



## Photographs

*Dual band SMR-700/800*

*Indoor solution*

***Confidential Information***

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# Dual Band Repeater

**Model Name: SMR-700/800**

**Part No : RS-IF27-80**

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## 1. Revision History

Authors	Date	Revision	Notes
Jini-Kim	January 15, 2010	00	First Draft



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## 1. SMR-700/800

### 1.1. Front



### 1.2. Top



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## 1.3. Bottom



## 1.4. Right





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### 1.5. Left



### 1.6. Back



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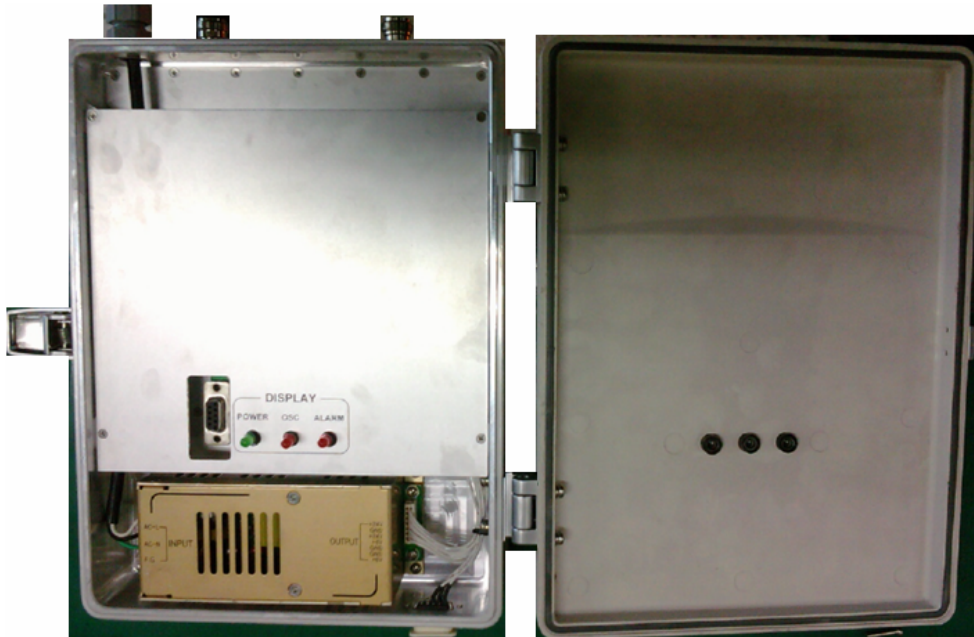
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## 1.7. In side





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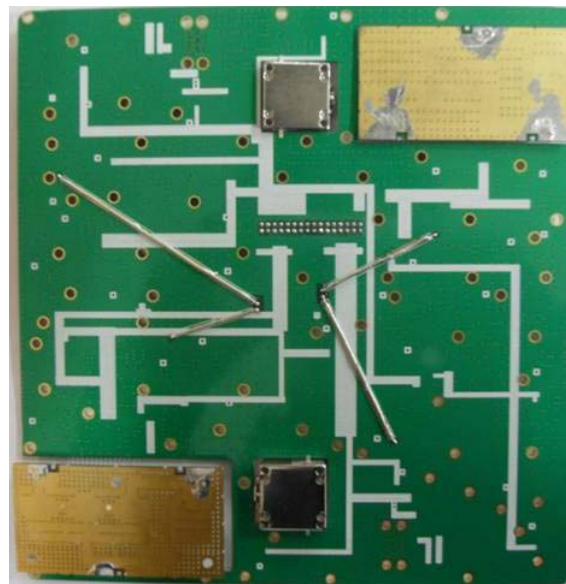
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## 2. MODULE

