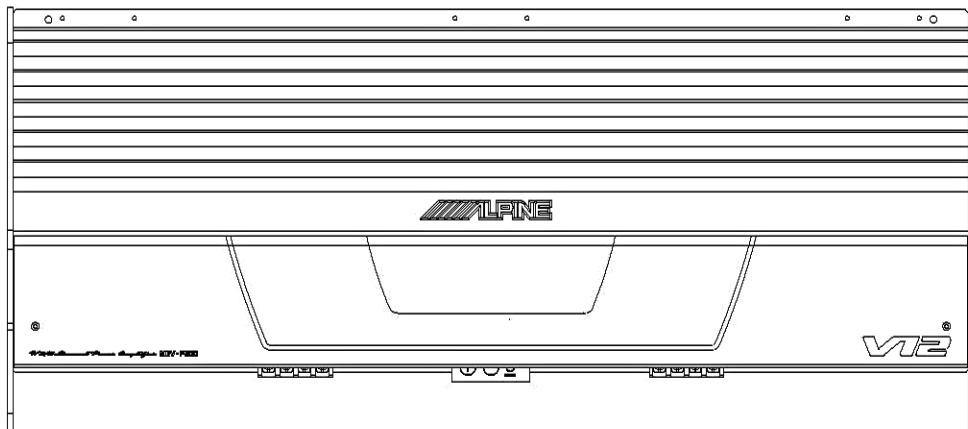


# ALPINE SERVICE MANUAL

---

## 4 CHANNEL POWER AMPLIFIER

---



5 / 03-A  
68E35552S01

---

# MRV-F900

# Specifications

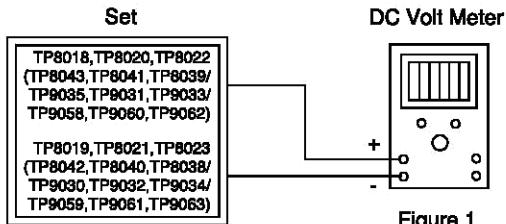
Power Output .....	4ohm, 0.2% T.H.D., 14.4V, 20Hz/1kHz/20kHz : 100W 2ohm, 0.3% T.H.D., 14.4V, 20Hz : 200W 4ohm-BTL, 0.3% T.H.D., 14.4V, 20Hz : 400W
T.H.D. (20kHz) .....	100W, 4ohm, 14.4V : 0.3%
Residual Noise (Input Short) .....	5.0mV
S/N Ratio (Ref. Output 100W/4ohm, Input short) .....	95dB (355uV)
Frequency Response (Ref. 1kHz, 0dB) .....	20Hz : -0.0+0.5, -3dB 50kHz : -0.8+1.0, -3dB
Input Sensitivity (Power Gain at 100W/4ohm Output) .....	0.92V±4dB
Cross Talk .....	70dB
Output Offset Voltage .....	±150mV
Remote on Voltage (1W Output) .....	6.5±1V
Current Drain .....	No Signal : 3.6A 200W x 4, 2ohm Load : 130A Remote Current Drain : 0.26±0.1mA Back-Up Current Drain : 1.5mA
Fuse Requirement .....	80A (For Battery Line)
Power Source .....	DC14.4V (10 to 16V)
Dimensions (W x H x D) .....	658 x 82.58 x 288.5mm
Weight .....	15kg

NOTE : Due to Continuing product improvement, specifications and designs are subject to change without notice.

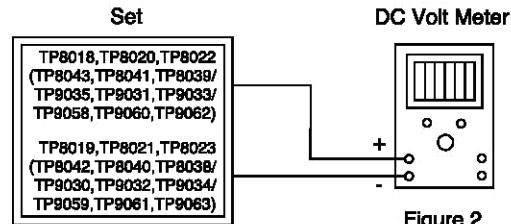
# Adjustment Procedures

## 1. Idling Adjustment

### (1) Connection



BATTERY : DC14.4V  
REMOTE : DC6.5+1, -1V  
Input : No Signal  
Output : No load



BATTERY : DC14.4V  
REMOTE : DC6.5+1, -1V  
Input : No Signal  
Output : 2ohm load

### (3) Control Settings

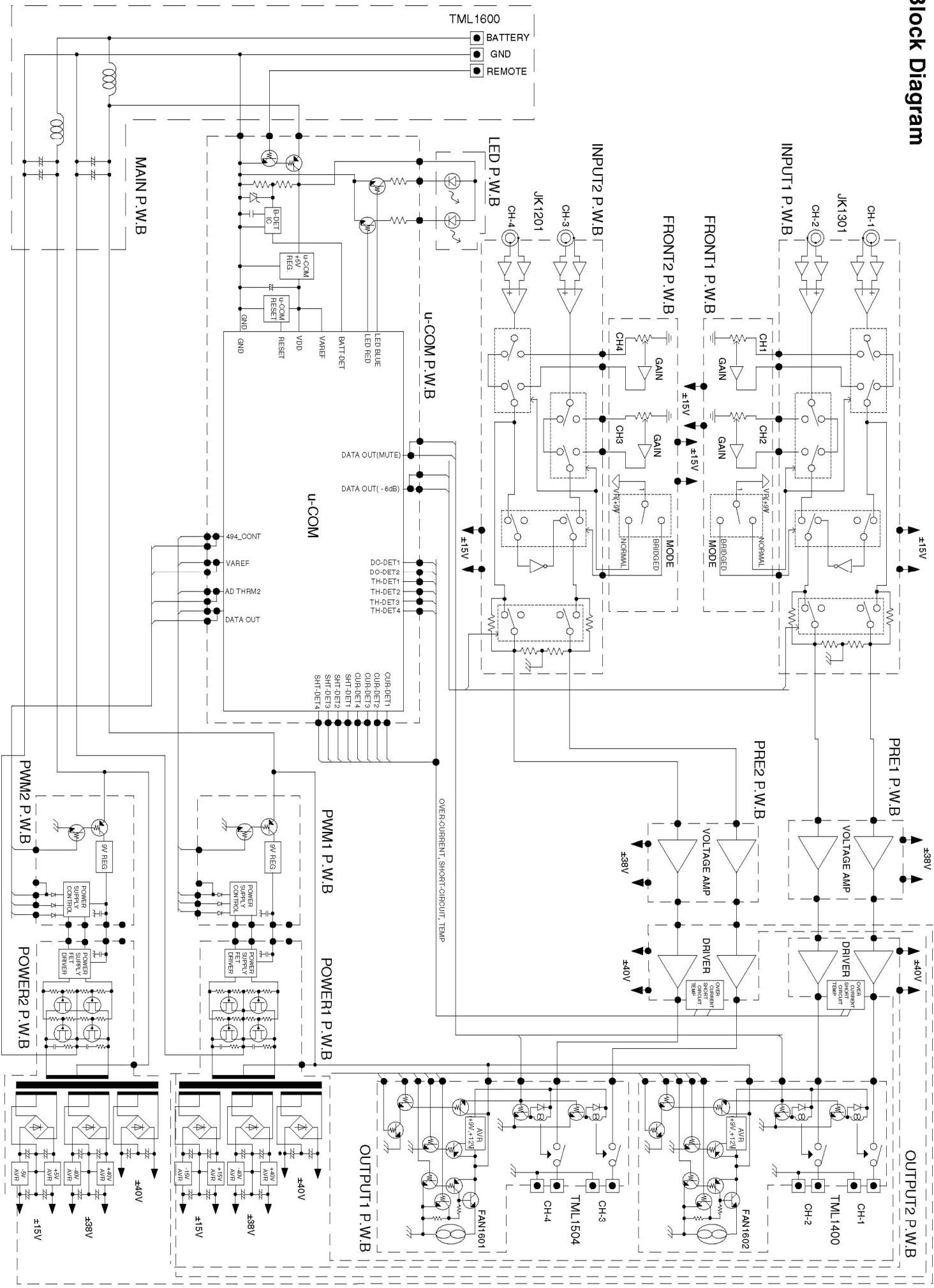
GAIN Control ..... MIN

## (2) Adjustment Procedures

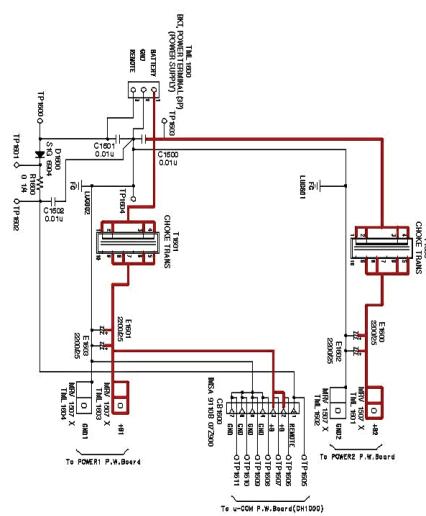
Step	Connection	Test Point / P.W. Board Coordinates	Adjustment
1	-	(1)	BATT : OFF , REMOTE : OFF
			VR100,VR200,VR300, and VR400 are turned clockwise.
			BATT : ON , REMOTE : ON
2	Figure 1	TP8018- TP8019 (4-A) (4-A)	The point with which a value serves as the maximum in a test point is investigated. (TEST POINT 1 : TP8018- TP8019, TEST POINT 2 : TP8020- TP8021, TEST POINT 3 : TP8022- TP8023)
		TP8020- TP8021 (4-A) (4-A)	VR100 is turned and the value of the test point of (1) is adjusted. (SPEC) TEST POINT : 0.7±0.05mV
3	Figure 1	TP8022- TP8023 (4-A) (4-A)	
		TP8043- TP8042 (2-A) (2-A)	The point with which a value serves as the maximum in a test point is investigated. (TEST POINT 1 : TP8043- TP8042, TEST POINT 2 : TP8041- TP8040, TEST POINT 3 : TP8039- TP8038)
4	Figure 1	TP8041- TP8040 (2-A) (2-A)	VR200 is turned and the value of the test point of (1) is adjusted. (SPEC) TEST POINT : 0.7±0.05mV
		TP8039- TP8038 (2-A) (2-A)	
		TP9058- TP9059 (2-G) (2-G)	The point with which a value serves as the maximum in a test point is investigated. (TEST POINT 1 : TP9058- TP9059, TEST POINT 2 : TP9060- TP9061, TEST POINT 3 : TP9062- TP9063)
5	Figure 1	TP9060- TP9061 (2-G) (2-G)	VR400 is turned and the value of the test point of (1) is adjusted. (SPEC) TEST POINT : 0.7±0.05mV
		TP9062- TP9063 (2-G) (2-G)	
		TP9035- TP9030 (4-G) (4-G)	The point with which a value serves as the maximum in a test point is investigated. (TEST POINT 1 : TP9035- TP9030, TEST POINT 2 : TP9031- TP9032, TEST POINT 3 : TP9033- TP9034)
		TP9031- TP9032 (4-G) (4-G)	VR300 is turned and the value of the test point of (1) is adjusted. (SPEC) TEST POINT : 0.7±0.05mV
		TP9033- TP9034 (4-G) (4-G)	

Step	Connection	Test Point / P.W. Board Coordinates	Adjustment
5	Figure 2	TP8018- TP8019 (4-A) (4-A) TP8020- TP8021 (4-A) (4-A) TP8022- TP8023 (4-A) (4-A)	(1) The point with which a value serves as the maximum in a test point is investigated. (TEST POINT 1 : TP8018- TP8019, TEST POINT 2 : TP8020- TP8021, TEST POINT 3 : TP8022- TP8023)
			(2) The value of the point with which a value serves as the maximum in a test point is measured. (SPEC) TEST POINT: $1.8 \pm 1.4\text{mV}$ OK (SPEC) TEST POINT: others $1.8 \pm 1.4\text{mV}$ NG NOTE : NG : Proceeds same Auto Adjustment of step (3).
			(3) VR100 is turned and the value of the test point of (2) is adjusted. (SPEC) TEST POINT: $1.8 \pm 1.4\text{mV}$
7	Figure 2	TP8043- TP8042 (2-A) (2-A) TP8041- TP8040 (2-A) (2-A) TP8039- TP8038 (2-A) (2-A)	(1) The point with which a value serves as the maximum in a test point is investigated. (TEST POINT 1 : TP8043- TP8042, TEST POINT 2 : TP8041- TP8040, TEST POINT 3 : TP8039- TP8038)
			(2) The value of the point with which a value serves as the maximum in a test point is measured. (SPEC) TEST POINT: $1.8 \pm 1.4\text{mV}$ OK (SPEC) TEST POINT: others $1.8 \pm 1.4\text{mV}$ NG NOTE : NG : Proceeds same Auto Adjustment of step (3).
			(3) VR200 is turned and the value of the test point of (2) is adjusted. (SPEC) TEST POINT: $1.8 \pm 1.4\text{mV}$
8	Figure 2	TP9058- TP9059 (2-G) (2-G) TP9060- TP9061 (2-G) (2-G) TP9062- TP9063 (2-G) (2-G)	(1) The point with which a value serves as the maximum in a test point is investigated. (TEST POINT 1 : TP9058- TP9059, TEST POINT 2 : TP9060- TP9061, TEST POINT 3 : TP9062- TP9063)
			(2) The value of the point with which a value serves as the maximum in a test point is measured. (SPEC) TEST POINT : $1.8 \pm 1.4\text{mV}$ OK (SPEC) TEST POINT: others $1.8 \pm 1.4\text{mV}$ NG NOTE : NG : Proceeds same Auto Adjustment of step (3).
			(3) VR400 is turned and the value of the test point of (2) is adjusted. (SPEC) TEST POINT : $1.8 \pm 1.4\text{mV}$
9	Figure 2	TP9035- TP9030 (4-G) (4-G) TP9031- TP9032 (4-G) (4-G) TP9033- TP9034 (4-G) (4-G)	(1) The point with which a value serves as the maximum in a test point is investigated. (TEST POINT 1 : TP9035- TP9030, TEST POINT 2 : TP9031- TP9032, TEST POINT 3 : TP9033- TP9034)
			(2) The value of the point with which a value serves as the maximum in a test point is measured. (SPEC) TEST POINT : $1.8 \pm 1.4\text{mV}$ OK (SPEC) TEST POINT: others $1.8 \pm 1.4\text{mV}$ NG NOTE : NG : Proceeds same Auto Adjustment of step (3).
			(3) VR300 is turned and the value of the test point of (2) is adjusted. (SPEC) TEST POINT : $1.8 \pm 1.4\text{mV}$

## Block Diagram

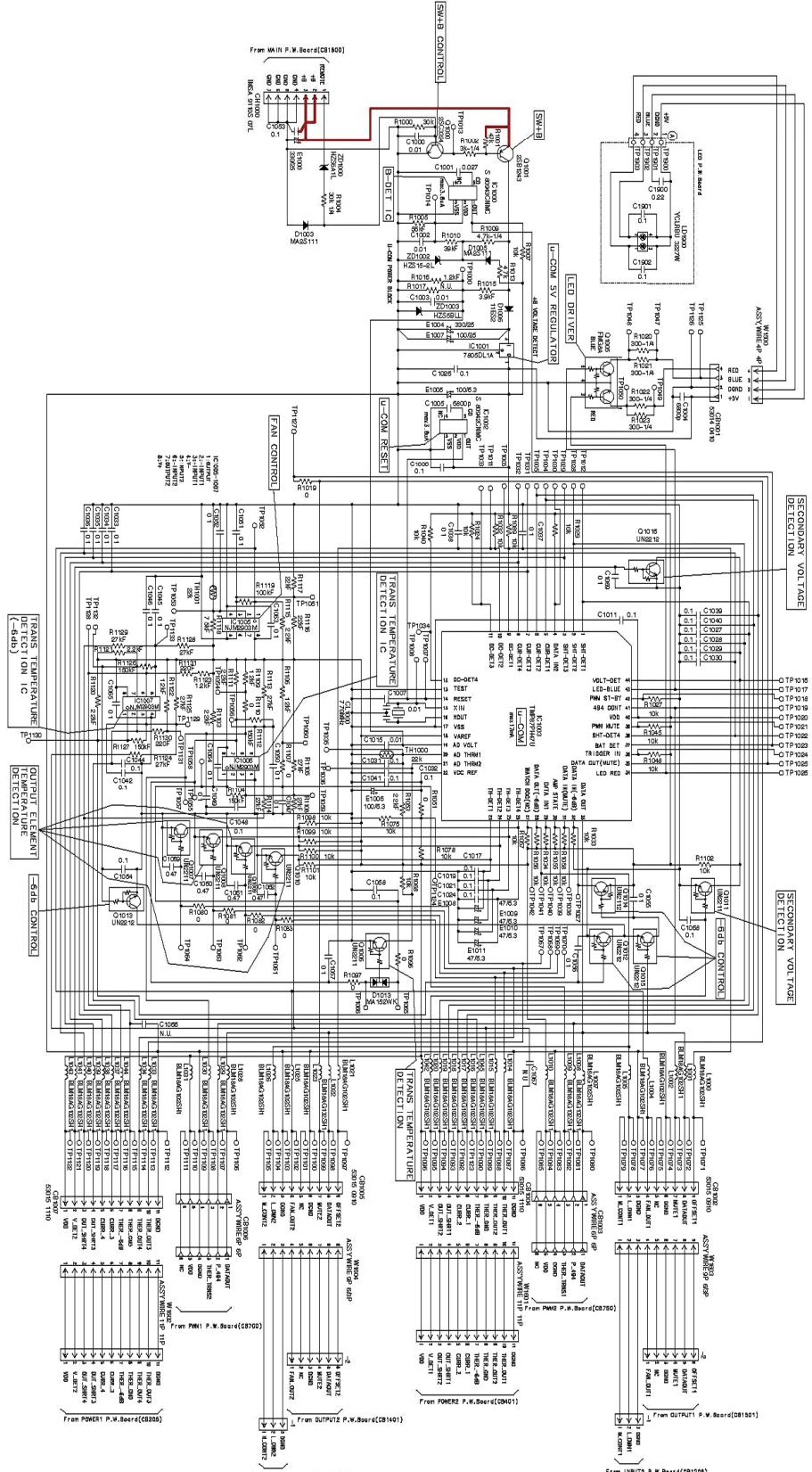


Schematic Diagram(1/14)



