

Parts List

Product Type : US PCS REPEATER

Model : MPF-001 (Uplink Part)

Spec No. :

Rev :

Date : 2003. 7. 18

No	Component CODE	Product	Qty	Location	Maker P/N	Description	Maker	Remark
1		CONNECTOR	1	CONN6		N-TYPE (Female)	Haneuritech	
2		CONNECTOR	2	CONN10,CONN7		MCF(Male)	Haneuritech	
3		CONNECTOR	2	CONN8,CONN9		DIP_SW(4Pin_R)	Haneuritech	
4		CONNECTOR	1	CONN11		Header 5x2	Haneuritech	
5		CONNECTOR	1	CONN12		9Pin D-SUB(Male)	Haneuritech	
6		CAPACITOR	14	C90,C92,C95,C100,C120, C140,C143,C149,C150,C153, C154,C162,C175,C176	0.1uF	CHIP CERAMIC 0.1uF 5% 0805	Samsung	
7		CAPACITOR	20	C91,C96,C97,C98,C99,C101, C106,C107,C113,C114,C115, C116,C117,C118,C119,C127, C128,C129,C130,C131	680pF	CHIP CERAMIC 680pF 5% 0805	Samsung	
8		CAPACITOR	10	C93,C94,C132,C135,C136, C137,C138,C139,C156,C157	10nF	CHIP CERAMIC 10nF 5% 0805	Samsung	
9		CAPACITOR	27	C102,C103,C104,C105,C108, C109,C110,C111,C112,C125, C141,C142,C144,C145,C146, C147,C148,C159,C160,C161, C163,C164,C165,C166,C167, C169,C174	33pF	CHIP CERAMIC 33pF 5% 0805	Samsung	
10		CAPACITOR	5	C121,C123,C124,C126,C507	22pF	CHIP CERAMIC 22pF 5% 0805	Samsung	
11		CAPACITOR	1	C122	39pF	CHIP CERAMIC 39pF 5% 0805	Samsung	
12		CAPACITOR	6	C133,C151,C152,C158,C505, C506	10uF/16V	CHIP TANTAL 10uF 16V(B-Type)	Samsung	

Parts List

Product Type : US PCS REPEATER

Model : MPF-001 (Uplink Part)

Spec No. :

Rev :

Date : 2003. 7. 18

No	Component CODE	Product	Qty	Location	Maker P/N	Description	Maker	Remark
13		CAPACITOR	2	C134,C155	3.3pF	CHIP CERAMIC 3.3pF 5% 0805	Samsung	
14		CAPACITOR	1	C168	4.7pF	CHIP CERAMIC 4.7pF 5% 0805	Samsung	
15				R73,R74,C172,C173	DNI (Do Not Insert)			
16		CAPACITOR	1	C508	TBD			
17		DIODE	3	D7,D10,D11	MMBZ5231	ZENER VOLTAGE REGULAR DIODE	MOTOROLA	
18		DIODE	2	D9,D8	HSMP-3864	SURFACE MOUNT PIN DIODE	AGILENT	
19		DIODE	1	D13	HSMS2850	SURFACE MOUNT ZERO BIAS SCHOTTKY DIODE	AGILENT	
20		SAW FILTER	1	F8	140MHz	140MHz(BW=15MHz)	C-TECH	
21		DUPLEXER	1	F9	DPX1883/1963S25B	1883/1963MHz, SMD-TYPE	ABSOLTECH	
22		BAND PASS FILTER	2	F10,F13		BPF1883	ABSOLTECH	
23		SAW FILTER	1	F11	155MHz	155MHz(BW=5MHz)	C-TECH	
24		BAND PASS FILTER	1	F12		BPF1738	ABSOLTECH	
25		THERMO PAD	1	F14	5N9	Temperature compensating Attenuator	EMC	
26		SAW FILTER	1	F500		RF SAW(1880)	Samsung	
27		LED	1	LED1		SLG162 (PWR-Green)		
28		LED	1	LED2		SLG162 (S/D-Red)		
29		INDUCTOR	4	L41,L51,L52,L65	680nH	CHIP. 680nH, 5% 0805	Samsung	
30		INDUCTOR	1	L42	3.9nH	CHIP. 3.9nH, 5% 0805	Samsung	
31		CAPACITOR	1	L43	0.5pF	CHIP CERAMIC 0.5pF 5% 0805	Samsung	
32		INDUCTOR	1	L44	33nH	CHIP. 33nH, 5% 0805	Samsung	
33		RESISTOR	3	L45,R72,R83	0	CHIP THICK FILM 0 OHM 5% 0805	Samsung	
34		INDUCTOR	11	L46,L47,L53,L54,L59,L62, L63,L76,L77,L78,L79	TBD			
35		INDUCTOR	8	L48,L49,L50,L60,L61,L64,	18nH	CHIP. 18nH, 5% 0805	Samsung	

