RX.FUSE.PCB	2	PCS	FR-4 2A (double sided blue oil) double sided blue oil spay tin 1.6T (darker blue)	
5	5103060241031	remote control plate	FPS REMOTE.PCB	1	PCS	94V01A double side blue-oil black line1.6T	remote control Component
6	5103070020001	carbon-film resistor	1/8w0ΩT = 26mm Rail Cover	1	PCS	R3_1	remote control Component
7	5103070020028	carbon-film resistor	1/8w100ΩT = 26mm Rail Cover	1	PCS	R2_1	remote control Component
8	5103070020071	carbon-film resistor	1/8w33KT = 26mm Rail Cover	3	PCS	R1_1, R5_1, R6_1	remote control Component
9	5103070020102	carbon-film resistor	1/8w75KT = 26mm Rail Cover	2	PCS	R4_1, R7_1	remote control Component
10	5103131030003	Polymer capacitor	16v47uf black 85 Rail Cover 5*11(A)	1	PCS	C1_1	remote control Component
11	5103200060003	Terylene Capacitor	yellow CL23/63V/104 Rail Cover ROHS	1	PCS	C2_1	remote control Component
12	5103250060010	diode	1/2W12V Rail Cover T= 26mm ROHS	1	PCS	D1_1	remote control Component
13	5103270040032	WH9011potentiometer(special)	B100K*2-10mm stepping ROHS <_> silver axis	1	PCS	VR1_1	remote control Component
14	5103300020112	luminotron	3 white light illuminated white (astigmatism) ROHS	1	PCS	LED1_1	remote control Component
15	5103330070022	self locking switch	PS-909L-22(grey) ROHS	1	PCS	SK1	remote control Component
16	5103410010001	remote control socket	4P vertical (black) small 13*15mm	1	PCS		remote control Component
17	5103120010004	Thermistor	B50K without cable ROHS	2	PCS	TH1, TH2	
18	5103120010044	Thermistor	insert directly B50K (MF56A) ROHS	2	PCS	RT1, RT2	
19	5103260050056	Mosfet	FQP65N06	12	PCS	IRF3, IRF4, IRF5, IRF6, IRF9,IRF10, IRF12, IRF14, IRF15, IRF16, IRF19, IRF20	
20	5103260050076	power tube	MSGT2810	16	PCS	IRF1, IRF2, IRF7, IRF8, IRF11,RF13, IRF17, IRF18, IRF21,IRF22, IRF23, IRF24, IRF25,IRF26, IRF27, IRF28	

21	5103270040030	WH9011potentiometer	B20K*2-17mm stepping black axis with cross (green) ROHS	1	PCS	VR3	
22	5103270060069	WH9011potentiometer	C50K*2-17mm stepping black axis with cross (green) ROHS	1	PCS	VR4	
23	5103270060071	WH9011potentiometer	C50K*4-17mm stepping black axis with cross (green) ROH	1	PCS	VR5	
24	5103270060072	WH9011potentiometer	C100K*4-17mm stepping black axis with cross (green) ROH	1	PCS	VR6	
25	5103280100008	Lotus jack	AV-8.4-21 black core gold plating ROHS	2	PCS	AV1, AV2 with a black pad,golden husuke,golden screw nut	
26	5103300020110	Acrylic Backlight panel	LED Backlight white light illuminated red 46*46*2 1light Focal	1	PCS		
27	5103300020113	luminotron	ZA35B-RG red and green (green down and ren up, lefr positive and right nagetive){over3.5mm}	1	PCS	LED1	
28	5103310020010	fuse lever	50A ROHS	2	PCS		
29	5103330050060	Toggle switch	SK43D03G6 ROHS	1	PCS	SW1	
30	5103330070022	self locking switch	PS-909L-22(grey) ROHS	1	PCS	SK3	
31	5103330070025	self locking switch	PS-909L-42(grey) ROHS	2	PCS	SK1,SK2	
32	5103410010001	remote control socket	4P vertical (black) small 13*15mm	1	PCS	REMOTE1	
33	5103380020017	Fuse holder	one Fuse holder (BXS-15A) ROHS	2	PCS		
34	5103440010001	others	4.2 soldering ROHS	1	PCS		
35	5103440010164	power socket	(5557-04WA)4P black SIRUBA ROHS	2	PCS		
36	5103450010002	current-limiting resistor	20W 0.01Ω	2	PCS	R37, R38 Line Diameter 1.5(with locator card)	
37	5104140020010	RUBBER MAT	45*30*3mm ROHS	2	PCS		
38	5105190040161	SAJ157Z cast parts speaker terminals ROHS	big 1 reverse black shell gold castings hexagon screw (JSZ1-52)	4	PCS		
39	5105190040162	SAJ163Z cast parts speaker terminals ROHS	big 3 reverse black shell gold castings hexagon screw (JSZ3-56)	1	PCS		
40	5105200010003	Transparent plastic pillars	L=26MM with taping ROHS	6	PCS		

41	5105220020001	sheet copper	L=20MM*0.8 golden ROHS	4	PCS	J5, J6, J7, J8	
42	5105220020053	sheet copper	L=52.5MM{overall length} thick1.2 four feet ROHS	2	PCS		
43	5105220020054	feet copper	L=52.5mm{overall length} thick1.2 gold plating ROHS	10	PCS		
44	5212000000001	Heat Shrink Tubing	0.6 Heat Shrink Tubing	0.48	M	L=10mm 48PCS	
45	5212000000003	Heat Shrink Tubing	2 Heat Shrink Tubing	0.576	M	L=12mm 48PCS	
46	5213000000006	Yellow Wax Tube	6 Yellow Wax Tube	0.2	M	L=200mm For the magnetic ring	
47	5213000000010	Yellow Wax Tube	5 Yellow Wax Tube	0.2	M	L=200mm For the magnetic ring	
48	5215070010010	tin bar	there are lead{Anson} SnPb63/37	0.038	KG		
49	5301000080063	Magnet	44 5:13{0.8*14/0.8*8}	2	PCS		
50	5104010010015	magnetic core	44 ROHS	2	PCS		
51	5204110010006	enamelled wire	QA-1 0.8 red	0.09	KG	Subprime 13circles 0.8*8	
52	5204110010028	enamelled wire	QZ-2 0.8 natural color	0.07	KG	Subprime 5circles 0.8*14	

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car amplifier FPS 2300RX (France)

unit PCS

Level	Material Code	Material name	Material Specifications	Amount of sub-parts	Unit	Drawing locations
MOUNT						
1	5101210010020	IC Tube Tablet	Punching Big preforming ROHS	8	PCS	fixed power tube
2	5101210010021	IC Tube Tablet	Punching Small preforming ROHS	4	PCS	
3	5101210010055	IC Tube Tablet	26*11*2 4.3 hole ROHS	4	PCS	
4	5101280050028	screw	BM3*6 whiteROHS	7	PCS	fixed PCB,thermal,soldering
5	5101280050051	screw	BM4*14 whiteROHS	12	PCS	fixed tube
6	5101280140049	screw	CM4*10 BNI(BN)ROHS	6	PCS	fixed adjusted surface
7	5101280140050	screw	CM4*4 BNI BN ROHS	3	PCS	fixed adjusted base
8	5101280230018	screw	KB3*6 white ROHS	3	PCS	fixed backlight panel
9	5101280240015	screw	KM3*6 black ROHS	4	PCS	fixed fan top cover
10	5101280240049	screw	KM4*14 white ROHS	4	PCS	fixed mosfet
11	5101280240050	screw	KM3*30 white ROHS	4	PCS	fixed fan blacket
12	5101280340035	screw	PM3*10 white ROHS	6	PCS	fixed small plate
13	5101280300058	screw	PA2.6*10 BN ROHS	4	PCS	fixed fuse
14	5101300010016	star washer	3 ROHS	1	PCS	soldering pads
15	5101300010017	flat-mediated	3 white ROHS	2	PCS	thermal
16	5101300020007	bomb-mediated	4 white ROHS	16	PCS	fixed tube
17	5101300020011	bomb-mediated	3 white ROHS	2	PCS	thermal
18	5103340020045	fan	8025 with cable L=80MM Neilsbed ROHS	1	PCS	change for 1500RPM (with Focal logo)
19	5104140020014	RUBBER MAT	30*15*8(put 3M glue on single side) ROHS	1	PCS	mat PCB

20	5105200020038	Fan strengthen the cushion cover(copper]	L=16.9mm ROHS PFS series	4	PCS	
21	5105250020013	left-down rubber feet	PFS GE ROHS	2	PCS	
22	5105250020014	right-down rubber feet	PFS GE ROHS	2	PCS	
23	5105250020015	right-up rubber top	PFS GE ROHS	2	PCS	
24	5105250020016	left-up rubber top	PFS GE ROHS	2	PCS	
25	5106170390001	illuminated plastic logo	SAL00097S	1	PCS	
26	5106260010129	blister	1 cast part blister	4	PCS	
27	5106260010130	blister	3 cast part blister	1	PCS	
28	5208000000014	sheet mica	with hole[40*22] Focal	8	PCS	
29	5208000000015	sheet mica	with hole[26*16] Focal	8	PCS	
30	5214000000014	Switch sponge	16*7*1.5 ROHS	1	PCS	
31	5214000000172	sponge	FPS series 1 cast part sponge-rubber pad ROHS	4	PCS	
32	5214000000173	sponge	FPS series 3 cast part sponge-rubber pad ROHS	1	PCS	
33	5216000000186	Other Accessories	single side gummed corduroy	0.0005	M2	25*20
34	5401080010062	front cover	Focal General fan cover ANODIZED	1	PCS	
35	5105410040001	others	RED INSULATOR	2	PCS	fixed fan top cover
36	5401260010013	supporting plate	FPS GE fan cover blacket board ANODIZED	1	PCS	
37	5402010160167	aluminium cover	FPS2300RX with hair 7C L=377MM	1	PCS	0
38	5402010060036	die-casting heatsink	FPS2300RX/4160 ANODIZED	1	PCS	
39	5402110010040	remote control	Focal wired remote shellL=39.5 with little hair 7C black	1	PCS	
40	5101280120039	screw	CA3*6 BN ROHS screw caps thickness2.0	8	PCS	Fix Front and rear panels

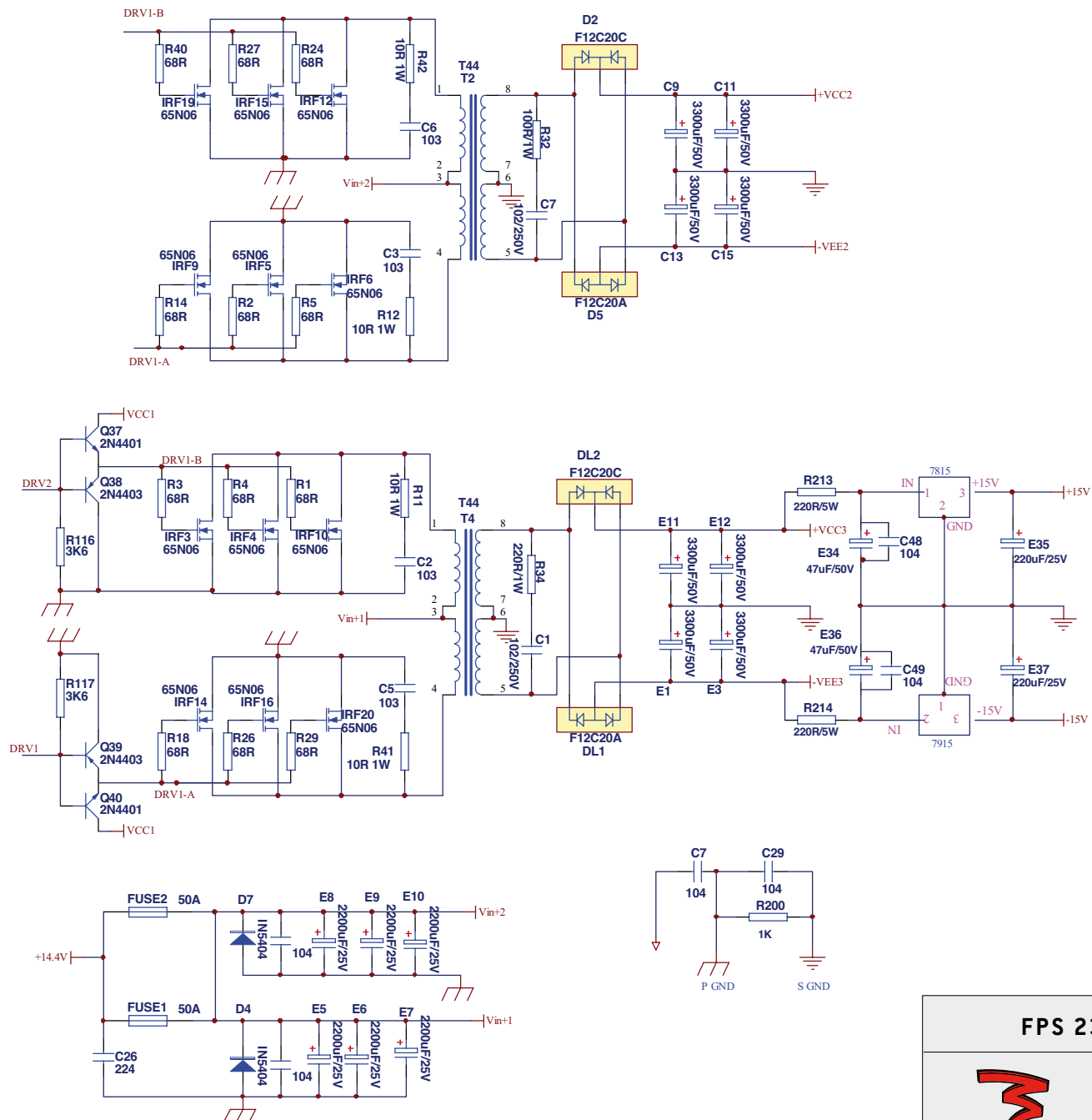
41	5101290010005	screw nut	7special white potentiometer	2	PCS	
42	5105140020038	plastic knob	FPS series (remote control) ROHS	1	PCS	for remote control
43	5402120010025	Aluminum wired remote front panel	Focal hairline7C	1	PCS	
44	5402130010038	Aluminum wired remote back panel	Focal hairline7C	1	PCS	
45	5405450020041	plastic square knob	4.5*4.5*12.5MM BLACK ROHS	1	PCS	for remote panel
46	5402270010008	aluminium adjusting plate	FPS2300RX aluminium adjusting plate with little hair7C	1	PCS	
47	5405450020041	plastic square knob	4.5*4.5*12.5MM BLACK ROHS	2	PCS	for remote panel
48	5405450020042	plastic square knob	4.5*4.5*12.5MM RED ROHS	1	PCS	For direct mode switch

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car amplifier FPS 2300RX(France)