MAIN P.W. Board

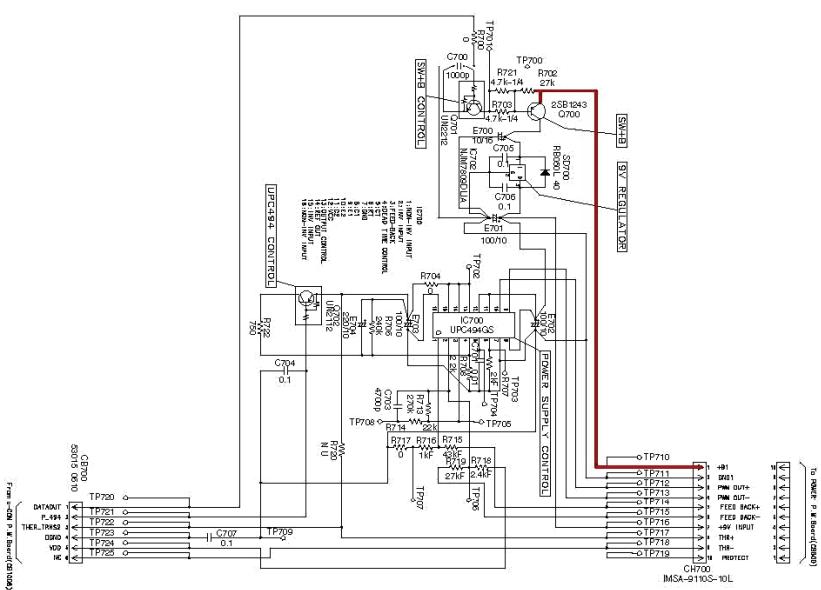
### Schematic Diagram(2/14)



U-COM P.W. Board

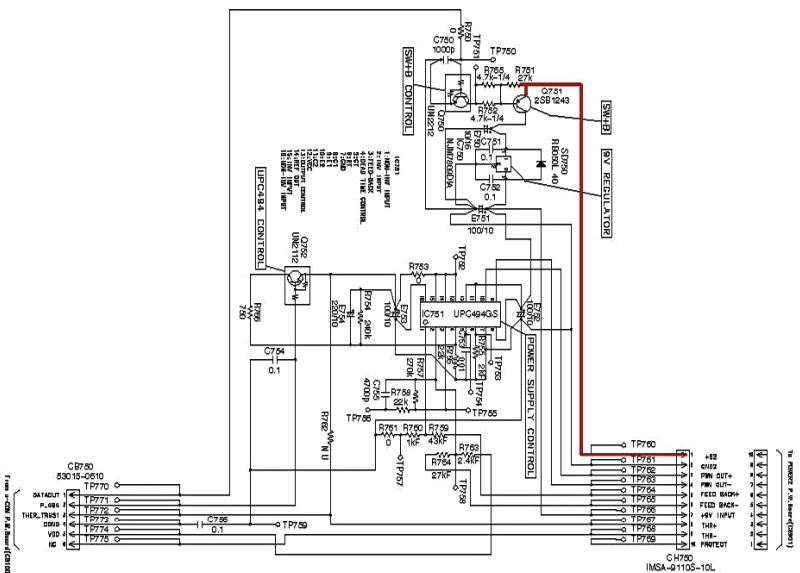
J=CJM P.W.Board

### Schematic Diagram(3/14)



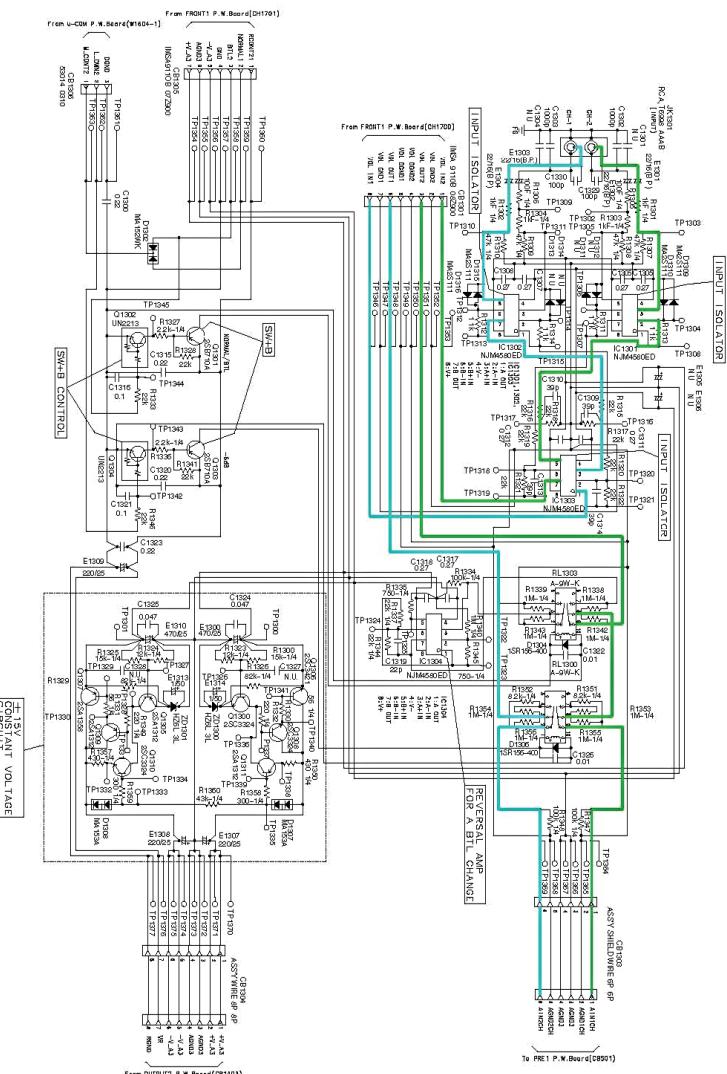
PWM1 P.W. Board  
NOTE:N.U. is Not Used Parts.

### Schematic Diagram(4/14)



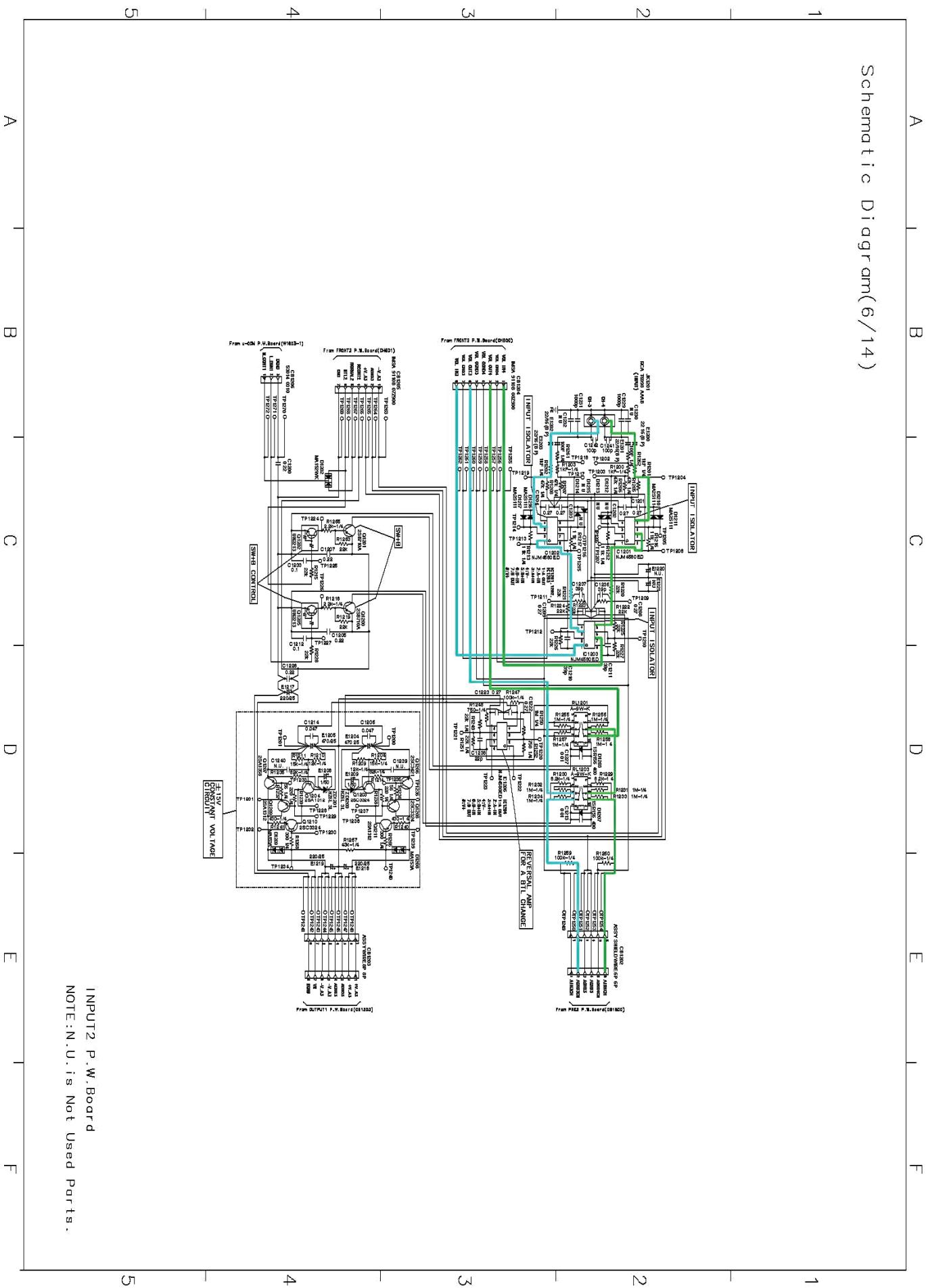
PWM2 P-W Board  
NOTE:N.U. is Not Used Parts.

Schematic Diagram(5/14)



INPUT1 P.W.Board  
NOTE:N.U. is Not Used Parts.

### Schematic Diagram(6/14)



Schematic Diagram(7/14)

8

2

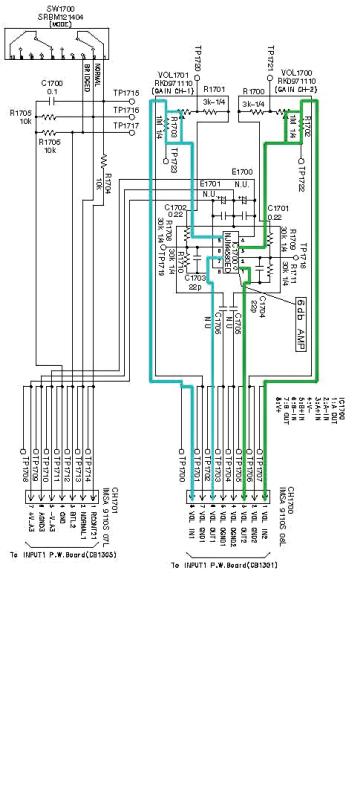
2

1

1

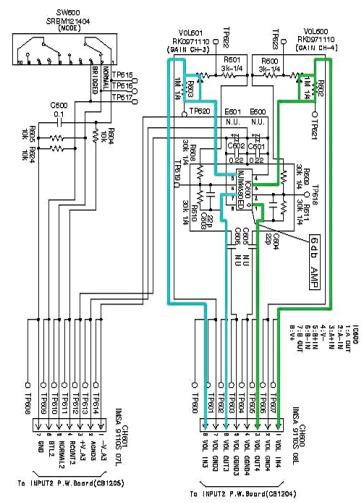
四

5 | 4 | 3 | 2 | 1 |



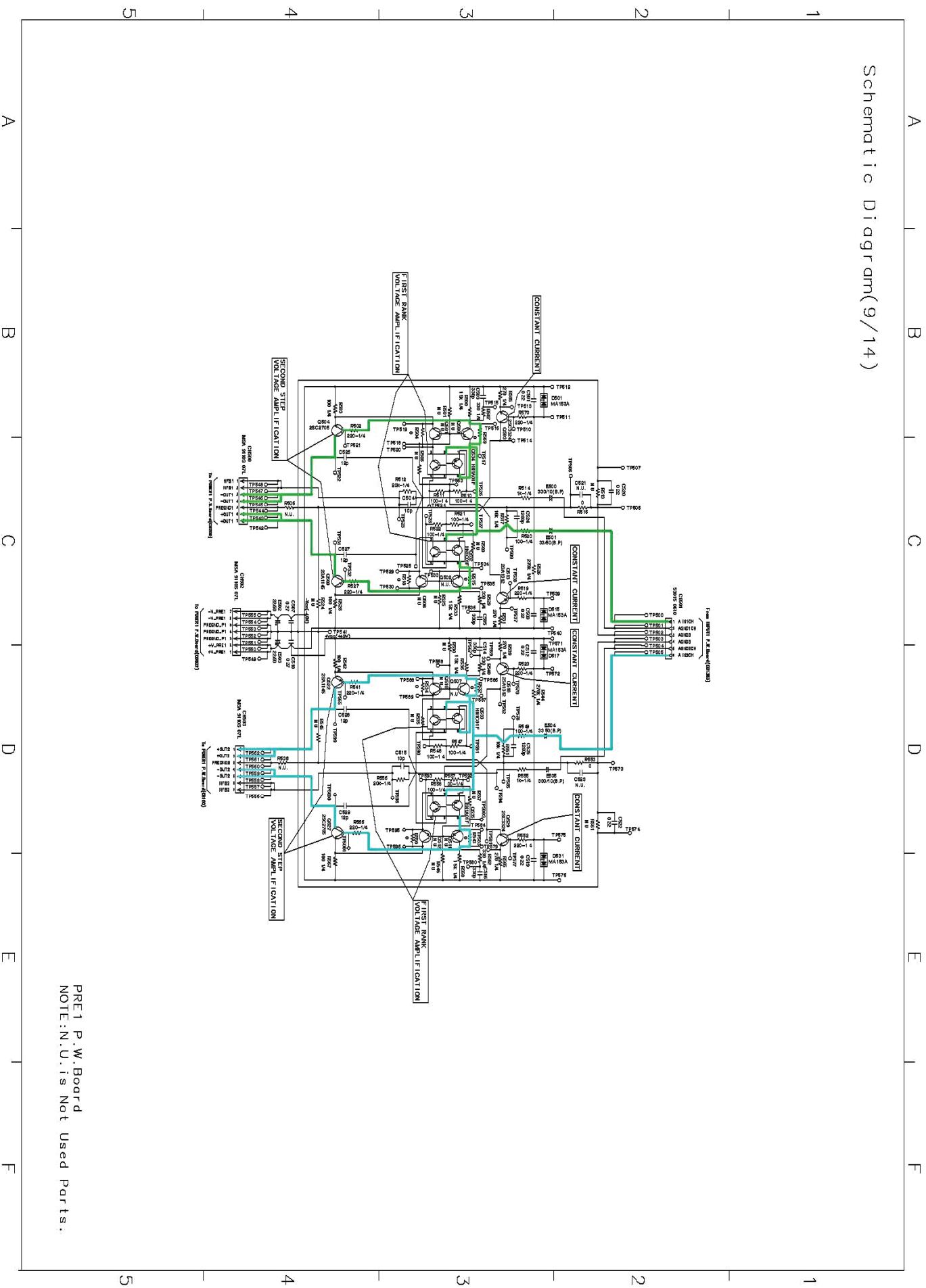
FRONT 1 P.W. Board  
NOTE: N.U. is Not Used Parts.

