

RF

No	Description	Part Name	Reference No	Q'ty
1	Chip CAP (1608)	18pF	C20,C21,C23,C25,C28,C29,C32,C33,C34,C46,C48,C49,C54,C57,C58,C66,C67,C68,C72,C73,C75,C76,C78,C79,C102	25
2	Chip CAP (1608)	10nF	C8,C15,C22,C38,C44	5
3	Chip CAP (1608)	100nF	C2,C7,C14,C17,C19,C26,C27,C47,C59,C71,C77	11
4	Chip CAP (1608)	470nF	C1	1
5	Chip CAP (1608)	680nF	C18	1
6	Chip CAP (1608)	10uF	C24	1
7	High Q CAP (2012)	j1pF	X3,X28,X29,X34,X42,X43,X47	7
8	High Q CAP (2012)	j1.5pF	X7	1
9	High Q CAP (2012)	j2pF	X5,X6,X9,X13,X17,X20,X24	7
10	High Q CAP (2012)	j2.4pF	C52	1
11	High Q CAP (2012)	j18pF	C3,C4,C6,C30,C31,C50,C53,C55,C60,C61,C65,C69,C70,C74,C84,C85,C89,C90,C94,C95,C99,C100,X8	23
12	High Q CAP (2012)	j10pF	C56,C80,C81	3
13	Chip CAP (2012)	10uF	C13,C16,C35,C36,C37,C39,C41,C42,C43,C45	10
14	High V CAP	HV 10uF/50V	C5,C12,C63,C64,C82,C83,C88,C91,C92,C93,C98,C101	12
15	High V CAP	HV 47uF/16V	C9,C10,C11	3
16	High V CAP	HV 220nF/200V	C62,C86,C87,C96,C97	5
17	Chip L (1608)	12nH	L3	1
18	Power L (5845D)	10uH	L1	1
19	Chip R (1608)	0	R29,R30,R35,R36,R42,R43,R80,R87,R84,R85,L2,R69,R74,R17,R6	15
20	Chip R (1608)	1	R23	1
21	Chip R (1608)	10	R33	1
22	Chip R (1608)	12	R2,R31	2
23	Chip R (1608)	18	R66	1
24	Chip R (1608)	24	R10,R25	2
25	Chip R (1608)	30	R13,R51,R60	3
26	Chip R (1608)	33	R20,R37,R44	3
27	Chip R (1608)	51	R8,R15,R28,R62,R64	5
28	Chip R (1608)	68	R54,R57,R68	3
29	Chip R (1608)	91	R53,R55,R56,R58	4
30	Chip R (1608)	100	R34,R41,R63	3
31	Chip R (1608)	150	R9,R11	2
32	Chip R (1608)	180	R12,R14,R50,R52,R59,R61	6
33	Chip R (1608)	220	R9,R11	2
34	Chip R (1608)	300	R19,R22,R65,R67	4
35	Chip R (1608)	470	R1,R3,R24,R27	4
36	Chip R (1608)	1K	R88	1
37	Chip R (1608)	1.8K	R82	1
38	Chip R (1608)	2K	R70,R72	2
39	Chip R (1608)	2.7K	R79,R83	2
40	Chip R (1608)	10K	R39,R46,R71,R77,R81,R86	6
41	Chip R (1608)	20K	R75,R76,R78,R89,R90	5
42	Chip R (1608)	62K	R93	1
43	Chip R (1608, 1%)	510	R91	1
44	Chip R (1608, 1%)	1.5K	R92	1
45	Chip R (2012)	a0	C40	1
46	Chip R (2012)	a51	R49	1

47	Chip Thermistor (1608)	47th	R21,R26,R32,R38,R45	5
48	Chip R (5025)	C0	R47,R48	2
49	Variable R (3224)	VR_500	VR1,VR2,VR3	3
50	Variable R (3224)	VR_10K	VR4	1
51	Term 50ohm	060120A_15Z50_2	R40	1
52	OP-AMP	LM8262	U4,U8	2
53	Switching Regulator	LM22670-ADJ	U1	1
54	Schottky Diode	MBRA340T3G	D1	1
55	Schottky Diode	BAT54CLT1	D2,D3	2
56	Logic Gate(NOR)	MC74HC1G02	U6	1
57	MMIC	BT05CV	Q1	1
58	Delay Line	XDL15-2-020S	U10,U11	2
59	LD MOSFET	AFT27S006N	Q2	1
60	LD MOSFET	PTFB210801FA	Q3,Q4	2
61	Regulator (LDO)	LP2992AIM5-5.0V	U16	1
62	Regulator (LDO)	LP2992AIM5-3.3V	U2,U14	2
63	Regulator (LDO)	EN5311QI	U13,U15	2
64	Detector	LTC5582	U7	1
65	Temp Sensor	LM50	U3	1
66	Hybrid Coupler	RCP2150Q03	U9	1
67	Hybrid Coupler	XC2100E_03S	U17	1
68	Doherty Coupler	X3DC21E2S	U18	1
69	Directional Coupler	X3C19E2_20S	U19	1
70	Directional Coupler	RCP2150Q10	U12	1
71	SPDT	NLAS4599	U5	1
72	D SUB Connector	9Pin R/A Male	CON3	1
73	Isolator	CES302G14DCB000	ISO1	1
74	Isolator	IHA211218AB	ISO3	1
75	EMI Filter (2012)	NFM21HC223R1H3A	E2	1
76	EMI Filter	CTH32R102S20A	E1	1
77	NC	R,L,C, NC	C51,ISO2,R73,R16,R18,R4,R5,R7,X1,X2,X4,X10,X11,X12,X14,X15,X16,X18,X19,X21,X22,X23,X25,X26,X27,X30,X31,X32,X33,X35,X36,X37,X38,X39,X40,X41,X44,X45,X46,X48,X49,X50,X51,X52	34
78	SMA Connector	SMA 4Hole 5-3 Female, 은색	CON1,CON2	2
79	APD Board Ass'y	SC1894-13_3G	APD1	1
80	Coaxial Cable	SF 141, 41mm, 외피포함		3

APD

No	Description	Part Name	Reference No	Q'ty
1	Chip Cap(1005)	1n(1005)	C5,C6,C7,C9,C10,C11,C12,C13,C15,C16,C17,C22,C23,C26,C28,C29,C30,C32,C33,C36,C37,C38,C39	23
2		10p(1005)	C8,C14	2
3		0.2p(1005)	C19	1
4		18nH(1005)	C20	1
5		15p(1005)	C25,C27,C35,C40,C47,C48	6
6		1p(1005)	C42	1
7		3.6nH(1005)	C43	1
8		8.2nH(1005)	C45	1
9		0.5p(1005)	C46	1
10	Chip Cap(1608)	2.2u(1608)	C18,C24,C31,C34	4
11	High Q Cap(2012)	J18pF	C1	1
12	Chip Cap(2012)	2.2uF/16V(2012)	C4	1

13	Chip Cap(3216)	22uF/6.3V(3216)	C2,C3	2
14	Chip Inductor(1005)	5.6nH(1005)	L1,L5	2
15		1.2nH(1005)	L10,L14	2
16		2.4nH(1005)	L13,L17	2
17	Chip Ferrite Beads	BLM18AG121SN1D	L3,L4,L7,L8,L9	5
18	SOC(APD Chip)	IC_APD_SC1894-13	Q1	1
19	Chip Resistor(1005)	0(1005)	L2,L6,L11,L12,L15,L16	6
20		10K(1005)	R1,R3	2
21		2.4K(1005)	R2	1
22	Chip Resistor(2012)	2K(2012)	R4	1
23	DC Connector	YDW200-08	U1	1
24	CRYSTAL	CRYSTAL/20MHz	U2	1
25	RF Balun	BD1722J50100AHF(Balun)	U3,U4,U5	3
26		NC	C21,C41,C44	3

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Infineon	
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ENPIRION	
Linear	
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Maruwa	
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PATECH	
엠텍웨이브	

Manufacture	Note
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연호전자	
DPCOM	
Anaren	

AH1745/742.5MLA70/89M27S_PartList_

No	Description	Part Name	Reference No
1	Chip CAP (1608)	15pF	C3,C9,C10,C11,C12,C19,C22,C23,C24,C25,C29,C34,C41,C43,C45,C46,C47,C49,C51,C53,C57,C58,C59,C60,C61,C63,C111
2	Chip CAP (1608)	100pF	C65,C72,C73,C74,C78,C79,C82,C81,C84,C85,C86,C87,C88,C89,C95,C97,C101,C107,C109
3	Chip CAP (1608)	1nF	C5,C31,C103,C113
4	Chip CAP (1608)	10nF	C4,C13,C18,C30,C55,C62,C67,C76,C102,C112
5	Chip CAP (1608)	100nF	C6,C32,C33,C42,C44,C66,C104,C114
6	Chip CAP (1608)	470nF	C52,C83
7	Chip CAP (1608)	10uF	C50,C80
8	High Q CAP (2012)	0.5pF.HQ	C210
9	High Q CAP (2012)	1pF.HQ	C36,C207
10	High Q CAP (2012)	1.5pF.HQ	C203,C204,C206,C208,C209,C211
11	High Q CAP (2012)	1.8pF.HQ	C201,C202,C205
12	High Q CAP (2012)	2.4pF.HQ	C301,C302,C303,C304,C305,C307
13	High Q CAP (2012)	4.7pF.HQ	C28
14	High Q CAP (2012)	8.2pF.HQ	C308
15	High Q CAP (2012)	12pF.HQ	C1,C2,C7,C16,C17,C20,C21,C26,C37
16	High Q CAP (2012)	100pF.HQ	C48,C69,C70,C92,C93,C95,C100,C105,C115,C116,C117
17	TanTal CAP	220nF/100V	C39,C40,C68,C94,C106
18	TanTal CAP	4.7uF/16V/SMA	C8,C14,C15,C54,C56,C71,C75,C77,C98,C110,C108
19	TanTal CAP	10uF/50V/SMD	C27,C38,C91
20	CAP (Chip 전해)	100uF/50V/Chip	C35,C90
21	CAP (READ)	470uF/50V	C212,C213
22	Chip L (1608)	2.7nH	L201
23	Chip L (1608)	22nH	L5
24	Chip L (1608)	27nH	L2
25	Chip L (1608)	33nH	L4
26	Air Coil 3 Turns	Air Coil 3Turns	L3
27	Chip R (1608)	0	R32,R40
28	Chip R (1608)	18	R68
29	Chip R (1608)	47	R47
30	Chip R (1608)	51	R4,R7,R71
31	Chip R (1608)	68	R33,R46
32	Chip R (1608)	130	R48,R49
33	Chip R (1608)	300	R5,R6,R8,R9,R69,R70,R72,R73
34	Chip R (1608)	510	R203,R42,R36
35	Chip R (1608)	2K	R44
36	Chip R (1608)	5.1K	R35
37	Chip R (1608)	10K	R201,R202,R39,R41
38	Chip R (1608)	12K	R43
39	Chip R (1608)	100K	R34,R45
40	Chip R (2012)	0	L1,R30,R66,R67,L203
41	Chip R (2012)	18	R75
42	Chip R (2012)	20	R10,R11,R60,R61
43	Chip R (2012)	36	R2
44	Chip R (2012)	47	R25
45	Chip R (2012)	82	R21,R23,R52,R54
46	Chip R (2012)	100	R22,R27,R28,R50,R51,R53
47	Chip R (2012)	130	R24,R26
48	Chip R (2012)	150	R1,R3,R56

49	Chip R (2012)	200	R19
50	Chip R (2012)	300	R74,R76
51	Chip R (2012)	510	R17
52	Chip R (2012)	820	R18,R57
53	Chip R (2012)	1K	R14,R37,R38,R63
54	Chip R (2012)	1.5K	R20
55	Chip R (2012)	2k	R55
56	Chip R (2012)	10K	R13,R58,R62
57	Chip R (2012)	20K	R15,R65
58	Chip R (2012)	100K	R59,R112
59	Chip Thermistor (1608)	40th	Rt1,Rt2,Rt3,Rt4
60	Variable R (3224)	VR_ 1K	VR1,VR4
61	Variable R (3224)	VR_ 5K	VR2,VR3
62	NPN BJT	NPN	U4,U21
63	PNP BJT	PNP	U7,U17
64	Logic Gate(NAND)	MC74VHC1G135	U5,U22
65	Regulator (LDO)	LP2992AIM-3.3	U10,U14,U18
66	Regulator (LDO)	LP2992AIM-3.8	U2
67	P-MOS	IRF5803	U3,U20
68	Voltage Regulator	7806	U6,U19
69	OP-AMP	MC33202	U9,U13
70	Detector	LTC5582	U11,U15
71	Voltage Regulator	78L05	U12
72	MMIC	BT05CV	U1,U23
73	LD MOSFET	AFT20P060-4N	U8
74	LD MOSFET	MRFE6S9045N	U16
75	Isolator	IHA171178AB	ISO1
76	Isolator	IHA069079AQ	ISO2
77	NC	R,L,C, NC	C21,C41,C44

R1

Q'ty	Manufacture	Note
27	Murata	
19	Murata	
4	Murata	
10	Murata	
8	Murata	
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2	Murata	
1	Johanson	
2	Johanson	
6	Johanson	
3	Johanson	
6	Johanson	
1	Johanson	
1	Johanson	
9	Johanson	
11	Johanson	
5	AVX	
11	AVX	
3	AVX	
2	RUBICON	
2	SAITECH	
1	ELEC	
1	TAIYO YUDEN	
1	TAIYO YUDEN	
1	TAIYO YUDEN	
1	TAIYO YUDEN	
1	KOEL	
2	Walsin	
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4	Joinset	
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2	Bourns	
2	KEC	
2	KEC	
2	On semi	
3	National S.C	
1	National S.C	
2	IRF	
2	KEC	
2	RN2 Tech	
2	Linear	
1	KEC	
2	BEREX	
1	NXP	
1	NXP	
1	3R Wave	Isolator(Term Type) 0.75" STD (19.05x25.4mm)
1	3R Wave	Isolator(Term Type) 0.75" STD (19.05x25.4mm)
3	-	