Parts List

Product Type : US PCS REPEATER

Model : MPF-001 (Uplink Part)

Spec No. :

Rev :

Date : 2003. 7. 18

No	Component CODE	Product	Qty	Location	Maker P/N	Description	Maker	Remark
				L71,L73				
36		INDUCTOR	4	L55,L56,L57,L58	68nH	CHIP. 68nH, 5% 0805	Samsung	
37		INDUCTOR	2	L66,L67	27nH	CHIP. 27nH, 5% 0805	Samsung	
38		CAPACITOR	2	L69,L68	47pF	CHIP CERAMIC 47pF 5% 0805	Samsung	
39		INDUCTOR	2	L72,L70	3.3nH	CHIP. 3.3nH, 5% 0805	Samsung	
40		INDUCTOR	2	L74,L75	100nH	CHIP. 100nH, 5% 0805	Samsung	
41		INDUCTOR	1	L80	4.7nH	CHIP. 4.7nH, 5% 0805	Samsung	
42		INDUCTOR	2	L503,L502	1.5nH	CHIP. 1.5nH, 5% 0805	Samsung	
43		PLL MODULE	1	PLL2	NCPA2-1738	PLL 1738MHz	ROSWIN	
44		RESISTOR	5	R45,R48,R49,R52,R58	62	CHIP THICK FILM 62 OHM 5% 0805	Samsung	
45		RESISTOR	1	R46	39K	CHIP THICK FILM 39K OHM 5% 0805	Samsung	
46		RESISTOR	7	R47,R53,R54,R63,R64,R65,R75	300	CHIP THICK FILM 300 OHM 5% 0805	Samsung	
47		RESISTOR	2	R50,R66	12	CHIP THICK FILM 12 OHM 5% 0805	Samsung	
48		RESISTOR	1	R51	18K	CHIP THICK FILM 18K OHM 5% 0805	Samsung	
49		RESISTOR	2	R56,R57	2.2K	CHIP THICK FILM 2.2K OHM 5% 0805	Samsung	
50		RESISTOR	2	R59,R60	620	CHIP THICK FILM 620 OHM 5% 0805	Samsung	
51		RESISTOR	1	R61	390	CHIP THICK FILM 390 OHM 5% 0805	Samsung	
52		RESISTOR	2	R78,R62	330	CHIP THICK FILM 330 OHM 5% 0805	Samsung	
53		RESISTOR	8	R67,R68,R69,R70,R76,R86,R87,R89	10K	CHIP THICK FILM 10K OHM 5% 0805	Samsung	
54		RESISTOR	1	R71	2.4K	CHIP THICK FILM 2.4K OHM 5% 0805	Samsung	
55		RESISTOR	1	R77	39	CHIP THICK FILM 39 OHM 5% 0805	Samsung	
56		RESISTOR	1	R79	56	CHIP THICK FILM 56 OHM 5% 0805	Samsung	
57		RESISTOR	1	R80	20	CHIP THICK FILM 20 OHM 5% 0805	Samsung	

Parts List

Product Type : US PCS REPEATER

Model : MPF-001 (Uplink Part)

Spec No. :

Rev :