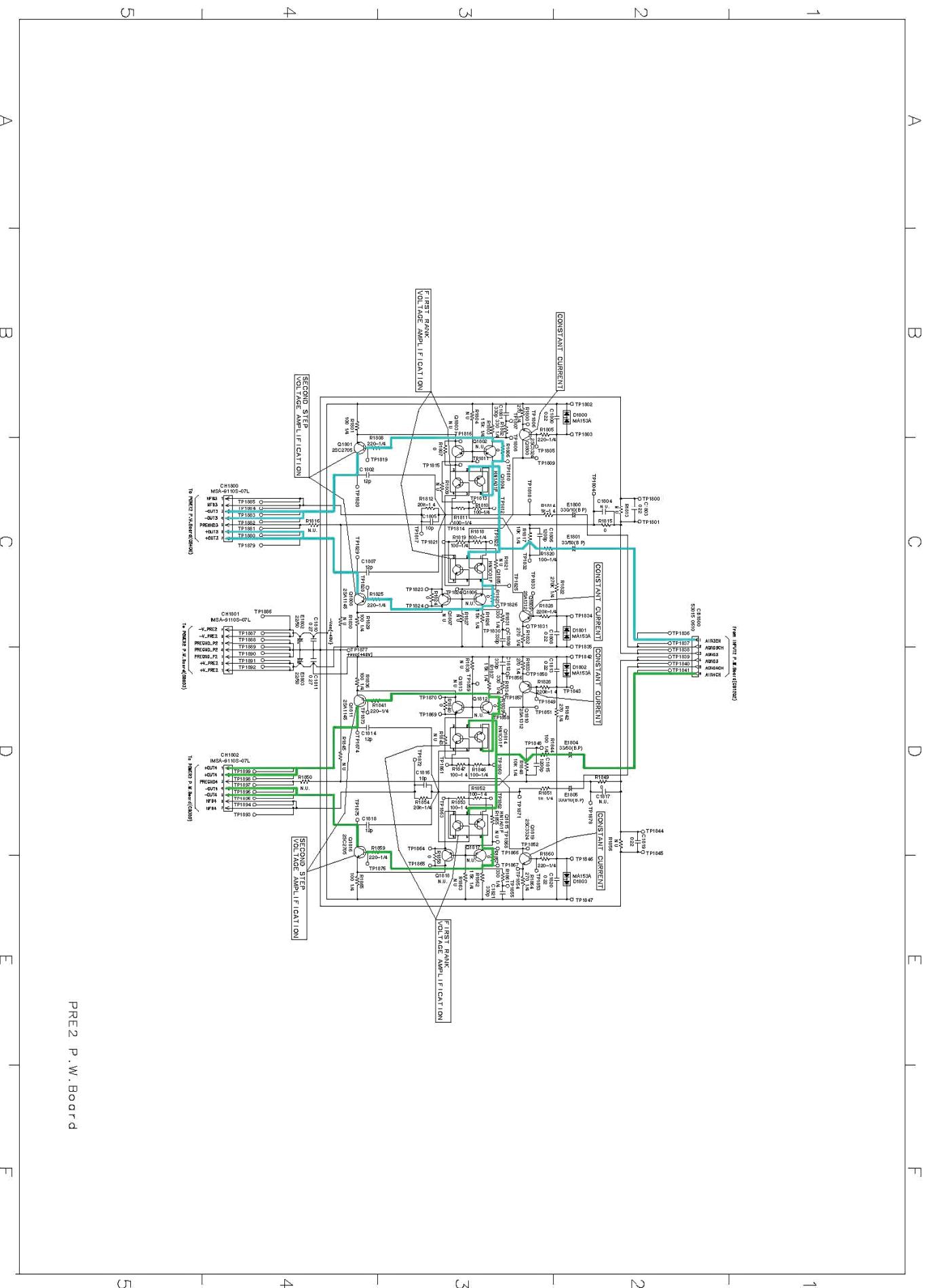
### Schematic Diagram(8/14)



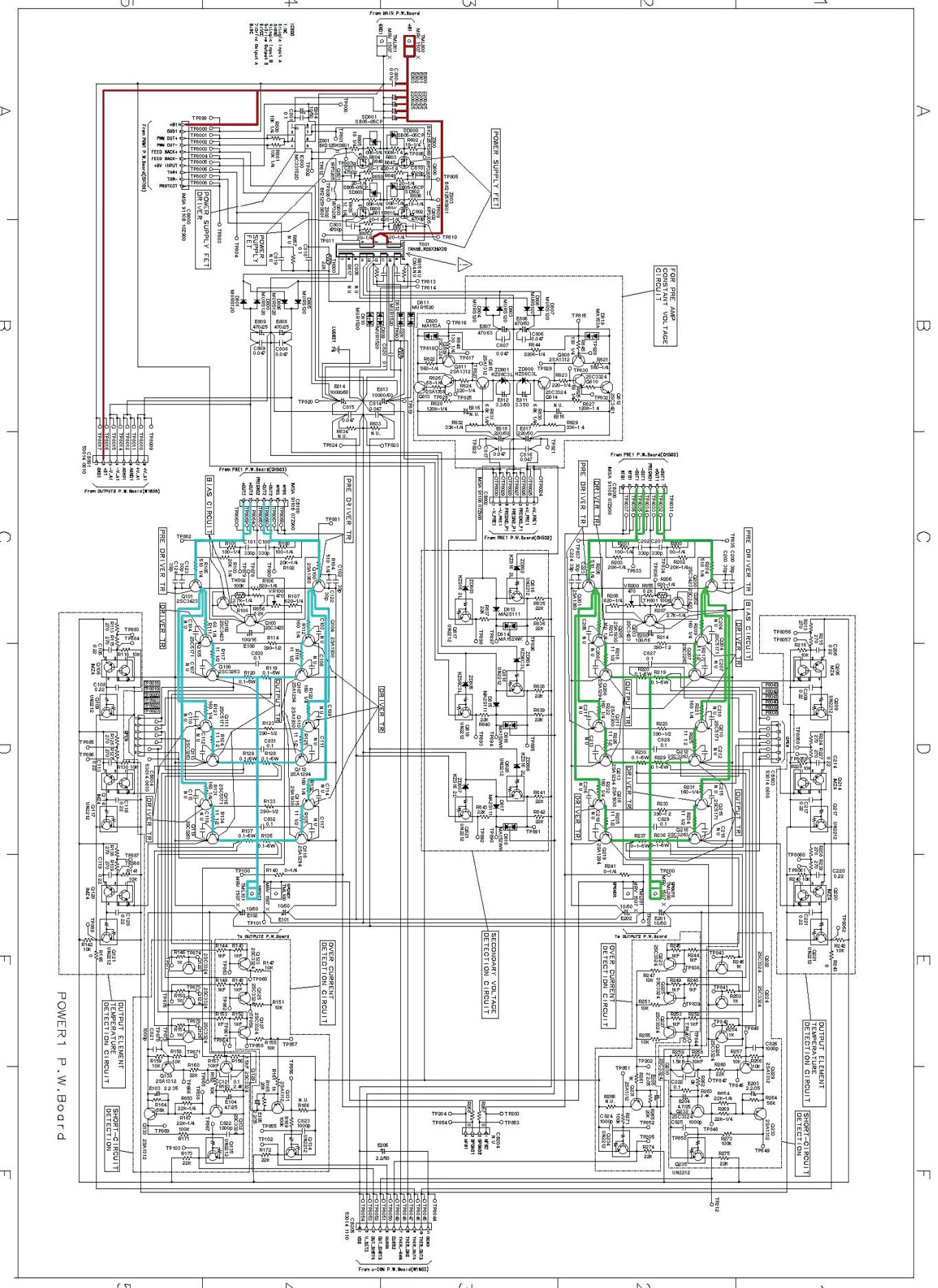
FRONT2 P.W. Board  
NOTE: N.U. is Not Used Parts.

Schematic Diagram(9/14)



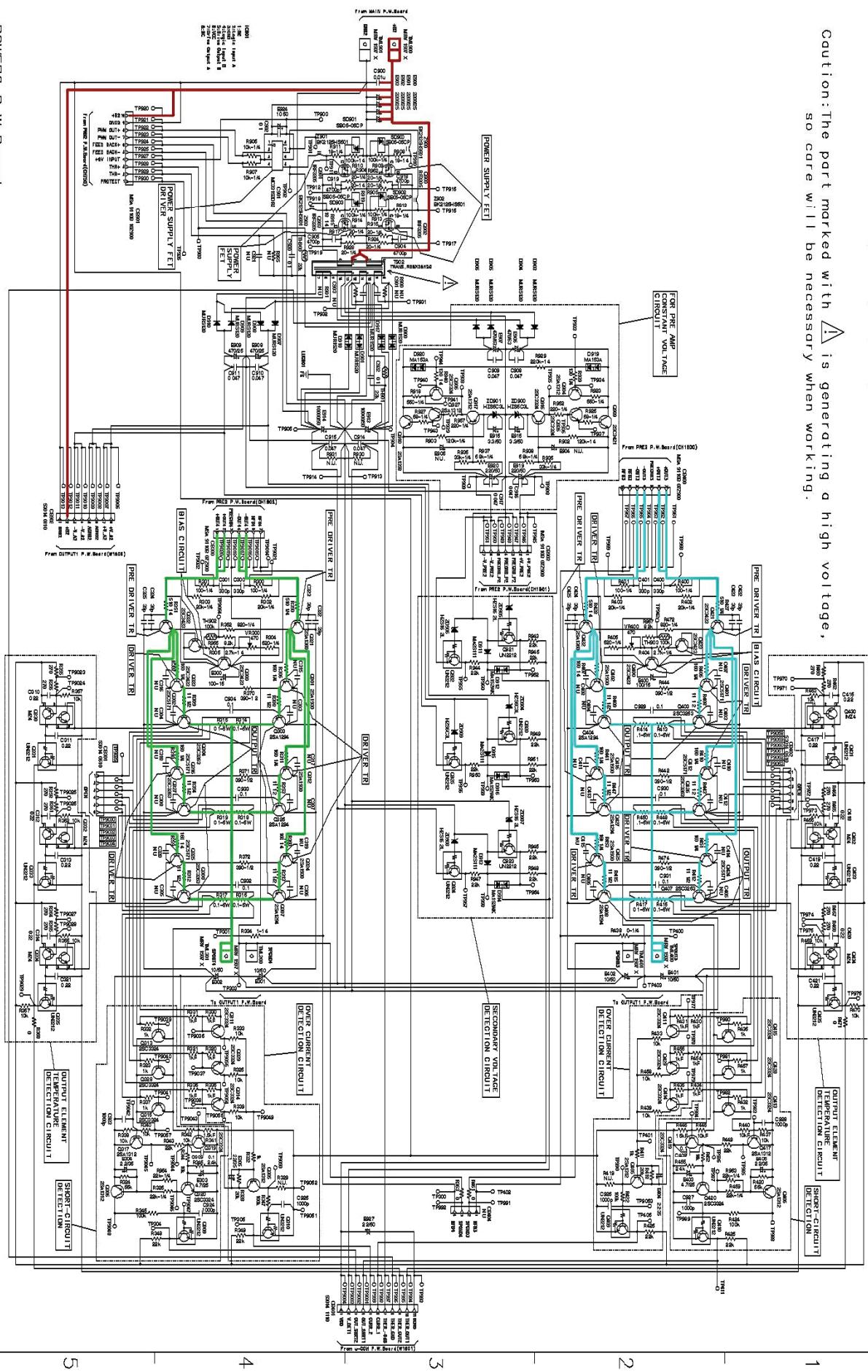


PRE2 P.W. Board

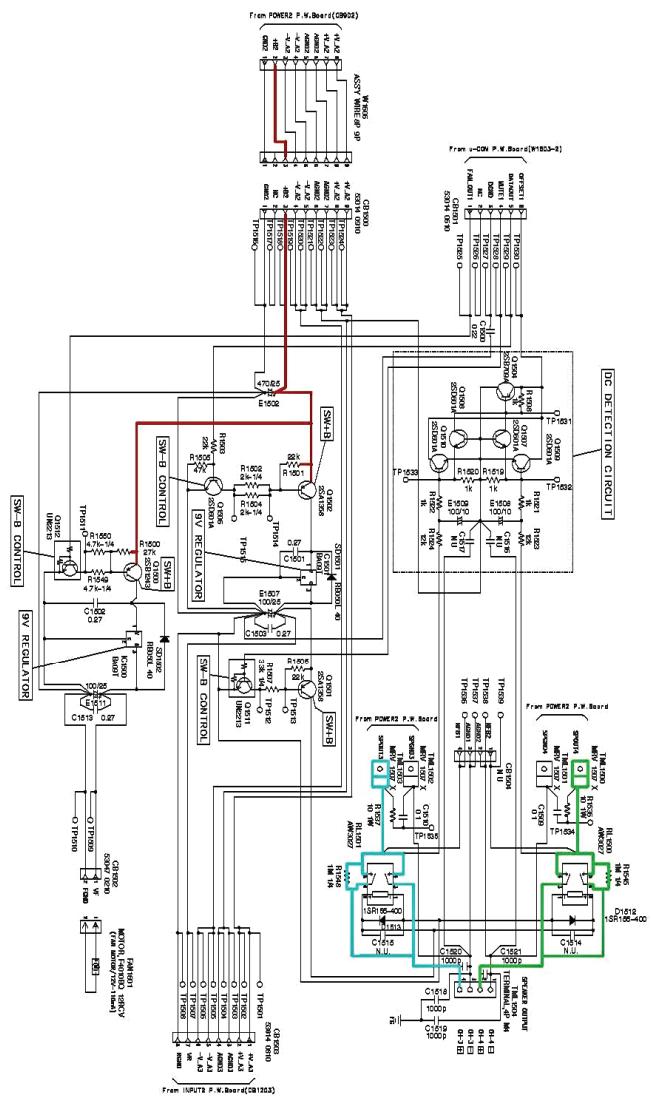


### Schematic Diagram(12/14)

**Caution:** The part marked with  is generating a high voltage, so care will be necessary when working.

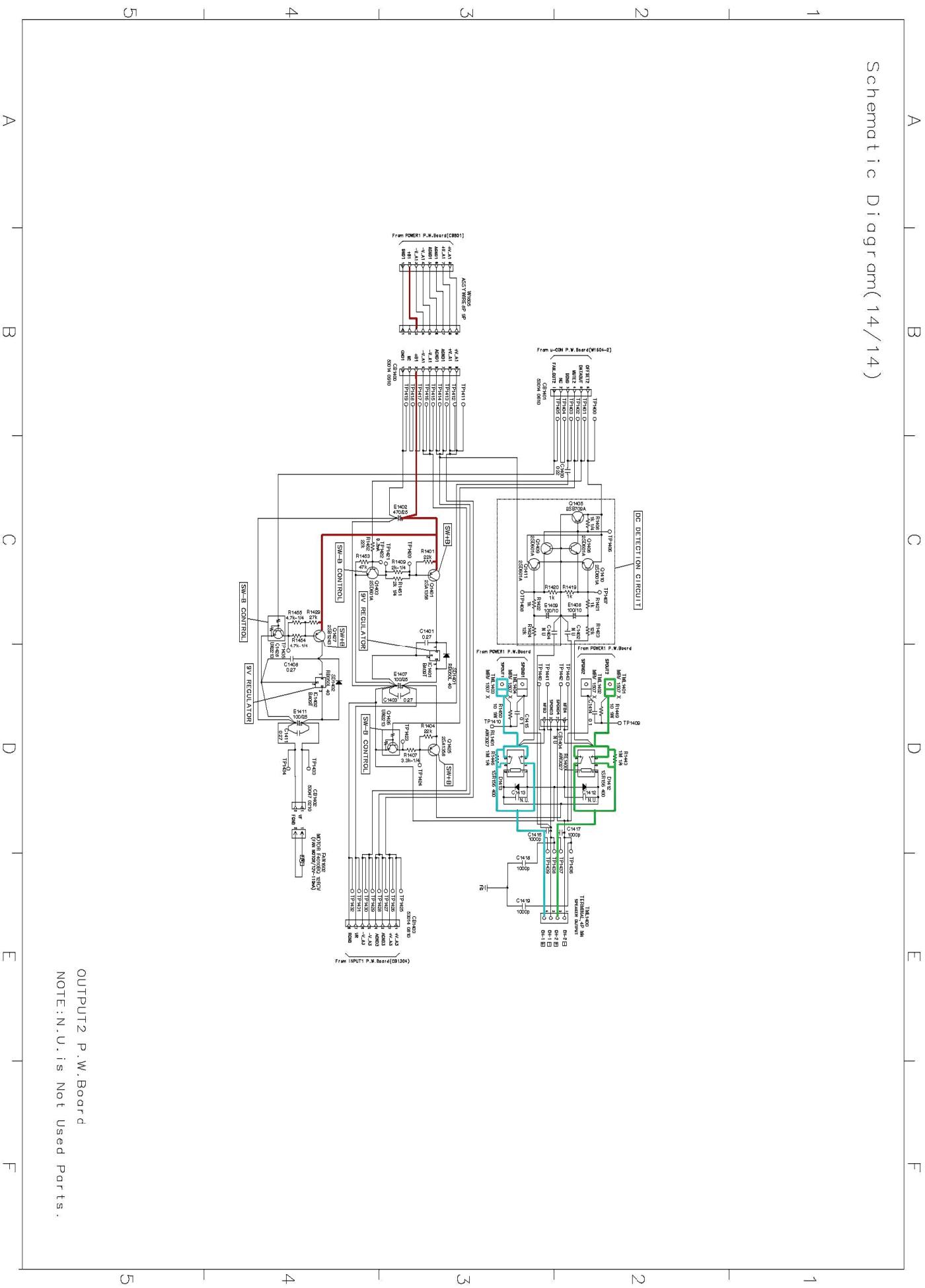


### Schematic Diagram(13/14)



OUTPUT1 P.W.Board  
NOTE:N.U. is Not Used Parts

### Schematic Diagram(14/14)



## Terminal Voltage of IC/TR

IC600	
1	6.7mV
2	7.3mV
3	7.7mV
4	-15.6V
5	9.2mV
6	9.9mV
7	10.0mV
8	15.5V

IC700			
1	0.95V	9	0.6V
2	0.87V	10	0.9V
3	3.77V	11	14.2V
4	212mV	12	14.2V
5	1.67V	13	5.0V
6	3.75V	14	5.0V
7	1.0mV	15	5.0V
8	14.2V	16	2.0mV