AH1745/742.5MLA70/89M27S_PartList_

No	Description	Part Name	Reference No
1	Chip CAP (1608)	15pF	C3,C9,C10,C11,C12,C19,C22,C23,C24,C25,C29,C34,C41,C43,C45,C46,C47,C49,C51,C53,C57,C58,C59,C60,C61,C63,C111
2	Chip CAP (1608)	100pF	C65,C72,C73,C74,C78,C79,C82,C81,C84,C85,C86,C87,C88,C89,C95,C97,C101,C107,C109
3	Chip CAP (1608)	1nF	C5,C31,C103,C113
4	Chip CAP (1608)	10nF	C4,C13,C18,C30,C55,C62,C67,C76,C102,C112
5	Chip CAP (1608)	100nF	C6,C32,C33,C42,C44,C66,C104,C114
6	Chip CAP (1608)	470nF	C52,C83
7	Chip CAP (1608)	10uF	C50,C80
8	High Q CAP (2012)	0.5pF.HQ	C210
9	High Q CAP (2012)	1pF.HQ	C36,C207
10	High Q CAP (2012)	1.5pF.HQ	C203,C204,C206,C208,C209,C211
11	High Q CAP (2012)	1.8pF.HQ	C201,C202,C205
12	High Q CAP (2012)	2.4pF.HQ	C301,C302,C303,C304,C305,C307
13	High Q CAP (2012)	4.7pF.HQ	C28
14	High Q CAP (2012)	8.2pF.HQ	C308
15	High Q CAP (2012)	12pF.HQ	C1,C2,C7,C16,C17,C20,C21,C26,C37
16	High Q CAP (2012)	100pF.HQ	C48,C69,C70,C92,C93,C95,C100,C105,C115,C116,C117
17	TanTal CAP	220nF/100V	C39,C40,C68,C94,C106
18	TanTal CAP	4.7uF/16V/SMA	C8,C14,C15,C54,C56,C71,C75,C77,C98,C110,C108
19	TanTal CAP	10uF/50V/SMD	C27,C38,C91
20	CAP (Chip 전해)	100uF/50V/Chip	C35,C90
21	CAP (READ)	470uF/50V	C212,C213
22	Chip L (1608)	2.7nH	L201
23	Chip L (1608)	22nH	L5
24	Chip L (1608)	27nH	L2
25	Chip L (1608)	33nH	L4
26	Air Coil 3 Turns	Air Coil 3Turns	L3
27	Chip R (1608)	0	R32,R40
28	Chip R (1608)	18	R68
29	Chip R (1608)	47	R47
30	Chip R (1608)	51	R4,R7,R71
31	Chip R (1608)	68	R33,R46
32	Chip R (1608)	130	R48,R49
33	Chip R (1608)	300	R5,R6,R8,R9,R69,R70,R72,R73
34	Chip R (1608)	510	R203,R42,R36
35	Chip R (1608)	2K	R44
36	Chip R (1608)	5.1K	R35
37	Chip R (1608)	10K	R201,R202,R39,R41
38	Chip R (1608)	12K	R43
39	Chip R (1608)	100K	R34,R45
40	Chip R (2012)	0	L1,R30,R66,R67,L203
41	Chip R (2012)	18	R75
42	Chip R (2012)	20	R10,R11,R60,R61
43	Chip R (2012)	36	R2
44	Chip R (2012)	47	R25
45	Chip R (2012)	82	R21,R23,R52,R54
46	Chip R (2012)	100	R22,R27,R28,R50,R51,R53
47	Chip R (2012)	130	R24,R26
48	Chip R (2012)	150	R1,R3,R56

49	Chip R (2012)	200	R19
50	Chip R (2012)	300	R74,R76
51	Chip R (2012)	510	R17
52	Chip R (2012)	820	R18,R57
53	Chip R (2012)	1K	R14,R37,R38,R63
54	Chip R (2012)	1.5K	R20
55	Chip R (2012)	2k	R55
56	Chip R (2012)	10K	R13,R58,R62
57	Chip R (2012)	20K	R15,R65
58	Chip R (2012)	100K	R59,R112
59	Chip Thermistor (1608)	40th	Rt1,Rt2,Rt3,Rt4
60	Variable R (3224)	VR_ 1K	VR1,VR4
61	Variable R (3224)	VR_ 5K	VR2,VR3
62	NPN BJT	NPN	U4,U21
63	PNP BJT	PNP	U7,U17
64	Logic Gate(NAND)	MC74VHC1G135	U5,U22
65	Regulator (LDO)	LP2992AIM-3.3	U10,U14,U18
66	Regulator (LDO)	LP2992AIM-3.8	U2
67	P-MOS	IRF5803	U3,U20
68	Voltage Regulator	7806	U6,U19
69	OP-AMP	MC33202	U9,U13
70	Detector	LTC5582	U11,U15
71	Voltage Regulator	78L05	U12
72	MMIC	BT05CV	U1,U23
73	LD MOSFET	AFT20P060-4N	U8
74	LD MOSFET	MRFE6S9045N	U16
75	Isolator	IHA171178AB	ISO1
76	Isolator	IHA069079AQ	ISO2
77	NC	R,L,C, NC	C21,C41,C44

R1

Q'ty	Manufacture	Note
27	Murata	
19	Murata	
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5	AVX	
11	AVX	
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2	SAITECH	
1	ELEC	
1	TAIYO YUDEN	
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2	Bourns	
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2	KEC	
2	On semi	
3	National S.C	
1	National S.C	
2	IRF	
2	KEC	
2	RN2 Tech	
2	Linear	
1	KEC	
2	BEREX	
1	NXP	
1	NXP	
1	3R Wave	Isolator(Term Type) 0.75" STD (19.05x25.4mm)
1	3R Wave	Isolator(Term Type) 0.75" STD (19.05x25.4mm)
3	-	

AH1882.5/836.5MLA65/25M27S_PartList_

No	Description	Part Name	Reference No
1	Chip CAP (1608)	15pF	C3,C9,C10,C11,C12,C19,C22,C23,C24,C25,C29,C34,C41,C43,C45,C46,C47,C49,C51,C53,C57,C58,C59,C60,C61,C63,C111
2	Chip CAP (1608)	100pF	C65,C72,C73,C74,C78,C79,C82,C81,C84,C85,C86,C87,C88,C89,C95,C97,C101,C107,C109
3	Chip CAP (1608)	1nF	C5,C31,C103,C113
4	Chip CAP (1608)	10nF	C4,C13,C18,C30,C55,C62,C67,C76,C102,C112
5	Chip CAP (1608)	100nF	C6,C32,C33,C42,C44,C66,C104,C114
6	Chip CAP (1608)	470nF	C52,C83
7	Chip CAP (1608)	10uF	C50,C80
8	High Q CAP (2012)	0.3pF.HQ	C205
9	High Q CAP (2012)	1.2pF.HQ	C201,C202,C203
10	High Q CAP (2012)	1.8pF.HQ	C204
11	High Q CAP (2012)	4.7pF.HQ	C302
12	High Q CAP (2012)	6.8pF.HQ	C28,C48,C96,C99,C210
13	High Q CAP (2012)	10pF.HQ	C208
14	High Q CAP (2012)	12pF.HQ	C1,C2,C7,C16,C17,C20,C21,C26,C36,C37,C209,C301
15	High Q CAP (2012)	100pF.HQ	C69,C70,C92,C93,C95,C100,C105,C115,C116,C117
16	TanTal CAP	220nF/100V	C39,C40,C68,C94,C106
17	TanTal CAP	4.7uF/16V/SMA	C8,C14,C15,C54,C56,C71,C75,C77,C98,C110,C108
18	TanTal CAP	10uF/50V/SMD	C27,C38,C91
19	CAP (전해)	100uF/50V/Chip	C35,C90
20	CAP (READ)	470uF/50V	C206,C207
21	Chip L (1608)	15nH	L4
22	Chip L (1608)	47nH	L2
23	Air Coil 3 Turns	Air Coil 3Turns	L3
24	Chip R (1608)	0	R32,R40
25	Chip R (1608)	47	R47
26	Chip R (1608)	51	R4,R7,R68,R71
27	Chip R (1608)	68	R33,R46
28	Chip R (1608)	130	R48,R49
29	Chip R (1608)	300	R5,R6,R8,R9,R69,R70,R72,R73
30	Chip R (1608)	510	R203,R42
31	Chip R (1608)	2K	R36,R44
32	Chip R (1608)	10K	R201,R202,R39,R41
33	Chip R (1608)	12K	R35,R43
34	Chip R (1608)	100K	R34,R45
35	Chip R (1608)	0	L1,L5,R30,R66,R67
36	Chip R (1608)	15	R10,R11
37	Chip R (1608)	20	R60,R61
38	Chip R (1608)	30	R2
39	Chip R (1608)	47	R25
40	Chip R (2012)	51	R22
41	Chip R (2012)	82	R52,R54
42	Chip R (2012)	91	R74,R75,R76
43	Chip R (2012)	100	R27,R28,R50,R51,R53
44	Chip R (2012)	120	R21,R23
45	Chip R (2012)	130	R24,R26
46	Chip R (2012)	180	R1,R3
47	Chip R (2012)	200	R19,R56
48	Chip R (2012)	510	R17
49	Chip R (2012)	820	R18,R57

50	Chip R (2012)	1K	R14,R37,R38,R55,R63
51	Chip R (2012)	1.5K	R20
52	Chip R (2012)	10K	R13,R58,R62
53	Chip R (2012)	20K	R15,R65
54	Chip R (2012)	100K	R59,R112
55	Chip Thermistor (1608)	40th	Rt1,Rt2,Rt3,Rt4
56	Variable R (3224)	VR_1K	VR1,VR4
57	Variable R (3224)	VR_5K	VR2,VR3
58	NPN BJT	NPN	U4,U21
59	PNP BJT	PNP	U7,U17
60	Logic Gate(NAND)	MC74VHC1G135	U5,U22
61	Regulator (LDO)	LP2992AIM-3.3	U10,U14,U18
62	Regulator (LDO)	LP2992AIM-3.8	U2
63	P-MOS	IRF5803	U3,U20
64	Voltage Regulator	7806	U6,U19
65	OP-AMP	MC33202	U9,U13
66	Detector	LTC5582	U11,U15
67	Voltage Regulator	78L05	U12
68	MMIC	BT05CV	U1,U23
69	LD MOSFET	AFT20P060-4N	U8
70	LD MOSFET	MRFE6S9045N	U16
71	Isolator	IHA171178AB	ISO1
72	Isolator	IHA069079AQ	ISO2
73	NC	R,L,C, NC	C21,C41,C44

R1M

Q'ty	Manufacture	Note
27	Murata	
19	Murata	
4	Murata	
10	Murata	
8	Murata	
2	Murata	
2	Murata	
1	Johanson	
3	Johanson	
1	Johanson	
1	Johanson	
5	Johanson	
1	Johanson	
12	Johanson	
10	Johanson	
5	AVX	
11	AVX	
3	AVX	
2	RUBICON	
2	SAWPOCING	
1	ELCO	
1	TAIYO YUDEN	
1	TAIYO YUDEN	
1	KOEL	
2	Walsin	
1	Walsin	
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3	Walsin	
2	Walsin	
2	Walsin	
4	Joinset	
2	Bourns	
2	Bourns	
2	KEC	
2	KEC	
2	On semi	
3	National S.C	
1	National S.C	
2	IRF	
2	KEC	
2	RN2 Tech	
2	Linear	
1	KEC	
2	BEREX	
1	NXP	
1	NXP	
1	3R Wave	Isolator(Term Type) 0.75" STD (19.05x25.4mm)
1	3R Wave	Isolator(Term Type) 0.75" STD (19.05x25.4mm)
3	-	