### 2.1 RF Board



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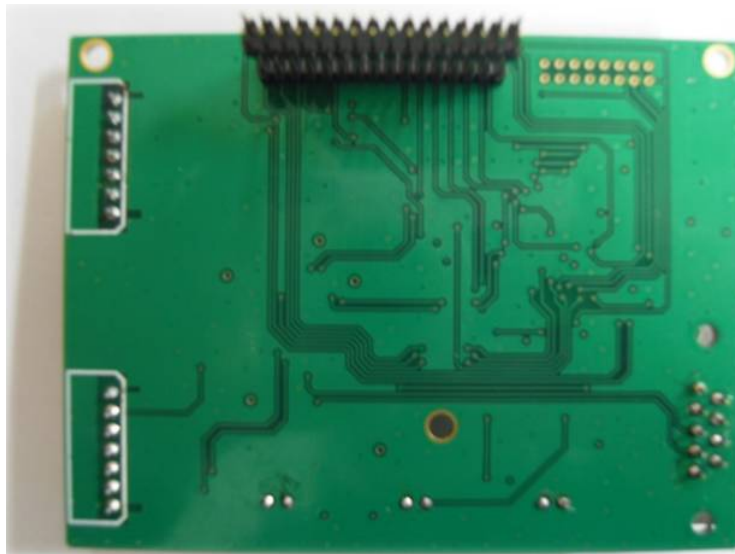
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## 2.2 CPU Board







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## 2.3 PSU (In side/Out side)





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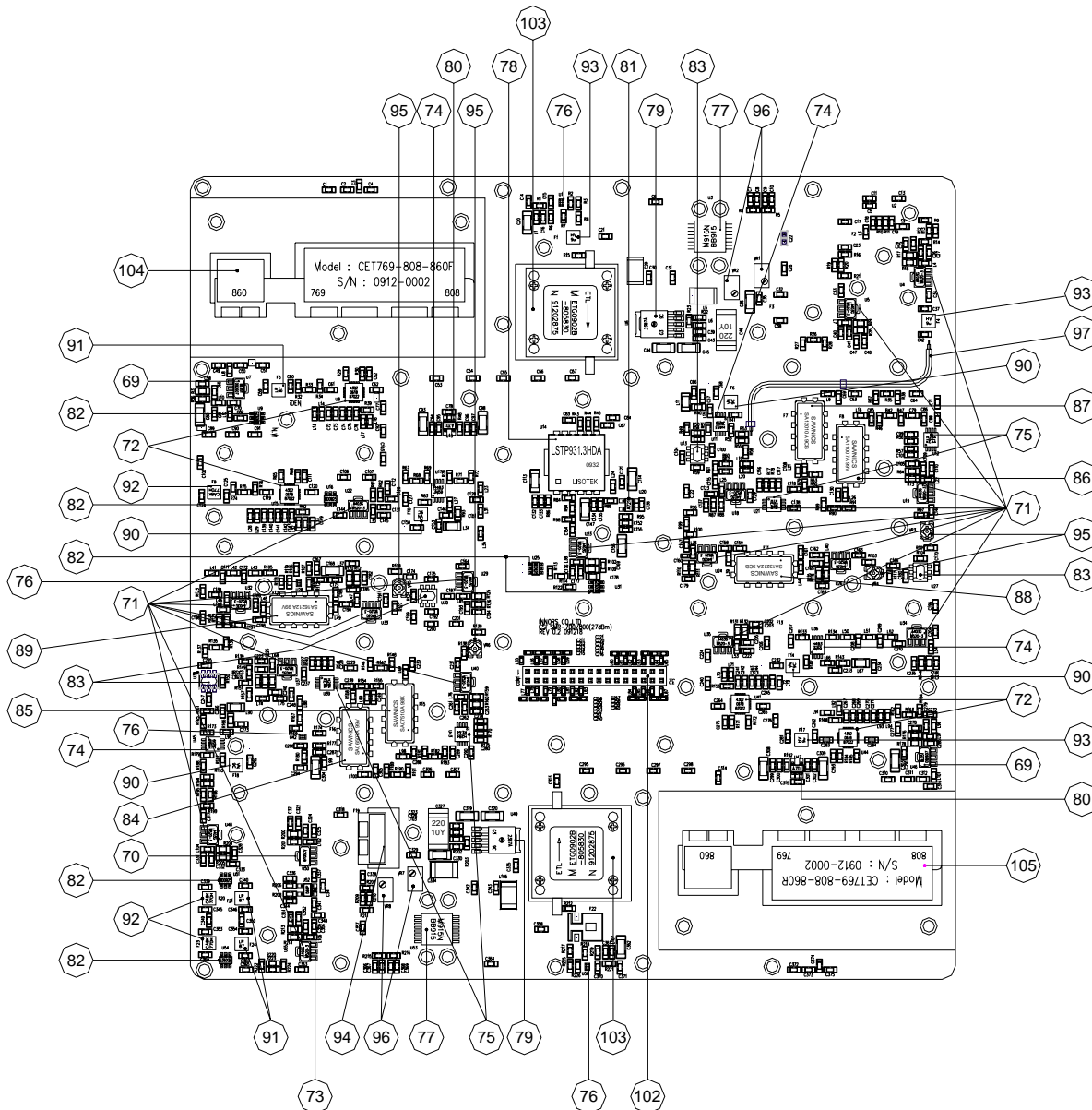
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## 3 PCB