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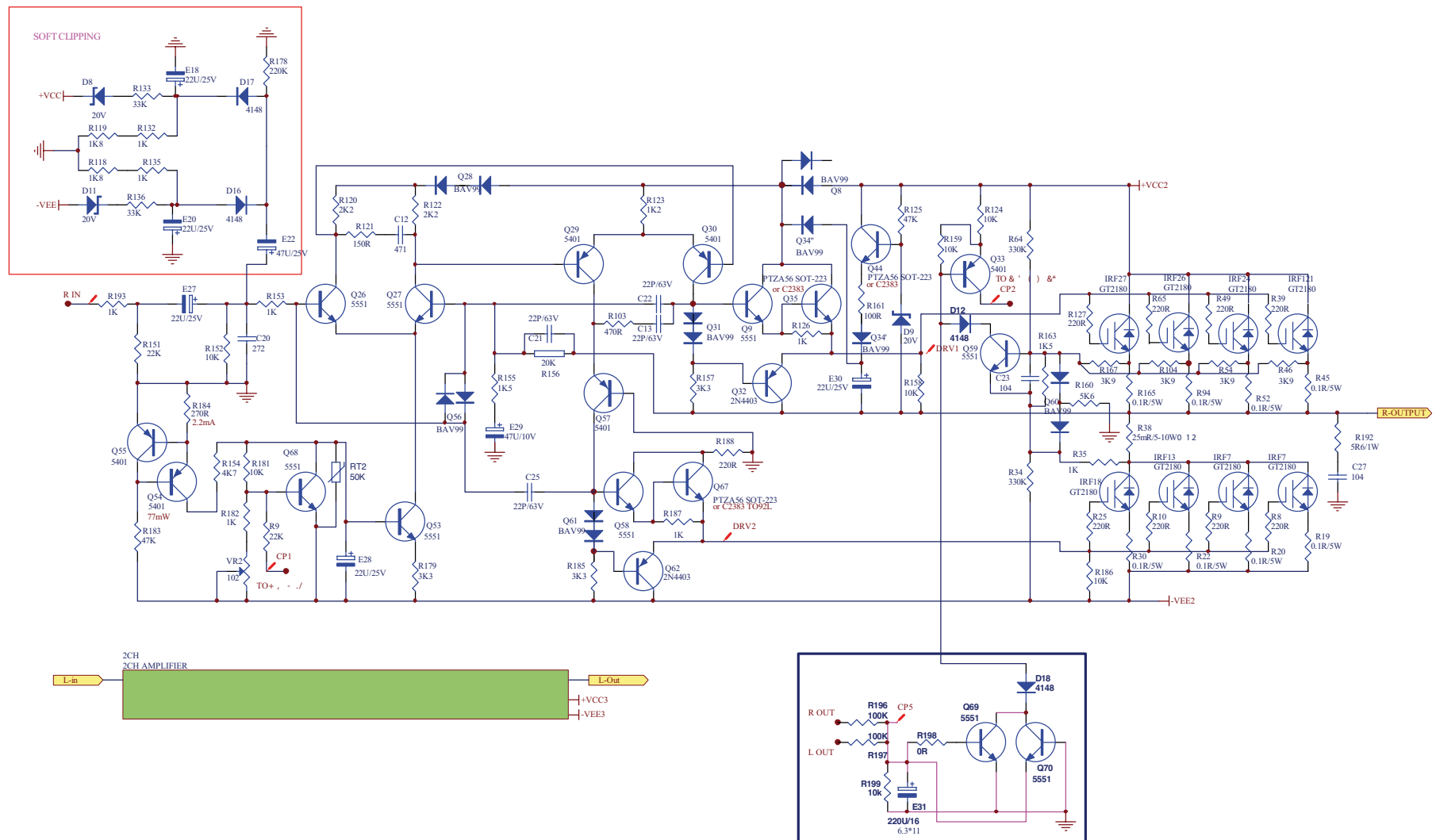
level	material No	material name	material specification	Amount of sub-parts	unit	Drawing locations
PACKING						
1	5101270020002	Accessory key	hexagon key 3 ROHS	1	PCS	
2	5101280010031	screw	BA3*10 black ROHS	2	PCS	Only for remote control
3	5101280530007	screw	TA4*50 darker black ROHS	4	PCS	
4	5101300010008	flat-mediated	3 black ROHS	2	PCS	Only for remote control
5	5101300010009	flat-mediated	4 black ROHS	4	PCS	
6	5101300020004	bomb-mediated	3 black ROHS	2	PCS	Only for remote control
7	5101300020005	bomb-mediated	4 black ROHS	4	PCS	
8	5103310020010	fuse lever	50A ROHS	2	PCS	
9	5105370010001	Lotus seat cap ROHS		2	PCS	
10	5106010060047	Carton	FPS2300RX	0,5	PCS	2PCS/box
11	5106030060078	Gift box	FPS2300RX	1	PCS	
12	5106150011645	Carton paster	FPS2300RX black printing on yellow ground 50*102 a duplicate (see note No.jump)	2	PCS	
13	5106150011647	Body code paster	FPS2300RX black printing on grey ground 26*11.5mm (No.jump see remarks)	1	PCS	
14	5106150011656	Giftbox paster	FPS2300RX black printing on grey ground	1	PCS	
15	5106200010002	Zip-lock bag	12*13 P0 material	1	PCS	mounted wired remote
16	5106210010095	environmental bags	65*36CM Thinken(Focal dedicated printing)	1	PCS	
17	5106220010001	Zip-lock bag	7*11	1	PCS	mount spare part
18	5106220010009	Zip-lock bag	13*18	1	PCS	mounted wired remote
19	5106220010005	Zip-lock bag	munual plastic(Focal dedicated printing)	1	PCS	Packaging Manual
20	5106260010128	pearl wool	No.52 three-piece suit	1	SET	
21	5210000000001	tape	transparent adhesive tape 48*100Y	0.04	PCS	
22	5216000000147	Other Accessories	10g desiccant(ROHS)	1	PCS	
23	5218001010004	remote cable	4P black wire-line reverse5M ROHS (4P4C)	1	PCS	



FPS 2300RX : Power Supply



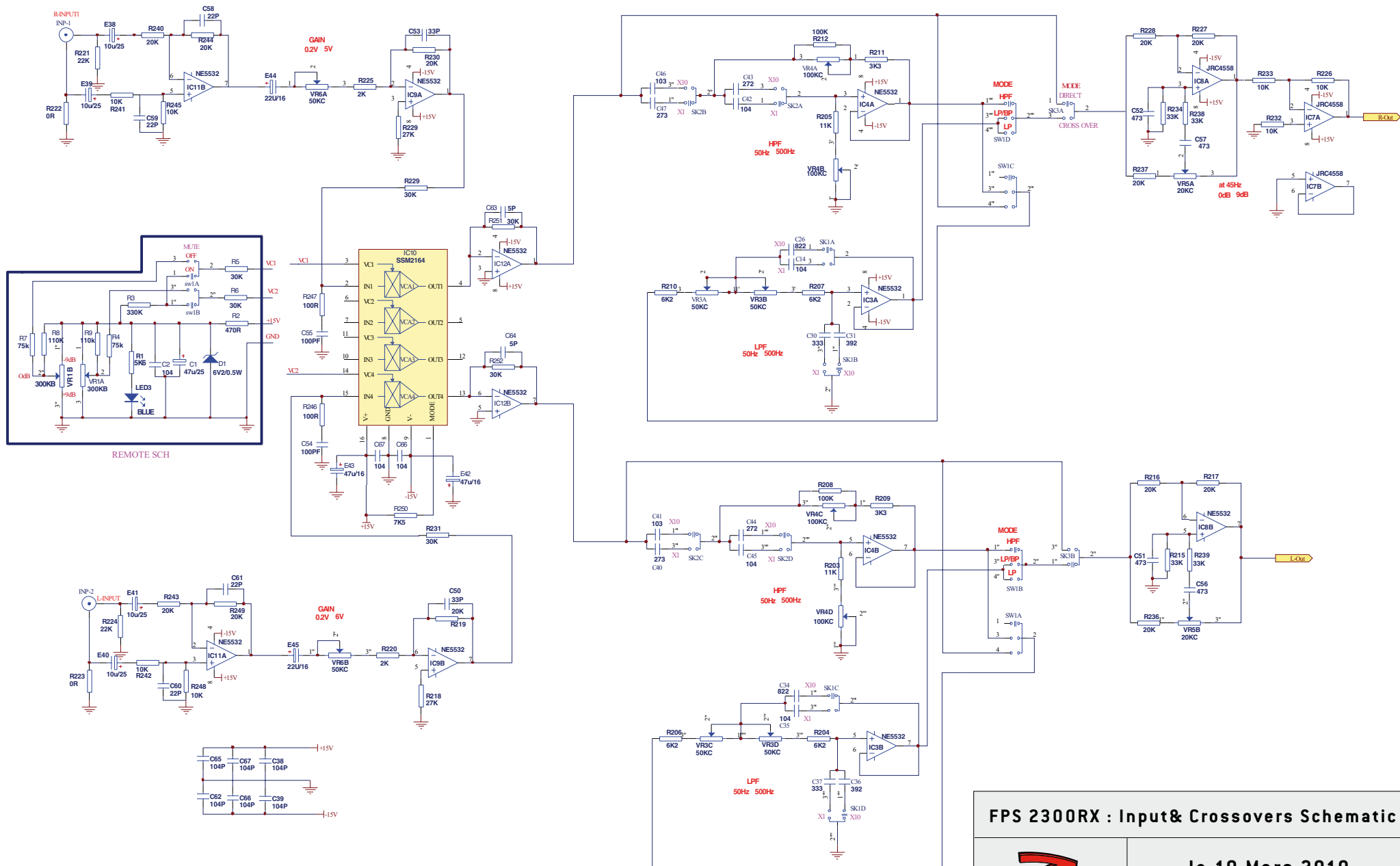
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FPS 2300RX : Amplifier Schematic



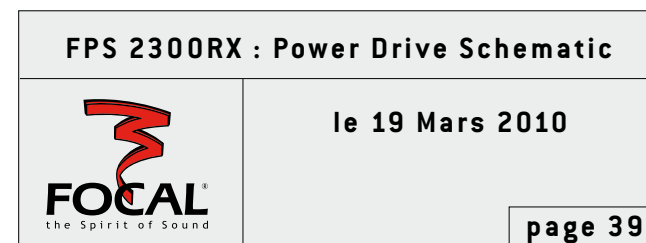
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FPS 2300RX : Input & Crossovers Schematic



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Declaration of Conformity



Reference No.: WT09113953-F-E-E
Applicant: Focal-JMlab
Address: ZI MOLINA LA CHAZOTTE - 108, rue de l'avenir -
BP37442353 LA TALAUDIERE CEDEX
Manufacturer: SAGA AUDIO EQUIPMENT CO., LTD.
Address: No. 1 Saga Road, Shashui District, Songgang Town,
Nanhai, Foshan City, Guangdong, P.R.China
Product: CAR AUDIO
Model No.: FPS2300RX
Technical Data: 10-15VDC, 300W

Test Standards:

EN 55013: 2001+A1: 2003+A2: 2006
EN 55020: 2007

The above product has been tested by us with the listed standards and found in compliance with the European Electromagnetic Compatibility Directive 2004/108/EC. It is possible to use CE marking to demonstrate the compliance with this EMC Directive.

EN 55013: Sound and television broadcast receivers and associated equipment-
Radio disturbance characteristics - Limits and methods of measurement
EN 55020: Sound and television broadcast receivers and associated equipment -
Immunity characteristics - Limits and methods of measurement

The referred test report shows that the product complies with standards recognized as giving presumption of compliance with the essential requirements in the above listed EU Directive. Other relevant Directives have to be observed.

After preparation of the necessary technical documentation as well as the conformity declaration, the CE marking as shown below can be affixed on the equipment.



CE

The statement is based on a single evaluation of the sample of above mentioned products. It does not imply an assessment of the whole production.

WALTER SERVICES CO., LTD.

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FPS 4160

 **symmetric** amplifier



product N°950300100771

main board FPS 4160 SMT+DIP

unit PCS

level	material No	material name	material specification	Amount of sub-parts	unit	Drawing locations
1	920304700341	main board	FPS 4160(A)	1	PCS	FR-42A 1.6T
2	920300600069	chip capacitor 0805	22P/50V ±5% ROHS	12	PCS	C55,C53, C54, C57, C58, C60, C61,C66, C67, C68, C69, C70
3	920300600082	chip capacitor 0805	104P/50V ±10% ROHS	16	PCS	C15, C16, C18, C19, C20, C23,C49, C50, C62, C63, C64, C65,C21, C22, C47, C48
4	920300600092	chip capacitor 0805	103P/50V ±5% ROHS	4	PCS	C8, C9, C11, C12
5	920300600106	chip capacitor 0805	102P/100V ±5% ROHS	2	PCS	C7, C10
6	920300600108	chip capacitor 0805	472P/50V ±5% ROHS	1	PCS	C14
7	920301100004	SMD Aluminium 0650	47UF/35V	2	PCS	C28, C39
8	920301100044	SMD Aluminium 0550	47UF/16V ROHS	4	PCS	E12, E16,C24, C25
9	920301100045	SMD Aluminium 0450	22UF/16V ROHS	12	PCS	E17,E18,E20,E21,E22,E23,E26,E27,E28,E29,E25,E30
10	920301100049	SMD Aluminium0670	220UF/16V ROHS	4	PCS	C37, C38,E19, E24
11	920302100159	chip resistor 0805	100KΩ ±1% ROHS	10	PCS	R125, R137, R163, R164, R165,R170, R179, R180, R193, R194
12	920302100191	chip resistor 0805	20KΩ ±1% ROHS	8	PCS	R171, R174, R177, R182, R200,R206, R211, R220
13	920302100198	chip resistor 0805	1.8KΩ ±1% ROHS	4	PCS	R205, R212, R214, R217
14	920302700016	SMD zener diodes SOD-323	5.1V	1	PCS	D7
15	920303000009	chip diode SOD-323	1N4148	2	PCS	D8, D9
16	920303000083	chip diode DO-214	1N5401 ROHS	3	PCS	D6,D4, D5
17	920303100006	SMD both diode SOT-23	BAV99/S	3	PCS	Q32, Q34, Q39
18	920303200088	SMD audion SOT-223	A1013 ROHS	1	PCS	Q26
19	920303200102	SMD audion SOT-23	2N5401 ROHS	1	PCS	Q36
20	920303200108	SMD audion SOT-23	2N4401 ROHS	13	PCS	Q27,Q28,Q30,Q31,Q33,Q35,Q38,Q40,Q43,Q44,Q45,Q46,Q47

21	920303200109	SMD audion SOT-23	2N4403 ROHS	4	PCS	Q29, Q37, Q41, Q42
22	920303500131	SMT IC S0-8	NE5532	6	PCS	IC5, IC6, IC7, IC8, IC9, IC10
23	920303500332	SMT IC S0-8	LM393	1	PCS	IC2
24	920303500449	SMT IC S0-16	TL494I ROHS[125]	1	PCS	IC1
25	920306600004	chip resistor 0805	10K Ω $\pm$ 1%	22	PCS	R83,R84,R85,R87,R88,R104,R122,R126,R132,R134,R142,R156,R176,R184,R198, R199,R207,R208,R209,R210,R219,R221
26	920306600005	chip resistor 0805	8.2K Ω $\pm$ 1%	1	PCS	R112
27	920306600007	chip resistor 0805	1.5K Ω $\pm$ 1%	5	PCS	R131, R138, R141, R145, R150
28	920306600009	chip resistor 0805	0 Ω $\pm$ 1%	5	PCS	R172, R175, R185, R186, R189
29	920306600011	chip resistor 0805	1K Ω $\pm$ 1% ROHS	8	PCS	R37, R42, R91, R93, R106, R128,R136, R151
30	920306600015	chip resistor 0805	3.3K Ω $\pm$ 1% ROHS	7	PCS	R80, R96, R127, R178, R181,R187, R188
31	920306600016	chip resistor 0805	4.7K Ω $\pm$ 1% ROHS	8	PCS	R98, R100, R101, R121, R124,R133, R154, R155
32	920306600017	chip resistor 0805	5.6K Ω $\pm$ 1% ROHS	1	PCS	R99
33	920306600024	chip resistor 0805	15K Ω $\pm$ 1% ROHS	5	PCS	R95, R201, R202, R203, R218
34	920306600025	chip resistor 0805	2.2K Ω $\pm$ 1% ROHS	1	PCS	R105
35	920306600026	chip resistor 0805	22K Ω $\pm$ 1% ROHS	9	PCS	R86, R89, R111, R114, R115,R173, R183, R192, R195
36	920306600029	chip resistor 0805	3.9K Ω $\pm$ 1% ROHS	8	PCS	R60, R70, R139, R160,R43, R63, R107, R140
37	920306600030	chip resistor 0805	47K Ω $\pm$ 1% ROHS	1	PCS	R123
38	920306600031	chip resistor 0805	470K Ω $\pm$ 1% ROHS	1	PCS	R94
39	920306600035	chip resistor 0805	220 Ω $\pm$ 1% ROHS	16	PCS	R38, R39, R40, R41, R46, R57,R64, R65, R71, R77, R78, R79,R108, R130, R146, R159
40	920306600037	chip resistor 0805	100 Ω $\pm$ 1% ROHS	2	PCS	R135, R149
41	920306600044	chip resistor 0805	6.2K Ω $\pm$ 1% ROHS	2	PCS	R102, R103
42	920306600053	chip resistor 0805	68 Ω $\pm$ 1% ROHS	12	PCS	R32, R33, R34, R35, R36, R48,R52, R61, R62, R66, R67, R72
43	920306600061	chip resistor 0805	330K Ω $\pm$ 1% ROHS	8	PCS	R109, R116, R117, R118, R119,R147, R152, R158

44	920306600062	chip resistor 0805	33K Ω $\pm$ 1% ROHS	1	PCS	R97
45	920306600063	chip resistor 0805	3.6K Ω $\pm$ 1% ROHS	2	PCS	R143, R144
46	920306600064	chip resistor 0805	43K Ω $\pm$ 1% ROHS	1	PCS	R110
47	920306600066	chip resistor 0805	27K Ω $\pm$ 1% ROHS	4	PCS	R204, R216,R213, R215
48	920306600067	chip resistor 0805	11K Ω $\pm$ 1% ROHS	4	PCS	R166, R167, R168, R169
49	920306600073	chip resistor 0805	82K Ω $\pm$ 1% ROHS	1	PCS	R113
50	920306900038	chip resistor 0805	10 Ω $\pm$ 1% ROHS	4	PCS	R44, R45, R73, R74
51	920306900039	chip resistor 0805	1K Ω $\pm$ 1% ROHS	1	PCS	R157
52	920306900041	chip resistor 0805	5.6 Ω $\pm$ 1% ROHS	4	PCS	R190, R191, R196, R197
53	920306900042	chip resistor 0805	220 Ω $\pm$ 1% ROHS	2	PCS	R47, R49
54	920304700342	main board	FPS 4160[D]	4	PCS	FR-42A 1.6T
55	920300600069	chip capacitor 0805	22P/50V $\pm$ 5% ROHS	16	PCS	C1, C3, C4, C6
56	920300600107	chip capacitor 0805	471P/50V $\pm$ 5% ROHS	4	PCS	C2
57	920300600109	chip capacitor 0805	821P/50V $\pm$ 5% ROHS	4	PCS	C5
58	920301100044	SMD Aluminium 0550	47UF/16V ROHS	4	PCS	E4
59	920301100045	SMD Aluminium 0450	22UF/16V ROHS	8	PCS	E2, E3
60	920301100055	SMD Aluminium 0450	10UF/25V ROHS	4	PCS	E1
61	920302100191	chip resistor 0805	20K Ω $\pm$ 1% ROHS	4	PCS	R18
62	920302700031	chip diode SOD-323	20V ROHS	4	PCS	D2
63	920303000009	chip diode SOD-323	IN4148	8	PCS	D1, D3
64	920303100006	SMD both diode SOT-23	BAV99/S	28	PCS	Q2, Q4, Q7, Q10, Q15, Q19, Q25
65	920303200089	SMD both audion SOT-223	C2383 ROHS	12	PCS	Q3, Q13, Q23
66	920303200102	SMD audion SOT-23	2N5401 ROHS	24	PCS	Q5, Q8, Q9, Q18, Q20, Q21