Item	Reference	Part	Qty	FootPrint
30	C466,C467	0.047uF	2	C0402
1	BC1,BC2,BC3,BC4,BC5,BC6,BC7,BC8,BC9,BC10,BC11,BC18,BC19,BC20,BC21,BC22,BC23,BC24,BC25,BC26,BC27,C28,BC28,C29,BC29,C30,BC30,C31,BC31,BC32,BC33,BC34,BC35,BC36,BC37,BC38,BC39,BC42,BC47,BC48,BC49,BC50,BC51,BC52,BC53,BC54,BC55,BC56,BC57,C58,BC58,C59,BC59,C60,BC60,C61,BC61,C62,BC62,C63,BC63,C64,BC64,C65,BC65,C66,BC66,C67,BC67,C68,BC68,BC69,C70,BC70,BC71,BC72,	0.1uF	636	C0402
1-1	BC73,BC74,BC75,BC76,BC77,BC78,C79,BC79,C80,BC80,C81,BC81,C82,BC82,C83,BC83,C84,BC84,BC85,BC86,BC87,BC88,BC89,BC90,BC91,BC92,BC93,BC94,BC95,C96,BC96,C97,BC97,C98,BC98,C99,BC99,C100,BC100,C101,BC101,C102,BC102,C103,BC103,BC104,BC105,BC106,BC107,BC108,BC109,BC110,BC111,BC112,BC113,BC114,BC115,BC116,BC117,BC118,BC119,BC120,BC121,BC122,BC123,BC124,BC125,BC126,BC127,BC128,BC129,BC130,BC131,BC132,BC133,BC134,BC135,BC136,BC137,BC138,BC139,BC140,BC141,BC142,BC143,BC144,BC145,BC146,BC147,BC148,BC149,BC150,	0.1uF		C0402
1-2	BC151,BC152,BC153,BC154,BC155,BC156,BC157,BC158,BC159,BC160,BC161,BC162,BC163,BC164,BC165,BC166,BC167,BC168,BC169,C170,BC170,C171,BC171,C172,BC172,C173,BC173,C174,BC174,C175,BC175,C176,BC176,C177,BC177,BC178,BC179,BC180,BC181,BC182,BC183,BC184,BC185,BC186,BC187,BC188,BC189,BC190,BC191,BC192,BC193,BC194,BC195,BC196,BC197,BC198,BC199,BC200,BC201,BC202,BC203,BC204,BC205,BC206,BC207,BC208,BC209,BC210,BC211,BC212,BC213,BC214,BC215,BC216,BC217,BC218,BC219,	0.1uF		C0402
1-3	BC220,BC221,BC222,BC223,BC224,BC225,BC226,BC229,BC231,BC234,BC236,BC239,BC241,BC243,C244,C245,C246,C247,C248,BC248,C249,C250,BC250,C251,BC252,BC255,BC257,BC261,BC264,BC267,BC269,BC271,BC276,BC278,BC279,BC280,BC281,BC282,BC283,BC284,BC297,BC298,BC299,BC300,BC301,BC302,BC315,BC316,BC317,C318,BC318,C319,BC319,BC320,BC321,C322,BC322,C323,BC323,C324,BC324,C325,BC325,BC326,BC327,C328,BC328,C329,BC329,BC330,C331,BC331,C332,BC332,BC333,C334,BC334,C335,BC335,	0.1uF		C0402
1-4	C336,BC336,C337,BC337,C338,BC338,C339,BC339,C340,BC340,C341,BC341,C342,BC342,BC343,BC344,C345,BC345,C346,C347,C349,C351,C352,BC352,C353,BC353,BC354,C355,BC355,BC356,C357,BC357,C358,BC358,BC359,C360,BC360,C361,BC361,BC362,C363,BC363,C364,BC364,BC365,C366,BC366,BC367,C368,BC368,BC369,C370,BC370,C371,BC371,C372,BC372,C373,BC373,C374,BC374,C375,BC375,BC376,BC377,BC378,BC379,BC380,BC381,BC382,BC383,BC384,BC385,BC386,BC387,BC388,BC389,BC390,BC391,BC392,BC393,	0.1uF		C0402
1-5	BC394,BC395,BC396,BC397,BC398,BC399,BC400,BC401,BC402,BC403,BC404,BC405,BC406,BC407,BC408,C409,BC409,BC410,C411,BC411,C412,BC412,BC413,BC414,BC415,BC416,BC417,BC418,BC419,BC426,BC427,BC428,BC429,BC430,BC431,BC432,BC433,BC434,BC435,BC436,BC437,BC438,BC439,BC440,BC441,BC442,BC443,BC444,BC445,BC446,BC447,BC448,BC449,BC450,BC451,BC452,BC453,BC454,BC455,BC456,BC457,BC458,BC459,BC460,BC461,BC462,BC463,	0.1uF		C0402
1-6	BC464,BC465,BC466,BC467,BC468,BC469,BC470,BC471,BC472,BC473,BC474,BC475,BC476,BC477,BC478,BC479,BC480,C481,BC481,C482,BC482,C483,BC483,BC484,BC485,BC486,BC487,BC488,BC489,BC490,BC491,BC492,BC493,BC494,BC496,BC499,BC500,BC501,BC502,BC503,BC504,BC505,C506,BC506,BC507,BC508,BC509,BC510,BC511,BC512,BC513,BC514,BC515,BC516,BC517,BC518,BC519,BC520,BC521,BC522,BC523,BC524,BC525,BC526,BC527,BC528,BC529,BC530,BC531,BC532,BC533,BC534,BC535,BC536,BC537,BC538,	0.1uF		C0402
1-7	BC539,BC540,BC541,BC542,BC543,BC544,BC545,BC546,BC547,BC548,BC549,BC550,BC551,BC552,BC553,BC554,BC555,BC556,BC557,BC558,BC559,BC560,BC561,BC562,BC563,BC564,BC565,BC566,BC567,BC568,BC569,BC570,BC571,BC572,BC573,BC574,BC575,BC576,BC577,BC578,BC579,BC580,BC581,BC582,BC583,BC584,BC585,BC586,BC587,BC588,BC589,BC590,BC591,BC592,BC593,BC594,BC595,BC596,BC597,BC598,BC599,BC600,BC601,BC602,BC603,BC604,BC605,C612,C651,C652,C682,C683,C684,C685,C711,C712,C713,C714,C715,C716,C740,C741,C742,C743,C744,C745,C746,C747	0.1uF		C0402
23	C343,C504	0.1uF	2	C0603
35	C679,C680,C681	0.1uF_NI	3	C0402
5	C6	0.22uF	1	C0402
59	L1,L2,L118,L119,L120,L123,L124	0.22uH	7	ZPWM-6030M
32	C522	0.47uF	1	C0402

Item	Reference	Part	Qty	FootPrint
72	R9,R10,R12,R13,R62,R63,R65,R71,R110,R111,R113,R119,R158,R159,R161,R167,R202,R234,R235,R236,R237,R250,R295,R298,R299,R300,R303,R304,R305,R306,R307,R308,R311,R312,R313,R314,R315,R316,R317,R322,R323,R352,R378,R379,R380,R381,R382,R384,R392,R734,R743,R744,R745,R746,R931,R939,R940,R941,R946,R947,R951,R954,R955,R957,R959,R960,R965,R966,R979,R980,R981,R982,R983,R1000,R1001,R1002,R1006	0	77	R0402
96	R631,R632,R633,R634,R635,R636,R637,R638,R639,R640,R641,R642,R643,R644,R645,R646,R647,R648,R752,R859,R860,R861,R862,R942,R943,R963,R974,R975	0	28	R0603
95	R385,R386,R387,R388,R389,R390,R733,R948,R949,R950,R952,R953,R956,R964,R1050,R1051	0_NI	16	R0402
99	R665,R666,R697,R698,R829,R830,R831,R832,R833,R834,R835,R836,R837,R838,R839,R840,R841,R842,R843,R844,R845,R846,R847,R848,R944,R945	0_NI	26	R0603
79	R34,R46,R47,R49,R50,R51,R52,R53,R54,R55,R56,R57,R58,R59,R60,R105,R106,R107,R108,R153,R154,R155,R156,R248,R249,R722,R723,R856,R857,R976,R977,R978,R996,R997,R998,R999	100	36	R0402
91	R203	100	1	R0603
113	R958,R968	100K	2	R0402
9	C104,C107,C110,C115,C178,C181,C184,C189,C252,C255,C258,C263,C654,C655,C656,C657,C658,C659,C660,C661,C662,C663,C664,C665,C748,C754,C760,C761,C766,C770,C771,C777	100pF	32	C0402
33	C523,C527,C531,C534,C536,C539,C542,C545,C548,C551,C554,C557,C749,C755,C762,C772	100pF	16	C0603
26	TC4,TC8,TC9,TC11,TC12,TC13,TC21,TC22,TC23,TC24,TC25,TC26,TC27,TC28,TC29,TC36,TC37,TC38,TC39,TC40,TC41,TC42,C367,C634,C638,C642,C667,C732,C738	100uF/10V	29	TC3528B
38	C701,C702,C703,C704,C705	100uF	5	C3225
77	R27,R28,R36,R351,R353,R922,R927,R928,R929,R988,R992,R1048	10K	12	R0402
6	C9,C10,C348,C354,C359,C365,C369,C421	10nF	8	C0402
14	C114,C119,C188,C193,C262,C267,C769,C781	10pF	8	C0402
27	TC7,C377,C378,C380,C381,C383,C384,C386,C388,C389,C391,C392,C394,C396,C397,C399,C400,C402,C404,C405,C832,C837,C842,C847,C852	10uF/10V	25	TC3216A
4	C2,C5,C36,C37,C38,C39,C40,C41,C42,C43,C46,C47,C48,C49,C50,C51,C327,C415,C416,C417,C418,C419,C420,C484,C485,C486,C487,C488,C489,C618,C619,C620,C645,C646,C647,C648,C649,C650,C717,C718,C719,C720,C721,C722,C723,C724,C725,C726,C727,C728,C729,C730,C774,C775	10uF	54	C0603
102	R851,R871,R879,R914,R986,R1043	121K_1%	6	R0402
89	R98,R100,R146,R148,R194,R196,R1032,R1034	127K	8	R0402
15	C120,C123,C124,C127,C134,C136,C137,C140,C145,C148,C149,C152,C158,C161,C162,C165,C194,C197,C198,C201,C206,C209,C211,C214,C219,C222,C223,C226,C232,C235,C236,C239,C268,C271,C272,C275,C281,C284,C285,C288,C293,C296,C297,C300,C306,C309,C310,C313,C782,C785,C786,C789,C795,C798,C799,C802,C807,C810,C811,C814,C820,C823,C824,C827	13pF	64	C0402
60	L3,L4,L41,L42,L79,L80,L125,L126	15nH	8	L0402
109	R917,R918	16	2	R3216
84	R43,R663,R853,R873,R881,R885,R1045	169K_1%	7	R0402
69	R1,R76,R77,R87,R88,R89,R103,R124,R125,R135,R136,R137,R151,R172,R173,R183,R184,R185,R199,R346,R735,R736,R737,R738,R739,R740,R741,R742,R937,R938,R1010,R1011,R1021,R1022,R1023,R1037,R1052,R1053	1K	38	R0402
100	R789,R790,R791,R821,R822,R823,R824,R825,R826,R827,R828,R891,R892,R893,R894	1K	15	R0603
114	R967	1K_NI	1	R0603
92	R207,R208,R209,R210,R211,R212,R213,R214,R215	1K5/1%	9	R0402
81	R37,R749,R750,R755,R756	1K5	5	R0402
17	C128,C133,C141,C142,C143,C144,C156,C157,C166,C167,C168,C169,C204,C205,C215,C216,C217,C218,C230,C231,C240,C241,C242,C243,C279,C280,C289,C290,C291,C292,C304,C305,C314,C315,C316,C317,C793,C794,C803,C804,C805,C806,C818,C819,C828,C829,C830,C831	1nF	48	C0402
20	C132,C155,C203,C229,C278,C303,C792,C817	1pF	8	C0402
24	C344,C350,C505	1uF	3	C0603
13	C113,C118,C187,C192,C261,C266,C768,C780	2.2nF	8	C0402
107	R908,R911,R990	200K	3	R0402
87	R81,R82,R83,R84,R93,R94,R95,R96,R129,R130,R131,R132,R141,R142,R143,R144,R177,R178,R179,R180,R189,R190,R191,R192,R243,R244,R246,R247,R1015,R1016,R1017,R1018,R1027,R1028,R1029,R1030	22	36	R0402
115	R969,R995	220	2	R0402
98	R659	220K	1	R0402
12	C112,C117,C186,C191,C260,C265,C326,C767,C779	220pF	9	C0402
11	C111,C116,C185,C190,C259,C264,C763,C773	22nF	8	C0402