IC702	
1	12.3V
2	5.2mV
3	8.9V

IC751			
1	0.95V	9	0.6V
2	0.87V	10	0.9V
3	3.77V	11	14.2V
4	212mV	12	14.2V
5	1.67V	13	5.0V
6	3.75V	14	5.0V
7	1.0mV	15	5.0V
8	14.2V	16	2.0mV

IC750	
1	12.3V
2	5.1mV
3	8.8V

IC800	
1	15.0mV
2	3.69V
3	13.9mV
4	3.8V
5	4.1V
6	8.9V
7	4.1V
8	20.0mV

IC901	
1	NC
2	3.7V
3	13.9mV
4	3.8V
5	4.1V
6	9.0V
7	3.9V
8	NC

IC1000	
1	8.0V
2	5.0V
3	6.7mV
4	NC
5	5.0V

IC1001	
1	5.0V
2	6.7mV
3	14.2V

IC1002	
1	5.0V
2	5.0V
3	6.7mV
4	NC
5	5.0V

IC1003							
1	-42.7mV	12	4.9V	23	23.7mV	34	10.4mV
2	-43.8mV	13	6.7mV	24	23.7mV	35	4.9V
3	-45.2mV	14	4.9V	25	22.9mV	36	4.9V
4	-149.1mV	15	1.7V	26	23.5mV	37	5.0V
5	-146.2mV	16	0.3V	27	24.3mV	38	5.0V
6	9.8mV	17	0.26V	28	40.5mV	39	5.0V
7	28.7mV	18	0.62V	29	41.8mV	40	5.0V
8	38.9mV	19	4.4V	30	5.0V	41	5.0V
9	47.9mV	20	5.0V	31	5.0V	42	4.9V
10	5.0V	21	2.5V	32	6.9mV	43	4.9V
11	5.0V	22	2.9V	33	4.9V	44	5.0V

IC1005	
1	103.0mV
2	3.5V
3	2.3V
4	6.7mV
5	6.7mV
6	6.7mV
7	5.0V
8	5.0V

IC1006	
1	104.6mV
2	4.7V
3	2.3V
4	6.7mV
5	2.3V
6	4.7V
7	105.7mV
8	5.0V

IC1007	
1	105.6mV
2	4.5V
3	2.2V
4	6.0mV
5	2.2V
6	4.6V
7	105.7mV
8	5.0V

IC1201	
1	10.1mV
2	7.4mV
3	13.8mV
4	-15.6V
5	12.5mV
6	1.7mV
7	6.7mV
8	15.6V

IC1202	
1	9.9mV
2	13.1mV
3	13.3mV
4	-15.6V
5	13.5mV
6	12.6mV
7	13.2mV
8	15.6V

IC1203	
1	8.0mV
2	12.5mV
3	11.9mV
4	-15.6V
5	11.7mV
6	11.7mV
7	8.4mV
8	15.6V

IC1206	
1	7.9mV
2	7.9mV
3	8.1mV
4	-15.6V
5	8.2mV
6	7.8mV
7	5.9mV
8	15.6V

IC1301	
1	13.1mV
2	13.3mV
3	13.4mV
4	-15.6V
5	13.4mV
6	14.0mV
7	16.5mV
8	15.5V

IC1302	
1	13.1mV
2	13.2mV
3	13.5mV
4	-15.6V
5	13.4mV
6	13.7mV
7	15.2mV
8	15.5V

IC1303	
1	9.0mV
2	12.2mV
3	12.0mV
4	-15.6V
5	12.1mV
6	12.0mV
7	8.1mV
8	15.5V

IC1304	
1	8.1mV
2	8.1mV
3	8.3mV
4	-15.6V
5	9.9mV
6	7.5mV
7	5.4mV
8	15.5V

IC1401	
1	14.3V
2	10.2mV
3	9.2V

IC1402	
1	10.3mV
2	10.1mV
3	10.2mV

IC1500	
1	10.3mV
2	10.1mV
3	10.2mV

IC1501	
1	14.3V
2	10.2mV
3	9.2V

IC1700	
1	9.0mV
2	14.1mV
3	10.0mV
4	-15.6V
5	10.0mV
6	6.5mV
7	7.5mV
8	15.5V

	1	2	3	4	5	6
Q106	20.1V	20.0mV	0.5mV	158mV	19.2V	19.4V
Q114	20.4V	20.0mV	3.5mV	176mV	19.3V	19.5V
Q120	20.1V	20.0mV	0.5mV	169mV	19.2V	19.2V
Q206	20.1V	20.0mV	1.7mV	176mV	19.2V	19.2V
Q214	20.3V	20.0mV	0.5mV	140mV	19.5V	20.8V
Q220	20.1V	20.0mV	2.6mV	176mV	19.2V	19.2V
Q330	20.1V	18.0mV	1.5mV	176mV	19.5V	19.5V
Q332	20.5V	20.0mV	0.5mV	125mV	19.2V	19.2V
Q334	20.1V	19.0mV	3.5mV	176mV	19.2V	20.2V
Q430	20.1V	20.0mV	0.5mV	156mV	19.2V	19.2V
Q432	20.1V	19.7mV	2.5mV	176mV	20.2V	20.2V
Q434	20.3V	20.6mV	0.5mV	90.0mV	19.2V	19.2V
Q532	0.6V	2.4mV	38.5V	0.6V	1.7mV	37.9V
Q533	0.6V	2.4mV	-38.5V	0.6V	1.7mV	-37.9V
Q534	0.6V	2.4mV	-38.5V	0.6V	1.7mV	-37.9V
Q535	0.6V	2.4mV	38.5V	0.6V	1.7mV	37.9V
Q1804	0.6V	2.4mV	-38.5V	0.6V	1.7mV	-37.9V
Q1805	0.6V	2.4mV	38.5V	0.6V	1.7mV	37.9V
Q1814	0.6V	2.4mV	-38.5V	0.6V	1.7mV	-37.9V
Q1815	0.6V	2.4mV	38.5V	0.6V	1.7mV	37.9V

	1	2	3	4	5
Q1005	5.0V	5.0V	5.0V	6.7mV	5.0V

	E	C	B		E	C	B
Q100	-0.5V	-42.9V	-1.0V	Q131	19.0mV	21.0V	40.0mV
Q101	0.5V	42.9V	1.0	Q132	0.4mV	9.3mV	16.8mV
Q102	1.7V	1.1V	1.7V	Q133	20.0mV	26.9V	12.4mV
Q103	-1.7V	1.8V	1.2V	Q134	17.0mV	22.0V	18.2mV
Q104	-0.5V	-42.9V	-1.0V	Q135	6.6mV	5.0V	0.23mV
Q105	0.5V	42.9V	1.0	Q200	1.12V	42.9V	1.76V
Q107	-0.5V	-42.9V	-1.0V	Q201	-0.5V	-42.9V	-1.0V
Q108	0.5V	42.9V	1.0	Q202	1.7V	1.7V	1.1V
Q109	0.8mV	2.87V	0.8mV	Q203	-1.7V	1.8V	1.2V
Q110	-0.5V	-42.9V	-1.0V	Q204	0.5V	42.9V	1.1V
Q111	0.5V	42.8V	1.1V	Q205	-0.5V	-42.8V	-1.0V
Q112	-0.5V	-42.9V	-1.0V	Q207	0.5V	42.9V	1.0V
Q113	0.5V	42.9V	1.0	Q208	-0.5V	-42.9V	-1.0V
Q115	-0.5V	-42.8V	-1.0V	Q209	26.4mV	40.1V	8.1mV
Q116	0.5V	42.8V	1.1V	Q210	0.5V	42.9V	1.0V
Q117	0.78mV	7.87V	0.85mV	Q211	-0.5V	-42.9	-1.0V
Q118	-0.5V	-42.9V	-1.0V	Q212	0.5V	42.8V	1.0V
Q119	0.5V	42.9V	1.0	Q213	-0.5V	-42.9V	-1.0V
Q121	13.3mV	2.8V	73.6mV	Q215	0.5V	42.8V	1.0V
Q122	25.8mV	35.1V	9.8mV	Q216	-0.5V	-42.9V	-1.0V
Q123	25.9mV	40.2V	8.2mV	Q217	1.8mV	2.7V	0.78mV
Q124	0.25mV	21.8V	0.25mV	Q218	0.5V	42.8V	1.0V
Q125	0.5mV	22.8V	0.3mV	Q219	-0.5V	-42.9V	-1.0V
Q126	-20.0mV	17.3V	5.5mV	Q221	0.8mV	2.76V	0.9mV
Q127	-84.5mV	20.1V	-4.4mV	Q222	0.27mV	22.3V	0.28mV
Q129	20.0mV	22.0V	14.0mV	Q223	0.28mV	21.3V	0.28mV
Q130	26.9V	0.23mV	25.6V	Q224	0.3mV	27.5V	0.3mV

	E	C	B		E	C	B
Q225	0.3mV	26.1V	0.28mV	Q412	0.5V	42.9V	1.0V
Q226	1.3mV	34.4V	0.9mV	Q413	1.3mV	34.4V	0.9mV
Q227	0.5mV	32.1V	0.45mV	Q414	0.5mV	32.1V	0.45mV
Q229	35.6V	0.24mV	32.5V	Q415	0.27mV	22.3V	0.28mV
Q230	20.0mV	23.0V	12.0mV	Q416	-0.5V	-42.9	-1.0V
Q231	19.0mV	21.0V	27.0mV	Q417	35.6V	0.24mV	32.5V
Q232	0.4mV	9.3mV	16.7mV	Q419	20.0mV	22.0V	12.0mV
Q233	3.3mV	16.7mV	3.2mV	Q420	0.4mV	9.3mV	16.8mV
Q234	17.0mV	22.0V	16.2mV	Q421	1.12V	42.9V	1.76V
Q235	21.0mV	24.9V	13.0mV	Q422	-0.5V	-42.9V	-1.0V
Q300	-1.7V	1.8V	1.2V	Q423	1.7V	1.7V	1.1V
Q301	-0.5V	-42.9V	-1.0V	Q424	0.5V	42.8V	1.0V
Q302	0.5V	42.9V	1.0	Q425	-0.5V	-42.9V	-1.0V
Q303	-0.5V	-42.9V	-1.0V	Q426	0.5V	42.8V	1.0V
Q304	0.5V	42.9V	1.0	Q427	-0.5V	-42.9V	-1.0V
Q305	19.0mV	21.0V	27.0mV	Q428	0.3mV	27.5V	0.3mV
Q306	20.0mV	26.9V	12.0mV	Q429	0.3mV	26.1V	0.28mV
Q307	-0.5V	-42.9V	-1.0V	Q431	26.4mV	40.1V	8.1mV
Q308	0.5V	42.9V	1.0	Q433	1.8mV	2.7V	0.78mV
Q309	6.6mV	5.0V	0.23mV	Q435	0.8mV	2.76V	0.9mV
Q310	17.0mV	22.0V	15.2mV	Q503	-39.0V	-0.7V	-38.0V
Q311	25.9mV	40.2V	8.2mV	Q504	-37.9V	-1.7V	-38.5V
Q312	-0.5V	-42.9V	-1.0V	Q509	-37.9V	1.7V	38.5V
Q313	25.8mV	35.1V	9.8mV	Q513	39.0V	0.7V	38.4V
Q314	-84.5mV	20.1V	-4.4mV	Q518	39.0V	0.7V	38.5V
Q315	-20.0mV	17.3V	5.5mV	Q522	39.7V	1.7V	39.0V
Q316	0.5V	42.8V	1.1V	Q527	-38.5V	-1.7V	-38.5V
Q317	26.9V	0.23mV	25.6V	Q529	-39.1V	-0.7V	-38.5V
Q319	20.0mV	22.0V	12.0mV	Q700	14.4V	12.1V	12.8mV
Q320	0.4mV	9.3mV	16.8mV	Q701	1.0mV	1.2mV	1.0mV
Q321	-0.5V	-42.9V	-1.0V	Q702	1.0mV	1.1mV	5.2V
Q322	0.5V	42.9V	1.0	Q751	14.4V	12.1V	12.8mV
Q323	1.7V	1.1V	1.7V	Q750	1.0mV	1.2mV	1.0mV
Q324	-0.5V	-42.8V	-1.0V	Q752	1.0mV	1.1mV	5.0V
Q325	0.5V	42.9V	1.1V	Q808	0.4mV	17.4mV	16.7mV
Q326	-0.5V	-42.9V	-1.0V	Q809	0.4mV	16.7mV	8.7mV
Q327	0.5V	42.9V	1.0	Q810	0.4mV	16.6mV	16.7mV
Q328	0.25mV	21.8V	0.25mV	Q811	0.3mV	56.5mV	16.7mV
Q329	0.5mV	22.8V	0.3mV	Q812	40.5V	52.4V	39.9V
Q331	0.8mV	2.87V	0.8mV	Q813	-40.6V	-52.4V	-40.0V
Q333	0.78mV	7.87V	0.85mV	Q814	0.4mV	17.4mV	16.7mV
Q335	13.3mV	2.8V	73.6mV	Q815	16.7mV	0.5mV	16.7mV
Q400	-1.7V	1.8V	1.2V	Q816	12.0mV	15.2V	15.8V
Q401	0.5V	42.9V	1.1V	Q817	0.4mV	3.3mV	108.9mV
Q402	-0.5V	-42.8V	-1.0V	Q818	6.7mV	16.7mV	16.7mV
Q403	0.5V	42.9V	1.0V	Q819	0.4mV	16.7mV	16.7mV
Q404	-0.5V	-42.9V	-1.0V	Q820	12.0mV	15.2V	15.8V
Q405	19.0mV	21.0V	27.0mV	Q821	0.4mV	3.2mV	101.6mV
Q406	3.3mV	16.7mV	3.2mV	Q904	1.4mV	17.4mV	16.7mV
Q407	0.5V	42.8V	1.0V	Q906	0.4mV	16.7mV	8.7mV
Q408	-0.5V	-42.9V	-1.0V	Q909	40.5V	52.4V	39.9V
Q409	17.0mV	22.0V	15.2mV	Q910	-40.6V	-52.4V	-40.0V
Q410	20.0mV	26.9V	12.0mV	Q916	1.4mV	17.4mV	16.7mV
Q411	0.28mV	21.3V	0.28mV	Q917	16.7mV	0.8mV	16.7mV

	E	C	B		E	C	B
Q920	6.8mV	16.7mV	16.7mV	Q1305	-6.3V	-16.8V	-6.9V
Q921	12.3mV	15.4V	15.8V	Q1306	15.5V	21.0V	16.1V
Q922	0.5mV	3.3mV	108.9mV	Q1307	-15.6V	-21.0V	-16.3V
Q923	12.0mV	15.2V	15.8V	Q1308	16.1V	21.0V	16.7V
Q924	0.4mV	3.2mV	101.6mV	Q1309	-40.0mV	-21.0V	-16.8V
Q925	1.4mV	16.7mV	16.7mV	Q1310	-20.2V	-16.8V	-19.7V
Q926	0.4mV	16.6mV	16.7mV	Q1311	20.3V	16.7V	19.7V
Q927	0.8mV	56.5mV	16.7mV	Q1401	14.3V	10.0mV	9.0V
Q1000	0.3mV	56.5mV	0.6V	Q1403	9.0mV	0.1V	0.7V
Q1001	14.3V	14.2V	13.7V	Q1405	5.0V	6.3mV	5.0V
Q1006	0.4mV	5.0V	8.7mV	Q1408	8.1mV	5.0V	7.0mV
Q1007	0.4mV	16.7mV	2.8V	Q1409	7.7mV	5.0V	7.8mV
Q1008	0.4mV	16.6mV	2.8V	Q1410	7.8mV	5.0V	8.4mV
Q1009	0.4mV	17.4mV	2.8V	Q1411	7.8mV	5.0V	7.9mV
Q1010	0.4mV	17.4mV	2.8V	Q1425	8.4V	9.0V	9.0V
Q1011	6.7mV	5.0V	3.7V	Q1426	9.2mV	64.0mV	4.9V
Q1012	0.4mV	3.2mV	101.6mV	Q1427	14.3V	9.0mV	14.4V
Q1013	0.4mV	3.3mV	108.9mV	Q1428	10.1mV	14.4V	108.2mV
Q1014	5.0V	0.5mV	5.0V	Q1500	14.3V	9.0mV	14.4V
Q1015	3.3mV	5.0V	3.2mV	Q1501	8.4V	9.0V	9.0V
Q1016	0.4mV	9.3mV	3.9V	Q1502	14.3V	10.0mV	9.0V
Q1200	9.1V	12.0mV	9.1V	Q1504	5.0V	6.3mV	5.0V
Q1201	9.1V	12.3V	9.1V	Q1506	7.7mV	5.0V	7.8mV
Q1202	12.0mV	9.1V	9.0mV	Q1507	8.1mV	5.0V	7.0mV
Q1203	6.3V	16.7V	6.9V	Q1508	9.0mV	0.1V	0.7V
Q1204	-6.2V	-16.7V	-6.9V	Q1509	7.8mV	5.0V	8.4mV
Q1205	9.0mV	9.1V	36.0mV	Q1510	7.8mV	5.0V	7.9mV
Q1206	15.5V	21.0V	16.2V	Q1511	9.2mV	64.0mV	4.9V
Q1207	-15.6V	-21.0V	-16.2V	Q1512	10.1mV	14.4V	108.2mV
Q1208	16.2V	16.2V	16.7V	Q1800	-39.0V	-0.7V	-38.0V
Q1209	-16.2V	-21.0V	-16.7V	Q1801	-37.9V	-1.7V	-38.5V
Q1210	-20.2V	-16.7V	-19.6V	Q1808	-37.9V	1.7V	38.5V
Q1211	20.3V	16.7V	19.7V	Q1809	39.0V	0.7V	38.4V
Q1300	6.2V	16.7V	6.9V	Q1810	39.0V	0.7V	38.5V
Q1301	9.0V	10.6mV	9.0V	Q1811	39.7V	1.7V	39.0V
Q1302	10.1mV	9.0V	10.0mV	Q1816	-38.5V	-1.7V	-38.5V
Q1303	9.0V	9.5mV	9.0V	Q1819	-39.1V	-0.7V	-38.5V
Q1304	10.9mV	9.1V	35.0mV				