67	920303200103	SMD both audion S0T-23	2N5551 ROHS	24	PCS	Q1, Q11, Q12, Q17, Q16, Q22
68	920303200109	SMD audion S0T-23	2N4403 ROHS	8	PCS	Q6, Q24
69	920306600004	chip resistor 0805	10K Ω $\pm$ 1%	24	PCS	R4, R11, R13, R16, R25, R30
70	920306600007	chip resistor 0805	1.5K Ω $\pm$ 1%	4	PCS	R19
71	920306600011	chip resistor 0805	1K Ω $\pm$ 1% ROHS	20	PCS	R1, R2, R20, R24, R29
72	920306600014	chip resistor 0805	270 Ω $\pm$ 1% ROHS	4	PCS	R28
73	920306600015	chip resistor 0805	3.3K Ω $\pm$ 1% ROHS	12	PCS	R17, R22, R26
74	920306600016	chip resistor 0805	4.7K Ω $\pm$ 1% ROHS	4	PCS	R12
75	920306600017	chip resistor 0805	5.6K Ω $\pm$ 1% ROHS	4	PCS	R10
76	920306600025	chip resistor 0805	2.2K Ω $\pm$ 1% ROHS	8	PCS	R7, R9
77	920306600026	chip resistor 0805	22K Ω $\pm$ 1% ROHS	8	PCS	R14, R31
78	920306600030	chip resistor 0805	47K Ω $\pm$ 1% ROHS	8	PCS	R3, R27
79	920306600035	chip resistor 0805	220 Ω $\pm$ 1% ROHS	4	PCS	R23
80	920306600037	chip resistor 0805	100 Ω $\pm$ 1% ROHS	4	PCS	R15
81	920306600058	chip resistor 0805	150 Ω $\pm$ 1% ROHS	4	PCS	R8
82	920306600059	chip resistor 0805	1.2K Ω $\pm$ 1% ROHS	4	PCS	R6
83	920306600065	chip resistor 0805	470 Ω $\pm$ 1% ROHS	4	PCS	R5
84	920304700343	main board FPS 4160	FPS 4160 CH1/CH2.EQ.(B)	1	PCS	FR-42A 1.6T
85	920300600082	chip capacitor 0805	104P/50V $\pm$ 10% ROHS	2	PCS	C99, C100
86	920303500131	SMT IC S0-8	NE5532	2	PCS	IC15, IC16
87	920306600004	chip resistor 0805	10K Ω $\pm$ 1%	4	PCS	R237, R238, R239, R240
88	920306600044	chip resistor 0805	6.2K Ω $\pm$ 1% ROHS	4	PCS	R241, R242, R243, R244
89	920304700344	main board FPS 4160	FPS 4160 CH3/CH4.EQ.(C)	1	PCS	FR-42A 1.6T

90	920300600067	chip capacitor 0805	101P/50V ±5% ROHS	4	PCS	C77, C78,C79, C80
91	920300600082	chip capacitor 0805	104P/50V ±10% ROHS	6	PCS	C81, C82, C87, C88, C71, C72
93	920301100044	SMD Aluminium 0550	47UF/16V ROHS	2	PCS	E31, E32
94	920301100045	SMD Aluminium 0450	22UF/16V ROHS	2	PCS	E33, E34
95	920303500131	SMT IC S0-8	NE5532	3	PCS	IC11, IC13, IC14
96	920303500508	SMT IC S0-16	SSM2164 ROHS	1	PCS	IC12
97	920306600004	chip resistor 0805	10K Ω ±1%	4	PCS	R224, R226, R227, R230
98	920306600037	chip resistor 0805	100 Ω ±1% ROHS	2	PCS	R228, R229
99	920306600044	chip resistor 0805	6.2K Ω ±1% ROHS	4	PCS	R231, R232, R235, R236
100	920306600045	chip resistor 0805	7.5K Ω ±1% ROHS	1	PCS	R225
101	920306600069	chip resistor 0805	30K Ω ±1% ROHS	4	PCS	R222, R223, R233, R234

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car amplifier FPS 4160 (France)

unit PCS

level	material No	material name	material specification	Amount of sub-parts	unit	Drawing locations
PCB PLUG-IN UNITS						
1	5103391060037	cable	FPS4160 ROHS	1	SET	
2	5103390270031	single extension	10#(70 core wire) red ROHS	0.372	M	L=118mm 2PCS,L=78mm 1PCS,L=58mm 1PCS (including some of the tin at both ends to open line 4mm)
3	5103440010061		2P Neilsbed ROHS	2	PCS	with fans ,light time
4	5103440010129		6P straight Neilsbed(2.0 spacing) ROHS	1	PCS	
5	5103440010155		5P Neilsbed (2.0 spacing) ROHS	1	PCS	
6	5103440010166		8P Neilsbed(2.0 spacing) ROHS	1	PCS	
7	5103440010167		13P Neilsbed(2.0 spacing) ROHS	1	PCS	
8	5103530070001	black single extension	16#	0.092	M	L=92mm (including some of the tin at both ends to open online 4mm)
9	5103531190001	orange single extension	16#	0.824	M	L=268mm 1PCS,L=278mm 2PCS (including some of the tin at both ends to open online 4mm)
10	5103540030001	2P red and white winding displacement	26# One with a socket,the other with Open Linear	0.28	M	L=280mm 1PCS light for spare parts requisitioned from the store Heat Shrink Tubing 1.0 L=15mm 2PCS
11	5103540130005	5P red and white winding displacement(2.0 spacing)	26# One with a socket,the other with Open Linear	0.045	M	L=45mm 1PCS
12	5103540190008	6P*2.0 red and white winding displacement	26# One with a socket,the other with a pin (3P shielding wire+3P Cable Assembly)	0.225	M	L=225mm 1pcs
13	5103540280005	8P red and white winding displacement(2.0 spacing)	26# One with a socket,the other with a pin	0.045	M	L=45mm 1PCS
14	5103540680001	13P red and white winding displacement2.0 spacing]	26# One with a socket,the other with a pin	0.045	M	L=45mm 1PCS
15	5302000060041	PCB plug-in	FPS4160 paster semi-finished products board	1	PCS	
16	5304000060005	PCB SMT	FPS4160(A) ROHS	1	PCS	SMT:950300100771
17	5103040010060	integrated package	KA7915	1	PCS	IC3

18	5103040010062	integrated package	KA7815	1	PCS	IC4	
19	5103100220020	wire-wound resistor	5w150Ω{Trumpet}T=71mm Rail Cover 6*17mm green ROHS	2	PCS	R148, R153	
20	5103111010017	non inductive resistance	5w0.1Ω{A}cylindrical	16	PCS	R50, R51, R53, R54, R58, R59, R68, R69, R75, R76, R81, R82, R120, R129, R161, R162	
21	5103131140023	Polymer capacitor	25v2200uf black 105 16*25{A}XL high frequency low resistor {golden font on negative pole}	6	PCS	E9, E10, E11, E13, E14, E15	With explosion-proof lid
22	5103131340036	Polymer capacitor	50V6800UF black 105 30*30{A} {golden font on negative pole}	4	PCS	E5, E6, E7, E8	With explosion-proof lid
23	5103200060024	Terylene Capacitor	yellow CL23/100V/273 Rail Cover ROHS	4	PCS	C42, C45, C51, C52	
24	5103200060041	Terylene Capacitor	yellow CL23/100V/103 Rail Cover ROHS	4	PCS	C43, C44, C56, C59	
25	5103200060047	Terylene Capacitor	yellow CL23/100V/104 Rail Cover ROHS	4	PCS	C29, C32, C33, C36	
26	5103200060053	Terylene Capacitor	yellow CL23/100V/224 Rail Cover ROHS	1	PCS	C46	
27	5103200060054	Terylene Capacitor	yellow CL23/100V/272 Rail Cover ROHS	4	PCS	C30, C31, C34, C35	
28	5103240030018	Porcelain capacitor	104P ROHS	5	PCS	C26, C27, C40, C41, C13	
29	5103250080011	audion	A1013 Rail Cover	1	PCS	Q48 0.6 L=4mm 3PCS	
30	5304000060007	PCB SMT	FPS4160 CH1/CH2.EQ.(B) ROHS	1	PCS		
31	5103200060042	Terylene Capacitor	yellow CL23/100V/333 Rail Cover ROHS	2	PCS	C94, C98	
32	5103200060047	Terylene Capacitor	yellow CL23/100V/104 Rail Cover ROHS	2	PCS	C89, C92	
33	5103200060051	Terylene Capacitor	yellow CL23/100V/392 Rail Cover ROHS	2	PCS	C93, C97	
34	5103200060052	Terylene Capacitor	yellow CL23/100V/822 Rail Cover ROHS	2	PCS	C90, C91	
35	5103240030018	Porcelain capacitor	104P ROHS	2	PCS	C95, C96	
36	5304000060008	PCB SMT	FPS4160 CH3/CH4.EQ.(C) ROHS	1	PCS		
37	5103200060042	Terylene Capacitor	yellow CL23/100V/333 Rail Cover ROHS	2	PCS	C83, C85	
38	5103200060047	Terylene Capacitor	yellow CL23/100V/104 Rail Cover ROHS	2	PCS	C73, C76	
39	5103200060051	Terylene Capacitor	yellow CL23/100V/392 Rail Cover ROHS	2	PCS	C84, C86	
40	5103200060052	Terylene Capacitor	yellow CL23/100V/822 Rail Cover ROHS	2	PCS	C74, C75	

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car amplifier FPS 4160 (France)

unit PCS

level	material No	material name	material specification	Amount of sub-parts	unit	Drawing locations
PCB SPARE PART						
1	5101260010006	Bracket	8.5*11mm[1 hole with teeth]heptagon ROHS	2	PCS	
2	5101280050028	screw	BM3*6 white ROHS	4	PCS	seven sub-frame fixed
3	5101290010008	screw nuts	3 white ROHS	2	PCS	seven sub-frame fixed
4	5103030010004	half-bridge	F12C20A	2	PCS	DL1, DL4
5	5103030010005	half-bridge	F12C20C	2	PCS	DL2, DL3
6	5103060241031	remote control panel	FPS REMOTE.PCB	1	PCS	94V01A blue paint double-sided black line 1.6T
7	5103070020001	carbon-film resistor	1/8w0ΩT=26mm Rail Cover	1	PCS	R3_1
8	5103070020018	carbon-film resistor	1/8w100ΩT=26mm Rail Cover	1	PCS	R2_1
9	5103070020071	carbon-film resistor	1/8w33KT=26mm Rail Cover	3	PCS	R1_1, R5_1, R6_1
10	5103070020102	carbon-film resistor	1/8w75KT=26mm Rail Cover	2	PCS	R4_1, R7_1
	5103070020082	carbon-film resistor	1/8w110KT=26mm Rail Cover	2	PCS	
11	5103131030003	Polymer capacitor	16v47uf black 85 Rail Cover 5*11 (A)	1	PCS	C1_1
12	5103200060003	Terylene Capacitor	yellow CL23/63V/104 Rail Cover ROHS	1	PCS	C2_1
13	5103250060010	diode	1/2W12V Rail Cover T=26mmROHS	1	PCS	D1_1
14	5103270040032	WH9011potentiometer (special)	B100K*2-10mm stepping ROHS silver word axis green	1	PCS	VR1_1
15	5103300020112	luminotron	3 white light illuminated white(astigmatism) ROHS	1	PCS	LED1_1
16	5103330070022	self-locking switch	PS-909L-22(grey) ROHS	1	PCS	SK1
17	5103410010001	remote control socket	4P vertical(black) small 13*15mm	1	PCS	
18	5103064250076	fuse panel	FPS-FUSE.PCB	1	PCS	

19	5103120010004	Thermistor	B50K without cable ROHS	2	PCS	TH1, TH2
20	5103260050057	Mosfet	FQP50N06	12	PCS	IRF3, IRF4, IRF5, IRF6,IRF9, IRF10, IRF11, IRF13, IRF15, IRF16, IRF20,IRF19
21	5103260050076	power tube	MSGT2810	16	PCS	IRF1,IRF2,IRF7,IRF8,IRF11,IRF13,IRF17,IRF18,IRF21,IRF22,IRF23, IRF24,IRF25,IRF26,IRF27,IRF28
22	5103270060069	WH9011potentiometer	C50K*2-17mm stepping black axis with cross (green) ROHS	2	PCS	VR2, VR3
23	5103270060071	WH9011potentiometer	C50K*4-17mm stepping black axis with cross (green) ROH	2	PCS	VR6,VR7 unequal spacing
24	5103270060072	WH9011potentiometer	C100K*4-17mm stepping black axis with cross (green) ROH	2	PCS	VR4, VR5 unequal spacing
25	5103280020005	Lotus Jack	AV2-8.4-57 qild black core ROHS	2	PCS	AV1, AV2 with a black pad,gold flat-mediated, Golden screw nut
26	5103300020110	ACRYLIC Backlight panel	LED backlight white light illuminated red 46*46*2 1 Focal	1	PCS	
27	5103300020114	luminotron	ZA35B-RG red and green(green down and ren up,lefr positive and right nagetive) ROHS	1	PCS	(over 3.5mm)
28	5103310020015	Fuse lever	40A ROHS(big fuse)	2	PCS	
29	5103330050060	Toggle switch	SK43D03G6 ROHS	2	PCS	SW1, SW2
30	5103330070022	self-locking switch	PS-909L-22(grey) ROHS	3	PCS	SK3,SK5, SK7
31	5103330070025	self-locking switch	PS-909L-42(grey) ROHS	4	PCS	SK1, SK2,SK4,SK6
32	5103380020017	Fuse holder	one fuse holder(BXS-15A) ROHS	2	PCS	
33	5103410010001	remote control socket	4P vertical(black) small 13*15mm	1	PCS	
34	5103440010001	Others	4.2 soldering ROHS	1	PCS	
35	5103440010045	Others	13P SIRUBA ROHS	2	PCS	
36	5103440010063	Others	12P SIRUBA ROHS	2	PCS	
37	5103440010164	power socket	(5557-04WA)4P BLACK SIRUBA ROHS	2	PCS	
38	5103450010002	current-limiting resistor	20W 0.01Ω	4	PCS	R24, R25, R59, R61 Line Diameter 1.5(with locator card)
39	5104140020007	magnetic ring pad	45*30*3mm ROHS	2	PCS	
40	5105190040162	SAJ163Z cast parts cable row ROHS	big 3 reverse black shell gold castings hexagon screw(JSZ3-56)	1	PCS	

41	5105190040163	SAJ164Z cast parts cable row ROHS	big 4 reverse black shell gold castings hexagon screw (JSZ4-52)	2	PCS	
42	5105220020004	sheet copper	L=39MM*0.8 gold plating ROHS	4	PCS	J11, J12, J13, J14
43	5105220020053	sheet copper	L=52.5MM(overall length) thick1.2 tetrapod ROHS	4	PCS	
44	5105220020054	feet copper	L=52.5mm(overall length) thick1.2 gold plating ROHS	6	PCS	
45	5105290010009	plastic pillars	hexagon L=28mm(oyster-white)	6	PCS	
46	5212000000002	Heat Shrink Tubing	2 Heat Shrink Tubing	0.432	M	L=12mm 36PCS
47	5212010000003	Heat Shrink Tubing	0.6 Heat Shrink Tubing ROHS	0.12	M	L=10mm 12PCS
48	5213000000009	Yellow Wax Tube	4 Yellow Wax Tube	0.2	M	L=200mm For the magnetic ring
49	5213000000010	Yellow Wax Tube	5 Yellow Wax Tube	0.2	M	L=200mm For the magnetic ring
50	5301000080062	Magnet	44 5:12(0.8*10/0.8*6)	2	PCS	
51	5104010010015	magnetic core	44 ROHS	2	PCS	