Item	Reference	Part	Qty	FootPrint
10	C105,C106,C108,C109,C179,C180,C182,C183,C253,C254,C256,C257,C752,C753,C758,C759	22pF	16	C0402
37	C696,C697	22uF/16V	2	TC3216A
7	C19,C20,C21,C22,C23,C25,C32,C33,C34,C35,C52,C53,C54,C55,C470,C471,C472,C473,C477,C478,C479,C480,C490,C491,C492,C493,C507,C508,C509,C510,C511,C512,C513,C514,C515,C516,C517,C518,C519,C560,C561,C562,C563,C568,C569,C570,C571,C572,C573,C574,C575,C576,C577,C578,C579,C580,C581,C582,C583,C584,C585,C586,C587,C588,C589,C590,C591,C592,C593,C594,C595,C596,C597,C598,C599,C600,C601,C602,C603,C604,C605,C606,C607,C608,C609,C610,C611,C613,C614,C671,C672,C708,C709,C710,C833,C834,C835,C836,C838,C839,C840,C841,C843,C844,C845,C846,C848,C849,C850,C851	22uF	110	C3216
76	R25,R26	240	2	R0402
16	C121,C122,C125,C126,C129,C135,C138,C139,C146,C147,C150,C151,C159,C160,C163,C164,C195,C196,C199,C200,C207,C208,C212,C213,C220,C221,C224,C225,C233,C234,C237,C238,C269,C270,C273,C274,C282,C283,C286,C287,C294,C295,C298,C299,C307,C308,C311,C312,C783,C784,C787,C788,C796,C797,C800,C801,C808,C809,C812,C813,C821,C822,C825,C826	24pF	64	C0402
112	R926	261K_1%	1	R0402
86	R69,R75,R117,R123,R165,R171,R1005,R1009	270	8	R0402
111	R925,R972	2K15_1%	2	R0402
110	R919,R920	2K2	2	R0402
116	R1047	2K2_NI	1	R0402
73	R11	2K4	1	R0603
94	R296,R297,R301,R302,R309,R310,R661,R662	300	8	R0402
105	R906,R909,R912,R923,R984,R993	300K	6	R0402
29	C410	300pF	1	C0402
104	R875,R877	30K_1%	2	R0402
85	R44,R350,R658,R660,R664,R724,R849,R850,R852,R854,R864,R867,R868,R869,R870,R872,R874,R876,R878,R880,R882,R883,R884,R886,R887,R888,R1039,R1040,R1041,R1042,R1044,R1046	30K1_1%	32	R0402
63	L11,L15,L29,L34,L48,L52,L67,L72,L87,L92,L105,L110,L132,L137,L151,L156	33nH	16	L0402
108	R913,R985	316	2	R0402
93	R232,R233,R260,R272,R284,R391,R747,R757,R758,R759,R760,R761,R762,R763,R764,R765,R766,R767,R768,R769,R770,R771,R772,R773,R774,R775,R776,R777,R778,R779,R780,R781,R782,R783,R784,R785,R786,R787,R788,R924,R987,R994	330	42	R0402
121	TC34,TC35	330uF/4V	2	TC7343E
8	C26,C27	33pF	2	C0402
36	C693,C694,C695	33uF	3	C3216
90	R201	392	1	R0402
61	L5,L7,L10,L12,L14,L16,L18,L19,L20,L22,L23,L25,L28,L30,L32,L33,L35,L37,L38,L40,L43,L45,L49,L51,L53,L55,L56,L57,L58,L60,L61,L63,L66,L68,L70,L71,L73,L75,L76,L78,L81,L83,L86,L88,L90,L91,L93,L95,L96,L98,L99,L101,L104,L106,L108,L109,L111,L113,L114,L116,L127,L129,L133,L135,L136,L138,L140,L141,L142,L144,L145,L147,L150,L152,L154,L155,L157,L159,L160,L162	39nH	80	L0402
18	C130,C153,C210,C227,C276,C301,C790,C815	3pF	8	C0402
21	C320	4.7nF	1	C0402
120	TC1,TC2	4.7uF/10V	2	TC3216A
101	R797,R798,R799,R800,R801,R802,R803,R804,R805,R806,R807,R808,R809,R810,R811,R812,R813,R814,R815,R816,R817,R818,R819,R820	40.2	24	R0402
103	R863	42.2K_1%	1	R0402
62	L6,L13,L17,L21,L24,L31,L36,L39,L44,L50,L54,L59,L62,L69,L74,L77,L82,L89,L94,L97,L100,L107,L112,L115,L128,L134,L139,L143,L146,L153,L158,L161	47nH	32	L0402
28	C406,C408,C520,C521	47pF	4	C0402
25	C356,C362	47uF/10V	2	TC3528B
34	C633,C635,C636,C637,C639,C640,C641,C643,C644,C666,C668,C669,C688,C689,C690,C691,C692,C706,C707,C731,C733,C734,C735,C736,C739	47uF	25	C3216
83	R39,R40,R41,R42,R1049	49.9	5	R0402
70	R2,R3,R5,R7,R693,R694,R793,R794,R795,R796	4K7	10	R0603
75	R19,R24,R90,R91,R92,R101,R138,R139,R140,R149,R186,R187,R188,R197,R221,R222,R223,R224,R225,R229,R230,R231,R238,R239,R240,R241,R337,R340,R855,R890,R1024,R1025,R1026,R1035	4K7	34	R0402
82	R38	4K87_1%	1	R0402
74	R18	510	1	R0402
88	R97,R99,R145,R147,R193,R195,R1031,R1033	5K	8	R0402
97	R657	64K9_1%	1	R0402
106	R907,R910,R989	715	3	R0402
78	R29	80.6	1	R0402

Item	Reference	Part	Qty	FootPrint
19	C131,C154,C202,C228,C277,C302,C791,C816	8pF	8	C0402
146	U183	ADG706	1	TSSOP28_065P_44X97_OS
51	JP8	BAIT_CON	1	battery_3v15hp_sh
132	U15,U16,U17,U18,U102,U103,U104,U105,U106,U107,U108,U130,U201,U202,U203,U204	BD0826J50200AHF	16	BD0826J50200AHF
54	JP25	BOOTSW	1	sw_cl-sa-12c_os
140	U145	BQ32002DR	1	SOIC8_127P_49X39_OS
138	U138	CAT24C64WI	1	SOIC8_127P_49X39_OS
125	U3	CP2102	1	QFN28_05
129	U11	DP83848K	1	NSQAU040
45	H2,H3,H5,H6,H8,H9,H10,H11,H12,H15,H16,H17,H18,H19	H3_0MM	14	HOLE-25
41	FB1,FB2,FB3,FB4,FB5,FB6,FB7,L8,FB8,L9,FB9,FB10,FB11,FB12,FB13,FB14,FB15,FB16,FB17,FB18,FB19,FB20,FB21,FB22,FB23,FB24,FB25,L26,FB26,L27,FB27,FB28,FB29,FB30,FB31,FB32,FB33,FB34,FB35,FB36,FB37,FB38,FB39,FB40,FB41,FB42,FB45,L46,FB46,L47,FB49,FB51,FB52,FB54,FB56,FB57,FB58,L64,L65,L84,L85,L102,L103,L130,L131,L148,L149,FB169,FB170,FB171,FB172,FB173,FB174,FB175,FB176,FB177,FB178,FB179,FB180,FB181,FB182	HB-1M1005-121J	81	L0402
48	JP3	HEADER 10	1	HEADER1X10-2MM
49	JP6	HEADER 10X2	1	HEADER2X10-2MM
52	JP9	HEADER 3X2	1	header2x3-2mm
46	JP1	HEADER 7X2 2.0mm	1	HEADER2X7-2MM
55	JP27	HEADER_HOUSING 5X2-2mm	1	header2x5-2mm
42	F1,F2,F5,F6,F7,F8,F12,F13,F14,FB43,FB44,FB47,FB48,FB50,FB53,FB55,FB61,FB62,FB63,FB64,FB67,FB68,FB69,F69,FB70,FB73,FB74,FB75,FB76,FB79,FB80,FB83,FB84,FB85,FB86,FB89,FB90,FB91,FB92,FB95,FB96,FB99,FB100,FB101,FB102,FB105,FB106,FB107,FB108,FB111,FB112,FB115,FB116,L117,FB117,FB118,FB120,FB121,FB122,FB126,FB127,FB128,FB129,FB130,FB131,FB132,FB133,FB134,FB137,FB138,FB139,FB140,FB141,FB142,FB143,FB144,FB145,FB146,FB147,FB148,FB149,FB150,FB151,FB152,FB153,FB154,FB155,FB160,FB161,FB162,FB183,FB184,FB185,FB186,FB187,FB188,FB189,FB190,FB191,FB192,FB193,FB194,FB195,FB196,FB197,FB198,FB199,FB200	HH-1M2012-121J	108	L2012
44	F43,F45,F46,F47,F48,F49,F50,F51,F52,F53,F54,F55,F62,F63,F64,F65,F67,F68,F70,F71,F72,F73,F74,F75,F76,F77,F78	HH-1M3216-121J	27	FB3216
122	TP1,TP2,TP3,TP4	HOLE TP	4	TP1-1
137	U135	J0011D21B	1	JX0011D21BNL-RJ45
39	D1,D3,D4,D5,D6,D7,D8,D11,D14,D17,D20,D22,D23,D24,D25,D26,D27,D29,D30,D31,D32	LED2012G	21	LED2012
142	U163,U164,U165,U171,U198,U199	LMZ31506RUQR	6	BIQFN-47P
149	U196	LMZ31530	1	LMZ31530_08P_16x15_OS
128	U10	LVDSOSC_200MHz	1	OSC5032
124	U2	M25P256	1	SOP2-16
40	E1	MAC ADDR.	1	1
67	Q2,Q3,Q4,Q6,Q7,Q12,Q13	MMBT3904LTIG	7	SOT23_095BEC
3	CON3,CON6	MOLEX-3P	2	MOLEX5267_3P
126	U5,U6	MT41K256M16HA-125IT	2	FBGA-96-MICRON
68	Q9,Q10,Q11,Q14	NDS331N	4	sot23_095bec
22	C321,C653	NI	2	C0402
31	C468,C525,C526,C528,C529,C530,C532,C533,C535,C537,C538,C540,C541,C543,C544,C546,C547,C549,C550,C552,C553,C555,C556,C558,C559,C750,C751,C756,C757,C764,C765,C776,C778	NI	33	C0603
43	F15,FB163,FB164,FB165	NI	4	L2012
64	L121,L122	NI	2	ZPWM-6030M
71	R6,R8,R14,R15,R16,R17,R753,R754,R971,R973	NI	10	R0603
80	R35,R66,R67,R72,R73,R78,R79,R80,R85,R86,R102,R104,R114,R115,R120,R121,R126,R127,R128,R133,R134,R150,R152,R162,R163,R168,R169,R174,R175,R176,R181,R182,R198,R200,R216,R217,R218,R219,R220,R226,R227,R228,R242,R245,R916,R970,R1003,R1004,R1007,R1008,R1012,R1013,R1014,R1019,R1020,R1036,R1038	NI	57	R0402
123	TP5	PAD TP	1	TP-SMD-08MM
133	U109	PM7538	1	PM7538
131	U14,U100,U101,U200	PM8910	4	PM8910-BAG324-08M
65	P1,P2,P5,P6,P10,P11,P13,P14	RF_CON	8	SMA-R-PC_OS
66	P3,P4,P7,P8,P9,P12,P15,P16	RF_CON	8	MCX-SJ_OS
143	U166	si-4435_NI	1	SOP-8
57	J1	SMA	1	MCX-SJ_OS
56	JP28,JP29,JP30,JP31	SMAW200-14D	4	smaw200_14d_sh
53	JP22,JP23	SMAW200-16D	2	smaw200_16d_sh
47	JP2	SMAW200-28D	1	smaw200_28d_sh
147	U185,U187,U209	SN74LVC245APW	3	TSSOP20_065P_65X44_OS

Item	Reference	Part	Qty	FootPrint
148	U188,U191,U192,U193,U194,U195	SN74LVC574APW	6	TSSOP20_065P_65X44_OS
118	SW2,SW5	ST1102S8	2	TS-1105
117	STM1	STM32F407ZG	1	LQFP-144
50	JP7	SuperCapCon	1	HEADER1X2-2MM
119	SW3,SW8	SW_DIP-4/SM	2	SMD_SW2X4
139	U141	TCXO_10Mhz	1	TCXO_10M_5032
135	U122	TPS3808G01DBV	1	SOT23DBV-6P
127	U7	TPS51206DSQ	1	DQS-10P
141	U159	TPS60151DRV	1	TPS60151_PWSON-N6
130	U12,U133,U136,U142,U143,U144,U146,U148,U149,U150,U151,U152,U153,U154,U155,U156,U157,U158,U205,U206,U207,U208	TPS7A7002DDA	22	DDA-9P
136	U134	TPS7A7002DDA_NI	1	DDA-9P
58	J6	USB_CON_Btype	1	USB_B_5P
144	U167	VCXO_100Mhz_NI	1	VCXO_100M_5032
134	U110	VCXO_120Mhz	1	VCXO_120M_1409
145	U168	XC7K480T-1FFG901I	1	bga900_1p_31x31_os
152	XTAL3	XTAL_32.768kHz	1	XTAL-3215
150	XTAL1	XTAL_8MHz	1	osc3225_osa
151	XTAL2	XTAL25MHz	1	osc3225_osa
2	CON1,CON7	YAW396-NNV-06V	2	YAW396-NNV-06V



Features :

- Universal AC input / Full range
- Withstand 300VAC surge input for 5 seconds
- Built-in active PFC function
- High efficiency up to 90%
- Low leakage current<0.4mA
- Protections: Short circuit / Overload / Over voltage / Over temperature
- Cooling by free air convection for 150W and 200W with 30CFM forced air
- Low profile:32mm
- Conformal coated
- ZVS technology to reduce power dissipation
- Built-in remote sense
- LED indicator for power on
- 3 years warranty