	G	D	S		G	D	S
Q800	PS(0 - 9V)	PS(0 - 28.8V)	7.6mV	Q900	PS(0 - 9V)	PS(0 - 28.8V)	7.6mV
Q801	PS(0 - 9V)	PS(0 - 28.8V)	7.6mV	Q901	PS(0 - 9V)	PS(0 - 28.8V)	7.6mV
Q802	PS(0 - 9V)	PS(0 - 28.8V)	7.6mV	Q902	PS(0 - 9V)	PS(0 - 28.8V)	7.6mV
Q803	PS(0 - 9V)	PS(0 - 28.8V)	7.6mV	Q903	PS(0 - 9V)	PS(0 - 28.8V)	7.6mV

#### [Measuring Conditions]

- 1.Power Supply Voltage : DC14.4V
- 2.Measuring Meter : Digital Multi Meter
- 3.Measuring Point Reference : Between GND
- 3.Measuring Condition : No signal

# Description of IC Terminal

**TMP87PH47U : IC1003**

No.	Symbol	I/O	Terminal Description
1	SHT-DET1	I	Short-circuit detect 1 terminal.
2	SHT-DET2	I	Short-circuit detect 2 terminal.
3	SHT-DET3	I	Short-circuit detect 3 terminal.
4	DATA IN2	I	LEVEL A0 compulsion input detect terminal.
5	CUR-DET1	I	Over current detect 1 terminal.
6	CUR-DET2	I	Over current detect 2 terminal.
7	CUR-DET3	I	Over current detect 3 terminal.
8	CUR-DET4	I	Over current detect 4 terminal.
9	DC-DET1	I	DC Offset detect 1 terminal.
10	DC-DET2	I	DC Offset detect 2 terminal.
11	DC-DET3	I	DC Offset detect 3 terminal.
12	DC-DET4	I	DC Offset detect 4 terminal.
13	TEST	I	Test terminal.
14	RESET	I	Reset terminal.
15	XIN	I	Crystal OSC connect terminal.
16	XOUT	O	
17	VSS	I	GND connect terminal of A/D converter.
18	VAREF	I	Analog standard voltage terminal.
19	AD VOLT	I	Voltage detect terminal.
20	AD THRM1	I	Temperature signal input terminal. (u-COM)
21	AD THRM2	I	Temperature signal input terminal. (transformer)
22	VCC REF	I	Output standard voltage terminal of Transformer.
23	TH-DET1	I	Temperature detect 1 terminal.
24	TH-DET2	I	Temperature detect 2 terminal.
25	TH-DET3	I	Temperature detect 3 terminal.
26	TH-DET4	I	Temperature detect 4 terminal.
27	WATCH DOG(NC)	-	No connect terminal.
28	DATA OUT(-6dB)	O	-6dB MUTE circuit control terminal.
29	DATA IN1	I	LEVEL A1 compulsion input detect terminal.
30	AMP STATE	I	AMP state detect interrupt input terminal.
31	DATA IN(MUTE)	I	LEVEL B compulsion input detect terminal.
32	DATA IN(-6dB)	I	LEVEL C compulsion input detect terminal.
33	DATA OUT	O	Power supply circuit control terminal.
34	LED RED	O	AMP protect state indication LED control terminal.
35	DATA OUT(MUTE)	O	MUTE circuit control terminal.
36	TRIGGER IN	O	Protect detect start trigger input terminal.
37	BAT DET	I	BAT-DET terminal.
38	SHT-DET4	I	Short-circuit detect 4 terminal.
39	PWM MUTE	O	PWM MUTE terminal.
40	VDD	I	Power supply terminal.
41	494 CONT	O	PWM IC(uPC494) control terminal.
42	PWM ST-BY	O	PWM STAND-BY terminal.
43	LED-BLUE	O	AMP power state indication LED control terminal.
44	VOLT-DET	I	Output voltage detect terminal of Transformer.

**Electrical Parts List**

## \*\*\*\*\*MAIN P.W.Board

=====Diode		
D1600	48T25593Y01	DIO,S1G-6904-E1

## =====Transformers

T1600	25E35619S01	CHOKE TRANS EI43 150UH/50A
T1601	25E35619S01	CHOKE TRANS EI43 150UH/50A

## =====Capacitors

C1600	08S45539Y04	CAP, CER 103KX7R2J-CP
C1601	08S45539Y04	CAP, CER 103KX7R2J-CP
C1602	08S45539Y04	CAP, CER 103KX7R2J-CP
E1600	23T45186Y04	CAP ,HD,222-1E
E1601	23T45186Y04	CAP ,HD,222-1E
E1602	23T45186Y04	CAP ,HD,222-1E
E1603	23T45186Y04	CAP ,HD,222-1E

## =====Resistor

R1600	06S55362Y39	RES,RK JUMPER 1/4-CP
-------	-------------	----------------------

## =====Connector

CB1600	09E35620S01	BTB IMSA-9110B-07Z900-ST
--------	-------------	--------------------------

## \*\*\*\*\*u-COM P.W.Board

## =====IC's

IC1000	51T65016Y31	IC S-80943 CNMC-T2-CP
IC1001	51E35627S01	IC REG 7805DL1A-TE1-T252
IC1002	51T65016Y30	IC S-80942 CNMC-T2-CP
IC1003	51T55543Y01	OTP,TMP87PH47UA06
IC1005	51T90931F01	NJM2903M-T2-SPD
IC1006	51T90931F01	NJM2903M-T2-SPD
IC1007	51T90931F01	NJM2903M-T2-SPD

## =====Transistors

Q1000	48T65385Y03	TR,2SC3324-BL-85L-CP
Q1001	48E09399S01	TR,2SB 1243,P,Q,R-TV4-RD
Q1005	48E31923S01	TR FMG8A,300mW,SC74A-CP
Q1006	48T64222F01	TR, UN2211-10-10-TX
Q1007	48T64222F01	TR, UN2211-10-10-TX
Q1008	48T64222F01	TR, UN2211-10-10-TX
Q1009	48T64222F01	TR, UN2211-10-10-TX
Q1010	48T64222F01	TR, UN2211-10-10-TX
Q1011	48T64222F01	TR, UN2211-10-10-TX
Q1012	48T64222F02	TR,UN2212 22-22-TX
Q1013	48T64222F02	TR,UN2212 22-22-TX
Q1014	48T64221F02	TR,UN2112 22-22-TX
Q1015	48T64222F02	TR,UN2212 22-22-TX
Q1016	48T64222F02	TR,UN2212 22-22-TX

## =====Diodes

D1003	48T15540Y01	DIO,MA2S111-TX-CP
D1005	48T15540Y01	DIO,MA2S111-TX-CP
D1006	48T84052F11	DIO SI 11ES2-TB5-R5
D1013	48T25651W02	DIO,MA152WK-TX-CP
ZD1000	48T25766W01	DIO,ZEN,HZS 6A1L-R5
ZD1002	48T25766W46	DIO,ZEN HZS 15-2L-R5
ZD1003	48T25801W11	DIO,ZEN,HZS 5BLL-R5

## =====Coils

L1000	24T95456W12	FBI,BLM18AG102SH1-CP
L1001	24T95456W12	FBI,BLM18AG102SH1-CP
L1002	24T95456W12	FBI,BLM18AG102SH1-CP
L1004	24T95456W12	FBI,BLM18AG102SH1-CP
L1005	24T95456W12	FBI,BLM18AG102SH1-CP
L1007	24T95456W12	FBI,BLM18AG102SH1-CP
L1008	24T95456W12	FBI,BLM18AG102SH1-CP
L1009	24T95456W12	FBI,BLM18AG102SH1-CP
L1010	24T95456W12	FBI,BLM18AG102SH1-CP
L1014	24T95456W12	FBI,BLM18AG102SH1-CP
L1015	24T95456W12	FBI,BLM18AG102SH1-CP
L1016	24T95456W12	FBI,BLM18AG102SH1-CP
L1017	24T95456W12	FBI,BLM18AG102SH1-CP
L1018	24T95456W12	FBI,BLM18AG102SH1-CP
L1019	24T95456W12	FBI,BLM18AG102SH1-CP
L1020	24T95456W12	FBI,BLM18AG102SH1-CP
L1021	24T95456W12	FBI,BLM18AG102SH1-CP
L1022	24T95456W12	FBI,BLM18AG102SH1-CP
L1023	24T95456W12	FBI,BLM18AG102SH1-CP
L1025	24T95456W12	FBI,BLM18AG102SH1-CP
L1026	24T95456W12	FBI,BLM18AG102SH1-CP
L1028	24T95456W12	FBI,BLM18AG102SH1-CP
L1029	24T95456W12	FBI,BLM18AG102SH1-CP
L1030	24T95456W12	FBI,BLM18AG102SH1-CP
L1031	24T95456W12	FBI,BLM18AG102SH1-CP
L1033	24T95456W12	FBI,BLM18AG102SH1-CP
L1034	24T95456W12	FBI,BLM18AG102SH1-CP
L1037	24T95456W12	FBI,BLM18AG102SH1-CP
L1038	24T95456W12	FBI,BLM18AG102SH1-CP
L1039	24T95456W12	FBI,BLM18AG102SH1-CP
L1040	24T95456W12	FBI,BLM18AG102SH1-CP
L1041	24T95456W12	FBI,BLM18AG102SH1-CP
L1042	24T95456W12	FBI,BLM18AG102SH1-CP
L1043	24T95456W12	FBI,BLM18AG102SH1-CP
L1044	24T95456W12	FBI,BLM18AG102SH1-CP
L1045	24T95456W12	FBI,BLM18AG102SH1-CP

## =====Thermistors

TH1000	48T25250Y06	TMT,ERTJ1VR223G-CP
TH1001	48T25250Y06	TMT,ERTJ1VR223G-CP

## MRV-F900

=====Crystal		
CL1000	91T45281Y04	OSC,CER CSTCR7M70-E1

=====Capacitors		
C1000	08E28771S01	CAP,CER 103-K-B1H-CP
C1001	08E31819S01	CAP,CER 273-K-B1E-CP
C1002	08E28771S01	CAP,CER 103-K-B1H-CP
C1003	08E28771S01	CAP,CER 103-K-B1H-CP
C1004	08E32300S01	CAP,CER 682-K-B1H-CP
C1005	08E32300S01	CAP,CER 682-K-B1H-CP
C1006	08E31820S01	CAP,CER 104-K-B1E-CP
C1007	08E28771S01	CAP,CER 103-K-B1H-CP
C1011	08E31820S01	CAP,CER 104-K-B1E-CP
C1015	08E28771S01	CAP,CER 103-K-B1H-CP
C1017	08E31820S01	CAP,CER 104-K-B1E-CP
C1019	08E31820S01	CAP,CER 104-K-B1E-CP
C1021	08E31820S01	CAP,CER 104-K-B1E-CP
C1024	08E31820S01	CAP,CER 104-K-B1E-CP
C1026	08E31820S01	CAP,CER 104-K-B1E-CP
C1027	08E31820S01	CAP,CER 104-K-B1E-CP
C1028	08E31820S01	CAP,CER 104-K-B1E-CP
C1029	08E31820S01	CAP,CER 104-K-B1E-CP
C1030	08E31820S01	CAP,CER 104-K-B1E-CP
C1031	08E31820S01	CAP,CER 104-K-B1E-CP
C1032	08E31820S01	CAP,CER 104-K-B1E-CP
C1033	08E31820S01	CAP,CER 104-K-B1E-CP
C1034	08E31820S01	CAP,CER 104-K-B1E-CP
C1035	08E31820S01	CAP,CER 104-K-B1E-CP
C1037	08E31820S01	CAP,CER 104-K-B1E-CP
C1038	08E31820S01	CAP,CER 104-K-B1E-CP
C1039	08E31820S01	CAP,CER 104-K-B1E-CP
C1040	08E31820S01	CAP,CER 104-K-B1E-CP
C1041	08E31820S01	CAP,CER 104-K-B1E-CP
C1042	08E31820S01	CAP,CER 104-K-B1E-CP
C1044	08E31820S01	CAP,CER 104-K-B1E-CP
C1045	08E31820S01	CAP,CER 104-K-B1E-CP
C1046	08E31820S01	CAP,CER 104-K-B1E-CP
C1047	08E31820S01	CAP,CER 104-K-B1E-CP
C1048	08E31820S01	CAP,CER 104-K-B1E-CP
C1049	08E31820S01	CAP,CER 104-K-B1E-CP
C1050	08E31820S01	CAP,CER 104-K-B1E-CP
C1051	08E31820S01	CAP,CER 104-K-B1E-CP
C1052	08E31820S01	CAP,CER 104-K-B1E-CP
C1053	08E31820S01	CAP,CER 104-K-B1E-CP
C1054	08E31820S01	CAP,CER 104-K-B1E-CP
C1055	08E31820S01	CAP,CER 104-K-B1E-CP
C1056	08E31820S01	CAP,CER 104-K-B1E-CP
C1057	08E31820S01	CAP,CER 104-K-B1E-CP
C1058	08E31820S01	CAP,CER 104-K-B1E-CP
C1059	08E35629S01	CAP,CER 474K-B1C-CP(1608)
C1060	08E35629S01	CAP,CER 474K-B1C-CP(1608)
C1061	08E35629S01	CAP,CER 474K-B1C-CP(1608)

C1062	08E35629S01	CAP,CER 474K-B1C-CP(1608)
C1063	08E31820S01	CAP,CER 104-K-B1E-CP
C1064	08E31820S01	CAP,CER 104-K-B1E-CP
C1065	08E31820S01	CAP,CER 104-K-B1E-CP
C1068	08E31820S01	CAP,CER 104-K-B1E-CP
C1069	08E31820S01	CAP,CER 104-K-B1E-CP
E1000	23S65134W49	CAP,ELY 331-1E(1)-EA
E1004	23S65134W49	CAP,ELY 331-1E(1)-EA
E1005	23S65134W13	CAP,ELY 101-0J(6)-E6
E1006	23S65134W13	CAP,ELY 101-0J(6)-E6
E1007	23S65134W47	CAP,ELY 101-1E(8)-E6
E1008	23S65134W12	CAP,ELY 47R-0J(5)-E3
E1009	23S65134W12	CAP,ELY 47R-0J(5)-E3
E1010	23S65134W12	CAP,ELY 47R-0J(5)-E3
E1011	23S65134W12	CAP,ELY 47R-0J(5)-E3

=====Resistors		
R1000	06S55366Y01	RES,RK 303J 1/10-CP
R1001	06S55366Y06	RES,RK 473J 1/10-CP
R1002	06S55361Y76	RES,RK 302J 1/4-CP
R1004	06S55362Y01	RES,RK 303J 1/4-CP
R1005	06S15593Y91	RES,RK,563F1/10-CP
R1007	06S55365Y89	RES,RK 103J 1/10-CP
R1009	06S55361Y81	RES,RK 472J 1/4-CP
R1010	06S15593Y87	RES,RK,393F1/10-CP
R1013	06S55365Y81	RES,RK 472J 1/10-CP
R1015	06S15593Y63	RES,RK 392F-1/10-CP
R1016	06S15593Y51	RES,RK 122F 1/10-CP
R1019	06S55366Y39	RES,RK JUMPER1/10-CP
R1020	06S55361Y52	RES,RK 301J 1/4-CP
R1021	06S55361Y52	RES,RK 301J 1/4-CP
R1022	06S55361Y52	RES,RK 301J 1/4-CP
R1023	06S55361Y52	RES,RK 301J 1/4-CP
R1024	06S55365Y89	RES,RK 103J 1/10-CP
R1027	06S55365Y89	RES,RK 103J 1/10-CP
R1029	06S55365Y89	RES,RK 103J 1/10-CP
R1032	06S55365Y89	RES,RK 103J 1/10-CP
R1033	06S55365Y89	RES,RK 103J 1/10-CP
R1034	06S55365Y89	RES,RK 103J 1/10-CP
R1040	06S55365Y89	RES,RK 103J 1/10-CP
R1045	06S55365Y89	RES,RK 103J 1/10-CP
R1048	06S55365Y89	RES,RK 103J 1/10-CP
R1051	06S55366Y39	RES,RK JUMPER1/10-CP
R1053	06S15593Y57	RES, RK 222F 1/10-CP
R1055	06S55365Y89	RES,RK 103J 1/10-CP
R1056	06S55365Y89	RES,RK 103J 1/10-CP
R1057	06S55365Y89	RES,RK 103J 1/10-CP
R1058	06S55365Y89	RES,RK 103J 1/10-CP
R1068	06S55365Y89	RES,RK 103J 1/10-CP
R1075	06S55365Y89	RES,RK 103J 1/10-CP
R1078	06S55365Y89	RES,RK 103J 1/10-CP
R1080	06S55366Y39	RES,RK JUMPER1/10-CP