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car amplifier FPS 4160(France)

unit PCS

level	material No	material name	material specification	Amount of sub-parts	unit	Drawing locations
ASSEMBLAGE						
1	5101210010020	IC Tube Tablet	punching large tabletingt ROHS	8	PCS	fixed power tube
2	5101210010021	IC Tube Tablet	punching small tabletingt ROHS	4	PCS	
3	5101210010055	IC Tube Tablet	26*11*2 4.3 hole ROHS	4	PCS	
4	5101280050028	screw	BM3*6 whiteROHS	7	PCS	fixed PCB,thermal,soldering pads
5	5101280050051	screw	BM4*14whiteROHS	12	PCS	fixed tube
6	5101280140049	screw	CM4*10 BNI(BN)ROHS	6	PCS	fixed adjusted surface
7	5101280140050	screw	CM4*4 BNI BN ROHS	3	PCS	fixed adjusted base
8	5101280230018	screw	KB3*6white ROHS	3	PCS	fixed backlight panel
9	5101280240015	screw	KM3*6 blackROHS	4	PCS	fixed fan top cover
10	5101280240049	screw	KM4*14white ROHS	4	PCS	fixed mosfet
11	5101280240050	screw	KM3*30white ROHS	4	PCS	fixed fan blacket
12	5101280340035	screw	PM3*10whiteROHS	6	PCS	fixed small plate
13	5101300010016	star washer	3 ROHS	1	PCS	soldering pads
14	5101300010017	flat-mediated	3whiteROHS	2	PCS	thermal
15	5101300020007	bomb-mediated	4whiteROHS	16	PCS	fixed tube
16	5101300020011	bomb-mediated	3whiteROHS	2	PCS	thermal
17	5103340020045	fan	8025 with cable L=80MM Neilsbed ROHS	1	PCS	change for 1500RPM (with Focal logo)
18	5104140020014	RUBBER MAT	30*15*8(put 3M glue on single side) ROHS	1	PCS	mat PCB
19	5105200020038	Fan strengthen the cushion cover[copper pillar]	L=16.9mm ROHS PFS	4	PCS	
20	5105250020013	left-down rubber feet	PFS GE ROHS	2	PCS	

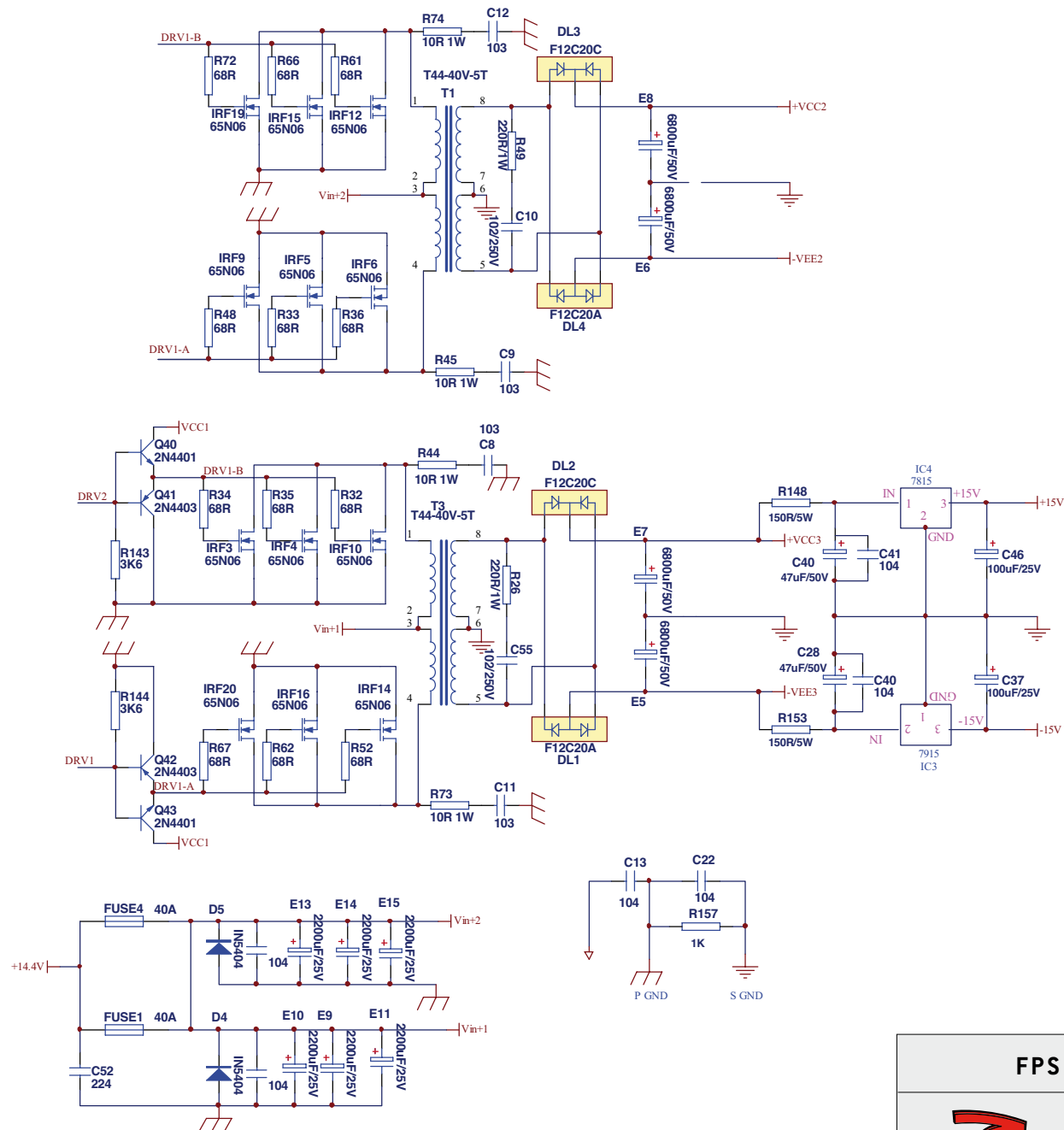
21	5105250020014	right-down rubber feet	PFS GE ROHS	2	PCS	
22	5105250020015	right-up rubber top	PFS GE ROHS	2	PCS	
23	5105250020016	left-up rubber top	PFS GE ROHS	2	PCS	
24	5105410040001	others	RED INSULATOR	2	PCS	fixed fan top cover
25	5106170390001	translucent plastic cards	SAL00097S	1	PCS	
26	5105410120005			0,007	M2	50*70mm 2PCS
27	5106260010130	blister	3 place cast part blister	1	PCS	
28	5106260010131	blister	4 place cast part blister	2	PCS	
29	5208000000014	sheet mica	with hole(40*22) Focal	8	PCS	
30	5208000000015	sheet mica	with hole(26*16) Focal	8	PCS	
31	5214000000014	Switch sponge	16*7*1.5 ROHS	2	PCS	
32	5214000000173	sponge	FPS series(50.5*28) 3 place cast part sponge-rubber pad ROHS	1	PCS	
33	5214000000174	sponge	FPS series(44.5*22) 4 place cast part sponge-rubber pad ROHS	2	PCS	
34	5216000000186	other accessory	single side gummed corduroy	0.0005	M2	25*20
35	5401080010062	front cover	Focal General fan cover ANODIZED	1	PCS	
36	5401260010013	supporting plate	FPS GE fan cover bracket board ANODIZED	1	PCS	
37	5402010160165	aluminium cover	FPS4160 with hair7C L=377MM	1	PCS	
38	5402010060036	die-casting heatsink	FPS2300RX/4160 ANODIZED	1	PCS	
39	5402110010040	remote control	Focal wired remote shellL=39.5 with hair7C black	1	PCS	
40	5101280120039	screw	CA3*6 BN ROHS(screwcap thickness2.0)	8	PCS	fixed end panel
41	5101290010005	screw nut	7special white potentiometer	2	PCS	
42	5105140020038	wire knob	FPS series 15*15 ROHS	1	PCS	for remote control
43	5402120010025	aluminum wired remote front panel	Focal with hair 7C	1	PCS	
44	5402130010038	aluminum wired remote back panel	Focal with hair 7C	1	PCS	
45	5405450020041	plastic square knob	4.5*4.5*12.5MM black ROHS	1	PCS	for remote panel
46	5402270010005	aluminium adjusting plate	FPS4160 aluminium adjusting plate with hair7C	1	PCS	
47	5405450020041	plastic square knob	4.5*4.5*12.5MM black ROHS	5	PCS	
48	5405450020042	plastic square knob	4.5*4.5*12.5MM red ROHS	2	PCS	

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car amplifier FPS 4160(France)

unit PCS

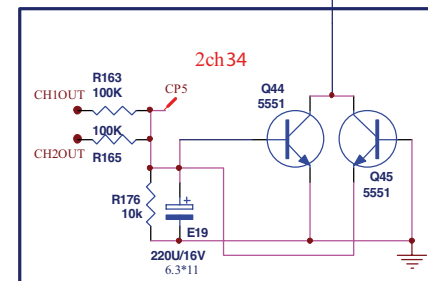
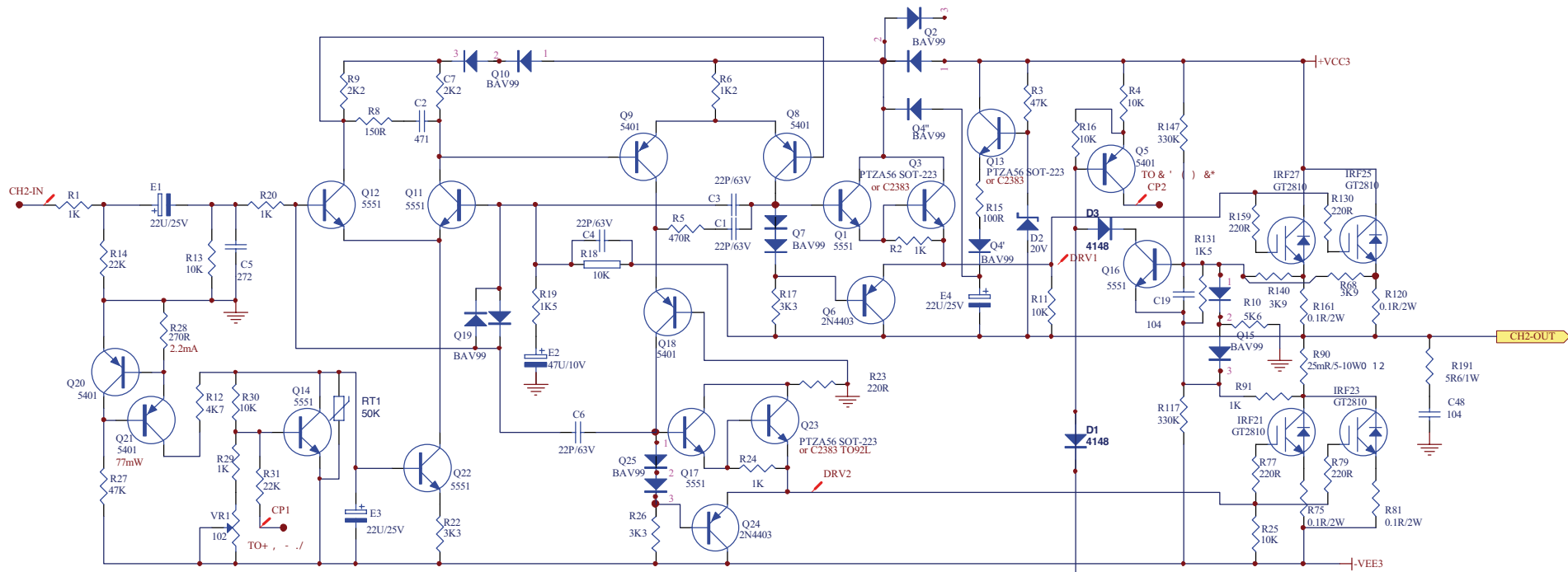
level	material No	material name	material specification	Amount of sub-parts	unit	Drawing locations
PACKING						
1	5101270020002	accessory key	hexagon key 3 ROHS	1	PCS	
2	5101280010031	screw	BA3*10 blackROHS	2	PCS	only for remote control
3	5101280530007	screw	TA4*50 darker black ROHS	4	PCS	darker black
4	5101300010008	flat-mediated	3b lackROHS	2	PCS	only for remote control
5	5101300010009	flat-mediated	4blackROHS	4	PCS	
6	5101300020004	bomb-mediated	3b lackROHS	2	PCS	only for remote control
7	5101300020005	bomb-mediated	4 blackROHS	4	PCS	
8	5103310020015	fuse lever	40A ROHS(big fuse)	2	PCS	
9	5105370010001	Lotus seat cap ROHS		2	PCS	
10	5106010060045	Carton	FPS4160	0.5	PCS	2PCS/box
11	5106030060076	gift box	FPS4160	1	PCS	
12	5106150011644	carton sticker	FPS4160 black printing on yellow ground 50*102 a duplicate(see note No.jump)	2	PCS	
13	5106150011653	body code sticker	FPS4160 black printing on grey ground 26*11.5mm (No.jump see remarks)	1	PCS	
14	5106150011659	gift box sticker	FPS4160 black printing on grey ground	1	PCS	
15	5106200010002	Zip-lock bag	12*13 P0 material	1	PCS	mounted wired remote
16	5106210010095	environmental bags	65*36CM Thinken(Focal dedicated printing)	1	PCS	
17	5106220010001	Zip-lock bag	7*11	1	PCS	mount spare part
18	5106220010009	Zip-lock bag	13*18	1	PCS	mounted wired remote
19	5106220010012	Zip-lock bag	manual plastic bag(Focal dedicated printing)	1	PCS	Packaging Manual
20	5106260010128	pearl wool	No.52 three-piece suit	1	SET	
21	5210000000001	adhesive sealing	transparent adhesive tape 48*100Y	0.04	PCS	
22	5216000000147	other accessories	10g desiccant(ROHS)	1	PCS	
23	5218001010004	remote cable	4P black wire-line reverse 5M ROHS (4P4C)	1	PCS	



FPS 4160 : Power Supply



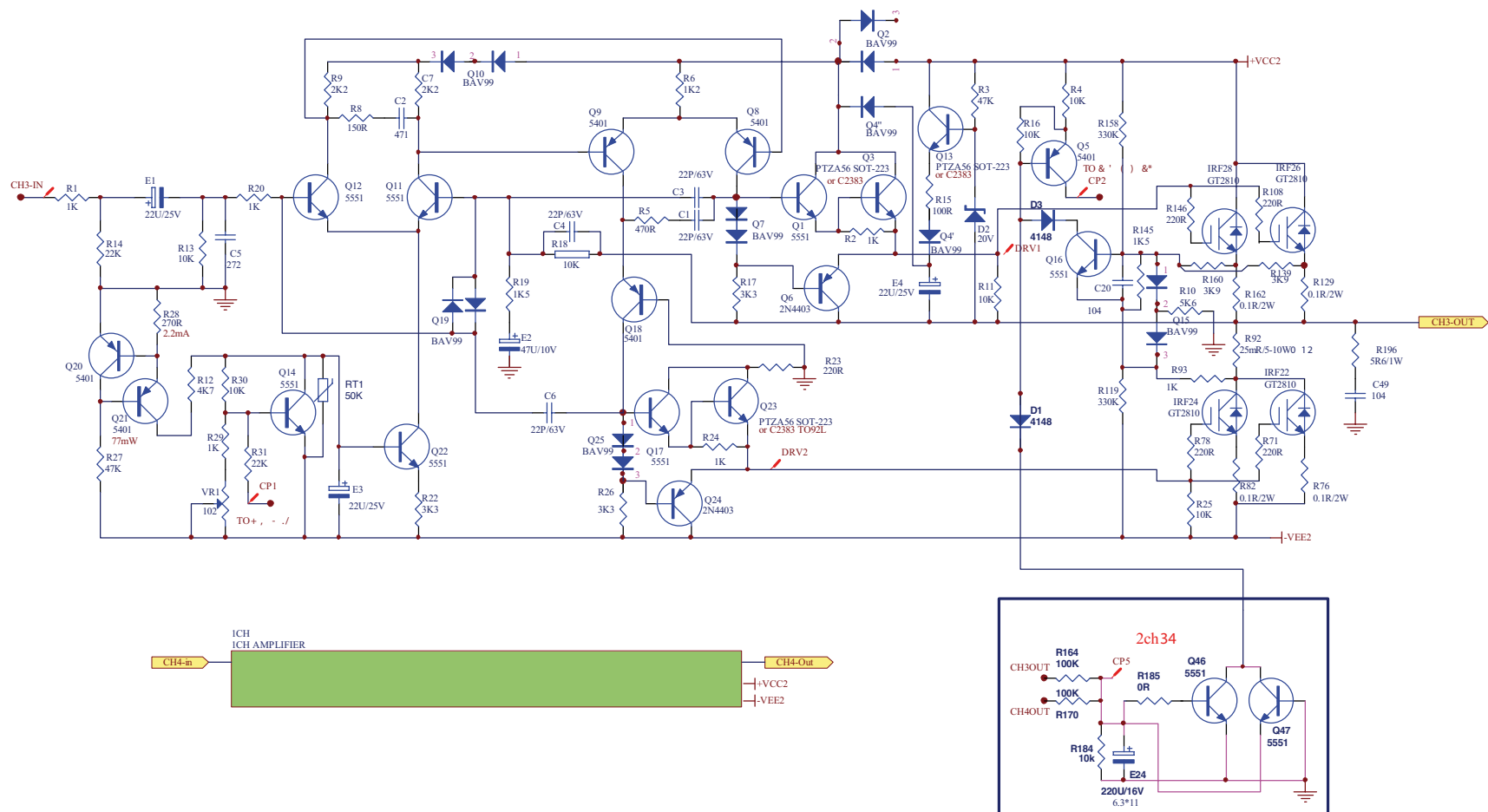
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FPS 4160 : Amplifier Schematic