Date : 2003. 7. 18

No	Component CODE	Product	Qty	Location	Maker P/N	Description	Maker	Remark
58		RESISTOR	1	R81	10	CHIP THICK FILM 10 OHM 5% 0805	Samsung	
59		RESISTOR	1	R82	15K	CHIP THICK FILM 15K OHM 5% 0805	Samsung	
60		RESISTOR	2	R91,R84	100	CHIP THICK FILM 100 OHM 5% 0805	Samsung	
61		RESISTOR	3	R85,R88,R90	560	CHIP THICK FILM 560 OHM 5% 0805	Samsung	
62		RESISTOR	1	R501	1.3K	CHIP THICK FILM 1.3K OHM 5% 0805	Samsung	
63		AMP	3	U20,U29,U35	SGA-4486	HBT Cascadable Gain Block	SIRENZA	
64		AMP	1	U21	SGA-4586	HBT Cascadable Gain Block	SIRENZA	
65		AMP	2	U22,U27	SGA-4286	HBT Cascadable Gain Block	SIRENZA	
66		MIXER	2	U23,U34	D54-0003	MIXER		
67		AMP	1	U24	SGA-6486	HBT Cascadable Gain Block	SIRENZA	
68		DIVIDER	2	U26,U25	JDPS-2-2	2-WAY DIVIDER		
69		DIGITAL ATTENUATOR	1	U28	AT65-0283	5-Bit TTL Driver		
70		PIC CHIP	2	U39,U30	PIC12C508	8Pin, 8-Bit CMOS Microcontroller	MICROCHIP	
71		DIVIDER	2	U501,U31	DS52-0005	TWO-WAY POWER DIVIDER	MACOM	
72		AMP	1	U32	SGA-6589	HBT Cascadable Gain Block	SIRENZA	
73		TCXO	1	U33	ITX2525-F1-19.68	19.68 OCILLATOR		
74		AMP	1	U36	DT-11A	HBT Gain Block	K1 Solution	
75		AMP	1	U37	DT-13A	POWER AMP	K1 Solution	
76		OP AMP	1	U38	LM2902M	Low Power Voltage Dual Comparator	NATIONAL	
77		Isolator	1	U101	IL05AL1880AAE	1880MHz Chip Isolator	Partron	
78		VARIABLE RESISTOR	2	VR6,VR5	200		BI-TECH	
79		VARIABLE RESISTOR	2	VR7,VR8	10K		BI-TECH	
80		PCB	1	US_SMS_PCB		Printed Circuit Board	Songwael	
81		CASE COVER	1	ALUMINUM CASE		US_SMS COVER/141.0*161.0*2.0T/AL		

Model : MPF-001 (Uplink Part)

Date : 2003. 7. 18

[illegible]

Parts List

Product Type : US PCS REPEATER

Model : MPF-001 (Downlink Part)

Spec No. :

Rev :

Date : 2003. 7. 18

No	Component CODE	Product	Qty	Location	Maker P/N	Description	Maker	Remark
1		CONNECTOR	1	CONN1		N-TYPE (Female)	Haneuritech	
2		CONNECTOR	2	CONN3,CONN2		MCF-TYPE (Female)	Haneuritech	
3		CONNECTOR	1	CONN4		DC_IN JACK	Haneuritech	
4		CONNECTOR		CONN5		Housing 5x2	Haneuritech	
5		CAPACITOR	13	C1,C3,C6,C11,C31,C53,C59,C60,C63,C71,C85,C87,C89	0.1uF	CHIP CERAMIC 0.01uF 5% 0805	Samsung	
6		CAPACITOR	20	C2,C7,C8,C9,C10,C12,C17,C18,C24,C25,C26,C27,C28,C29,C30,C38,C39,C40,C41,C42	680pF	CHIP CERAMIC 680pF 5% 0805	Samsung	
7		CAPACITOR	10	C4,C5,C43,C46,C47,C48,C49,C50,C65,C66	10nF	CHIP CERAMIC 10nF 5% 0805	Samsung	
8		CAPACITOR	27	C13,C14,C15,C16,C19,C20,C21,C22,C23,C51,C52,C54,C55,C56,C57,C58,C68,C69,C70,C72,C73,C74,C75,C76,C77,C78,C86	33pF	CHIP CERAMIC 33pF 5% 0805	Samsung	
9		CAPACITOR	5	C32,C34,C35,C37,C502	22pF	CHIP CERAMIC 22pF 5% 0805	Samsung	
10		CAPACITOR	2	C36,C33	39pF	CHIP CERAMIC 39pF 5% 0805	Samsung	
11		CAPACITOR	8	C44,C61,C62,C67,C83,C88,C500,C501	10uF/16V	CHIP TANTAL 10uF 16V(B-Type)	Samsung	
12		CAPACITOR	2	C45,C64	3.3pF	CHIP CERAMIC 3.3pF 5% 0805	Samsung	
13		CAPACITOR	1	C79	0.5pF	CHIP CERAMIC 0.5pF 5% 0805	Samsung	
14		CAPACITOR	1	C80	0.75pF	CHIP CERAMIC 0.75pF 5% 0805	Samsung	