# MRV-F900

R1081	06S55366Y39	RES,RK JUMPER1/10-CP
R1082	06S55366Y39	RES,RK JUMPER1/10-CP
R1083	06S55366Y39	RES,RK JUMPER1/10-CP
R1089	06S55365Y89	RES,RK 103J 1/10-CP
R1096	06S55366Y39	RES,RK JUMPER1/10-CP
R1097	06S55366Y39	RES,RK JUMPER1/10-CP
R1098	06S55365Y89	RES,RK 103J 1/10-CP
R1099	06S55365Y89	RES,RK 103J 1/10-CP
R1100	06S55365Y89	RES,RK 103J 1/10-CP
R1101	06S55365Y89	RES,RK 103J 1/10-CP
R1102	06S55365Y89	RES,RK 103J 1/10-CP
R1103	06S15593Y57	RES, RK 222F 1/10-CP
R1104	06S15594Y02	RES,RK 154F 1/10-CP
R1105	06S15593Y83	RES,RK 273F 1/10-CP
R1106	06S15593Y51	RES,RK 122F 1/10-CP
R1107	06S55366Y39	RES,RK JUMPER1/10-CP
R1108	06S15593Y83	RES,RK 273F 1/10-CP
R1109	06S15593Y51	RES,RK 122F 1/10-CP
R1110	06S55366Y39	RES,RK JUMPER1/10-CP
R1111	06S15593Y57	RES, RK 222F 1/10-CP
R1112	06S15594Y02	RES,RK 154F 1/10-CP
R1113	06S15593Y83	RES,RK 273F 1/10-CP
R1114	06S15593Y83	RES,RK 273F 1/10-CP
R1115	06S15593Y57	RES, RK 222F 1/10-CP
R1116	06S15593Y81	RES RK 223F 1/10-CP
R1117	06S15593Y81	RES RK 223F 1/10-CP
R1118	06S15593Y70	RES RK 752F 1/10-CP
R1119	06S15593Y97	RES RK 104F-1/10-CP
R1120	06S15593Y57	RES, RK 222F 1/10-CP
R1121	06S15593Y57	RES, RK 222F 1/10-CP
R1122	06S15593Y51	RES,RK 122F 1/10-CP
R1123	06S15593Y51	RES,RK 122F 1/10-CP
R1124	06S15593Y83	RES,RK 273F 1/10-CP
R1125	06S15593Y83	RES,RK 273F 1/10-CP
R1126	06S15594Y02	RES,RK 154F 1/10-CP
R1127	06S15594Y02	RES,RK 154F 1/10-CP
R1128	06S15593Y83	RES,RK 273F 1/10-CP
R1129	06S15593Y83	RES,RK 273F 1/10-CP
R1130	06S15593Y33	RES,RK 221F 1/10-CP
R1131	06S15593Y33	RES,RK 221F 1/10-CP

=====Connectors		
CB1001	09E33691S01	CONN BASE, 53014-0410
CB1002	09E29480S01	CONN BASE 53015-0910
CB1003	01E35665S01	ASS'Y WIRE 6P-6P AWG#26
CB1004	09E32280S01	CONN BASE 53015-1110
CB1005	09E29480S01	CONN BASE 53015-0910
CB1006	01E35665S01	ASS'Y WIRE 6P-6P AWG#26
CB1007	09E32280S01	CONN BASE 53015-1110
CH1000	09E35621S01	CON,IMSA-9110S-07L-ANGLE
W1601	01E35623S01	ASS'Y WIRE 11P-11P AWG#26
W1602	01E35623S01	ASS'Y WIRE 11P-11P AWG#26

W1603	01E35625S01	ASS'Y WIRE 9P-6/3P AWG#26
W1604	01E35625S01	ASS'Y WIRE 9P-6/3P AWG#26

\*\*\*\*\*LED P.W.Board

=====LED		
LD1900	48E33716S01	LED YCLRBU-3227W-B/R-CP

=====Capacitors

C1900	08E31932S01	CAP,CER 224-Z-F1C-CP
C1901	08E31820S01	CAP,CER 104-K-B1E-CP
C1902	08E31820S01	CAP,CER 104-K-B1E-CP

=====Connector

W1500	01E35666S01	ASS'Y WIRE 4P-4P
-------	-------------	------------------

\*\*\*\*\*PWM1 P.W. Board

=====IC's		
IC700	51E27890S01	IC,uPC 494GS
IC702	51E33855S01	IC,NJM7809DL1A-TE1

=====Transistors

Q700	48E09399S01	TR,2SB 1243,P,Q,R-TV4-RD
Q701	48T64222F02	TR,UN2212 22-22-TX
Q702	48T64221F02	TR,UN2112 22-22-TX

=====Diodes

SD700	48E35640S01	DIO SHT RB050L-40-PMDS-CP
-------	-------------	---------------------------

=====Capacitors

C700	08E28769S01	CAP,CER 102-K-SL1H-CP
C701	08T55390W17	CAP, PF 103J-H-R5
C703	08E31816S01	CAP,CER 472-K-B1H-CP
C704	08E31820S01	CAP,CER 104-K-B1E-CP
C705	08E31820S01	CAP,CER 104-K-B1E-CP
C706	08E31820S01	CAP,CER 104-K-B1E-CP
C707	08E31820S01	CAP,CER 104-K-B1E-CP
E700	23S65134W31	CAP, ELY 10R-1C(4)-E2
E701	23S65134W23	CAP,ELY 101-1A(6)-E6
E702	23S65134W23	CAP,ELY 101-1A(6)-E6
E703	23S65134W23	CAP,ELY 101-1A(6)-E6
E704	23S65134W24	CAP,ELY 221-1A(8)-E6

=====Resistors

R700	06S55366Y39	RES,RK JUMPER1/10-CP
R702	06S55365Y99	RES,RK 273J 1/10-CP
R703	06S55361Y81	RES,RK 472J 1/4-CP
R704	06S55366Y39	RES,RK JUMPER1/10-CP
R706	06S55366Y23	RES,RK 244J 1/10-CP
R707	06S15593Y56	RES,RK 202F 1/10-CP
R708	06S55365Y73	RES,RK 222J 1/10-CP
R713	06S55366Y24	RES,RK 274J 1/10-CP
R714	06S55365Y97	RES,RK 223J 1/10-CP

## MRV-F900

R715	06S15593Y88	RES,RK 433F 1/10-CP
R716	06S15593Y49	RES,RK,102F1/10-CP
R717	06S55366Y39	RES,RK JUMPER1/10-CP
R718	06S15593Y58	RES,RK 242F 1/10-CP
R719	06S15593Y83	RES,RK 273F 1/10-CP
R721	06S55361Y81	RES,RK 472J 1/4-CP
R722	06S55365Y62	RES,RK 751J 1/10-CP

R763	06S15593Y58	RES,RK 242F 1/10-CP
R764	06S15593Y83	RES,RK 273F 1/10-CP
R765	06S55361Y81	RES,RK 472J 1/4-CP
R766	06S55365Y62	RES,RK 751J 1/10-CP

=====Connectors		
CB700	09E29478S01	CONN BASE 53015-0610
CH700	09E35637S01	CON,IMSA-9110S-10L-ANGLE

*****PWM2 P.W.Board		
=====IC's		
IC750	51E33855S01	IC,NJM7809DL1A-TE1
IC751	51E27890S01	IC,uPC 494GS

=====Transistors		
Q750	48T64222F02	TR,UN2212 22-22-TX
Q751	48E09399S01	TR,2SB 1243,P,Q,R-TV4-RD
Q752	48T64221F02	TR,UN2112 22-22-TX

=====Diodes		
SD750	48E35640S01	DIO SHT RB050L-40-PMDS-CP

=====Capacitors		
C750	08E28769S01	CAP,CER 102-K-SL1H-CP
C751	08E31820S01	CAP,CER 104-K-B1E-CP
C752	08E31820S01	CAP,CER 104-K-B1E-CP
C753	08T55390W17	CAP, PF 103J-H-R5
C754	08E31820S01	CAP,CER 104-K-B1E-CP
C755	08E31816S01	CAP,CER 472-K-B1H-CP
C756	08E31820S01	CAP,CER 104-K-B1E-CP
E750	23S65134W31	CAP, ELY 10R-1C(4)-E2
E751	23S65134W23	CAP,ELY 101-1A(6)-E6
E752	23S65134W23	CAP,ELY 101-1A(6)-E6
E753	23S65134W23	CAP,ELY 101-1A(6)-E6
E754	23S65134W24	CAP,ELY 221-1A(8)-E6

=====Resistors		
R750	06S45675W43	RES RK JUMPER1/10-CP
R751	06S55365Y99	RES,RK 273J 1/10-CP
R752	06S55361Y81	RES,RK 472J 1/4-CP
R753	06S45675W43	RES RK JUMPER1/10-CP
R754	06S55366Y23	RES,RK 244J 1/10-CP
R755	06S15593Y56	RES,RK 202F 1/10-CP
R756	06S55365T73	RES,RK 222J 1/10-CP
R757	06S55366Y24	RES,RK 274J 1/10-CP
R758	06S55365Y97	RES,RK 223J 1/10-CP
R759	06S15593Y88	RES,RK 433F 1/10-CP
R760	06S15593Y49	RES,RK,102F1/10-CP
R761	06S55366Y39	RES,RK JUMPER1/10-CP

=====Connectors		
CB750	09E29478S01	CONN BASE 53015-0610
CH750	09E35637S01	CON,IMSA-9110S-10L-ANGLE

*****INPUT1 P.W.Board		
=====IC's		
IC1301	51T25576W08	IC NJM4580ED-TE2-SE2
IC1302	51T25576W08	IC NJM4580ED-TE2-SE2
IC1303	51T25576W08	IC NJM4580ED-TE2-SE2
IC1304	51T25576W08	IC NJM4580ED-TE2-SE2

=====Transistors		
Q1300	48T65385Y03	TR,2SC3324-BL-85L-CP
Q1301	48T35548Y04	TR,2SB710A-S-TX-CP
Q1302	48T64222F03	TR,UN2213 47-47-TX
Q1303	48T35548Y04	TR,2SB710A-S-TX-CP
Q1304	48T64222F03	TR,UN2213 47-47-TX
Q1305	48T65384Y03	TR,2SA1312-BL-85L-CP
Q1306	48T69176F02	TR 2SC3421-Y
Q1307	48T69177F02	TR,2SA1358-Y
Q1308	48T65385Y03	TR,2SC3324-BL-85L-CP
Q1309	48T65384Y03	TR,2SA1312-BL-85L-CP
Q1310	48T65385Y03	TR,2SC3324-BL-85L-CP
Q1311	48T65384Y03	TR,2SA1312-BL-85L-CP

=====Diodes		
D1302	48T25651W02	DIO,MA152WK-TX-CP
D1304	48E35641S01	DIO RECT 1SR156-400-PMDS
D1306	48E35641S01	DIO RECT 1SR156-400-PMDS
D1307	48T94335F02	DIO,MA153A-TX-CP
D1308	48T94335F02	DIO,MA153A-TX-CP
D1309	48T15540Y01	DIO,MA2S111-TX-CP
D1310	48T15540Y01	DIO,MA2S111-TX-CP
D1315	48T15540Y01	DIO,MA2S111-TX-CP
D1316	48T15540Y01	DIO,MA2S111-TX-CP
ZD1300	48T52741F09	DIODE,ZEN HZ6L-3L-A1
ZD1301	48T52741F09	DIODE,ZEN HZ6L-3L-A1

=====Relays		
RL1300	80T25747W05	RELAY,A-9W-K-OH-DB
RL1303	80T25747W05	RELAY,A-9W-K-OH-DB

=====Capacitors		
C1300	08T25628Y03	CAP,TF 224M-1C-CP
C1302	08T55401W01	CAP,TF.102J-1H-J1-CP
C1303	08T55401W01	CAP,TF.102J-1H-J1-CP
C1305	08T55390W34	CAP, TF 274J-1H-R5

C1306	08T55390W34	CAP, TF 274J-1H-R5
C1307	08T55390W34	CAP, TF 274J-1H-R5
C1308	08T55390W34	CAP, TF 274J-1H-R5
C1309	08T35739Y25	CAP,UC 39RJ-2A-CP
C1310	08T35739Y25	CAP,UC 39RJ-2A-CP
C1311	08T55390W34	CAP, TF 274J-1H-R5
C1312	08T55390W34	CAP, TF 274J-1H-R5
C1313	08T35739Y25	CAP,UC 39RJ-2A-CP
C1314	08T35739Y25	CAP,UC 39RJ-2A-CP
C1315	08T25628Y03	CAP,TF 224M-1C-CP
C1316	08E31820S01	CAP,CER 104-K-B1E-CP
C1317	08T55390W34	CAP, TF 274J-1H-R5
C1318	08T55390W34	CAP, TF 274J-1H-R5
C1319	08T35739Y19	CAP,UC 22RJ-2A-CP
C1320	08T25628Y03	CAP,TF 224M-1C-CP
C1321	08E31820S01	CAP,CER 104-K-B1E-CP
C1322	08E28771S01	CAP,CER 103-K-B1H-CP
C1323	08T25628Y03	CAP,TF 224M-1C-CP
C1324	08T55390W25	CAP,TF 473-J-1H-R5
C1325	08T55390W25	CAP,TF 473-J-1H-R5
C1326	08E28771S01	CAP,CER 103-K-B1H-CP
C1329	08T55401W02	CAP TF 101J-1H-CP
C1330	08T55401W02	CAP TF 101J-1H-CP
E1300	23T00149L39	CAP,SME 471-1E-R5
E1301	23T45174W06	CAP,SME 22R-1C(SME-BP)
E1302	23T45174W06	CAP,SME 22R-1C(SME-BP)
E1303	23T45174W06	CAP,SME 22R-1C(SME-BP)
E1304	23T45174W06	CAP,SME 22R-1C(SME-BP)
E1307	23T00149L37	CAP,SME 221-1E-R5
E1308	23T00149L37	CAP,SME 221-1E-R5
E1309	23T00149L37	CAP,SME 221-1E-R5
E1310	23T00149L39	CAP,SME 471-1E-R5
E1313	23T45102W21	CAP,NS1.1R0-1H-R2
E1314	23T45102W21	CAP,NS1.1R0-1H-R2

=====Resistors		
R1300	06S35083Y39	RES,RK,153F 1/4-CP
R1301	06S35083Y25	RES,RK 102F 1/4-CP
R1302	06S35083Y25	RES,RK 102F 1/4-CP
R1303	06S35083Y25	RES,RK 102F 1/4-CP
R1304	06S35083Y25	RES,RK 102F 1/4-CP
R1305	06S35083Y13	RES,RK 101F 1/4-CP
R1306	06S35083Y13	RES,RK 101F 1/4-CP
R1307	06S55362Y06	RES,RK 473J 1/4-CP
R1308	06S55362Y06	RES,RK 473J 1/4-CP
R1309	06S55362Y06	RES,RK 473J 1/4-CP
R1310	06S55362Y06	RES,RK 473J 1/4-CP
R1311	06S55361Y66	RES,RK 112J 1/4-CP
R1312	06S55361Y66	RES,RK 112J 1/4-CP
R1313	06S55361Y66	RES,RK 112J 1/4-CP
R1314	06S55361Y66	RES,RK 112J 1/4-CP
R1315	06T75409Y01	RES,RK 223 B1/16-CP

R1316	06T75409Y01	RES,RK 223 B1/16-CP
R1317	06T75409Y01	RES,RK 223 B1/16-CP
R1318	06T75409Y01	RES,RK 223 B1/16-CP
R1319	06T75409Y01	RES,RK 223 B1/16-CP
R1320	06T75409Y01	RES,RK 223 B1/16-CP
R1321	06T75409Y01	RES,RK 223 B1/16-CP
R1322	06T75409Y01	RES,RK 223 B1/16-CP
R1323	06S35083Y38	RES,RK,123F 1/4-CP
R1324	06S35083Y38	RES,RK,123F 1/4-CP
R1325	06S35083Y39	RES,RK,153F 1/4-CP
R1326	06S55362Y12	RES,RK 823J 1/4-CP
R1327	06S55361Y73	RES,RK 222J 1/4-CP
R1328	06S55365Y97	RES,RK 223J 1/10-CP
R1329	06S55362Y12	RES,RK 823J 1/4-CP
R1330	06S55361Y35	RES,RK 56R 1/4-CP
R1331	06S55361Y35	RES,RK 56R 1/4-CP
R1332	06S55361Y49	RES,RK 221J 1/4-CP
R1333	06S55365Y97	RES,RK 223J 1/10-CP
R1334	06T65466Y97	RES,RD 104J 1/4-A5
R1335	06T65466Y46	RES,RD 751J 1/4-A5
R1336	06S55361Y73	RES,RK 222J 1/4-CP
R1337	06T65466Y81	RES,RD 223J 1/4-A5
R1338	06T65478Y22	RES,RD 105J 1/4-A5
R1339	06T65478Y22	RES,RD 105J 1/4-A5
R1340	06T65478Y22	RES,RD 105J 1/4-A5
R1341	06S55365Y97	RES,RK 223J 1/10-CP
R1342	06T65478Y22	RES,RD 105J 1/4-A5
R1343	06T65478Y22	RES,RD 105J 1/4-A5
R1344	06T65466Y81	RES,RD 223J 1/4-A5
R1345	06T65466Y46	RES,RD 751J 1/4-A5
R1346	06S55365Y97	RES,RK 223J 1/10-CP
R1347	06T65466Y97	RES,RD 104J 1/4-A5
R1348	06T65466Y97	RES,RD 104J 1/4-A5
R1349	06S55361Y49	RES,RK 221J 1/4-CP
R1350	06S55361Y56	RES,RK 431J1/4-CP
R1351	06T65466Y71	RES,RD 822J 1/4-A5
R1352	06T65466Y71	RES,RD 822J 1/4-A5
R1353	06T65478Y22	RES,RD 105J 1/4-A5
R1354	06T65478Y22	RES,RD 105J 1/4-A5
R1355	06T65478Y22	RES,RD 105J 1/4-A5
R1356	06T65478Y22	RES,RD 105J 1/4-A5
R1357	06S55361Y56	RES,RK 431J1/4-CP
R1358	06S55361Y52	RES,RK 301J 1/4-CP
R1359	06S55361Y52	RES,RK 301J 1/4-CP
R1360	06S55362Y05	RES,RK,433J 1/4-CP