### 3.1 TOP VIEW

#### 3.1.1 RF PCB



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## 3.1.2 Part List

No	Part Number	Descriptions / remarks	Qty	Designations	Maker
69	BL051	Low Noise Amplifier	2	U7,U46	BeRex
70	BT05CV	InGaP HBT Gain Block	1	U50	BeRex
71	AG403-89G	InGaP HBT Gain Block	17	U4,U5,U18,U19,U22,U23,U24,U26,U29,U32,U33,U34,U35,U3 7,U40,U48,U55	WJ
72	PE4302	Digital Step Attenuator,0.5dB Step	4	U8,U15,U41,U44	Peregrine
73	MAADSS0008	Digital Attenuator, 1-Bit, 15 dB	1	U52	MACOM
74	HMC483MS8GE	HIGH IP3 GaAs MMIC MIXER	4	U11,U17,U36,U45	Hittite
75	HMC284MS8G	SPDT NON-REFLECTIVE SWITCH	4	U12,U21,U39,U43	Hittite
76	AD8312-CB-6	Log RF Power Detector	4	U1,U28,U42,U56	ADI
77	MHVIC915NR2	LD MOS Power Amplifier	2	U3,U53	Freescale
78	LSTP931.3HDN	PLL Synthesizer Module, 911.3 ~ 951.3,STEP50KHz	1	U14	LISOTEK
79	NJM2387ADL3	ADJ LOW DRO VOLTAGE REGULATOR(252-5)	2	U6,U49	JRC
80	NJM2871BF33	150mA LDO, 3.3V, SOT-23-5	2	U10,U47	JRC
81	NJM2871BF05	150mA LDO, 5V, SOT-23-5	1	U20	JRC
82	BD0926	2-Way SMT Power Divider	6	U9,U16,U25,U31,U51,U54	BeRex
83	TCP-2-10	Surface Mount Power Splitter	4	U13,U27,U30,U38	Minicircuits
84	SA06507AV	IF SAW Filter, 65.8MHz, SMD	1	F16	SAWNICS