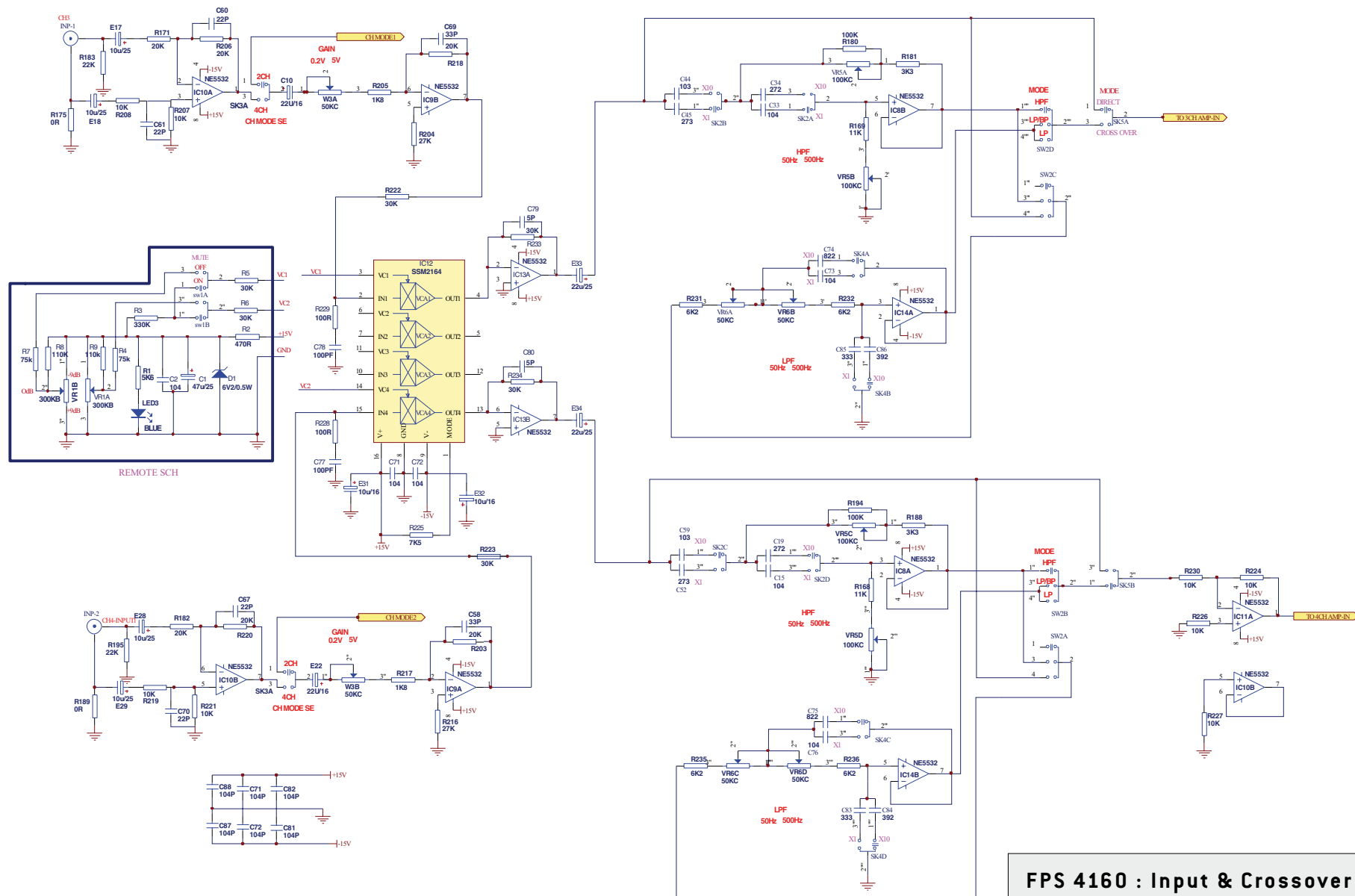
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Front CH1/CH1



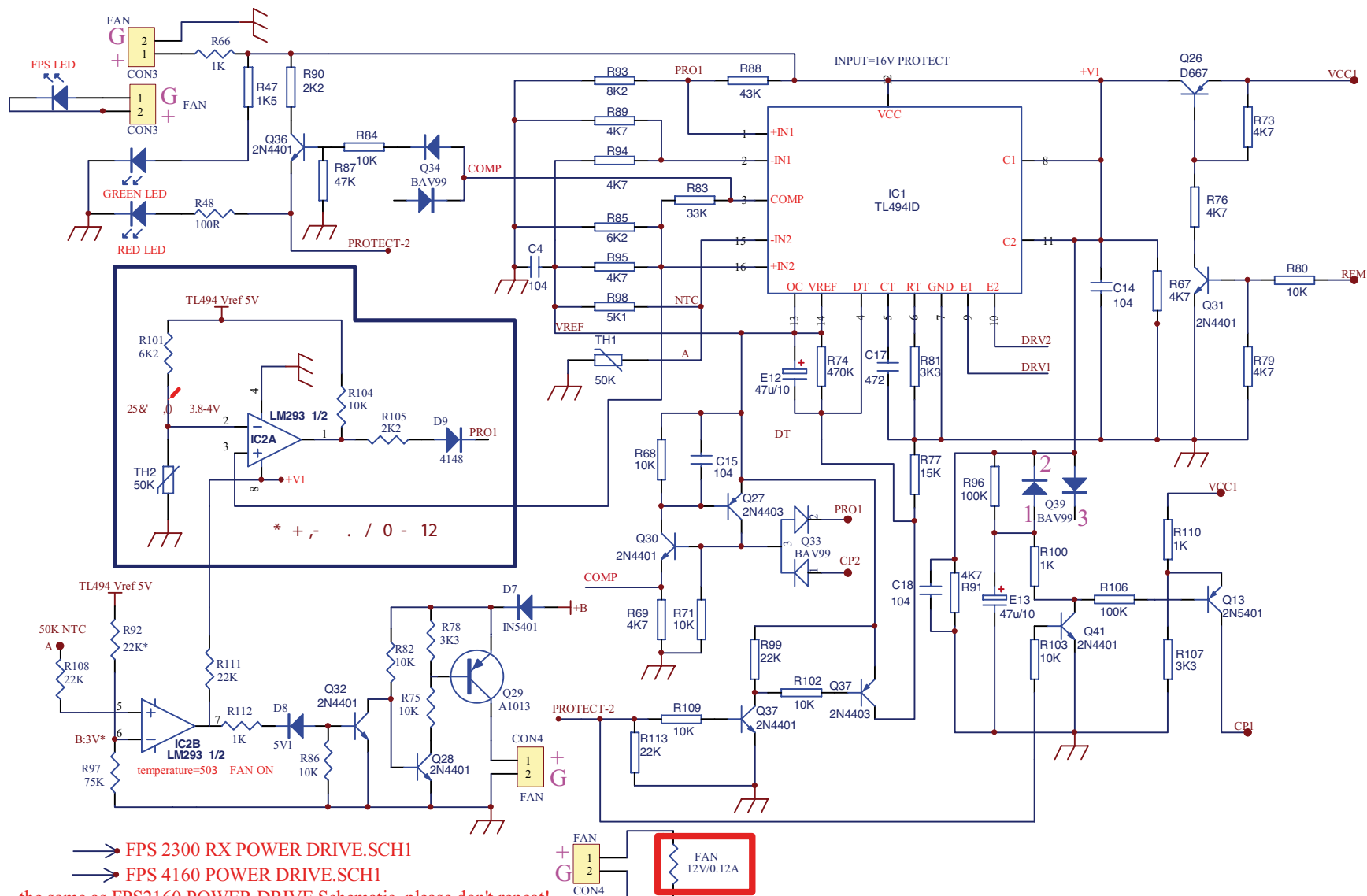
FPS 4160 : Amplifier Schematic



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Rear CH3/CH4



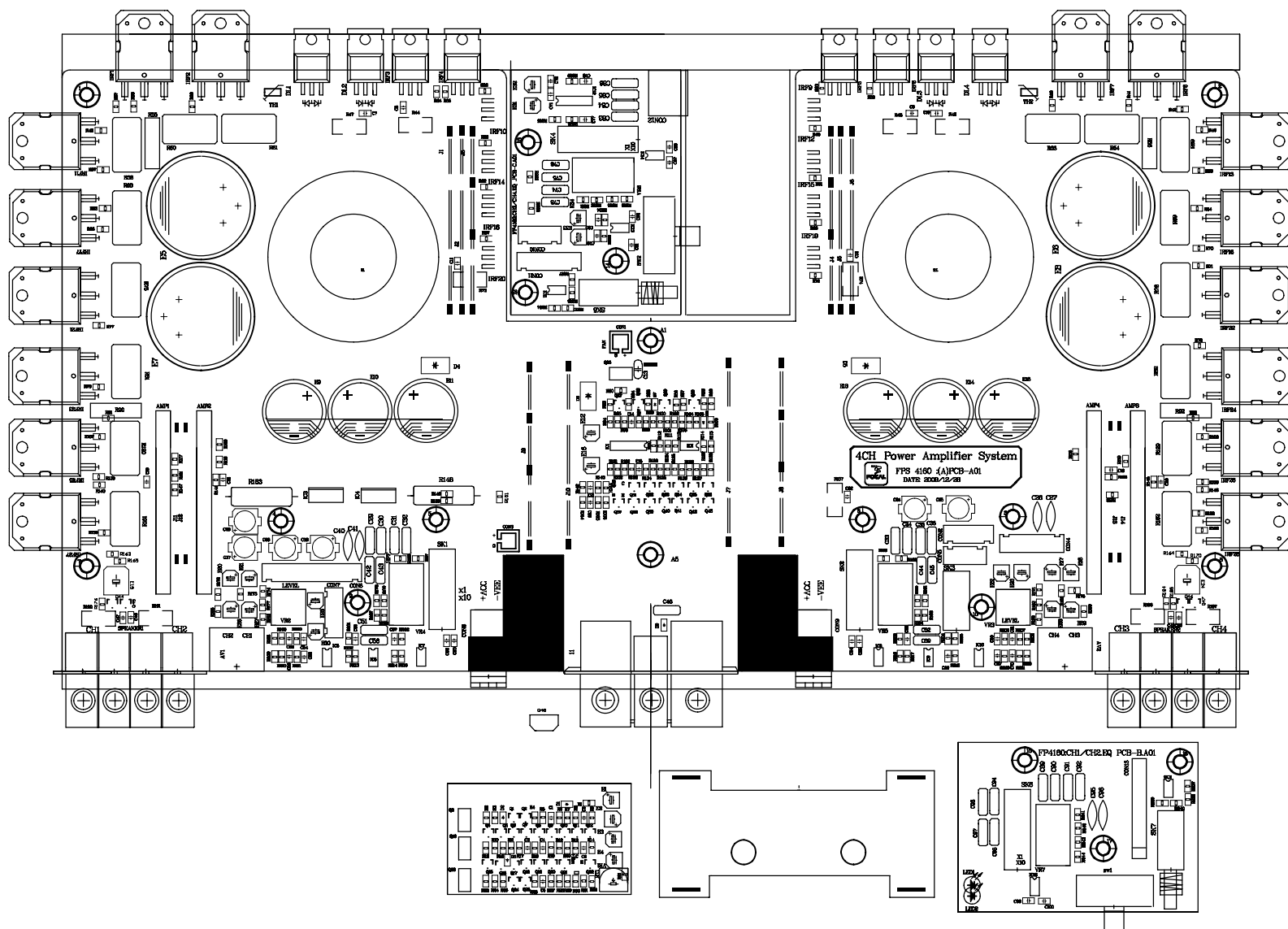
FPS 4160 : Input & Crossover Schematic



FPS 4160 : Power Drive Schematic



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FPS 4160 : Component Layout



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Declaration of Conformity



Reference No.: WT09113940-F-E-E
Applicant: Focal-JMLab
Address: ZI MOLINA LA CHAZOTTE - 108, rue de l'avenir -
BP37442353 LA TALAUDIERE CEDEX
Manufacturer: SAGA AUDIO EQUIPMENT CO., LTD.
Address: No. 1 Saga Road, Shashui District, Songgang Town,
Nanhai, Foshan City, Guangdong, P.R.China
Product: CAR AUDIO
Model No.: FPS4160
Technical Data: 10-15VDC, 400W

Test Standards:

EN 55013: 2001+A1: 2003+A2: 2006
EN 55020: 2007

The above product has been tested by us with the listed standards and found in compliance with the European Electromagnetic Compatibility Directive 2004/108/EC. It is possible to use CE marking to demonstrate the compliance with this EMC Directive.

EN 55013: Sound and television broadcast receivers and associated equipment-
Radio disturbance characteristics - Limits and methods of measurement
EN 55020: Sound and television broadcast receivers and associated equipment --
Immunity characteristics - Limits and methods of measurement

The referred test report shows that the product complies with standards recognized as giving presumption of compliance with the essential requirements in the above listed EU Directive. Other relevant Directives have to be observed.

After preparation of the necessary technical documentation as well as the conformity declaration, the CE marking as shown below can be affixed on the equipment.



CE

The statement is based on a single evaluation of the sample of above mentioned products. It does not imply an assessment of the whole production.

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FPS 1500

 **symmetric** amplifier



product N°950300100770

Main board FPS 1500 SMT+DIP

unit PCS

level	material No	material name	material specification	Amount of sub-parts	UNIT	drawing locations
1	920304700340	main board	FPS 1500	1	PCS	FR-42A
2	920300600020	chip capacitor 0805	47P/50V ±5%	1	PCS	C95
3	920300600067	chip capacitor 0805	101P/50V ±5% ROHS	2	PCS	C21,C97
4	920300600069	chip capacitor 0805	22P/50V ±5% ROHS	4	PCS	C93,C94,C96,C99
5	920300600078	chip capacitor 0805	155P/50V ±10% ROHS	2	PCS	C50,C19
6	920300600082	chip capacitor 0805	104P/50V ±10% ROHS	26	PCS	C28,C35,C36,C52,C1,C4,C16,C17,C18,C30,C31,C32,C33,C43,C44,C45,C46,C47,C48,C54,C56,C58,C60,C63,C66,C67
7	920300600092	chip capacitor 0805	103P/50V ±5% ROHS	6	PCS	C2,C27,C29,C49,C59,C62
8	920300600098	chip capacitor 0805	102P/50V ±5% ROHS	4	PCS	C51,C20,C26,C64
9	920300600103	chip capacitor 0805	105P/50V ±10% ROHS	1	PCS	C3
10	920300600106	chip capacitor 0805	102P/100V ±5% ROHS	1	PCS	C5
11	920300600110	chip capacitor 0805	122P/50V ±5% ROHS	1	PCS	C34
12	920300600112	chip capacitor 0805	221P/50V ±5% ROHS	1	PCS	C91
13	920300800001	chip capacitor 1206	685P/50V	1	PCS	CL1
14	920301100036	SMT Aluminium 0550	22UF/25V	1	PCS	C75
15	920301100040	SMT Aluminium 0650	100UF/16V ROHS	2	PCS	C24,C61
16	920301100042	SMT Aluminium 0450	10UF/16V ROHS	3	PCS	C23,C40,C65
17	920301100044	SMT Aluminium 0550	47UF/16V ROHS	7	PCS	C38,C39,C55,C69,C70,C83,C92
18	920301100062	SMT Aluminium 0550	47UF/25V ROHS	1	PCS	C22
19	920301100045	SMT Aluminium 0450	22UF/16V ROHS	1	PCS	E9
20	920301100049	SMT Aluminium0670	220UF/16V ROHS	3	PCS	C42,C74,C73

21	920301100055	SMT Aluminium 0450	10UF/25V ROHS	5	PCS	C68,C84,C85,C89,C90
22	920301100064	SMT Aluminium 0650	100UF/25V ROHS	1	PCS	C41
23	920301100066	SMT Aluminium 0670	100UF/35V ROHS	2	PCS	C71,C72
24	920301200074	chip inductors 0805	1UH ROHS	2	PCS	L3,L4
25	920301400017	chip industry shaped inductor CD52	47UH/800MA	5	PCS	L5,L6,L7,L8,L9
26	920302100158	chip resistor 0805	75K Ω $\pm$ 1% ROHS	1	PCS	R162
27	920302100159	chip resistor 0805	100K Ω $\pm$ 1% ROHS	21	PCS	R14,R15,R23,R26,R38,R45,R48,R52,R53,R61,R76,R77,R78,R79,R84,R50,R114, R115,R116,R128,R133
28	920302100191	chip resistor 0805	20K Ω $\pm$ 1% ROHS	7	PCS	R12,R83,R173,R143,R163,R164,R172
29	920302700016	SMT zener diodesS0D-323	5.1V	3	PCS	D1,D2,D43
30	920302700030	chip diode S0D-323	15V ROHS	2	PCS	D22,D28
31	920302700032	chip diode S0D-323	3.6V ROHS	1	PCS	D38
32	920303000009	chip diode S0D-323	IN4148	23	PCS	D3,D7,D8,D9,D10,D11,D17,D18,D19,D20,D21,D29,D30,D31,D32,D33,D34,D35, D36,D37,D40,D41,D42
33	920303000064	surface mount diodes SMA	ER1D ROHS	1	PCS	D16
34	920303000070	SMT diode D0-214	FR107 ROHS	4	PCS	D12,D13,D24,D25
35	920303000082	SMT diode D0-214	FR154 ROHS	4	PCS	D14,D15,D26,D27
36	920303000083	SMT diode D0-214	1N5401 ROHS	3	PCS	D39,D4,D44
37	920303200088	SMT transistors S0T-223	A1013 ROHS	2	PCS	Q2,Q8
38	920303200091	SMT transistors S0T-23	BR SC2412 ROHS	5	PCS	Q22,Q13,Q19,Q20,Q21
39	920303200093	SMT transistorsS0T-23	MMBT3904(1AM) (Y) ROHS	1	PCS	Q16
40	920303200095	SMT transistors S0T-23	MMBT3906(2A) (P) ROHS	1	PCS	Q15
41	920303200097	SMT transistors S0T-23	KTD1304(MAX) (14) ROHS	1	PCS	Q4
42	920303200098	SMT transistors S0T-89	BE(RR) 2SB1122 ROHS	3	PCS	Q12,Q14,Q23