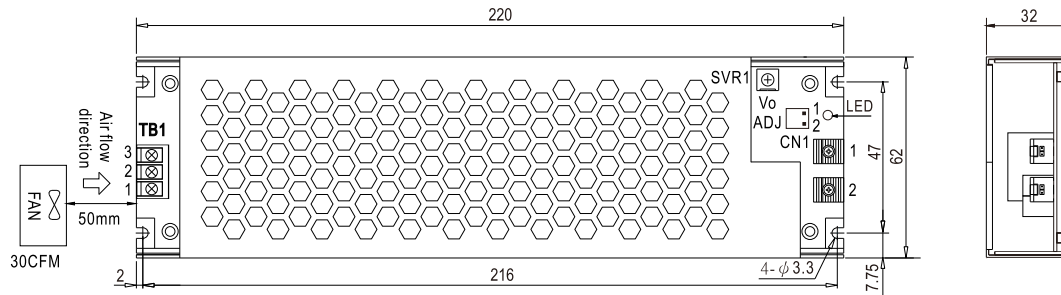
SPECIFICATION

MODEL		HSP-150-2.5	HSP-150-3.8	HSP-150-5
OUTPUT	DC VOLTAGE	2.5V	3.8V	5V
	RATED CURRENT	30A	30A	30A
	CURRENT RANGE(convection)	0 ~ 30A	0 ~ 30A	0 ~ 30A
	PEAK CURRENT RANGE(30CFM FAN)	0 ~ 40A	0 ~ 40A	0 ~ 40A
	RATED POWER(convection)	75W	114W	150W
	PEAK POWER(30CFM FAN)	100W	152W	200W
	RIPPLE & NOISE (max.) Note.2	80mVp-p	100mVp-p	100mVp-p
	VOLTAGE ADJ. RANGE	2.35~2.75V	3.4~4.2V	4.5~5.5V
	VOLTAGE TOLERANCE Note.3	±2.0%	±2.0%	±2.0%
	LINE REGULATION	±0.5%	±0.5%	±0.5%
	LOAD REGULATION	±1.0%	±1.0%	±1.0%
	SETUP, RISE TIME	2000ms, 100ms/230VAC 3000ms, 100ms/115VAC at full load		
	HOLD UP TIME (Typ.)	16ms/230VAC 16ms/115VAC at full load		
INPUT	VOLTAGE RANGE Note.4	90 ~ 264VAC 127 ~ 370VDC		
	FREQUENCY RANGE	47 ~ 63Hz		
	POWER FACTOR (Typ.)	PF ≥0.95/230VAC PF ≥0.98/115VAC at full load		
	EFFICIENCY (Typ.)	86%	88%	90%
	AC CURRENT (Typ.)	0.8A/115VAC 0.4A/230VAC	1.2A/115VAC 0.6A/230VAC	1.5A/115VAC 0.8A/230VAC
	INRUSH CURRENT (Typ.)	Cold start 70A/230VAC		
	LEAKAGE CURRENT	<0.4mA / 240VAC		
PROTECTION	OVERLOAD	140~180% rated output power Protection type : Hiccup mode, recovers automatically after fault condition is removed		
	SHORT CIRCUIT	Protection type : Hiccup mode, recovers automatically after fault condition is removed		
	OVER VOLTAGE	3.2 ~ 3.7V	4.7 ~ 5.7V	5.7 ~ 7.0V
		Protection type : Shut down o/p voltage, re-power on to recover		
	OVER TEMPERATURE	110℃ ±5℃ (TSW1)	115℃ ±5℃ (TSW1)	
		Protection type : Hiccup mode, recovers automatically after fault condition is removed		
ENVIRONMENT	WORKING TEMP.	-30 ~ +70℃ (Refer to "Derating Curve")		
	WORKING HUMIDITY	20 ~ 90% RH non-condensing		
	STORAGE TEMP., HUMIDITY	-40 ~ +85℃, 10 ~ 95% RH		
	TEMP. COEFFICIENT	±0.03%/℃ (0 ~ 60℃)		
	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes		
SAFETY & EMC (Note 5)	SAFETY STANDARDS	UL60950-1, EN60950-1 approved		
	WITHSTAND VOLTAGE	I/P-O/P:3.0KVAC I/P-FG:2KVAC O/P-FG:0.5KVAC		
	ISOLATION RESISTANCE	I/P-O/P, I/P-FG, O/P-FG:100M Ohms/500VDC/25℃ / 70%RH		
	EMC EMISSION	Compliance to EN55022 (CISPR22) Class B, EN61000-3-2, EN61000-3-3		
	EMC IMMUNITY	Compliance to EN61000-4-2,3,4,5,6,8,11; EN55024, light industry level (surge 4KV), criteria A		
OTHERS	MTBF	263.2K hrs min. MIL-HDBK-217F (25℃)		
	DIMENSION	220*62*32mm (L*W*H)		
	PACKING	0.61kg; 24pcs/15.6kg/1.63CUFT		
NOTE	1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25℃ of ambient temperature. 2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor. 3. Tolerance : line regulation and load regulation. 4. Derating may be needed under low input voltages. Please check the static characteristics for more details. 5. The power supply is considered a component which will be installed into a final equipment. The final equipment must be re-confirmed that it still meets EMC directives.			

Mechanical Specification

CASE NO.:208A

Unit:mm



AC Input Terminal(TB1) pin NO. Assignment

Pin No.	Assignment	Terminal
1	AC/L	T21-BM10-03
2	AC/N	
3	FG $\perp$	

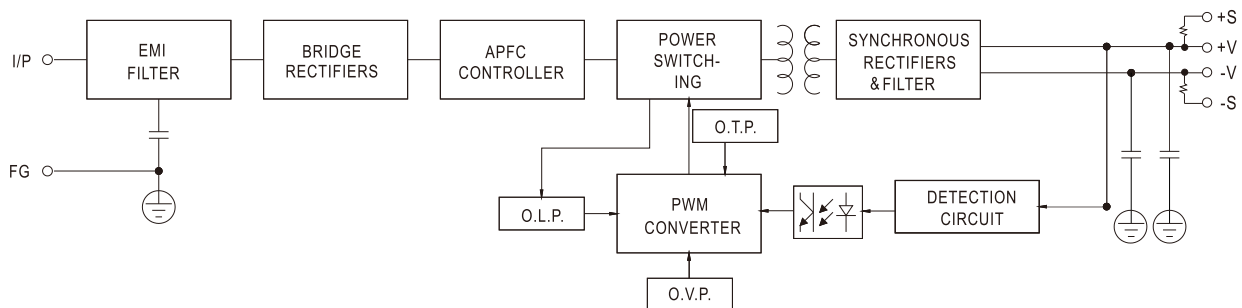
Remote sense pin(CN1):JS-1001-02 or equivalent

Pin No.	Assignment	Mating Housing	Terminal
1	-S	JS-2001-02 or equivalent	JS-1001-02 or equivalent
2	+S		

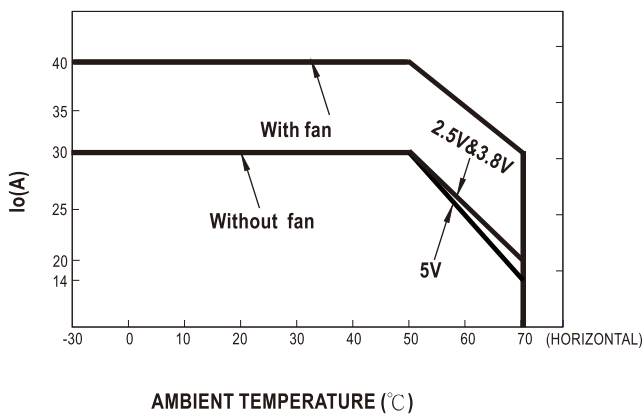
DC Output Terminal pin NO. Assignment

Pin No.	Assignment	Terminal
1	-V	CPB-7 M5
2	+V	

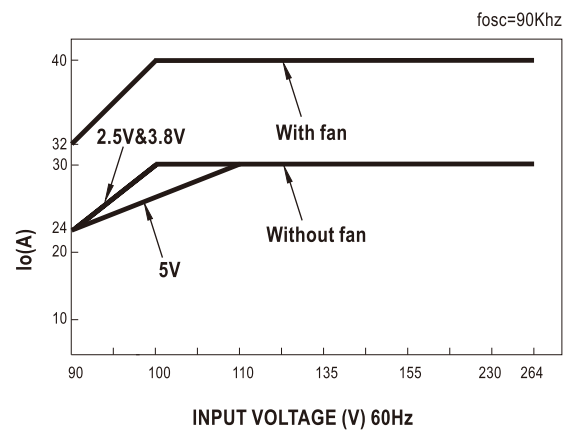
Block Diagram



Derating Curve



Static Characteristics





■ Features :

- Universal AC input / Full range
- AC input active surge current limiting
- High efficiency up to 92%
- Built-in 12V/0.1A auxiliary power
- Built-in active PFC function, PF>0.97
- Protections: Short circuit / Overload / Over voltage / Over temperature / Fan alarm
- Output voltage can be trimmed between 40 ~ 110% by 2 ~ 5.5VDC external control signal
- Output current can be trimmed between 40 ~ 110% by 2 ~ 5.5VDC external control signal
- Forced air cooling by built-in DC with fan speed control function
- High power density 9.44w/inch³
- 1U low profile 41mm
- DC OK Signal
- Built-in remote ON-OFF control
- Built-in remote sense function
- 3 years warranty

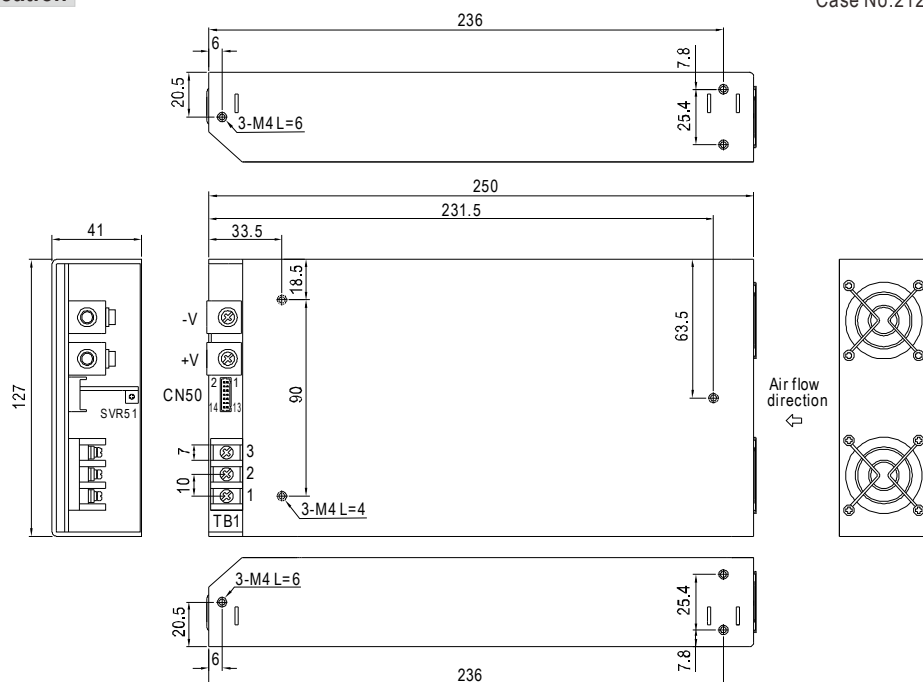


SPECIFICATION

MODEL		RSP-750-5	RSP-750-12	RSP-750-15	RSP-750-24	RSP-750-27	RSP-750-48
OUTPUT	DC VOLTAGE	5V	12V	15V	24V	27V	48V
	RATED CURRENT	100A	62.5A	50A	31.3A	27.8A	15.7A
	CURRENT RANGE	0 ~ 100A	0 ~ 62.5A	0 ~ 50A	0 ~ 31.3A	0 ~ 27.8A	0 ~ 15.7A
	RATED POWER	500W	750W	750W	751.2W	750.6W	753.6W
	RIPPLE & NOISE (max.) Note.2	150mVp-p	150mVp-p	150mVp-p	150mVp-p	150mVp-p	150mVp-p
	VOLTAGE ADJ. RANGE	4.75 ~ 5.5V	10 ~ 13.5V	13.5 ~ 16.5V	20 ~ 26.4V	24 ~ 30V	43 ~ 55V
	VOLTAGE TOLERANCE Note.3	±2.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%
	LINE REGULATION	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%
	LOAD REGULATION	±2.0%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%
	SETUP, RISE TIME	1000ms, 50ms at full load					
HOLD UP TIME (Typ.)	16ms/230VAC 16ms/115VAC at full load						
INPUT	VOLTAGE RANGE Note.5	90 ~ 264VAC	127 ~ 370VDC				
	FREQUENCY RANGE	47 ~ 63Hz					
	POWER FACTOR (Typ.)	0.97/230VAC 0.98/115VAC at full load					
	EFFICIENCY (Typ.)	82%	87%	89%	90.5%	90.5%	92%
	AC CURRENT (Typ.)	5V : 5.6A/115VAC 2.8A/230VAC		12V~48V : 8.2A/115VAC 3.9A/230VAC			
	INRUSH CURRENT (Typ.)	25A/115VAC 40A/230VAC					
LEAKAGE CURRENT	<2.0mA/ 240VAC						
PROTECTION	OVERLOAD	105 ~ 125% rated output power Protection type : Constant current limiting, recovers automatically after fault condition is removed					
	OVER VOLTAGE	5.75 ~ 6.75V	13.8 ~ 16.8V	17 ~ 20.5V	27.6 ~ 32.4V	31 ~ 36.5V	56.6 ~ 66.2V
		Protection type : Shut down o/p voltage, re-power on to recover					
	OVER TEMPERATURE	Shut down o/p voltage, recovers automatically after temperature goes down					
FUNCTION	AUXILIARY POWER(AUX)	12V @ 0.1A ; tolerance : ±10%					
	REMOTE ON/OFF CONTROL Note.6	Power on : short between on/off(pin13) & 12V-AUX(pin14) on CN50 Power off : open between on/off(pin13) & 12-AUX(pin14) on CN50					
	DC OK SIGNAL	The TTL signal out, PSU turn on = 0 ~ 1V ; PSU turn off = 3.3 ~ 5.6V					
	OUTPUT VOLTAGE TRIM Note.6	Adjustment of output voltage is possible between 40 ~ 110% by 2 ~ 5.5VDC external control signal					
	OUTPUT CURRENT TRIM	Adjustment of output current is between 40 ~ 110% by 2 ~ 5.5VDC external control signal					
ENVIRONMENT	WORKING TEMP.	-30 ~ +70°C (Refer to "Derating Curve")					
	WORKING HUMIDITY	20 ~ 90% RH non-condensing					
	STORAGE TEMP., HUMIDITY	-40 ~ +85°C, 10 ~ 95% RH					
	TEMP. COEFFICIENT	±0.03%/°C (0 ~ 50°C)					
	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes					
SAFETY & EMC (Note 4)	SAFETY STANDARDS	UL60950-1, TUV EN60950-1 approved					
	WITHSTAND VOLTAGE	I/P-O/P:3KVAC I/P-FG:2KVAC O/P-FG:0.5KVAC					
	ISOLATION RESISTANCE	I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500VDC / 25°C / 70% RH					
	EMC EMISSION	Compliance to EN55022 (CISPR22), EN61000-3-2,-3					
	EMC IMMUNITY	Compliance to EN61000-4-2,3,4,5,6,8,11, EN55024, EN61000-6-2, EN61204-3, heavy industry level, criteria A					
OTHERS	MTBF	120.8K hrs min. MIL-HDBK-217F (25°C)					
	DIMENSION	250*127*41mm (L*W*H)					
	PACKING	1.64Kg; 6pcs/10.8Kg/1.1CUFT					
NOTE	1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature. 2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor. 3. Tolerance : includes set up tolerance, line regulation and load regulation. 4. The power supply is considered a component which will be installed into a final equipment. The final equipment must be re-confirmed that it still meets EMC directives. For guidance on how to perform these EMC tests, please refer to "EMI testing of component power supplies." (as available on http://www.meanwell.com) 5. Derating may be needed under low input voltages. Please check the derating curve for more details. 6. The power supply unit will have no output if the shorting connector is not assembled. It contains three shorting wires: one is from on/off(pin13) to 12V-AUX(pin14), two is from PC(pin7) to PO(pin8) and the other is from PV(pin5) to PS(pin6). Please refer to function manual for details.						