=====Connectors		
CB1301	09E35635S01	BTB IMSA-9110B-08Z900-ST
CB1303	01E35639S01	ASS'Y SHIELD WIRE 6P-6P
CB1304	01E35664S01	ASS'Y WIRE 8P-8P AWG#26
CB1305	09E35620S01	BTB IMSA-9110B-07Z900-ST
CB1306	09E31048S01	CONN BASE, 53014-0310

# MRV-F900

## \*\*\*\*\*INPUT2 P.W.Board

### =====IC's

IC1201	51T25576W08	IC NJM4580ED-TE2-SE2
IC1202	51T25576W08	IC NJM4580ED-TE2-SE2
IC1203	51T25576W08	IC NJM4580ED-TE2-SE2
IC1206	51T25576W08	IC NJM4580ED-TE2-SE2

### =====Transistors

Q1200	48T35548Y04	TR,2SB710A-S-TX-CP
Q1201	48T35548Y04	TR,2SB710A-S-TX-CP
Q1202	48T64222F03	TR,UN2213 47-47-TX
Q1203	48T65385Y03	TR,2SC3324-BL-85L-CP
Q1204	48T65384Y03	TR,2SA1312-BL-85L-CP
Q1205	48T64222F03	TR,UN2213 47-47-TX
Q1206	48T69176F02	TR 2SC3421-Y
Q1207	48T69177F02	TR,2SA1358-Y
Q1208	48T65385Y03	TR,2SC3324-BL-85L-CP
Q1209	48T65384Y03	TR,2SA1312-BL-85L-CP
Q1210	48T65385Y03	TR,2SC3324-BL-85L-CP
Q1211	48T65384Y03	TR,2SA1312-BL-85L-CP

### =====Diodes

D1202	48T25651W02	DIO,MA152WK-TX-CP
D1203	48E35641S01	DIO RECT 1SR156-400-PMDS
D1207	48E35641S01	DIO RECT 1SR156-400-PMDS
D1208	48T94335F02	DIO,MA153A-TX-CP
D1209	48T94335F02	DIO,MA153A-TX-CP
D1210	48T15540Y01	DIO,MA2S111-TX-CP
D1211	48T15540Y01	DIO,MA2S111-TX-CP
D1216	48T15540Y01	DIO,MA2S111-TX-CP
D1217	48T15540Y01	DIO,MA2S111-TX-CP
ZD1200	48T52741F09	DIODE,ZEN HZ6L-3L-A1
ZD1201	48T52741F09	DIODE,ZEN HZ6L-3L-A1

### =====Relays

RL1201	80T25747W05	RELAY,A-9W-K-OH-DB
RL1203	80T25747W05	RELAY,A-9W-K-OH-DB

### =====Capacitors

C1200	08T25628Y03	CAP,TF 224M-1C-CP
C1201	08T55390W34	CAP, TF 274J-1H-R5
C1202	08T55390W34	CAP, TF 274J-1H-R5
C1203	08T55390W34	CAP, TF 274J-1H-R5
C1204	08T55390W34	CAP, TF 274J-1H-R5
C1205	08T25628Y03	CAP,TF 224M-1C-CP
C1206	08T55390W25	CAP,TF 473-J-1H-R5
C1207	08T25628Y03	CAP,TF 224M-1C-CP
C1208	08T55390W34	CAP, TF 274J-1H-R5
C1209	08T55390W34	CAP, TF 274J-1H-R5
C1210	08T35739Y25	CAP,UC 39RJ-2A-CP
C1211	08T35739Y25	CAP,UC 39RJ-2A-CP
C1212	08E31820S01	CAP,CER 104-K-B1E-CP

C1213	08E28771S01	CAP,CER 103-K-B1H-CP
C1214	08T55390W25	CAP,TF 473-J-1H-R5
C1222	08T55390W34	CAP, TF 274J-1H-R5
C1223	08T55390W34	CAP, TF 274J-1H-R5
C1227	08E28771S01	CAP,CER 103-K-B1H-CP
C1228	08T25628Y03	CAP,TF 224M-1C-CP
C1229	08T55401W01	CAP,TF,102J-1H-J1-CP
C1231	08T55401W01	CAP,TF,102J-1H-J1-CP
C1233	08E31820S01	CAP,CER 104-K-B1E-CP
C1236	08T35739Y25	CAP,UC 39RJ-2A-CP
C1237	08T35739Y25	CAP,UC 39RJ-2A-CP
C1238	08T35739Y19	CAP,UC 22RJ-2A-CP
C1241	08T55401W02	CAP TF 101J-1H-CP
C1242	08T55401W02	CAP TF 101J-1H-CP
E1200	23T45174W06	CAP,SME 22R-1C(SME-BP)
E1201	23T45174W06	CAP,SME 22R-1C(SME-BP)
E1202	23T45174W06	CAP,SME 22R-1C(SME-BP)
E1203	23T45174W06	CAP,SME 22R-1C(SME-BP)
E1204	23T00149L39	CAP,SME 471-1E-R5
E1205	23T00149L39	CAP,SME 471-1E-R5
E1208	23T45102W21	CAP,NS1.1R0-1H-R2
E1209	23T45102W21	CAP,NS1.1R0-1H-R2
E1217	23T00149L37	CAP,SME 221-1E-R5
E1218	23T00149L37	CAP,SME 221-1E-R5
E1219	23T00149L37	CAP,SME 221-1E-R5

### =====Resistors

R1200	06S35083Y25	RES,RK 102F 1/4-CP
R1201	06S35083Y25	RES,RK 102F 1/4-CP
R1202	06S35083Y25	RES,RK 102F 1/4-CP
R1203	06S35083Y25	RES,RK 102F 1/4-CP
R1204	06S35083Y39	RES,RK,153F 1/4-CP
R1205	06S55362Y06	RES,RK 473J 1/4-CP
R1206	06S55362Y06	RES,RK 473J 1/4-CP
R1207	06S55362Y06	RES,RK 473J 1/4-CP
R1208	06S55362Y06	RES,RK 473J 1/4-CP
R1209	06S35083Y38	RES,RK,123F 1/4-CP
R1210	06S35083Y38	RES,RK,123F 1/4-CP
R1211	06S35083Y39	RES,RK,153F 1/4-CP
R1212	06S55361Y66	RES,RK 112J 1/4-CP
R1213	06S55361Y66	RES,RK 112J 1/4-CP
R1214	06S55362Y12	RES,RK 823J 1/4-CP
R1215	06S55365Y97	RES,RK 223J 1/10-CP
R1216	06S55361Y66	RES,RK 112J 1/4-CP
R1217	06S55361Y66	RES,RK 112J 1/4-CP
R1218	06S55361Y73	RES,RK 222J 1/4-CP
R1219	06S55365Y97	RES,RK 223J 1/10-CP
R1220	06T75409Y01	RES,RK 223 B1/16-CP
R1221	06T75409Y01	RES,RK 223 B1/16-CP
R1222	06T75409Y01	RES,RK 223 B1/16-CP
R1223	06T75409Y01	RES,RK 223 B1/16-CP
R1224	06T75409Y01	RES,RK 223 B1/16-CP

# MRV-F900

R1225	06T75409Y01	RES,RK 223 B1/16-CP
R1226	06T75409Y01	RES,RK 223 B1/16-CP
R1227	06T75409Y01	RES,RK 223 B1/16-CP
R1228	06S55365Y97	RES,RK 223J 1/10-CP
R1229	06T65466Y71	RES,RD 822J 1/4-A5
R1230	06T65466Y71	RES,RD 822J 1/4-A5
R1231	06T65478Y22	RES,RD 105J 1/4-A5
R1232	06T65478Y22	RES,RD 105J 1/4-A5
R1233	06T65478Y22	RES,RD 105J 1/4-A5
R1234	06T65478Y22	RES,RD 105J 1/4-A5
R1235	06S55362Y12	RES,RK 823J 1/4-CP
R1236	06S55361Y35	RES,RK 56R 1/4-CP
R1237	06S55361Y35	RES,RK 56R 1/4-CP
R1238	06S55361Y49	RES,RK 221J 1/4-CP
R1239	06S55361Y49	RES,RK 221J 1/4-CP
R1240	06S55361Y56	RES,RK 431J1/4-CP
R1241	06S55361Y56	RES,RK 431J1/4-CP
R1247	06T65466Y97	RES,RD 104J 1/4-A5
R1248	06T65466Y46	RES,RD 751J 1/4-A5
R1249	06T65466Y81	RES,RD 223J 1/4-A5
R1250	06T65478Y22	RES,RD 105J 1/4-A5
R1251	06T65466Y81	RES,RD 223J 1/4-A5
R1252	06T65466Y46	RES,RD 751J 1/4-A5
R1255	06T65478Y22	RES,RD 105J 1/4-A5
R1256	06T65478Y22	RES,RD 105J 1/4-A5
R1257	06T65478Y22	RES,RD 105J 1/4-A5
R1258	06T65478Y22	RES,RD 105J 1/4-A5
R1259	06T65466Y97	RES,RD 104J 1/4-A5
R1260	06T65466Y97	RES,RD 104J 1/4-A5
R1261	06S35083Y13	RES,RK 101F 1/4-CP
R1262	06S35083Y13	RES,RK 101F 1/4-CP
R1263	06S55365Y97	RES,RK 223J 1/10-CP
R1265	06S55361Y73	RES,RK 222J 1/4-CP
R1266	06S55361Y52	RES,RK 301J 1/4-CP
R1267	06S55362Y05	RES,RK,433J 1/4-CP
R1268	06S55361Y52	RES,RK 301J 1/4-CP

=====Connectors		
CB1202	01E35639S01	ASS'Y SHIELD WIRE 6P-6P
CB1203	01E35664S01	ASS'Y WIRE 8P-8P AWG#26
CB1204	09E35635S01	BTB IMSA-9110B-08Z900-ST
CB1205	09E35620S01	BTB IMSA-9110B-07Z900-ST
CB1206	09E31048S01	CONN BASE, 53014-0310

*****FRONT1 P.W.Board		
=====IC		
IC1700	51T25576W08	IC NJM4580ED-TE2-SE2

=====Switch		
SW1700	40T55241W03	SW,ROTRY SRBM121404 (MODE NORMAL/BRIDGED)

=====Capacitors		
C1700	08E31820S01	CAP,CER 104-K-B1E-CP
C1701	08T25628Y03	CAP,TF 224M-1C-CP
C1702	08T25628Y03	CAP,TF 224M-1C-CP
C1703	08T35739Y19	CAP,UC 22RJ-2A-CP
C1704	08T35739Y19	CAP,UC 22RJ-2A-CP

=====Resistors		
R1700	06T65466Y60	RES,RD 302J 1/4-A5
R1701	06T65466Y60	RES,RD 302J 1/4-A5
R1702	06T65478Y22	RES,RD 105J 1/4-A5
R1703	06T65478Y22	RES,RD 105J 1/4-A5
R1704	06S55365Y89	RES,RK 103J 1/10-CP
R1705	06S55365Y89	RES,RK 103J 1/10-CP
R1706	06S55365Y89	RES,RK 103J 1/10-CP
R1708	06T65466Y84	RES,RD 303J 1/4-A5
R1709	06T65466Y84	RES,RD 303J 1/4-A5
R1710	06T65466Y84	RES,RD 303J 1/4-A5
R1711	06T65466Y84	RES,RD 303J 1/4-A5
VOL1700	18T92154F05	ROT,RK0971110-DB (GAIN CH-1)
VOL1701	18T92154F05	ROT,RK0971110-DB (GAIN CH-2)

=====Connectors		
CH1700	09E35636S01	CON,IMSA-9110S-08L-ANGLE
CH1701	09E35621S01	CON,IMSA-9110S-07L-ANGLE

*****FRONT2 P.W.Board		
=====IC		
IC600	51T25576W08	IC NJM4580ED-TE2-SE2

=====Switch		
SW600	40T55241W03	SW,ROTRY SRBM121404 (MODE NORMAL/BRIDGED)

=====Capacitors		
C600	08E31820S01	CAP,CER 104-K-B1E-CP
C601	08T25628Y03	CAP,TF 224M-1C-CP
C602	08T25628Y03	CAP,TF 224M-1C-CP
C603	08T35739Y19	CAP,UC 22RJ-2A-CP
C604	08T35739Y19	CAP,UC 22RJ-2A-CP

=====Resistors		
R600	06T65466Y60	RES,RD 302J 1/4-A5
R601	06T65466Y60	RES,RD 302J 1/4-A5
R602	06T65478Y22	RES,RD 105J 1/4-A5
R603	06T65478Y22	RES,RD 105J 1/4-A5
R604	06S55365Y89	RES,RK 103J 1/10-CP
R605	06S55365Y89	RES,RK 103J 1/10-CP
R608	06T65466Y84	RES,RD 303J 1/4-A5
R609	06T65466Y84	RES,RD 303J 1/4-A5
R610	06T65466Y84	RES,RD 303J 1/4-A5
R611	06T65466Y84	RES,RD 303J 1/4-A5

# MRV-F900

R624	06S55365Y89	RES,RK 103J 1/10-CP
VOL600	18T92154F05	ROT,RK0971110-DB (GAIN CH-4)
VOL601	18T92154F05	ROT,RK0971110-DB (GAIN CH-3)

=====Connectors		
CH600	09E35636S01	CON,IMSA-9110S-08L-ANGLE
CH601	09E35621S01	CON,IMSA-9110S-07L-ANGLE

## \*\*\*\*\*PRE1 P.W.Board

=====Transistors		
Q503	48T65385Y03	TR,2SC3324-BL-85L-CP
Q504	48T65773Y03	TR,2SC2705-Y-RD
Q509	48T65772Y03	TR,2SA1145-Y-RD
Q513	48T65384Y03	TR,2SA1312-BL-85L-CP
Q518	48T65384Y03	TR,2SA1312-BL-85L-CP
Q522	48T65772Y03	TR,2SA1145-Y-RD
Q527	48T65773Y03	TR,2SC2705-Y-RD
Q529	48T65385Y03	TR,2SC3324-BL-85L-CP
Q532	48T65387Y03	TR,HN1C01F-GR-85L-CP
Q533	48T65387Y03	TR,HN1C01F-GR-85L-CP
Q534	48T65386Y03	TR,HN1A01F-GR-85L-CP
Q535	48T65386Y03	TR,HN1A01F-GR-85L-CP

=====Diodes		
D501	48T94335F02	DIO,MA153A-TX-CP
D515	48T94335F02	DIO,MA153A-TX-CP
D517	48T94335F02	DIO,MA153A-TX-CP
D531	48T94335F02	DIO,MA153A-TX-CP

=====Capacitors		
C501	08T25628Y03	CAP,TF 224M-1C-CP
C503	08T45614Y02	CAP,ECHR 331G-1H-R5
C504	08T35739Y11	CAP,UC 10RC-2A-CP
C505	08T45614Y02	CAP,ECHR 331G-1H-R5
C507	08T55390W34	CAP, TF 274J-1H-R5
C509	08T25628Y03	CAP,TF 224M-1C-CP
C510	08T55390W34	CAP, TF 274J-1H-R5
C512	08T25628Y03	CAP,TF 224M-1C-CP
C514	08T45614Y02	CAP,ECHR 331G-1H-R5
C515	08T35739Y11	CAP,UC 10RC-2A-CP
C516	08T45614Y02	CAP,ECHR 331G-1H-R5
C519	08T25628Y03	CAP,TF 224M-1C-CP
C520	08T25628Y03	CAP,TF 224M-1C-CP
C522	08T25628Y03	CAP,TF 224M-1C-CP
C524	08T55390W06	CAP,PF 122J-1H-R5
C525	08T55390W06	CAP,PF 122J-1H-R5
C526	08T35739Y13	CAP,UC 12RJ-2A-CP
C527	08T35739Y13	CAP,UC 12RJ-2A-CP
C528	08T35739Y13	CAP,UC 12RJ-2A-CP
C529	08T35739Y13	CAP,UC 12RJ-2A-CP
E500	23T45424Y14	CAP,NS1 331-1A-BP-R5
E501	23T45424Y50	CAP NSI 33R-1H-BP