43	920303200100	SMT transistors SOT-23	G1 555 ROHS	5	PCS	Q5,Q6,Q18,Q24,Q25
44	920303200101	SMT transistors SOT-89	DF(RZ) SD1898 ROHS	1	PCS	Q11
45	920303200108	SMT transistors SOT-23	2N4401 ROHS	1	PCS	Q1
46	920303200112	SMT transistors SOT-23	KTC3198 ROHS	1	PCS	Q3
47	920303200113	SMT transistors SOT-23	MMBTA42(1D) ROHS	1	PCS	Q9
48	920303200114	SMT transistors SOT-23	MMBTA92 2D	2	PCS	Q10,Q17
49	920303200120	SMT transistors SOT-23	KTA1266 ROHS	1	PCS	Q7
50	920303500131	SMT IC S0-8	NE5532	4	PCS	IC7,IC8,IC9,IC10
51	920303500228	SMT IC S0-8	JRC4558D ROHS	1	PCS	U1
52	920303500331	SMT IC S0-8	TL072	1	PCS	U4
53	920303500401	SMT IC SOP-8	LM293 ROHS	2	PCS	U2,U7
54	920303500402	SMT IC SOP-8	LM311 ROHS	1	PCS	U5
55	920303500403	SMT IC SOP-14	IR21844S ROHS	1	PCS	U3
56	920303500404	SMT IC TO-252	ST7815 ROHS	1	PCS	IC2
57	920303500449	SMT IC S0-16	TL494I ROHS(125)	1	PCS	U6
58	920303500451	SMT IC TO-252	KIA7812AF ROHS	1	PCS	IC1
59	920303500471	SMT IC TO-252	ST7915 ROHS	1	PCS	IC5
60	920303500508	SMT IC S0-16	SSM2164 ROHS	1	PCS	IC6
61	920306600003	chip resistor 0805	12K Ω $\pm$ 1%	1	PCS	R11
62	920306600004	chip resistor 0805	10K Ω $\pm$ 1%	29	PCS	R5,R17,R18,R36,R42,R43,R51,R54,R55,R62,R63,R65,R66,R82,R87,R90,R100, R121,R161,R74,R94,R95,R108,R113,R118,R119,R127,R131,R136
63	920306600005	chip resistor 0805	8.2K Ω $\pm$ 1%	3	PCS	R8,R110,R141
64	920306600007	chip resistor805	1.5K Ω $\pm$ 1%	2	PCS	R137,R134
65	920306600008	chip resistor 0805	56K Ω $\pm$ 1%	2	PCS	R142,R139

66	920306600009	chip resistor 0805	0 Ω $\pm$ 1%	2	PCS	R153,R155
67	920306600011	chip resistor 0805	1K Ω $\pm$ 1% ROHS	6	PCS	R4,R44,R71,R126,R159,R169
68	920306600012	chip resistor 0805	1M Ω $\pm$ 1% ROHS	4	PCS	R41,R46,R47,R92
69	920306600013	chip resistor 0805	1.8M Ω $\pm$ 1% ROHS	2	PCS	R40,R99
70	920306600015	chip resistor 0805	3.3K Ω $\pm$ 1% ROHS	4	PCS	R10,R20,R72,R88
71	920306600016	chip resistor 0805	4.7K Ω $\pm$ 1% ROHS	7	PCS	R97,R103,R104,R120,R80,R109,R130
72	920306600017	chip resistor 0805	5.6K Ω $\pm$ 1% ROHS	4	PCS	R60,R160,R93,R129
73	920306600018	chip resistor 0805	4.7 Ω $\pm$ 1% ROHS	1	PCS	R58
74	920306600020	chip resistor 0805	68K Ω $\pm$ 1% ROHS	2	PCS	R64,R123
75	920306600021	chip resistor 0805	820 Ω $\pm$ 1% ROHS	1	PCS	R105
76	920306600024	chip resistor 0805	15K Ω $\pm$ 1% ROHS	1	PCS	R111
77	920306600025	chip resistor 0805	2.2K Ω $\pm$ 1% ROHS	1	PCS	R69
78	920306600026	chip resistor 0805	22K Ω $\pm$ 1% ROHS	5	PCS	R9,R6,R21,R81,R132
79	920306600027	chip resistor 0805	2.7K Ω $\pm$ 1% ROHS	4	PCS	R138,R91,R96,R102
80	920306600028	chip resistor 0805	270K Ω $\pm$ 1% ROHS	1	PCS	R70
81	920306600029	chip resistor 0805	3.9K Ω $\pm$ 1% ROHS	1	PCS	R98
82	920306600030	chip resistor 0805	47K Ω $\pm$ 1% ROHS	14	PCS	R112,R146,R147,R156,R157,R158,R165,R166,R167,R168,R107,R122,R124,R125
83	920306600031	chip resistor 0805	470K Ω $\pm$ 1% ROHS	1	PCS	R117
84	920306600035	chip resistor 0805	220 Ω $\pm$ 1% ROHS	2	PCS	R89,R106
85	920306600040	chip resistor 0805	150K Ω $\pm$ 1% ROHS	3	PCS	R151,R152,R49
86	920306600042	chip resistor 0805	560 Ω $\pm$ 1% ROHS	3	PCS	R75,R85,R86
87	920306600045	chip resistor 0805	7.5K Ω $\pm$ 1% ROHS	2	PCS	R140,R148
88	920306600053	chip resistor 0805	68 Ω $\pm$ 1% ROHS	6	PCS	R1,R3,R7,R30,R34,R68

89	920306600054	chip resistor 0805	$33\Omega \pm 1\% \text{ ROHS}$	4	PCS	R13,R16,R25,R27
90	920306600058	chip resistor 0805	$150\Omega \pm 1\% \text{ ROHS}$	1	PCS	R150
91	920306600060	chip resistor 0805	$270\Omega \pm 1\% \text{ ROHS}$	3	PCS	R2,R32,R59
92	920306600066	chip resistor 0805	$27K\Omega \pm 1\% \text{ ROHS}$	1	PCS	R171
93	920306600068	chip resistor 0805	$300K\Omega \pm 1\% \text{ ROHS}$	1	PCS	R149
94	920306600069	chip resistor 0805	$30K\Omega \pm 1\% \text{ ROHS}$	3	PCS	R144,R154,R170
95	920306600070	chip resistor 0805	$36K\Omega \pm 1\% \text{ ROHS}$	1	PCS	R174
96	920306600071	chip resistor 0805	$430\Omega \pm 1\% \text{ ROHS}$	1	PCS	R145
97	920306600072	chip resistor 0805	$680\Omega \pm 1\% \text{ ROHS}$	1	PCS	R37

product N°5509215010003

car amplifier FPS 1500(France)

unit PCS

level	material No	material name	material specification	Amount of sub-parts	unit	drawing locations	change/remark
PCB PLUG-IN UNIT							
1	5103391060038	cable	FPS1500 ROHS	1	SET		
2	5103440010061		2P neilsbed ROHS	2	PCS	with fans,light time	plug-requisitioned
3	5103531190001	orange single extension	16#	0.216	M	L=78mm 2PCS,L=68mm 1PCS (sets of yellow wax tubes,including some of the tin at both ends to open online 4mm)	
4	5103540030001	2P red and white cable	26# one with an open line of Block	0.28	M	L=280mm 1PCS LIGHT for spare parts requisitioned from the store sets of heat-shrinkable tube 1 L=15mm 2PCS	
5	5302000060040	PCB plug-in unit	FPS1500 chip semi-finished panels	1	PCS		
6	5103080050039	metal film resistor	1/4w2K±1%T=26mm Rail Cover	1	PCS	R135special component L15mm	sets of heat-shrinkable tube
7	5103090100004	oxide film resistor	1w5.6Ω	2	PCS	R39, R73	
8	5103100170010	wirewound	3w47ΩT=52mm brede (Trumpet) 6*17mm green ROHS	1	PCS	R22	
9	5103100170019	wirewound	3w1ΩT=52mm brede (Trumpet) 5*15mm green ROHS	1	PCS	R101	
10	5103111010040	cement resistor	5w1.2K(A) Vertical	1	PCS	R67	
11	5103111010041	cement resistor	5w3.3K(A) Vertical	2	PCS	R31, R35	
12	5103131140023	electrolytic capacitor	25v2200uf black 105 16*25(A)XL HF at the end of resistance(Gold Cathode Font)	4	PCS	E1, E6, E7, E8	
13	5103160010037	electrolytic capacitor	100V100UF(formlessness)black105 13*25(Gold Cathode Font)	4	PCS	C12, C14,C13, C15	
14	5103151470005	electrolytic capacitor	80V2700UF black 105 25*3 (A)(Gold Cathode Font)	2	PCS	E3, E4	with explosion-proof lid
15	5103151470006	electrolytic capacitor	80V3900UF black 105 30*33(A)(Gold Cathode Font)	2	PCS	E5,E2	with explosion-proof lid
16	5103191100001	polyester capacitor	blue CL21X/100V/225 brede (A)ROHS	1	PCS	C88	
17	5103191110001	polyester capacitor	blue CL21X/250V/125 brede (A)ROHS	1	PCS	C8	

18	5103191120001	polyester capacitor	blue CL21X/1000V/681 brede (A)ROHS	1	PCS	C9	
19	5103200060003	polyester capacitor	yellow CL23/100V/104 brede ROHS	2	PCS	C98,C53	
20	5103200060005	polyester capacitor	yellow CL23/100V/124 brede ROHS	1	PCS	C76	
21	5103200060020	polyester capacitor	yellow CL23/100V/563 brede ROHS	2	PCS	C77, C78	
22	5103200060022	polyester capacitor	yellow CL23/100V/823 brede ROHS	2	PCS	C79, C87	
23	5103200060023	polyester capacitor	yellow CL23/100V/273 brede ROHS	1	PCS	C80	
24	5103200060032	polyester capacitor	yellow CL23/100V/105 brede ROHS	2	PCS	C10, C11	
25	5103200060053	polyester capacitor	yellow CL23/100V/224 brede ROHS	1	PCS	C86	
26	5103240030018	porcelain capacitor	104P ROHS	3	PCS	C81, C82,C57	
27	5103250040049	diode	P6KE200A(select range 190Vff200V)brede T=52 ROHS	3	PCS	D5, D6, D23	
28	5103260050006	audio	79L05	1	PCS	IC4	
29	5103260050047	audio	78L05	1	PCS	IC3	
30	5103430020005	relay	SLB-12VDC-SL-C 40A ROHS	1	PCS	JRX1	
31	5212000000002	heat-shrink tube	2 heat shrink tube	0,045	M	sets 1/4 W2K resistor	
32	5304000060004	PCB SMD	FPS1500 ROHS	1	PCS	SMT:950300100770	

product N°5509215010003

car amplifier FPS 1500(France)

unit PCS

level	material No	material name	material specification	Amount of sub-parts	unit	drawing locations	change/remark
PCB SPARE PARTS							
1	5103040010077	half-bridge	F16C20A	1	PCS	DL1	
2	5103040010078	half-bridge	F16C20C	1	PCS	DL2	
3	5103060241031	remote control panel	FPS REMOTE.PCB	1	PCS	94V01A double side blue-oil black line1.6T	remote control component
4	5103070020001	carbon-film resistor	1/8w0ΩT=26mm brede	1	PCS	R3_1	remote control component
5	5103070020028	carbon-film resistor	1/8w100ΩT=26mm brede	1	PCS	R2_1	remote control component
6	5103070020071	carbon-film resistor	1/8w33KT=26mm brede	3	PCS	R1_1, R5_1, R6_1	remote control component
7	5103070020102	carbon-film resistor	1/8w75KT=26mm brede	2	PCS	R4_1, R7_1	remote control component
8	5103070020082	carbon-film resistor	1/8w75KT=26mm brede	2	PCS		remote control component
9	5103131030003	Polymer capacitor	16v47uf black 85 brede 5*11(A)	1	PCS	C1_1	remote control component
10	5103200060003	Terylene Capacitor	yellow CL23/63V/104 brede ROHS	1	PCS	C2_1	remote control component
11	5103250060010	diode	1/2W12V brede T=26mmROHS	1	PCS	D1_1	remote control component
12	5103270040032	WH9011potentiometer(special)	B100K*2-10mm stepping ROHS silver word axis	1	PCS	VR1_1	remote control component
13	5103300020112	luminotron	3 white hair and white(astigmatism) ROHS	1	PCS	LED1_1	remote control component
14	5103330070022	self-locking switch	PS-909L-22(grey) ROHS	1	PCS	SK1	remote control component
15	5103410010001	remote control holder	4P Vertical (black) small 13*15mm	1	PCS		remote control component
16	5103064250067	switch board	FPS 1500(B)	1	PCS	FR-4 2A(double sided blue oil)double sided blue oil spay tin 1.6T(darker blue)	
17	5103120010003	thermal resistor	B20K without cable ROHS	1	PCS	TH1	
18	5103120010004	thermal resistor	B50K without cable ROHS	1	PCS	TH2	
19	5103260050056	mosfet	FQP65N06	6	PCS	IRF1, IRF2, IRF3, IRF8, IRF9,IRF10	
20	5103260050091	mosfet	IRFP250N	4	PCS	IRF4, IRF5, IRF6, IRF7	

20	5103260050091	mosfet	IRFP250N	4	PCS	IRF4, IRF5, IRF6, IRF7
21	5103270040030	WH9011potentiometer	B20K*2-17mm stepping cross black shalf{green} ROHS	1	PCS	VR4
22	5103270040031	WH9011potentiometer	B50K*2-17mm steppingcross black shalf{green} ROHS	1	PCS	VR1
23	5103270060073	WH9011potentiometer	C150K*2-17mm stepping cross black shalf{green} ROH	2	PCS	VR2, VR5
24	5103270060074	WH9011potentiometer	C100K*2-17mm stepping cross black shalf{green} ROH	1	PCS	VR3
25	5103280020005	Lotus Jack	AV2-8.4-57 gold-plated black core ROHS	1	PCS	AV1 with a black pad, golden husuke, golden nuts
26	5103300020113	luminotron	ZA35B-Rgcombined rend and green(the green and red, left is right) ROHS	1	PCS	over 3.5mm
27	5103300020110	Acrylic Backlight panel	LED backlight white hair red 46*46*2 1 Focal	1	PCS	
28	5103310020009	safety disc	40A ROHS(small fuse)	2	PCS	FUSE1
29	5103330050061	snap switch	SK22H03G6 ROHS	2	PCS	SW1, SW2
30	5103380020010	Fuse holder	2plus fiber 0.7mm red copper ROHS	1	PCS	
31	5103410010001	remote control holder	4P Vertical (black) small 13*15mm	1	PCS	
32	5103440010164	power supply holder	{5557-04WA}4P black curved needle ROHS	1	PCS	
33	5103440010165	1*40P straight pin	2gold pin L=20mm ROHS	1	PCS	dosage 3P 2PCS
34	5103450010002	current-limiting resistor	20W 0.01Ω	2	PCS	R28, R29 Line Diameter 1.5(with locator card)
35	5104050020024	I-shaped inductor	OD 25*ID 12.5*H 26 ROHS	1	PCS	L2
36	5104140010002	RUBBER MAT	33	1	PCS	
37	5104140020007	Magnetic ring pad	45*30*3mm ROHS	1	PCS	
38	5104140020011	RUBBER MAT	25*15*1.5 ROHS	1	PCS	I-shaped inductor
39	5105190040162	SAJ163Z cast part flat cable ROHS	big 3 reverse black shell gold castings hexagon screw {JSZ3-56}	1	PCS	
40	5105190040163	SAJ164Z cast part flat cable ROHS	4reverse black gold shell castings hexagon screw{JSZ4-52}	1	PCS	
41	5103440010001	others	4.2 soldering ROHS	1	PCS	
42	5105220020001	sheet copper	L=20MM*0.8 Golden ROHS	8	PCS	J2, J3, J4, J9, J16, J18, J19, J17