Mechanical Specification

Case No.212A Unit:mm



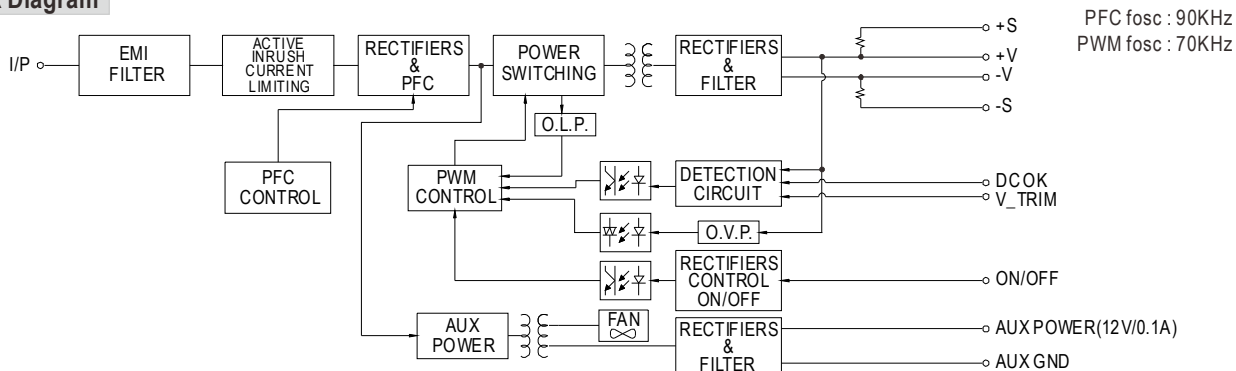
AC Input Terminal Pin No. Assignment

Pin No.	Assignment
1	AC/N
2	AC/L
3	FG $\perp$

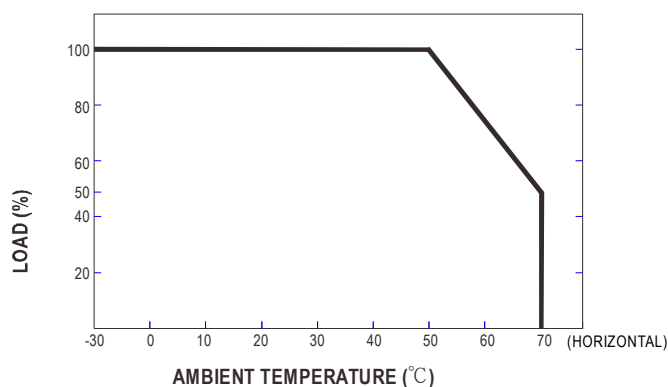
Control Pin No. Assignment (CN50) : HRS DF11-14DP-2DS or equivalent

Pin No.	Assignment	Pin No.	Assignment	Pin No.	Assignment	Mating Housing	Terminal
1	+S	6	PS	12	G-AUX	HRS DF11-14DS or equivalent	HRS DF11-**SC or equivalent
2	+VS	7	PC	13	ON/OFF		
3	-S	8	PO	14	12V-AUX		
4	-VS	9	DC-OK				
5	PV	10,11	GND				

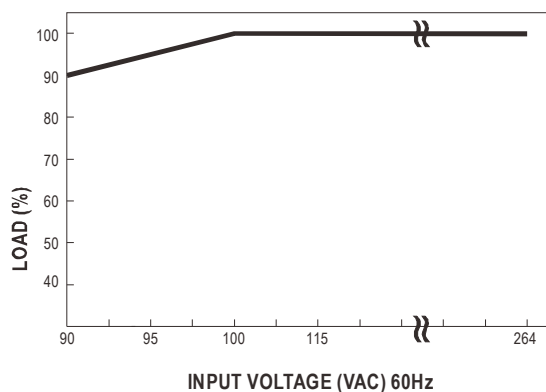
Block Diagram



Derating Curve



Static Characteristics



Function Description of CN50

Pin No.	Function	Description
1	+S	Positive sensing. The +S signal should be connected to the positive terminal of the load. The +S and -S leads should be twisted in pair to minimize noise pick-up effect. The maximum line drop compensation is 0.5V.
2	+VS	+V Signal. The +VS should be connected to the +S to reduce the noise when "output voltage TRIM" function is in use.
3	-S	Negative sensing. The -S signal should be connected to the negative terminal of the load. The -S and +S leads should be twisted in pair to minimize noise pick-up effect. The maximum line drop compensation is 0.5V.
4	-VS	-V Signal. The -VS should be connected to the -S to reduce the noise when "output voltage TRIM" function is in use.
5	PV	Connect to external DC voltage source for output voltage trimming, referenced to pin 10,11 (GND). Output voltage can be trimmed between 40 ~ 110% of the rated output voltage.
6	PS	Short connecting between PV (pin5) and PS (pin6) if "output voltage TRIM" function is not used.
7	PC	Connect to external DC voltage source for output current trimming, referenced output current can be trimmed between 40 ~ 110% of the rated output current. Please refer to function manual for details.
8	PO	Short connecting between PC (pin7) and PO (pin8) if output current trim function is not used.
9	DC_OK	Open collector signal, referenced to pin10,11(GND). Low when PSU turns on. The maximum sink current is 10mA and the maximum external voltage is 5.6V.
10,11	GND	These pins connect to the negative terminal (-V). Return for DC_OK Signal output.
12	G-AUX	Auxiliary voltage output ground. The signal return is isolated from the output terminals (+V & -V).
13	ON/OFF	Turns the output on and off by electrical or dry contact between pin 13 (ON/OFF) and pin 14 (12V-AUX). Short: Power ON, Open: Power OFF.
14	12V-AUX	Auxiliary voltage output, 10.8~13.2V, referenced to pin 12(G-AUX). The maximum load current is 0.1A. This output is not controlled by the "remote ON/OFF control".

Function Manual

1."Remote ON/OFF" and "Output voltage trim" and "Output current trim" functions are not used.

- (1)The power supply unit will have no output if the shorting connector (accessory comes along with the PSU) is not assembled. It contains three shorting wires : one is from ON/OFF (pin13) to 12V-AUX (pin14), two is from PV(pin5) to PS (pin6) and the other is from PC (pin7) to PO (pin8).
- (2)Factory setting is shorted as Fig1.1

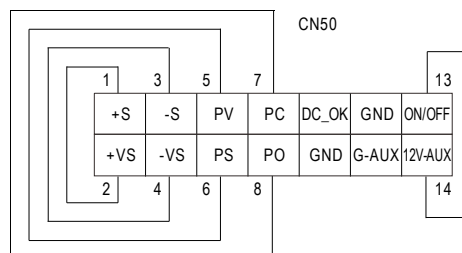
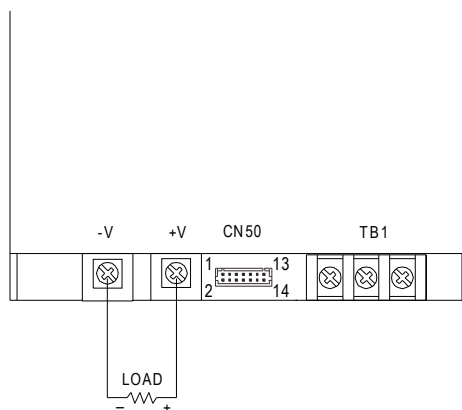
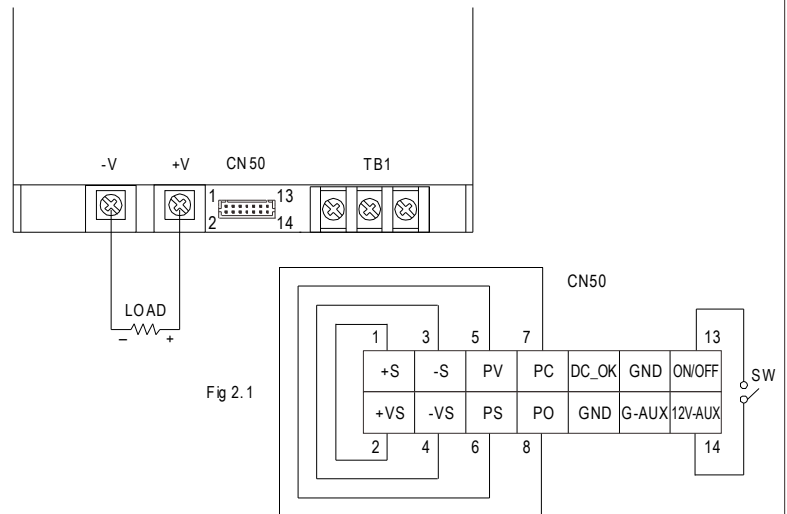


Fig 1.1 (Shorting connector)

2.Remote ON/OFF

The PSU can be turned ON/OFF by using the "Remote ON/OFF" function

Between ON/OFF(pin13) and 12V-AUX(pin14)	Output Status
SW close (Short)	PSU ON
SW open (Open)	PSU OFF



3.DC_OK signal

"DC_OK" is an open collector signal.

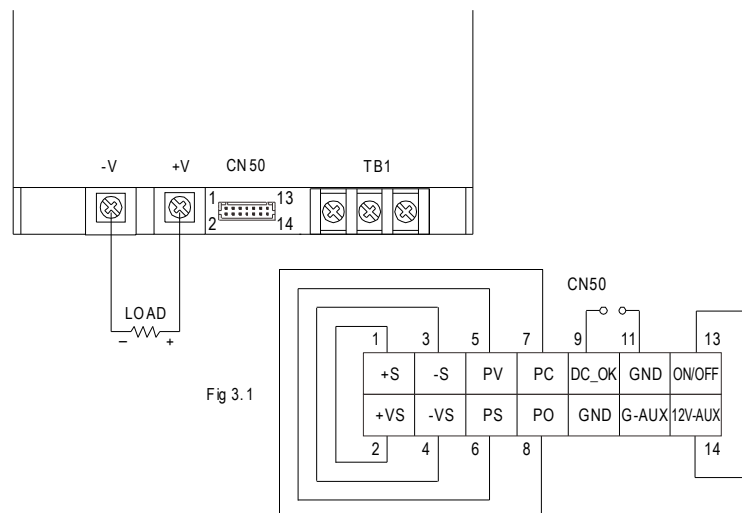
It indicates the output status of the PSU. It can operate in two ways : One is sinking current from external TTL signal ; the other is sending out a TTL voltage signal.

3-1 Sink current :

The maximum sink current is 10mA and the maximum external voltage is 5.6V.

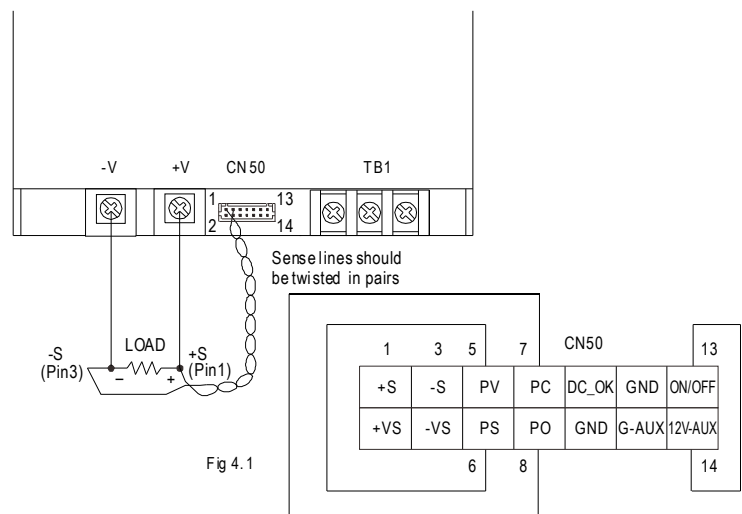
3-2 TTL voltage signal :

Between DC- OK(pin9) and GND(pin10&11)	Output Status
0 ~ 1V	PSU ON
3.3 ~ 5.6V	PSU OFF



4.Remote Sense

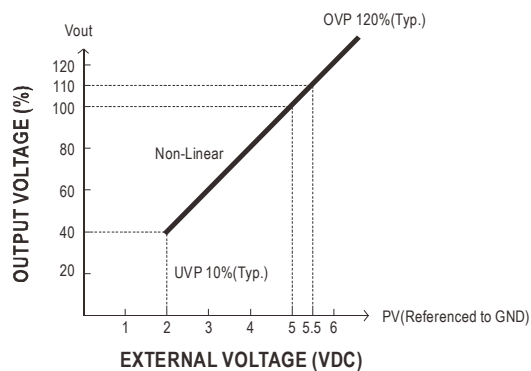
The remote sensing compensates voltage drop on the load wiring up to 0.5V.