Parts List

Product Type : US PCS REPEATER

Model : MPF-001 (Downlink Part)

Spec No. :

Rev :

Date : 2003. 7. 18

No	Component CODE	Product	Qty	Location	Maker P/N	Description	Maker	Remark
15		CAPACITOR	3	C81,C82,C504	TBD			
16		CAPACITOR	1	C84	100uF/16V	Electrolytic Capacitor		
17		CAPACITOR	1	C503	1.5pF	CHIP CERAMIC 1.5pF 5% 0805	Samsung	
18		DIODE	1	D1	MMBZ5231	ZENER VOLTAGE REGULAR DIODE	MOTOROLA	
19		DIODE	2	D2,D3	HSMP-3864	SURFACE MOUNT PIN DIODE	AGILENT	
20		DIODE	1	D5	HSMS-2850	SURFACE MOUNT ZERO BIAS SCHOTTKY DIODE	AGILENT	
21		DIODE	1	D6	RLS4148	VOLTAGE DIODE		
22		SAW FILTER	1	F1	140MHz	140MHz(BW=15MHz)	C-TECH	
23		DUPLEXER	1	F2	DPX1883/1963S25A	1882/1962MHz, SMD-TYPE		
24		BAND PASS FILTER	2	F3,F6	BPF1963	BAND PASS 1963		
25		SAW FILTER	1	F4	155MHz	155MHz(BW=5MHz)	C-TECH	
26		BAND PASS FILTER	1	F5	BPF1818	BAND PASS 1818		
27		THERMO PAD	1	F7	T_PAD(5N9)	Temperature compensating Attenuator	EMC	
28		INDUCTOR	4	L1,L11,L12,L25	680nH	CHIP. 680nH, 5% 0805	Samsung	
29		INDUCTOR	3	L2,L30,L32	3.3nH	CHIP. 3.3nH, 5% 0805	Samsung	
30		INDUCTOR	12	L3,L6,L7,L13,L14,L19,L22, L23,L36,L37,L38,L39	TBD			
31								
32		INDUCTOR	1	L4	33nH	CHIP. 33nH, 5% 0805	Samsung	
33		RESISTOR	3	L5,R27,R37	0	CHIP THICK FILM 0 OHM 5% 0805	Samsung	
34		INDUCTOR	8	L8,L9,L10,L20,L21,L24, L31,L33	18nH	CHIP. 18nH, 5% 0805	Samsung	
35		INDUCTOR	4	L15,L16,L17,L18	68nH	CHIP. 68nH, 5% 0805	Samsung	
36		INDUCTOR	2	L26,L27	27nH	CHIP. 27nH, 5% 0805	Samsung	
37		CAPACITOR	2	L29,L28	47pF	CHIP CERAMIC 47pF 5% 0805	Samsung	

Parts List

Product Type : US PCS REPEATER

Model : MPF-001 (Downlink Part)

Spec No. :

Rev :

Date : 2003. 7. 18

No	Component CODE	Product	Qty	Location	Maker P/N	Description	Maker	Remark
38		INDUCTOR	2	L34,L35	100nH	CHIP. 100nH, 5% 0805	Samsung	
39		INDUCTOR	1	L40	4.7nH	CHIP. 4.7nH, 5% 0805	Samsung	
40		INDUCTOR	2	L501,L500	1nH	CHIP. 1nH, 5% 0805	Samsung	
41		PLL MODULE	1	PLL1	NCPA2-1818	PLL 1818MHz	ROSWIN	
42		TRANSISTOR	1	Q1	KTC3875	CHIP Transistor	Hankuk	
43		RELAY	1	RELAY1	ATQ209	5V Relay	NAIS	
44		RESISTOR	6	R1,R4,R5,R8,R14,R33	62	CHIP THICK FILM 62 OHM 5% 0805	Samsung	
45		RESISTOR	1	R2	39k	CHIP THICK FILM 39K OHM 5% 0805	Samsung	
46		RESISTOR	5	R3,R9,R10,R19,R20	300	CHIP THICK FILM 300 OHM 5% 0805	Samsung	
47		RESISTOR	2	R21,R6	12	CHIP THICK FILM 12 OHM 5% 0805	Samsung	
48		RESISTOR	2	R7,R36	15K	CHIP THICK FILM 15K OHM 5% 0805	Samsung	
49		RESISTOR	2	R12,R13	2.2K	CHIP THICK FILM 2.2K OHM 5% 0805	Samsung	
50		RESISTOR	2	R16,R15	620	CHIP THICK FILM 620 OHM 5% 0805	Samsung	
51		RESISTOR	1	R17	390	CHIP THICK FILM 390 OHM 5% 0805	Samsung	
52		RESISTOR	2	R32,R18	330	CHIP THICK FILM 330 OHM 5% 0805	Samsung	
53		RESISTOR	8	R22,R23,R24,R25,R30,R41, R42,R43	10K	CHIP THICK FILM 10K OHM 5% 0805	Samsung	
54		RESISTOR	2	R40,R26	2.4K	CHIP THICK FILM 2.4K OHM 5% 0805	Samsung	
55		RESISTOR	2	R29,R28	TBD			
56		RESISTOR	1	R31	39	CHIP THICK FILM 39 OHM 5% 0805	Samsung	
57		RESISTOR	1	R34	20	CHIP THICK FILM 20 OHM 5% 0805	Samsung	
58		RESISTOR	1	R35	10	CHIP THICK FILM 10 OHM 5% 0805	Samsung	
59		RESISTOR	2	R44,R38	100	CHIP THICK FILM 100 OHM 5% 0805	Samsung	
60		RESISTOR	1	R39	560	CHIP THICK FILM 560 OHM 5% 0805	Samsung	