43	5105220020004	sheet copper	L=39MM*0.8 qild ROHS	4	PCS	J5, J7, J8, J14	
44	5105220020044	sheet copper	L=71MM Golden ROHS	4	PCS	J10, J11, J12, J13	thickness 1.0
45	5105220020053	sheet copper	L=52.5MM(total lenth) thick 1.2 four feet ROHS	1	PCS	J1,	
46	5105220020054	feet copper	L=52.5mm(total lenth) thick 1.2 qild ROHS	2	PCS	J7, J15	
47	5211000000002	cable ties(tie line)	Belting 3*100	1	PCS	For the magnetic ring	
48	5212000000001	Heat Shrink Tubing	0.6 Heat Shrink Tubing	0.24	M	L=10mm 24PCS	
49	5212000000003	Heat Shrink Tubing	2 Heat Shrink Tubing	0.15	M	L=12mm 12PCS	
50	5213000000001	Yellow Wax Tube	1 Yellow Wax Tube	0.1	M	For the magnetic ring	
51	5213000000005	Yellow Wax Tube	3 Yellow Wax Tube	0.15	M	For the magnetic ring	
52	5213000000010	Yellow Wax Tube	5 Yellow Wax Tube	0.1	M	For the magnetic ring	
53	5215070010010	tin bar	there are lead(Anson) SnPb63/37	0.038	KG		
54	5301000110033	Magnet	47 4:16:4:5(0.7*14/0.7*8/1.0*1/1.0*1)	1	PCS		
55	5104010010017	magnetic core	47*15-27 ROHS	1	PCS		
56	5204110010003	enamelled wire	QA-1 0.7 natural color	0.0263	KG	Subprime 14 circles 0.7*8	
57	5204110010007	enamelled wire	QA-1 1.0 natural color	0.0124	KG	Subprime 5 circles 1.0*1	
58	5204110010008	enamelled wire	QA-1 1.0 red	0.0124	KG	Subprime 4 circles 1.0*1	
59	5204110010029	enamelled wire	QZ-2 0.7 natural color	0.0243	KG	Subprime 4 circles 0.7*14	
60	5301000140003	Magnet	40 36 circles(0.7*8)	1	PCS	2 core portofio	
61	5104010010031	magnetic core	40*23-10(sendust) ROHS	2	PCS	L6	
62	5204110010029	enamelled wire	QZ-2 0.7 natural color	0.033	KG	0.7*8	

product N°5509215010003

car amplifier FPS 1500(France)

unit PCS

level	material NO	material name	material specification	Amount of sub-parts	unit	drawing locations
MOUNT						
1	5101210010020	IC Tube Tablet	punching large tableting ROHS	2	PCS	fixed power tube
2	5101210010026	IC Tube Tablet	K4tableting ROHS	2	PCS	40*12*1 pitch of holes17mm
3	5101210010055	IC Tube Tablet	26*11*2 4.3 hole ROHS	1	PCS	
4	5101280050028	screw	BM3*6 whiteROHS	8	PCS	fixed PCB,thermal,soldering pads
5	5101280050051	screw	BM4*1 whiteROHS	6	PCS	fixed tube
6	5101280120038	screw	CA3*10 BN ROHS	1	PCS	fixed fuse
7	5101280140049	screw	CM4*10 BNI(BN)ROHS	6	PCS	fixed adjusted surface
8	5101280140050	screw	CM4*4 BNI BN ROHS	3	PCS	fixed adjusted base
9	5101280230018	screw	KB3*6 white ROHS	3	PCS	fixed backlight panel
10	5101280240015	screw	KM3*6 blackROHS	4	PCS	fixed fan top cover
11	5101280240049	screw	KM4*14 white ROHS	1	PCS	fixed half-bridge
12	5101280240050	screw	KM3*30 white ROHS	4	PCS	fixed fan blacket
13	5101300010016	star washer	3 ROHS	1	PCS	soldering pads
14	5101300010017	flat-mediated	3 white ROHS	2	PCS	thermal
15	5101300020007	bomb-mediated	4 white ROHS	7	PCS	fixed tube
16	5101300020011	bomb-mediated	3 white ROHS	2	PCS	thermal
17	5208000000014	sheet mica	perforated 40*22 Focal	2	PCS	
18	5208000000015	sheet mica	perforated 26*16 Focal	1	PCS	
19	5208000000016	sheet mica	perforated {44.6*16} Focal	2	PCS	

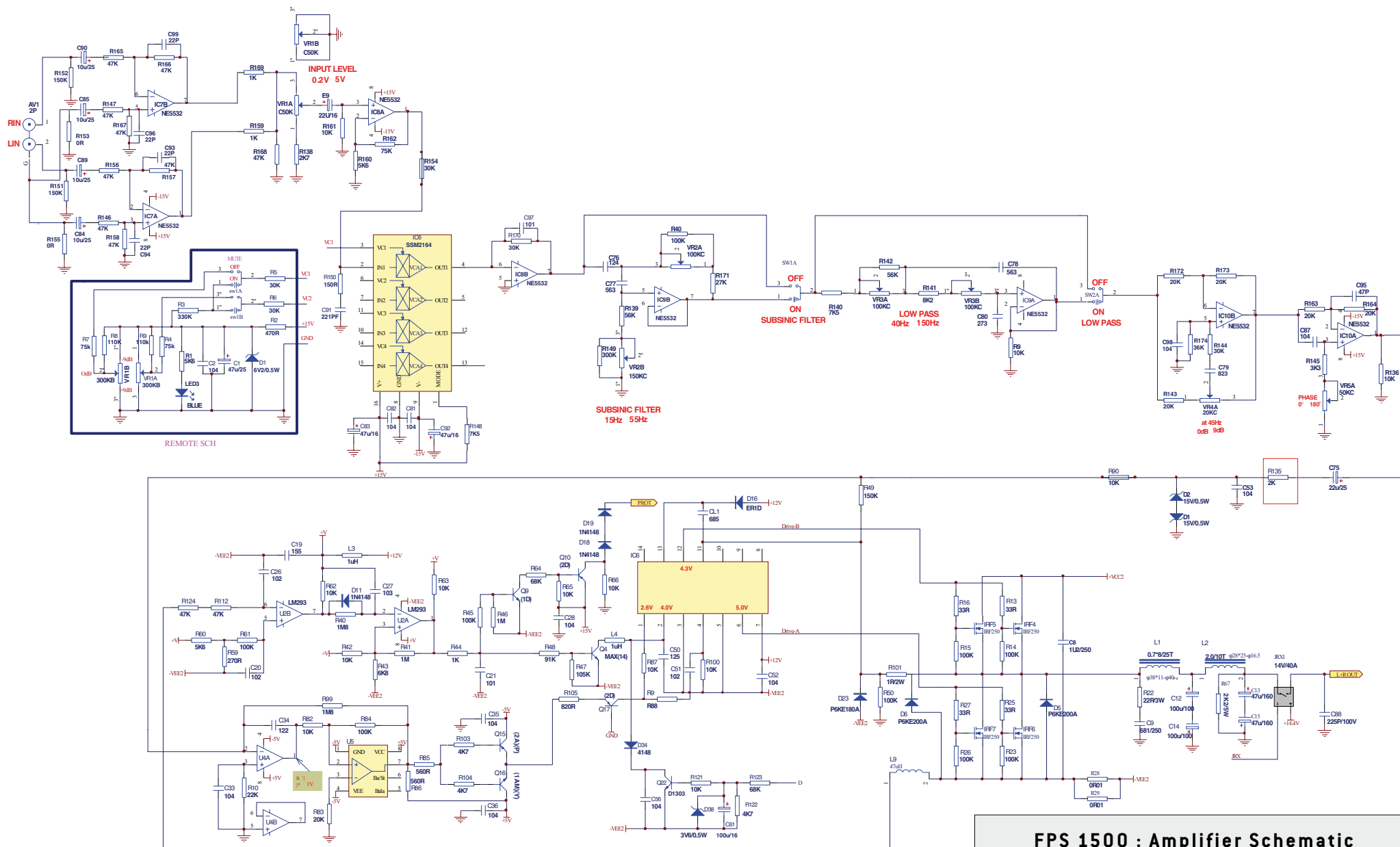
20	5103340020045	fan	8025 with cable L=80MM Neilsbed ROHS	1	PCS	change for 1500RPM (with Focal logo)
21	5105200020038	Fan strengthen the cushion cover	L=16.9mm ROHS PFS series	4	PCS	
22	5105250020013	left-down rubber feet	PFS GE ROHS	2	PCS	
23	5105250020014	right-down rubber feet	PFS GE ROHS	2	PCS	
24	5105250020015	right-up rubber top	PFS GE ROHS	2	PCS	
25	5105250020016	left-up rubber top	PFS GE ROHS	2	PCS	
26	5106170390001	illuminated plastic logo	SAL00097S	1	PCS	
27	5214000000014	Switch sponge	16*7*1.5 ROHS	2	PCS	
28	5106260010129	blister	4 cast part blister	1	PCS	
29	5106260010130	blister	3 cast part blister	1	PCS	
30	5214000000173	sponge	FPS series 3 cast part sponge-rubber pad ROHS	1	PCS	
31	5214000000174	sponge	FPS series 4 cast part sponge-rubber pad ROHS	1	PCS	
32	5216000000186	other accessory	single side gummed corduroy	0.0005	M2	25*20
33	5401080010062	front cover	Focal General fan cover ANODIZED	1	PCS	
34	5105410040001	others	RED INSULATOR	2	PCS	for fan top cover
35	5401260010013	supporting plate	FPS GE fan cover blacket board ANODIZED	1	PCS	
36	5402010160166	aluminium cover	FPS1500 with hair 7C L=301MM	1	PCS	
37	5402010060035	die-casting heatsink	FPS2160/1500 ANODIZED	1	PCS	
38	5402110010040	remote control	Focal wired remote shell L=39.5 with little hair 7C black	1	PCS	
39	5101280120039	screw	CA3*6 BN ROHS screw caps thickness 2.0	8	PCS	fixed end panel
40	5101290010005	screw nut	7 special white potentiometer	2	PCS	
41	5105140020038	plastic knob	FPS series (remote control) ROHS	1	PCS	for remote control
42	5402120010025	Aluminum wired remote front panel	Focal with hair 7C	1	PCS	
43	5402130010038	Aluminum wired remote back panel	Focal with hair 7C	1	PCS	
44	5405450020041	plastic square knob	4.5*4.5*12.5MM black ROHS	1	PCS	for remote panel
45	5402270010007	aluminium adjusting plate	FPS1500aluminium adjusting plate with little hair7C	1	PCS	

product N°5509215010003

car amplifier FPS 1500(France)

unit PCS

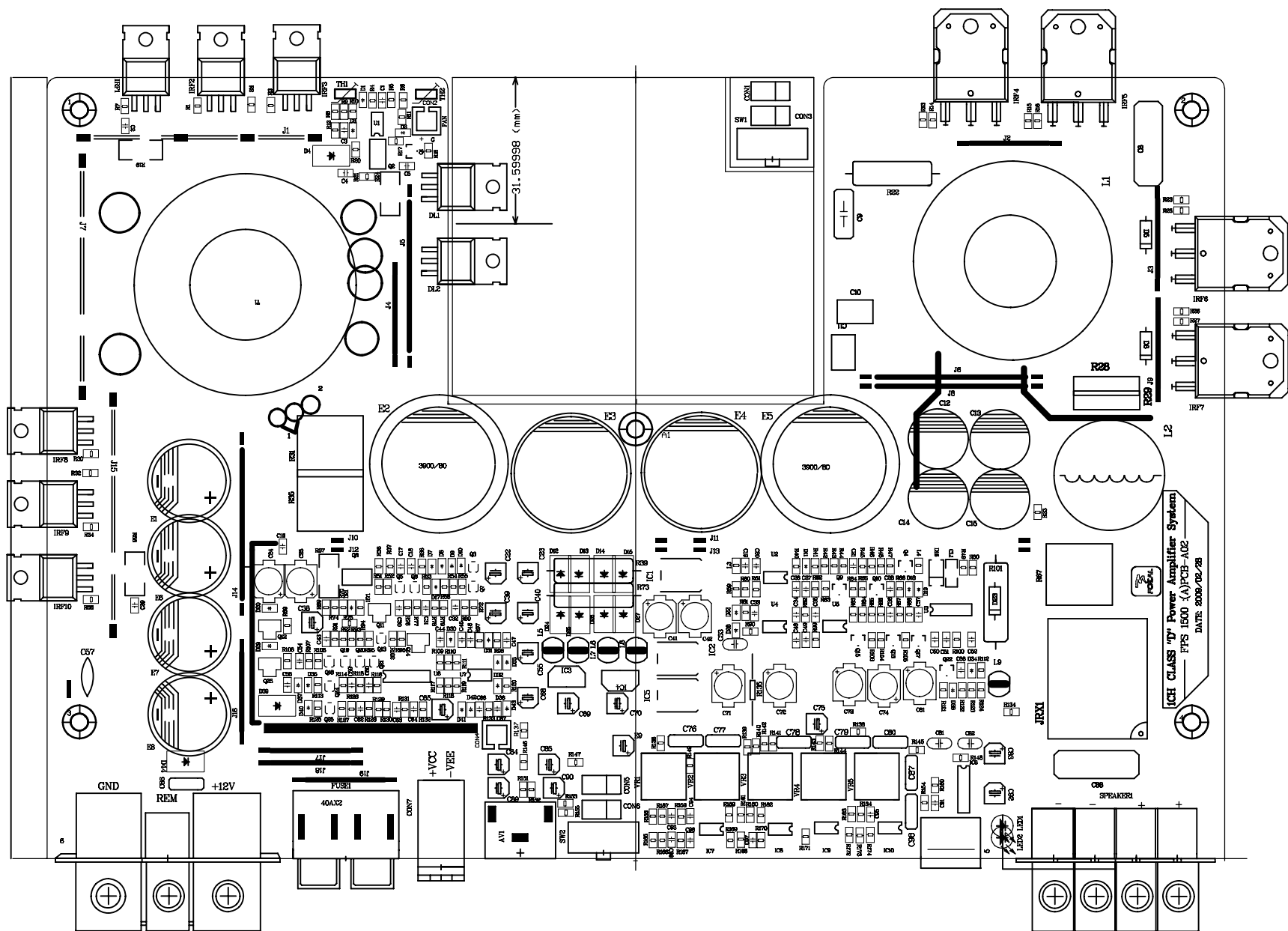
level	material No	material name	material specification	Amount of sub-parts	unit	Drawing locations
PACKING						
1	5101270020002	Accessory key	hexagon key 3 R0HS	1	PCS	
2	5101280010031	screw	BA3*10 black R0HS	2	PCS	Only for remote control
3	5101280530007	screw	TA4*50 darker black R0HS	4	PCS	
4	5101300010008	flat-mediated	3 black R0HS	2	PCS	Only for remote control
5	5101300010009	flat-mediated	4 black R0HS	4	PCS	
6	5101300020004	bomb-mediated	3 black R0HS	2	PCS	Only for remote control
7	5101300020005	bomb-mediated	4 black R0HS	4	PCS	
8	5103310020009	fuse lever	40A R0HS[]	2	PCS	
9	5105370010001	Lotus seat cap R0HS		2	PCS	
10	5106010060046	Carton	FPS1500	0,5	PCS	2PCS/box
11	5106030060077	gift box	FPS1500	1	PCS	
12	5106260010128	pearl wool	No.52 three-piece suit	1	SET	
13	5106150011643	carton sticker	FPS1500 black and yellow 50*102 a duplicate(see note No.jump)	2	PCS	
14	5106150011647	body code sticker	FPS1500 duplex black 26*11.5mm (No.jump see remarks)	1	PCS	
15	5106150011657	gift box sticker	FPS1500 duplex black	1	PCS	
16	5106200010002	Zip-lock bag	12*13 P0 material	1	PCS	mounted wired remote
17	5106210010096	environmental bags	46*36CM Thinken(Focal dedicated printing)	1	PCS	mounted amplifier
18	5106220010001	Zip-lock bag	7*11	1	PCS	mount spare part
19	5106220010005	Zip-lock bag	munual plastic(Focal dedicated printing)	1	PCS	Packaging Manual
20	5106220010009	Zip-lock bag	13*18	1	PCS	installed wire-line
21	5210000000001	adhesive sealing	transparent adhesive tape 48*100Y	0.04	PCS	
22	5216000000147	other accessories	10g desiccant(R0HS)	1	PCS	
23	5218001010004	remote cable	4P black wire-line reverse 5M R0HS (4P4C)	1	PCS	



FPS 1500 : Amplifier Schematic



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FPS 1500 : Component Layout



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Declaration of Conformity



Reference No.: WT09113955-F-E-E
Applicant: Focal-JMlab
Address: ZI MOLINA LA CHAZOTTE - 108, rue de l'avenir -
BP37442353 LA TALAUDIERE CEDEX
Manufacturer: SAGA AUDIO EQUIPMENT CO., LTD.
Address: No.1 Saga Road, Shashui District, Songgang Town,
Nanhai, Foshan City, Guangdong, P.R.China
Product: CAR AUDIO
Model No.: FPS1500
Technical Data: 10-15VDC, 800W

Test Standards:

EN 55013: 2001+A1: 2003+A2: 2006
EN 55020: 2007

The above product has been tested by us with the listed standards and found in compliance with the European Electromagnetic Compatibility Directive 2004/108/EC. It is possible to use CE marking to demonstrate the compliance with this EMC Directive.

EN 55013: Sound and television broadcast receivers and associated equipment-
Radio disturbance characteristics - Limits and methods of measurement
EN 55020: Sound and television broadcast receivers and associated equipment-
Immunity characteristics - Limits and methods of measurement

The referred test report shows that the product complies with standards recognized as giving presumption of compliance with the essential requirements in the above listed EU Directive. Other relevant Directives have to be observed.

After preparation of the necessary technical documentation as well as the conformity declaration, the CE marking as shown below can be affixed on the equipment.