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No	Part Number	Descriptions / remarks	Qty	Designations	Maker
85	SA07510AV	IF SAW Filter, 75.3MHz, SMD	1	F15	SAWNICS
86	SA11007AV	IF SAW Filter, 110.8MHz, SMD	1	F8	SAWNICS
87	SA12010AV	IF SAW Filter, 120.15MHz, SMD	1	F7	SAWNICS
88	SA13212AV	IF SAW Filter, 132.45MHz SMD	1	F11	SAWNICS
89	SA16212AV	IF SAW Filter, 162.3MHz, SMD	1	F12	SAWNICS
90	SA927BM	LOCAL RF SAW Filter, SMD ,	4	F6,F10,F14,F18	SAWNICS
91	SA861AM	DL RF SAW Filter, SMD	4	F5,F21,F24	SAWNICS
92	CT770HTI	DL RF SAW Filter, SMD	3	F9,F20,F23	C-Tech
93	TA1071A	UL RF SAW Filter, SMD	5	F1,F4,F17	TAISAW
94	Ceramic BPF	5Pole(13*12mm), DL	2	F19	RTX
95	EVM2NSX80B12	Variable Resistor	4	VR3,VR4,VR5,VR6	PANASONIC
96	3224W-1-103e	Variable Resistor	4	VR1,VR2,VR8,VR9	BOURNS
97	RF Jump CABLE	047t, 57.9mm, top	1	047-C1	WIDE TELECOM
102	FB11-1-32-G1	2.0mm Pitch Female Header S/T	1		SHINHWA Tech
103	ETG0902B-805830	DROP-IN ISOLATOR ,764 ~ 941 MHz	2		Eleading
104	Multiplexer	Ceramic Multiplexer Forward type	1	MUX_DL	Lime T&C
105	Multiplexer	Ceramic Multiplexer Reverse type	1	MUX_UL	Lime T&C



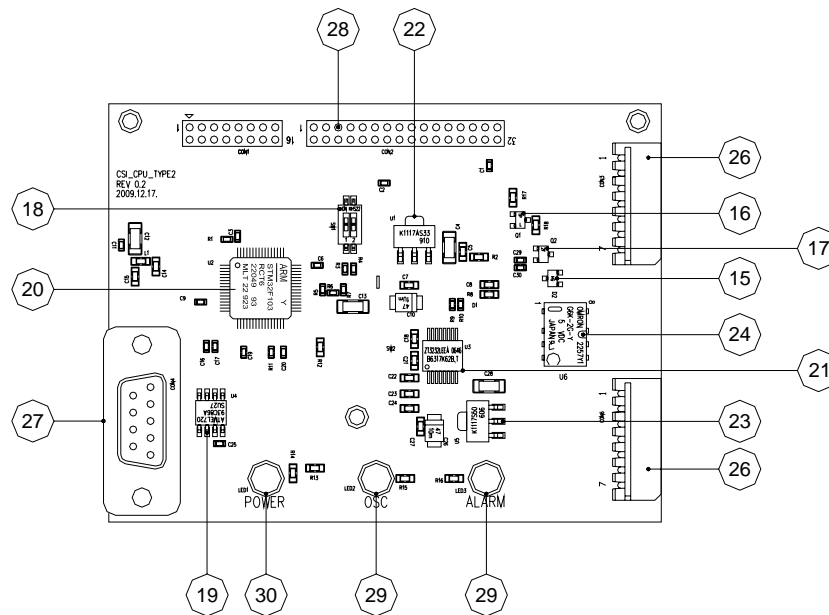
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## 3.1.3 CPU PCB