5. Output Voltage TRIM

Output voltage of RSP-750 can be trimmed between 40% ~ 110% of its rated value by the following methods :

- (1) Using an external DC source (2~5.5VDC) between "PV"(pin5) and "GND"(pin10, 11) that is shown in Fig5.1



Note: External voltage < 0.5V Vo may be the UVP need to restart.

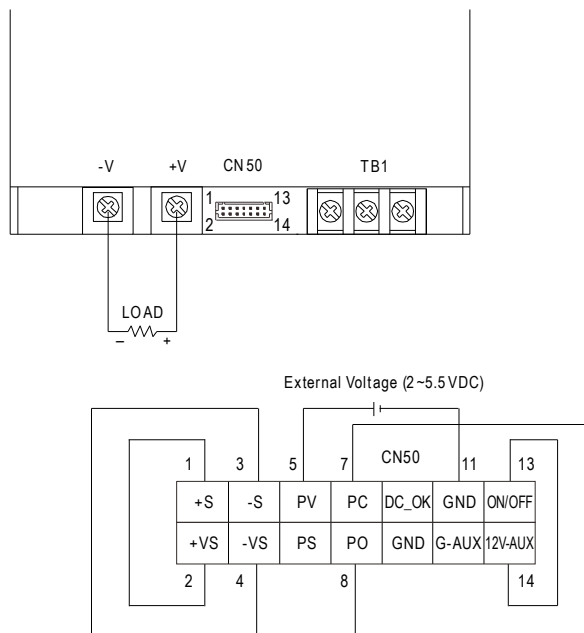


Fig 5. 1

6. Output Current TRIM

Output current of RSP-750 can be trimmed between 40% ~ 110% of its rated value by the following methods :

- (1) Using external voltage source between "PC"(pin7) and "GND"(pin10, 11) that is shown in Fig6. 1

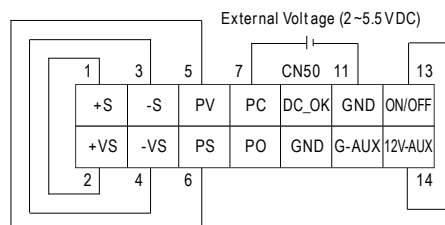
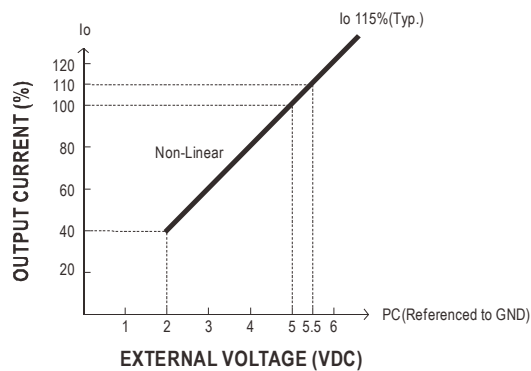


Fig 6. 1

700M_AA0728MLB29M40S _ PartList_R1

No	Description	Part Name	Reference No	Q'ty
1	Chip CAP (1608)	47pF	C20,C21,C23,C25,C28,C29,C32,C33,C34,C46,C48,C49,C54,C57,C58,C66,C67,C68,C72,C73,C75,C76,C78,C79,C102	25
2	Chip CAP (1608)	10nF	C8,C15,C22,C38,C44	5
3	Chip CAP (1608)	100nF	C2,C7,C14,C17,C19,C26,C27,C47,C59,C71,C77	11
4	Chip CAP (1608)	470nF	C1	1
5	Chip CAP (1608)	680nF	C18	1
6	Chip CAP (1608)	10uF	C24	1
7	High Q CAP (2012)	j2pF	X14,X21,X38,X51	4
8	High Q CAP (2012)	j5.6pF	C51,X1,X15,X18,X22,X25,X32	7
9	High Q CAP (2012)	j6.8pF	X26,X45	2
10	High Q CAP (2012)	j7.5pF	X16,X17,X23,X24	4
11	High Q CAP (2012)	j10pF	X27,X29,X36,X39,X42,X44,X49	7
12	High Q CAP (2012)	j100pF	C3,C4,C6,C30,C31,C50,C53,C55,C56,C60,C61,C65,C69,C70,C74,C80,C81,C84,C85,C89,C90,C94,C95,C99,C100	25
13	Chip CAP (2012)	10uF	C13,C16,C35,C36,C37,C39,C41,C42,C43,C45	10
14	High V CAP	HV 10uF/50V	C5,C12,C63,C64,C82,C83,C88,C91,C92,C93,C98,C101	12
15	High V CAP	HV 47uF/16V	C9,C10,C11	3
16	High V CAP	HV 220nF/200V	C62,C86,C87,C96,C97	5
17	Chip L (1608)	47nH	L3	1
18	Power L (5845D)	10uH	L1	1
19	Chip R (1608)	0	R29,R30,R35,R36,R42,R43,R80,R87,R84,R85,L2,R74	12
20	Chip R (1608)	1	R23	1
21	Chip R (1608)	10	R33	1
22	Chip R (1608)	12	R2,R31,R17	3
23	Chip R (1608)	18	R66	1
24	Chip R (1608)	24	R5,R10,R25	3
25	Chip R (1608)	30	R13,R51,R60	3
26	Chip R (1608)	33	R20,R37,R44	3
27	Chip R (1608)	51	R8,R15,R28,R62,R64	5
28	Chip R (1608)	68	R54,R57,R68	3
29	Chip R (1608)	91	R53,R55,R56,R58	4
30	Chip R (1608)	100	R34,R41,R63	3
31	Chip R (1608)	150	R9,R11	2
32	Chip R (1608)	180	R12,R14,R50,R52,R59,R61	6
33	Chip R (1608)	220	R9,R11	2
34	Chip R (1608)	300	R19,R22,R65,R67	4
35	Chip R (1608)	470	R1,R3,R4,R7,R24,R27,R16,R18	8
36	Chip R (1608)	1K	R88	1
37	Chip R (1608)	1.8K	R82	1
38	Chip R (1608)	2K	R70,R72	2
39	Chip R (1608)	2.7K	R79,R83	2
40	Chip R (1608)	10K	R39,R46,R71,R77,R81,R86	6
41	Chip R (1608)	12K	R69	1
42	Chip R (1608)	20K	R75,R76,R78,R89,R90	5
43	Chip R (1608)	62K	R93	1
44	Chip R (1608, 1%)	510	R91	1
45	Chip R (1608, 1%)	1.5K	R92	1
46	Chip R (2012)	a0	C40	1

47	Chip R (2012)	a51	R49	1
48	Chip Thermistor (1608)	47th	R6,R21,R26,R32,R38,R45	6
49	Chip R (5025)	C0	R47,R48	2
50	Variable R (3224)	VR 500	VR1,VR2,VR3	3
51	Variable R (3224)	VR 10K	VR4	1
52	Term 50ohm	060120A_15Z50_2	R40	1
53	OP-AMP	LM8262	U4,U8	2
54	Switching Regulator	LM22670-ADJ	U1	1
55	Schottky Diode	MBRA340T3G	D1	1
56	Schottky Diode	BAT54CLT1	D2,D3	2
57	Logic Gate(NOR)	MC74HC1G02	U6	1
58	MMIC	BT05CV	Q1	1
59	Delay Line	XDL15-2-020S	U10,U11	2
60	LD MOSFET	AFT27S006N	Q2	1
61	LD MOSFET	PTFB090901FA	Q3,Q4	2
62	Regulator (LDO)	LP2992AIM5-5.0V	U16	1
63	Regulator (LDO)	LP2992AIM5-3.3V	U2,U14	2
64	Regulator (LDO)	EN5311QI	U13,U15	2
65	Detector	LTC5582	U7	1
66	Temp Sensor	LM50	U3	1
67	Hybrid Coupler	XC0900P_03S	U9	1
68	Hybrid Coupler	XC0900E_03S	U17	1
69	Doherty Coupler	X3DC09E2S	U18	1
70	Directional Coupler	X3C09E2_20S	U19	1
71	Directional Coupler	RCP890Q10	U12	1
72	SPDT	NLAS4599	U5	1
73	D SUB Connector	9Pin R/A Male	CON3	1
74	Isolator	IHA072076AC	ISO3	1
75	EMI Filter (2012)	NFM21HC223R1H3A	E2	1
76	EMI Filter	CTH32R102S20A	E1	1
77	NC	R,L,C, NC	C52,ISO1,ISO2,R73,X2,X3,X4,X5,X6,X7,X8,X9, X10,X11,X12,X13,X19,X20,X28,X30,X31,X33,X34, X35,X37,X40,X41,X43,X46,X47,X48,X50,X52	33
78	SMA Connector	SMA 4Hole 5-3 Female,은색	CON1,CON2	2
79	Coaxial Cable	SF 141, 41mm, 외피포함		3

Walsin	
Joinset	
Walsin	
Bourns	
Bourns	
Anaren	
National S.C	
T.I	
On semi	
On semi	
On semi	
Berex	
Anaren	
Freescale	
Infineon	
National S.C	
National S.C	
ENPIRION	
Linear	
National S.C	
RN2 Tech	
Anaren	
Anaren	
Anaren	
RN2 Tech	
On semi	
-	
3R Wave	
Murata	
Maruwa	
-	
-	
엠텍웨이브	

800M_AA0869MLB25M40S _ PartList_R1

No	Description	Part Name	Reference No	Q'ty
1	Chip CAP (1608)	47pF	C20,C21,C23,C25,C28,C29,C32,C33,C34,C46,C48,C49,C54,C57,C58,C66,C67,C68,C72,C73,C75,C76,C78,C79,C102	25
2	Chip CAP (1608)	10nF	C8,C15,C22,C38,C44	5
3	Chip CAP (1608)	100nF	C2,C7,C14,C17,C19,C26,C27,C47,C59,C71,C77	11
4	Chip CAP (1608)	470nF	C1	1
5	Chip CAP (1608)	680nF	C18	1
6	Chip CAP (1608)	10uF	C24	1
7	High Q CAP (2012)	j2pF	X37,X50,X52	3
8	High Q CAP (2012)	j5.6pF	C51,X2,X8,X11,X26,X31,X40,X45	8
9	High Q CAP (2012)	j8.2pF	X16,X17,X23,X24	4
10	High Q CAP (2012)	j10pF	X27,X30,X35,X41,X44,X48	6
11	High Q CAP (2012)	j100pF	C3,C4,C6,C30,C31,C50,C53,C55,C56,C60,C61,C65,C69,C70,C74,C80,C81,C84,C85,C89,C90,C94,C95,C99,C100	25
12	Chip CAP (2012)	10uF	C13,C16,C35,C36,C37,C39,C41,C42,C43,C45	10
13	High V CAP	HV 10uF/50V	C5,C12,C63,C64,C82,C83,C88,C91,C92,C93,C98,C101	12
14	High V CAP	HV 47uF/16V	C9,C10,C11	3
15	High V CAP	HV 220nF/200V	C62,C86,C87,C96,C97	5
16	Chip L (1608)	47nH	L3	1
17	Power L (5845D)	10uH	L1	1
18	Chip R (1608)	0	R29,R30,R35,R36,R42,R43,R80,R87,R84,R85,L2,R74	12
19	Chip R (1608)	1	R23	1
20	Chip R (1608)	10	R33	1
21	Chip R (1608)	12	R2,R31,R17	3
22	Chip R (1608)	18	R66	1
23	Chip R (1608)	24	R5,R10,R25	3
24	Chip R (1608)	30	R13,R51,R60	3
25	Chip R (1608)	33	R20,R37,R44	3
26	Chip R (1608)	51	R8,R15,R28,R62,R64	5
27	Chip R (1608)	68	R54,R57,R68	3
28	Chip R (1608)	91	R53,R55,R56,R58	4
29	Chip R (1608)	100	R34,R41,R63	3
30	Chip R (1608)	150	R9,R11	2
31	Chip R (1608)	180	R12,R14,R50,R52,R59,R61	6
32	Chip R (1608)	220	R9,R11	2
33	Chip R (1608)	300	R19,R22,R65,R67	4
34	Chip R (1608)	470	R1,R3,R4,R7,R24,R27,R16,R18	8
35	Chip R (1608)	1K	R88	1
36	Chip R (1608)	1.8K	R82	1
37	Chip R (1608)	2K	R70,R72	2
38	Chip R (1608)	2.7K	R79,R83	2
39	Chip R (1608)	10K	R39,R46,R71,R77,R81,R86	6
40	Chip R (1608)	12K	R69	1
41	Chip R (1608)	20K	R75,R76,R78,R89,R90	5
42	Chip R (1608)	62K	R93	1
43	Chip R (1608, 1%)	510	R91	1
44	Chip R (1608, 1%)	1.5K	R92	1
45	Chip R (2012)	a0	C40	1
46	Chip R (2012)	a51	R49	1