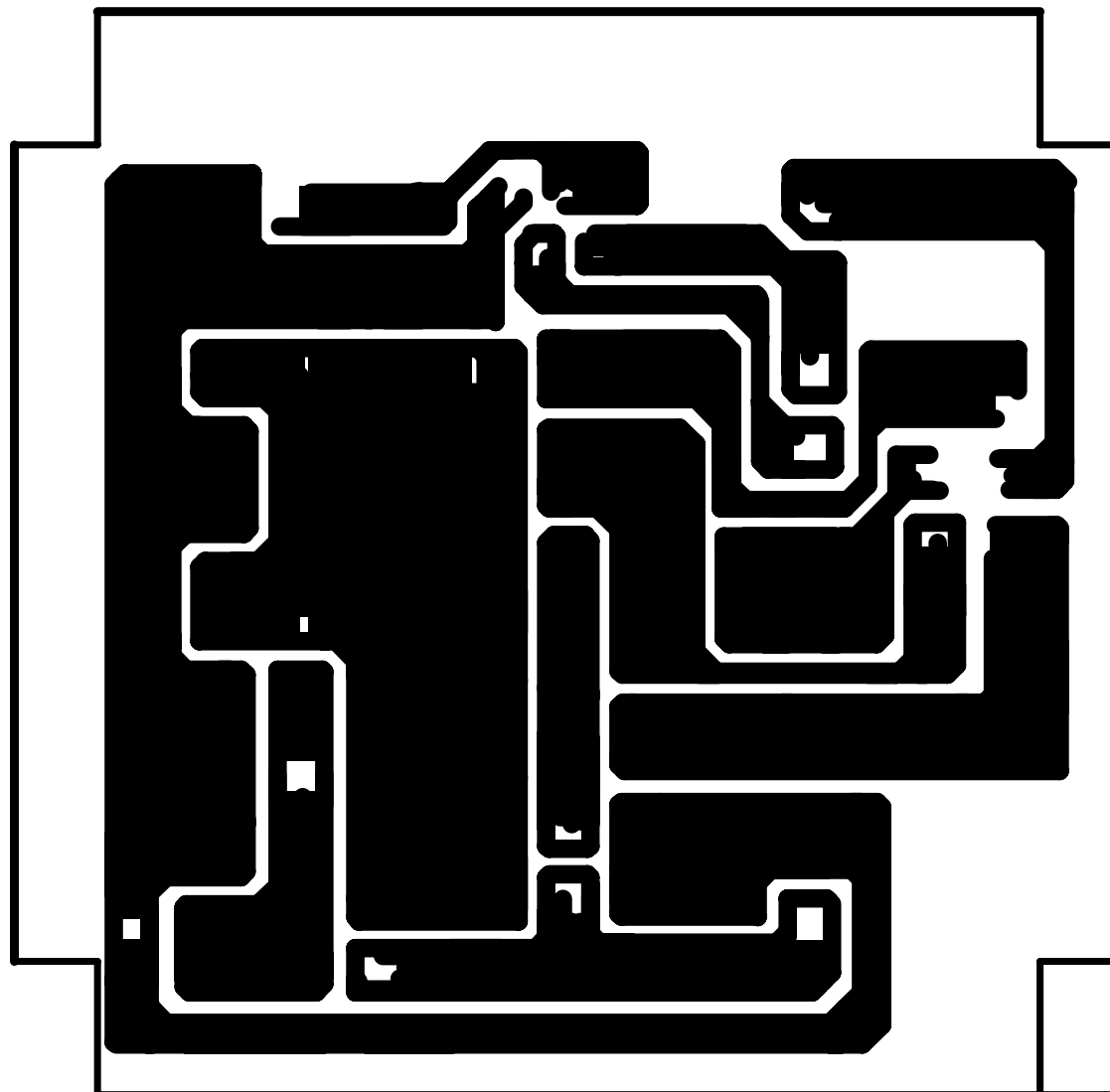


CE

The statement is based on a single evaluation of the sample of above mentioned products. It does not imply an assessment of the whole production.

WALTEK SERVICES CO., LTD.

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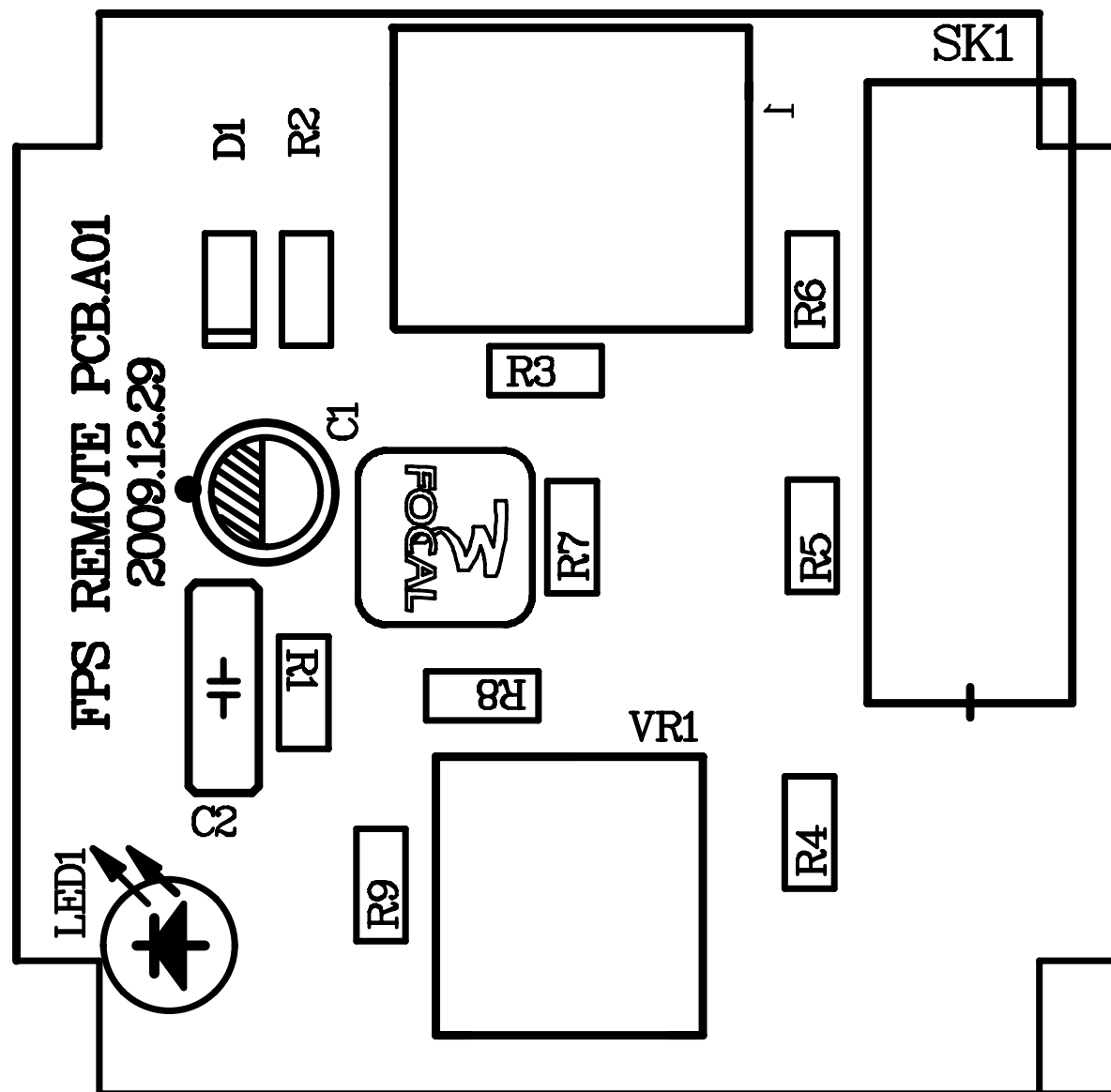


Remote : Bottom Layout



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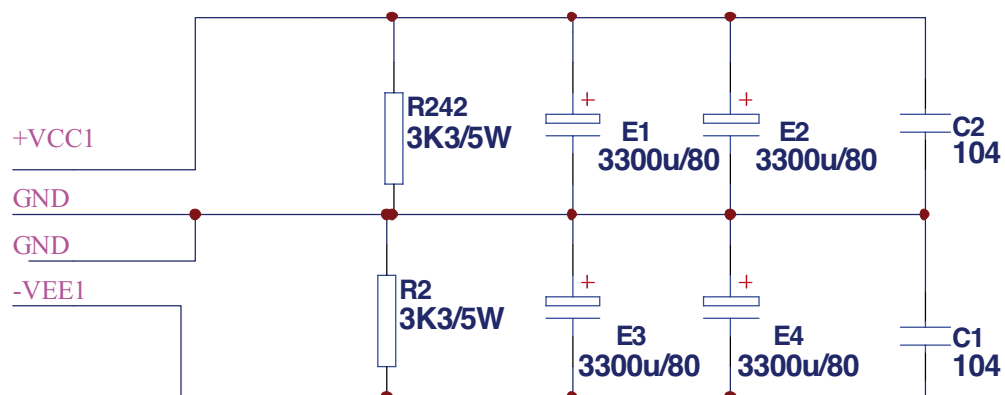
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Remote : Component Layout



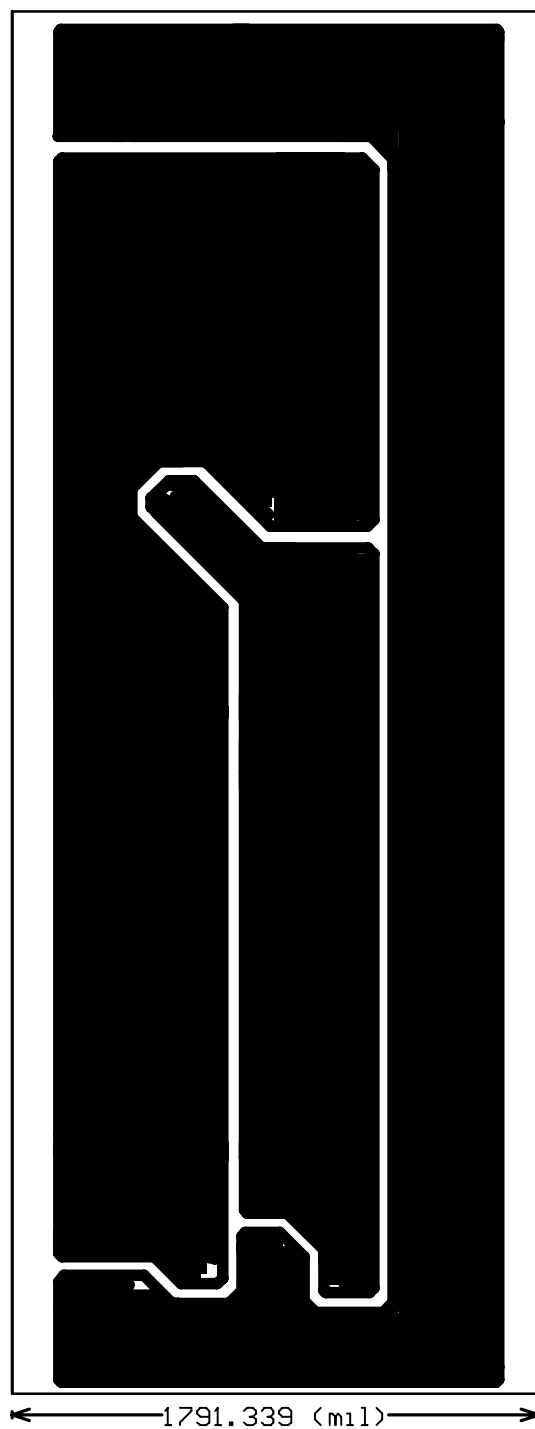
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High Cap : Schematic



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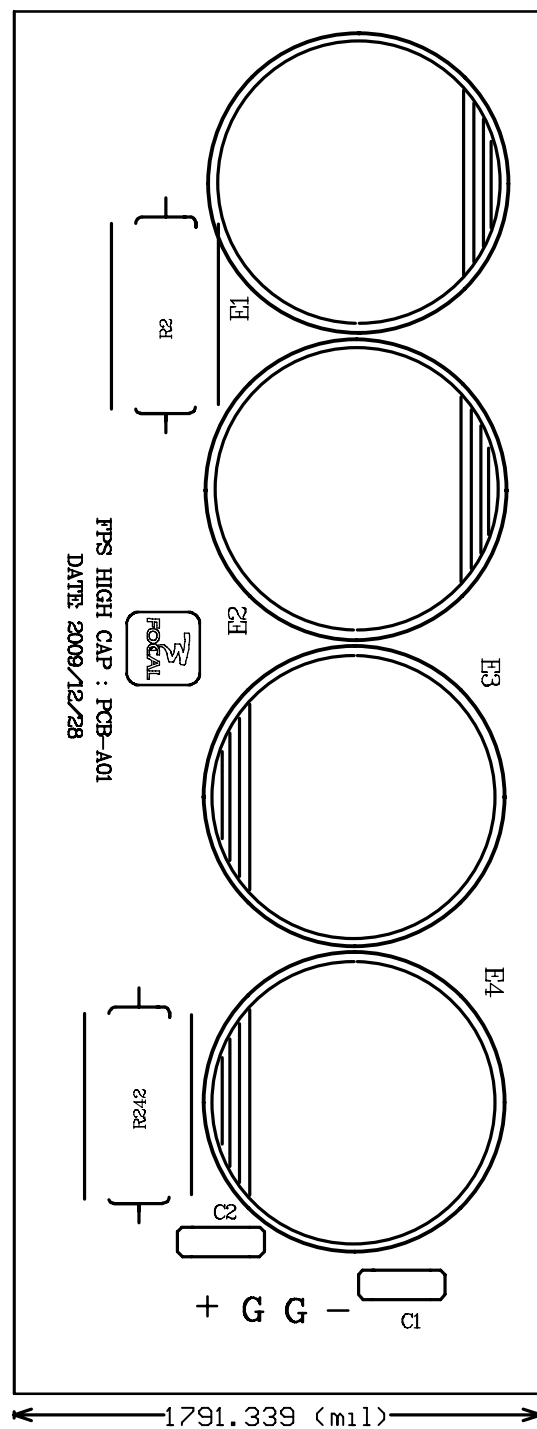


1791.339 (mil)

High Cap : Bottom Layout



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High Cap : Component Layout



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Focal Reference	Material No	Material name	Unit Price
ELDI1002	920303500449	SMT IC S0-16 - TL494I ROHS{125 }	2,30 €
ELDI1003	920303200108	SMD transistors SOT-23 - 2N4401 ROHS	0,10 €
ELDI1004	920303200109	SMD transistors SOT-23 - 2N4403 ROHS	0,10 €
ELDI1005	5103250080003	Audion - 2N5551 Rail Cover	0,10 €
ELDI1006	5103340020045	Fan - 8025 with cableL=80MM Neilsbed ROHS	3,80 €
ELDI1007	5103260050056	Mosfet - FQP65N06	3,10 €
ELDI1008	5103260050058	Mosfet - FQP50N06	3,10 €
ELDI1009	5103260050091	Mosfet - IRFP250N	3,90 €
ELDI1010	5103260050076	Power tube - MSGT2810	2,80 €
ELDI1011	5106170390001	Illuminated plastic logo - SAL00097S	3,00 €
ELDI1012	920306600053	Chip resistor 0805 - 68Ω ±1% ROHS	0,05 €
ELDI1013	5103310020015	Fuse lever - 40A ROHS {FPS4160}	2,90 €
ELDI1014	5103310020010	Fuse lever - 50A ROHS {FPS2300RX}	2,90 €
ELTR1001	5301000070077	T36 - Transformer FPS 2160	7,80 €
ELTR1002	5301000080063	T44 - Transformer FPS 2300RX	12,90 €
ELTR1003	5301000080062	T44-40V-5T - Transformer FPS 4160	12,90 €
ELTR1004	5301000110033	T47-4T-64V - Transformer FPS 1500	21,50 €
ELDI1015	5402110010040 + 5218001010004	Remote control + Cable	10,50 €
ELDI1016	5105250020013 + 5105250020014	Machine feet (Pack of 8 parts)	4,50 €
COVI1100	5101280530007 + 35101270020002 + 5101300010009 + 5101300020005	Wood screws + tool (Accessory)	1,50 €
EMCA1302	5106030060075	Gift Box FPS2160	11,50 €
EMCA1303	5106030060076	Gift Box FPS4160	11,50 €
EMCA1304	5106030060078	Gift Box FPS2300RX	11,50 €
EMCA1305	5106030060077	Gift Box FPS1500	11,50 €
EMCQ1009	5106260010128	EPE Set	4,00 €

Désignation française
Contrôleur - TL494I
Transistor Bipolaire - 2N4401
Transistor Bipolaire - 2N4403
Transistor Bipolaire - 2N5551 Rail Cover
Ventilateur 80x80mm
Transistor Mosfet - FQP65N06
Transistor Mosfet - FQP50N06
Transistor Mosfet - IRFP250N
Transistor IGBT- MSGT2810
Logo rétroéclairé
Résistance - 68Ω ±1% ROHS
Fusible - 40A {FPS4160}
Fusible - 50A {FPS2300RX}
Transformateur FPS 2160
Transformateur FPS 2300RX
Transformateur FPS 4160
Transformateur FPS 1500
Télécommande + Câble
Pieds caoutchouc (Sachet de 8pcs)
Sachet de visserie
Boîte FPS2160
Boîte FPS4160
Boîte FPS2300RX
Boîte FPS1500
Calles EPE