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## 3.1.4 Part List

No	Part Number	Descriptions / remarks	Qty	Designations	Maker
15	MMBD4148	Small Signal Diode , SOT-23	1	D2	FAIRCHILD
16	KTN2222AS	EPITAXIAL PLANAR NPN TRANSISTOR , SOT-23	1	Q1	KEC
17	MMBT2907ALT1G	General Purpose Transisters , SOT-23	1	Q2	FAIRCHILD
18	KHS-22	SMD Switch	1	sw1	Korea Relay
19	AT93C86A-10SU-2.7	3-wire Serial EEPROM, 16K, SOIC-8P	1	U4	Atmel
20	STM32F103x8(LQFP64)	Medium-density performance line ARM Based 32-bit MCU	1	U2	ST
21	ZT3232E(SSOP)	RS232 Transceivers	1	U3	Zywyn
22	KIA1117AS/AF33(SOT-223)	LOW DROP FIXED AND ADJUSTABLE VOLTAGE REGULATOR	1	U1	KIA
23	KIA1117AS/AF50(SOT-223)	LOW DROP FIXED AND ADJUSTABLE VOLTAGE REGULATOR	1	U5	KIA
24	G6K-2G-Y	Low Signal Relay ,SMD	1	U6	OMRON
26	Molex5268-7	2.50mm (.098") Pitch ,7 PIN	2	CON3 , CON6	MOLEX
27	DS03-S-09-1-S1	9PIN D-SUB DIP TYPE	1	CON4	SHINHWA Tech
29	LED L-314HD	3Ø,적색	2	LED2,LED3	
30	LED L-314GD	3Ø,녹색(전원)	1	LED1	



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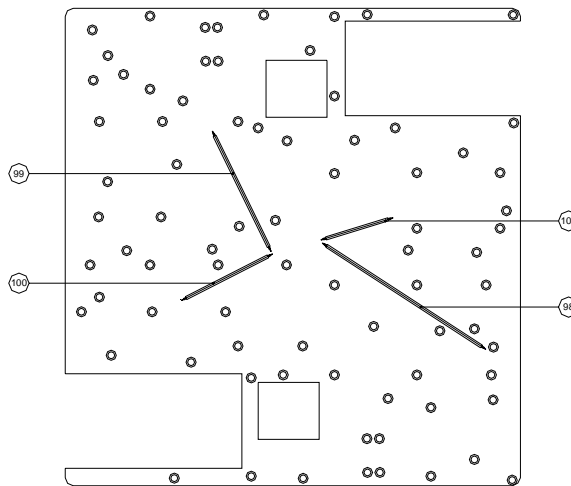
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### 3.2 BOTTOM VIEW

#### 3.2.1 RF PCB



#### 3.2.2 Part List

No	Part Number	Descriptions / remarks	Qty	Designations	Maker
98	RF Jump CABLE	047t, 73.5mm, bottom	1	047-C2	WIDE TELECOM
99	RF Jump CABLE	047t, 50.5mm, bottom	1	047-C3	WIDE TELECOM
100	RF Jump CABLE	047t, 38.5mm, bottom	1	047-C4	WIDE TELECOM
101	RF Jump CABLE	047t, 28.4mm, bottom	1	047-C5	WIDE TELECOM

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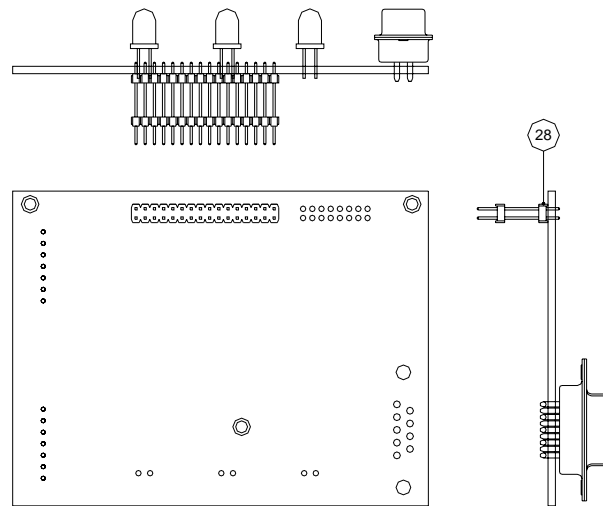
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### 3.2.3 CPU PCB



### 3.2.4 Part Lis

No	Part Number	Descriptions / remarks	Qty	Designations	Maker
28	HB-14-1-32-(2.5/7/8)	32PIN , 2.00mm PIN HEADER , DUAL ROW DOUBLE BASE	1	CON2	SHINHWA Tech

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