Parts List

Product Type : US PCS REPEATER

Model : MPF-001 (Downlink Part)

Spec No. :

Rev :

Date : 2003. 7. 18

No	Component CODE	Product	Qty	Location	Maker P/N	Description	Maker	Remark
61		RESISTOR	1	R500	1.3K	CHIP THICK FILM 1.3K OHM 5% 0805	Samsung	
62		AMP	2	U10,U1	SGA-4486	HBT Cascadable Gain Block	SIRENZA	
63		AMP	1	U2	SGA-4586	HBT Cascadable Gain Block	SIRENZA	
64		AMP	3	U3,U8,U16	SGA-4286	HBT Cascadable Gain Block	SIRENZA	
65		MIXER	2	U4,U15	D54-0003	MIXER	MA-COM	
66		PIC CHIP	1	U11	PIC12C508	8Pin, 8-Bit CMOS Microcontroller	MICROCHIP	
67		DIVIDER	2	U500,U12	DS52-0005	TWO-WAY POWER DIVIDER	MA-COM	
68		AMP	1	U5	SGA-6486	HBT Cascadable Gain Block	SIRENZA	
69		DIVIDER	2	U6,U7	JDPS-2-2	2-WAY DIVIDER	MINICURCUITS	
70		DIGITAL ATTENUATOR	1	U9	AT65-0283	5-Bit TTL Driver	MA-COM	
71		AMP	1	U13	SGA-6589	HBT Cascadable Gain Block	SIRENZA	
72		TCXO	1	U14	ITX2525-F1-19.68	19.68 OCILLATOR		
73		AMP	1	U17	DT-11A	HBT Gain Block	K1 Solution	
74		AMP	1	U18	DT-13A	POWER AMP	K1 Solution	
75		OP AMP	1	U19	LM2902M	Low Power Voltage Dual Comparator	NATIONAL	
76		Isolator	1	U100	IL05AL1960AAE	1960MHz Chip Isolator	Partron	
77		VARIABLE RESISTOR	2	VR1,VR2	200		BI-TECH	
78		VARIABLE RESISTOR	4	VR4,VR3	10K		BI-TECH	
79		PCB	1	US_SMS_PCB		Printed Circuit Board	Songwael	
80		CASE BODY	1	ALUMINUM CASE		US_SMS BODY/141.0*161.0*38.0T/AL		
81		CASE COVER	1	ALUMINUM CASE		US_SMS COVER/141.0*161.0*2.0T/AL		
82		SCREW	102		Round Head M2.3	RH M2.3*0.4*6.0/SUS		
83		SCREW	100		Flat Head M2.3	FH M2.3*0.4*6.0/SUS		
84								

Parts List

Product Type : US PCS REPEATER

Model : MPF-001 (Downlink Part)

Spec No. : Rev :

Date : 2003. 7. 18

No	Component CODE	Product	Qty	Location	Maker P/N	Description	Maker	Remark
85								
86								
87								
88								
89								
90								
91								
92								
93								

[