47	Chip Thermistor (1608)	47th	R6,R21,R26,R32,R38,R45	6
48	Chip R (5025)	C0	R47,R48	2
49	Variable R (3224)	VR_500	VR1,VR2,VR3	3
50	Variable R (3224)	VR_10K	VR4	1
51	Term 50ohm	060120A_15Z50_2	R40	1
52	OP-AMP	LM8262	U4,U8	2
53	Switching Regulator	LM22670-ADJ	U1	1
54	Schottky Diode	MBRA340T3G	D1	1
55	Schottky Diode	BAT54CLT1	D2,D3	2
56	Logic Gate(NOR)	MC74HC1G02	U6	1
57	MMIC	BT05CV	Q1	1
58	Delay Line	XDL15-2-020S	U10,U11	2
59	LD MOSFET	AFT27S006N	Q2	1
60	LD MOSFET	PTFB090901FA	Q3,Q4	2
61	Regulator (LDO)	LP2992AIM5-5.0V	U16	1
62	Regulator (LDO)	LP2992AIM5-3.3V	U2,U14	2
63	Regulator (LDO)	EN5311QI	U13,U15	2
64	Detector	LTC5582	U7	1
65	Temp Sensor	LM50	U3	1
66	Hybrid Coupler	XC0900P_03S	U9	1
67	Hybrid Coupler	XC0900E_03S	U17	1
68	Doherty Coupler	X3DC09E2S	U18	1
69	Directional Coupler	X3C09E2_20S	U19	1
70	Directional Coupler	RCP890Q10	U12	1
71	SPDT	NLAS4599	U5	1
72	D SUB Connector	9Pin R/A Male	CON3	1
73	Isolator	CES40836MDCB000	ISO2	1
74	Isolator	IHA086089AC	ISO3	1
75	EMI Filter (2012)	NFM21HC223R1H3A	E2	1
76	EMI Filter	CTH32R102S20A	E1	1
77	NC	R,L,C, NC	C52,ISO1,R73,X1,X3,X4,X5,X6,X7,X9,X10,X12, X13,X14,X15,X18,X19,X20,X21,X22,X25,X28,X29, X32,X33,X34,X36,X38,X39,X42,X43,X46,X47,X49, X51	3
78	SMA Connector	SMA 4Hole 5-3 Female, 은색	CON1,CON2	2
79	Coaxial Cable	SF 141, 41mm, 외피포함		3

Joinset	
Walsin	
Bourns	
Bourns	
Anaren	
National S.C	
T.I	
On semi	
On semi	
On semi	
Berex	
Anaren	
Freescale	
Infineon	
National S.C	
National S.C	
ENPIRION	
Linear	
National S.C	
RN2 Tech	
Anaren	
Anaren	
Anaren	
RN2 Tech	
On semi	
-	
Murata	
3R Wave	
Murata	
Maruwa	
-	
-	
엠텍웨이브	

AH1745/742.5MLA70/89M27S_ PartList_

No	Description	Part Name	Reference No
1	Chip CAP (1608)	15pF	C3,C9,C10,C11,C12,C19,C22,C23,C24,C25,C29,C34,C41,C43,C45,C46,C47,C49,C51,C53,C57,C58,C59,C60,C61,C63,C111
2	Chip CAP (1608)	100pF	C65,C72,C73,C74,C78,C79,C82,C81,C84,C85,C86,C87,C88,C89,C95,C97,C101,C107,C109
3	Chip CAP (1608)	1nF	C5,C31,C103,C113
4	Chip CAP (1608)	10nF	C4,C13,C18,C30,C55,C62,C67,C76,C102,C112
5	Chip CAP (1608)	100nF	C6,C32,C33,C42,C44,C66,C104,C114
6	Chip CAP (1608)	470nF	C52,C83
7	Chip CAP (1608)	10uF	C50,C80
8	High Q CAP (2012)	0.5pF.HQ	C210
9	High Q CAP (2012)	1pF.HQ	C36,C207
10	High Q CAP (2012)	1.5pF.HQ	C203,C204,C206,C208,C209,C211
11	High Q CAP (2012)	1.8pF.HQ	C201,C202,C205
12	High Q CAP (2012)	2.4pF.HQ	C301,C302,C303,C304,C305,C307
13	High Q CAP (2012)	4.7pF.HQ	C28
14	High Q CAP (2012)	8.2pF.HQ	C308
15	High Q CAP (2012)	12pF.HQ	C1,C2,C7,C16,C17,C20,C21,C26,C37
16	High Q CAP (2012)	100pF.HQ	C48,C69,C70,C92,C93,C95,C100,C105,C115,C116,C117
17	TanTal CAP	220nF/100V	C39,C40,C68,C94,C106
18	TanTal CAP	4.7uF/16V/SMA	C8,C14,C15,C54,C56,C71,C75,C77,C98,C110,C108
19	TanTal CAP	10uF/50V/SMD	C27,C38,C91
20	CAP (Chip 전해)	100uF/50V/Chip	C35,C90
21	CAP (READ)	470uF/50V	C212,C213
22	Chip L (1608)	2.7nH	L201
23	Chip L (1608)	22nH	L5
24	Chip L (1608)	27nH	L2
25	Chip L (1608)	33nH	L4
26	Air Coil 3 Turns	Air Coil 3Turns	L3
27	Chip R (1608)	0	R32,R40
28	Chip R (1608)	18	R68
29	Chip R (1608)	47	R47
30	Chip R (1608)	51	R4,R7,R71
31	Chip R (1608)	68	R33,R46
32	Chip R (1608)	130	R48,R49
33	Chip R (1608)	300	R5,R6,R8,R9,R69,R70,R72,R73
34	Chip R (1608)	510	R203,R42,R36
35	Chip R (1608)	2K	R44
36	Chip R (1608)	5.1K	R35
37	Chip R (1608)	10K	R201,R202,R39,R41
38	Chip R (1608)	12K	R43
39	Chip R (1608)	100K	R34,R45
40	Chip R (2012)	0	L1,R30,R66,R67,L203
41	Chip R (2012)	18	R75
42	Chip R (2012)	20	R10,R11,R60,R61
43	Chip R (2012)	36	R2
44	Chip R (2012)	47	R25
45	Chip R (2012)	82	R21,R23,R52,R54
46	Chip R (2012)	100	R22,R27,R28,R50,R51,R53
47	Chip R (2012)	130	R24,R26
48	Chip R (2012)	150	R1,R3,R56

49	Chip R (2012)	200	R19
50	Chip R (2012)	300	R74,R76
51	Chip R (2012)	510	R17
52	Chip R (2012)	820	R18,R57
53	Chip R (2012)	1K	R14,R37,R38,R63
54	Chip R (2012)	1.5K	R20
55	Chip R (2012)	2k	R55
56	Chip R (2012)	10K	R13,R58,R62
57	Chip R (2012)	20K	R15,R65
58	Chip R (2012)	100K	R59,R112
59	Chip Thermistor (1608)	40th	Rt1,Rt2,Rt3,Rt4
60	Variable R (3224)	VR_ 1K	VR1,VR4
61	Variable R (3224)	VR_ 5K	VR2,VR3
62	NPN BJT	NPN	U4,U21
63	PNP BJT	PNP	U7,U17
64	Logic Gate(NAND)	MC74VHC1G135	U5,U22
65	Regulator (LDO)	LP2992AIM-3.3	U10,U14,U18
66	Regulator (LDO)	LP2992AIM-3.8	U2
67	P-MOS	IRF5803	U3,U20
68	Voltage Regulator	7806	U6,U19
69	OP-AMP	MC33202	U9,U13
70	Detector	LTC5582	U11,U15
71	Voltage Regulator	78L05	U12
72	MMIC	BT05CV	U1,U23
73	LD MOSFET	AFT20P060-4N	U8
74	LD MOSFET	MRFE6S9045N	U16
75	Isolator	IHA171178AB	ISO1
76	Isolator	IHA069079AQ	ISO2
77	NC	R,L,C, NC	C21,C41,C44

R1

Q'ty	Manufacture	Note
27	Murata	
19	Murata	
4	Murata	
10	Murata	
8	Murata	
2	Murata	
2	Murata	
1	Johanson	
2	Johanson	
6	Johanson	
3	Johanson	
6	Johanson	
1	Johanson	
1	Johanson	
9	Johanson	
11	Johanson	
5	AVX	
11	AVX	
3	AVX	
2	RUBICON	
2	SAITECH	
1	TAIYO YUDEN	
1	TAIYO YUDEN	
1	TAIYO YUDEN	
1	TAIYO YUDEN	
1	KOEL	
2	Walsin	
1	Walsin	
1	Walsin	
3	Walsin	
2	Walsin	
2	Walsin	
8	Walsin	
3	Walsin	
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4	Walsin	
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1	Walsin	
3	Walsin	
2	Walsin	
2	Walsin	
4	Joinset	
2	Bourns	
2	Bourns	
2	KEC	
2	KEC	
2	On semi	
3	National S.C	
1	National S.C	
2	IRF	
2	KEC	
2	RN2 Tech	
2	Linear	
1	KEC	
2	BEREX	
1	NXP	
1	NXP	
1	3R Wave	Isolator(Term Type) 0.75" STD (19.05x25.4mm)
1	3R Wave	Isolator(Term Type) 0.75" STD (19.05x25.4mm)
3	-	

AH1882.5/836.5MLA65/25M27S_PartList_

No	Description	Part Name	Reference No
1	Chip CAP (1608)	15pF	C3,C9,C10,C11,C12,C19,C22,C23,C24,C25,C29,C34,C41,C43,C45,C46,C47,C49,C51,C53,C57,C58,C59,C60,C61,C63,C111
2	Chip CAP (1608)	100pF	C65,C72,C73,C74,C78,C79,C82,C81,C84,C85,C86,C87,C88,C89,C95,C97,C101,C107,C109
3	Chip CAP (1608)	1nF	C5,C31,C103,C113
4	Chip CAP (1608)	10nF	C4,C13,C18,C30,C55,C62,C67,C76,C102,C112
5	Chip CAP (1608)	100nF	C6,C32,C33,C42,C44,C66,C104,C114
6	Chip CAP (1608)	470nF	C52,C83
7	Chip CAP (1608)	10uF	C50,C80
8	High Q CAP (2012)	0.3pF.HQ	C205
9	High Q CAP (2012)	1.2pF.HQ	C201,C202,C203
10	High Q CAP (2012)	1.8pF.HQ	C204
11	High Q CAP (2012)	4.7pF.HQ	C302
12	High Q CAP (2012)	6.8pF.HQ	C28,C48,C96,C99,C210
13	High Q CAP (2012)	10pF.HQ	C208
14	High Q CAP (2012)	12pF.HQ	C1,C2,C7,C16,C17,C20,C21,C26,C36,C37,C209,C301
15	High Q CAP (2012)	100pF.HQ	C69,C70,C92,C93,C95,C100,C105,C115,C116,C117
16	TanTal CAP	220nF/100V	C39,C40,C68,C94,C106
17	TanTal CAP	4.7uF/16V/SMA	C8,C14,C15,C54,C56,C71,C75,C77,C98,C110,C108
18	TanTal CAP	10uF/50V/SMD	C27,C38,C91
19	CAP (전해)	100uF/50V/Chip	C35,C90
20	CAP (READ)	470uF/50V	C206,C207
21	Chip L (1608)	15nH	L4
22	Chip L (1608)	47nH	L2
23	Air Coil 3 Turns	Air Coil 3Turns	L3
24	Chip R (1608)	0	R32,R40
25	Chip R (1608)	47	R47
26	Chip R (1608)	51	R4,R7,R68,R71
27	Chip R (1608)	68	R33,R46
28	Chip R (1608)	130	R48,R49
29	Chip R (1608)	300	R5,R6,R8,R9,R69,R70,R72,R73
30	Chip R (1608)	510	R203,R42
31	Chip R (1608)	2K	R36,R44
32	Chip R (1608)	10K	R201,R202,R39,R41
33	Chip R (1608)	12K	R35,R43
34	Chip R (1608)	100K	R34,R45
35	Chip R (1608)	0	L1,L5,R30,R66,R67
36	Chip R (1608)	15	R10,R11
37	Chip R (1608)	20	R60,R61
38	Chip R (1608)	30	R2
39	Chip R (1608)	47	R25
40	Chip R (2012)	51	R22
41	Chip R (2012)	82	R52,R54
42	Chip R (2012)	91	R74,R75,R76
43	Chip R (2012)	100	R27,R28,R50,R51,R53
44	Chip R (2012)	120	R21,R23
45	Chip R (2012)	130	R24,R26
46	Chip R (2012)	180	R1,R3
47	Chip R (2012)	200	R19,R56
48	Chip R (2012)	510	R17
49	Chip R (2012)	820	R18,R57

50	Chip R (2012)	1K	R14,R37,R38,R55,R63
51	Chip R (2012)	1.5K	R20
52	Chip R (2012)	10K	R13,R58,R62
53	Chip R (2012)	20K	R15,R65
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71	Isolator	IHA171178AB	ISO1
72	Isolator	IHA069079AQ	ISO2
73	NC	R,L,C, NC	C21,C41,C44

R1M

Q'ty	Manufacture	Note
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19	Murata	
4	Murata	
10	Murata	
8	Murata	
2	Murata	
2	Murata	
1	Johanson	
3	Johanson	
1	Johanson	
1	Johanson	
5	Johanson	
1	Johanson	
12	Johanson	
10	Johanson	
5	AVX	
11	AVX	
3	AVX	
2	RUBICON	
2	SAWPOCING	
1	ELCO	
1	TAIYO YUDEN	
1	TAIYO YUDEN	
1	KOEL	
2	Walsin	
1	Walsin	
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3	Walsin	
2	Walsin	
2	Walsin	
4	Joinset	
2	Bourns	
2	Bourns	
2	KEC	
2	KEC	
2	On semi	
3	National S.C	
1	National S.C	
2	IRF	
2	KEC	
2	RN2 Tech	
2	Linear	
1	KEC	
2	BEREX	
1	NXP	
1	NXP	
1	3R Wave	Isolator(Term Type) 0.75" STD (19.05x25.4mm)
1	3R Wave	Isolator(Term Type) 0.75" STD (19.05x25.4mm)
3	-	