E502	23T45365W16	CAP SME,22R-1H-R2
E503	23T45365W16	CAP SME,22R-1H-R2
E504	23T45424Y50	CAP NSI 33R-1H-BP
E505	23T45424Y14	CAP,NS1 331-1A-BP-R5

=====Resistors		
R500	06T65466Y53	RES,RD 152J 1/4-A5
R502	06T65466Y33	RES,RD 221J 1/4-A5
R503	06T65466Y25	RES,RD 101J 1/4-A5
R504	06S55366Y39	RES,RK JUMPER1/10-CP
R505	06T65466Y35	RES,RD 271J 1/4-A5
R507	06T65466Y37	RES,RD 331J 1/4-A5
R510	06T65466Y25	RES,RD 101J 1/4-A5
R511	06T65466Y25	RES,RD 101J 1/4-A5
R512	06T65466Y80	RES,RD 203J 1/4-A5
R514	06T65466Y49	RES,RD 102J 1/4-A5
R515	06S55366Y39	RES,RK JUMPER1/10-CP
R516	06S55366Y39	RES,RK JUMPER1/10-CP
R517	06T65466Y73	RES,RD 103J 1/4-A5
R518	06S55366Y39	RES,RK JUMPER1/10-CP
R519	06T65466Y33	RES,RD 221J 1/4-A5
R520	06T65466Y25	RES,RD 101J 1/4-A5
R521	06T65466Y25	RES,RD 101J 1/4-A5
R522	06T65466Y25	RES,RD 101J 1/4-A5
R523	06T65466Y33	RES,RD 221J 1/4-A5
R526	06T65478Y08	RES,RD 274J 1/4-A5
R527	06T65466Y33	RES,RD 221J 1/4-A5
R528	06T65466Y25	RES,RD 101J 1/4-A5
R529	06T65466Y37	RES,RD 331J 1/4-A5
R531	06T65466Y35	RES,RD 271J 1/4-A5
R532	06S55366Y39	RES,RK JUMPER1/10-CP
R533	06T65466Y53	RES,RD 152J 1/4-A5
R534	06S55366Y39	RES,RK JUMPER1/10-CP
R536	06T65466Y53	RES,RD 152J 1/4-A5
R539	06T65466Y35	RES,RD 271J 1/4-A5
R540	06T65466Y37	RES,RD 331J 1/4-A5
R541	06T65466Y33	RES,RD 221J 1/4-A5
R542	06T65466Y25	RES,RD 101J 1/4-A5
R543	06S55366Y39	RES,RK JUMPER1/10-CP
R544	06T65478Y08	RES,RD 274J 1/4-A5
R547	06T65466Y25	RES,RD 101J 1/4-A5
R548	06T65466Y25	RES,RD 101J 1/4-A5
R549	06T65466Y25	RES,RD 101J 1/4-A5
R550	06S55366Y39	RES,RK JUMPER1/10-CP
R551	06T65466Y73	RES,RD 103J 1/4-A5
R552	06T65466Y33	RES,RD 221J 1/4-A5
R553	06S55366Y39	RES,RK JUMPER1/10-CP
R555	06T65466Y49	RES,RD 102J 1/4-A5
R556	06T65466Y80	RES,RD 203J 1/4-A5
R557	06T65466Y25	RES,RD 101J 1/4-A5
R558	06T65466Y25	RES,RD 101J 1/4-A5
R562	06T65466Y37	RES,RD 331J 1/4-A5

R565	06T65466Y35	RES,RD 271J 1/4-A5
R566	06T65466Y33	RES,RD 221J 1/4-A5
R567	06T65466Y25	RES,RD 101J 1/4-A5
R568	06T65466Y53	RES,RD 152J 1/4-A5
R569	06S55366Y39	RES,RK JUMPER1/10-CP
R570	06T65466Y33	RES,RD 221J 1/4-A5

=====Connectors		
CB501	09E29478S01	CONN BASE 53015-0610
CH500	09E35621S01	CON,IMSA-9110S-07L-ANGLE
CH502	09E35621S01	CON,IMSA-9110S-07L-ANGLE
CH503	09E35621S01	CON,IMSA-9110S-07L-ANGLE

**\*\*\*\*\*PRE2 P.W.Board**

=====Transistors		
Q1800	48T65385Y03	TR,2SC3324-BL-85L-CP
Q1801	48T65773Y03	TR,2SC2705-Y-RD
Q1804	48T65386Y03	TR,HN1A01F-GR-85L-CP
Q1805	48T65387Y03	TR,HN1C01F-GR-85L-CP
Q1808	48T65772Y03	TR,2SA1145-Y-RD
Q1809	48T65384Y03	TR,2SA1312-BL-85L-CP
Q1810	48T65384Y03	TR,2SA1312-BL-85L-CP
Q1811	48T65772Y03	TR,2SA1145-Y-RD
Q1814	48T65387Y03	TR,HN1C01F-GR-85L-CP
Q1815	48T65386Y03	TR,HN1A01F-GR-85L-CP
Q1816	48T65773Y03	TR,2SC2705-Y-RD
Q1819	48T65385Y03	TR,2SC3324-BL-85L-CP

=====Diodes		
D1800	48T94335F02	DIO,MA153A-TX-CP
D1801	48T94335F02	DIO,MA153A-TX-CP
D1802	48T94335F02	DIO,MA153A-TX-CP
D1803	48T94335F02	DIO,MA153A-TX-CP

=====Capacitors		
C1800	08T25628Y03	CAP,TF 224M-1C-CP
C1801	08T45614Y02	CAP,ECHR 331G-1H-R5
C1802	08T35739Y13	CAP,UC 12RJ-2A-CP
C1803	08T25628Y03	CAP,TF 224M-1C-CP
C1805	08T35739Y11	CAP,UC 10RC-2A-CP
C1806	08T55390W06	CAP,PF 122J-1H-R5
C1807	08T35739Y13	CAP,UC 12RJ-2A-CP
C1808	08T25628Y03	CAP,TF 224M-1C-CP
C1809	08T45614Y02	CAP,ECHR 331G-1H-R5
C1810	08T55390W34	CAP,TF 274J-1H-R5
C1811	08T55390W34	CAP,TF 274J-1H-R5
C1812	08T45614Y02	CAP,ECHR 331G-1H-R5
C1813	08T25628Y03	CAP,TF 224M-1C-CP
C1814	08T35739Y13	CAP,UC 12RJ-2A-CP
C1815	08T55390W06	CAP,PF 122J-1H-R5
C1816	08T35739Y11	CAP,UC 10RC-2A-CP
C1818	08T35739Y13	CAP,UC 12RJ-2A-CP

C1819	08T25628Y03	CAP,TF 224M-1C-CP
C1820	08T25628Y03	CAP,TF 224M-1C-CP
C1821	08T45614Y02	CAP,ECHR 331G-1H-R5
E1800	23T45424Y14	CAP,NS1 331-1A-BP-R5
E1801	23T45424Y50	CAP NSI 33R-1H-BP
E1802	23T45365W16	CAP SME,22R-1H-R2
E1803	23T45365W16	CAP SME,22R-1H-R2
E1804	23T45424Y50	CAP NSI 33R-1H-BP
E1805	23T45424Y14	CAP,NS1 331-1A-BP-R5

=====Resistors		
R1800	06T65466Y35	RES,RD 271J 1/4-A5
R1801	06T65466Y25	RES,RD 101J 1/4-A5
R1802	06T65466Y37	RES,RD 331J 1/4-A5
R1803	06T65466Y53	RES,RD 152J 1/4-A5
R1805	06T65466Y33	RES,RD 221J 1/4-A5
R1806	06S55366Y39	RES,RK JUMPER1/10-CP
R1807	06S45675W43	RES RK JUMPER1/10-CP
R1808	06T65466Y33	RES,RD 221J 1/4-A5
R1810	06T65466Y25	RES,RD 101J 1/4-A5
R1811	06T65466Y25	RES,RD 101J 1/4-A5
R1812	06T65466Y80	RES,RD 203J 1/4-A5
R1814	06T65466Y49	RES,RD 102J 1/4-A5
R1815	06S45675W43	RES RK JUMPER1/10-CP
R1817	06T65466Y73	RES,RD 103J 1/4-A5
R1818	06T65466Y25	RES,RD 101J 1/4-A5
R1819	06T65466Y25	RES,RD 101J 1/4-A5
R1820	06T65466Y25	RES,RD 101J 1/4-A5
R1822	06T65478Y08	RES,RD 274J 1/4-A5
R1823	06S55366Y39	RES,RK JUMPER1/10-CP
R1824	06S45675W43	RES RK JUMPER1/10-CP
R1825	06T65466Y33	RES,RD 221J 1/4-A5
R1826	06T65466Y53	RES,RD 152J 1/4-A5
R1828	06T65466Y33	RES,RD 221J 1/4-A5
R1829	06T65466Y25	RES,RD 101J 1/4-A5
R1831	06T65466Y37	RES,RD 331J 1/4-A5
R1832	06T65466Y35	RES,RD 271J 1/4-A5
R1833	06T65466Y35	RES,RD 271J 1/4-A5
R1834	06T65466Y37	RES,RD 331J 1/4-A5
R1835	06T65466Y33	RES,RD 221J 1/4-A5
R1836	06T65466Y25	RES,RD 101J 1/4-A5
R1837	06T65466Y53	RES,RD 152J 1/4-A5
R1839	06S55366Y39	RES,RK JUMPER1/10-CP
R1840	06S45675W43	RES RK JUMPER1/10-CP
R1841	06T65466Y33	RES,RD 221J 1/4-A5
R1842	06T65478Y08	RES,RD 274J 1/4-A5
R1844	06T65466Y25	RES,RD 101J 1/4-A5
R1846	06T65466Y25	RES,RD 101J 1/4-A5
R1847	06T65466Y25	RES,RD 101J 1/4-A5
R1848	06T65466Y73	RES,RD 103J 1/4-A5
R1849	06S45675W43	RES RK JUMPER1/10-CP
R1851	06T65466Y49	RES,RD 102J 1/4-A5

## MRV-F900

R1852	06T65466Y25	RES,RD 101J 1/4-A5
R1853	06T65466Y25	RES,RD 101J 1/4-A5
R1854	06T65466Y80	RES,RD 203J 1/4-A5
R1857	06S55366Y39	RES,RK JUMPER1/10-CP
R1858	06S45675W43	RES RK JUMPER1/10-CP
R1859	06T65466Y33	RES,RD 221J 1/4-A5
R1860	06T65466Y33	RES,RD 221J 1/4-A5
R1861	06T65466Y37	RES,RD 331J 1/4-A5
R1862	06T65466Y53	RES,RD 152J 1/4-A5
R1864	06T65466Y35	RES,RD 271J 1/4-A5
R1865	06T65466Y25	RES,RD 101J 1/4-A5

=====Connectors		
CB1800	09E29478S01	CONN BASE 53015-0610
CH1800	09E35621S01	CON,IMSA-9110S-07L-ANGLE
CH1801	09E35621S01	CON,IMSA-9110S-07L-ANGLE
CH1802	09E35621S01	CON,IMSA-9110S-07L-ANGLE

### \*\*\*\*\*POWER1

#### P.W.Board

=====IC		
IC800	51T55433Y01	MC33152D

=====Transistors		
Q100	48T64375F03	TR,2SA1360-Y
Q101	48T64376F03	TR,2SC3423-Y
Q102	48T64376F03	TR,2SC3423-Y
Q103	48T64376F03	TR,2SC3423-Y
Q104	48T35671Y01	TR 2SA1930
Q105	48T35674Y01	TR 2SC5171
Q106	48E33332S01	TR,IMZ4 108-SMT6
Q107	48T75011Y02	TR,2SA1294-0-DB
Q108	48T75012Y02	TR,2SC3263-0-DB
Q109	48T64222F02	TR,UN2212 22-22-TX
Q110	48T35671Y01	TR 2SA1930
Q111	48T35674Y01	TR 2SC5171
Q112	48T75011Y02	TR,2SA1294-0-DB
Q113	48T75012Y02	TR,2SC3263-0-DB
Q114	48E33332S01	TR,IMZ4 108-SMT6
Q115	48T35671Y01	TR 2SA1930
Q116	48T35674Y01	TR 2SC5171
Q117	48T64222F02	TR,UN2212 22-22-TX
Q118	48T75011Y02	TR,2SA1294-0-DB
Q119	48T75012Y02	TR,2SC3263-0-DB
Q120	48E33332S01	TR,IMZ4 108-SMT6
Q121	48T64222F02	TR,UN2212 22-22-TX
Q122	48T65385Y03	TR,2SC3324-BL-85L-CP
Q123	48T65385Y03	TR,2SC3324-BL-85L-CP
Q124	48T65385Y03	TR,2SC3324-BL-85L-CP
Q125	48T65385Y03	TR,2SC3324-BL-85L-CP
Q126	48T65385Y03	TR,2SC3324-BL-85L-CP
Q127	48T65385Y03	TR,2SC3324-BL-85L-CP
Q129	48T65385Y03	TR,2SC3324-BL-85L-CP

Q130	48T65384Y03	TR,2SA1312-BL-85L-CP
Q131	48T65384Y03	TR,2SA1312-BL-85L-CP
Q132	48T65385Y03	TR,2SC3324-BL-85L-CP
Q133	48T65384Y03	TR,2SA1312-BL-85L-CP
Q134	48T64222F02	TR,UN2212 22-22-TX
Q135	48T64222F02	TR,UN2212 22-22-TX
Q200	48T64376F03	TR,2SC3423-Y
Q201	48T64375F03	TR,2SA1360-Y
Q202	48T64376F03	TR,2SC3423-Y
Q203	48T64376F03	TR,2SC3423-Y
Q204	48T35674Y01	TR 2SC5171
Q205	48T35671Y01	TR 2SA1930
Q206	48E33332S01	TR,IMZ4 108-SMT6
Q207	48T75012Y02	TR,2SC3263-0-DB
Q208	48T75011Y02	TR,2SA1294-0-DB
Q209	48T64222F02	TR,UN2212 22-22-TX
Q210	48T35674Y01	TR 2SC5171
Q211	48T35671Y01	TR 2SA1930
Q212	48T75012Y02	TR,2SC3263-0-DB
Q213	48T75011Y02	TR,2SA1294-0-DB
Q214	48E33332S01	TR,IMZ4 108-SMT6
Q215	48T35674Y01	TR 2SC5171
Q216	48T35671Y01	TR 2SA1930
Q217	48T64222F02	TR,UN2212 22-22-TX
Q218	48T75012Y02	TR,2SC3263-0-DB
Q219	48T75011Y02	TR,2SA1294-0-DB
Q220	48E33332S01	TR,IMZ4 108-SMT6
Q221	48T64222F02	TR,UN2212 22-22-TX
Q222	48T65385Y03	TR,2SC3324-BL-85L-CP
Q223	48T65385Y03	TR,2SC3324-BL-85L-CP
Q224	48T65385Y03	TR,2SC3324-BL-85L-CP
Q225	48T65385Y03	TR,2SC3324-BL-85L-CP
Q226	48T65385Y03	TR,2SC3324-BL-85L-CP
Q227	48T65385Y03	TR,2SC3324-BL-85L-CP
Q229	48T65384Y03	TR,2SA1312-BL-85L-CP
Q230	48T65385Y03	TR,2SC3324-BL-85L-CP
Q231	48T65384Y03	TR,2SA1312-BL-85L-CP
Q232	48T65385Y03	TR,2SC3324-BL-85L-CP
Q233	48T65384Y03	TR,2SA1312-BL-85L-CP
Q234	48T64222F02	TR,UN2212 22-22-TX
Q235	48T64222F02	TR,UN2212 22-22-TX
Q800	48E33387S01	FET, IRF3205
Q801	48E33387S01	FET, IRF3205
Q802	48E33387S01	FET, IRF3205
Q803	48E33387S01	FET, IRF3205
Q808	48T65384Y03	TR,2SA1312-BL-85L-CP
Q809	48T65385Y03	TR,2SC3324-BL-85L-CP
Q810	48T65385Y03	TR,2SC3324-BL-85L-CP
Q811	48T65384Y03	TR,2SA1312-BL-85L-CP
Q812	48T69176F02	TR 2SC3421-Y
Q813	48T69177F02	TR,2SA1358-Y
Q814	48T65385Y03	TR,2SC3324-BL-85L-CP

# MRV-F900

Q815	48T65384Y03	TR,2SA1312-BL-85L-CP
Q816	48T64222F02	TR,UN2212 22-22-TX
Q817	48T64222F02	TR,UN2212 22-22-TX
Q818	48T64222F02	TR,UN2212 22-22-TX
Q819	48T64222F02	TR,UN2212 22-22-TX
Q820	48T64222F02	TR,UN2212 22-22-TX
Q821	48T64222F02	TR,UN2212 22-22-TX

TH803	48T25250Y06	TMT,ERTJ1VR223G-CP
-------	-------------	--------------------

=====Transformer		
T801	25T65683Y01	TRANS,R56X36X20-DB-PMF900

=====Capacitors		
-----------------	--	--

=====Diodes		
D800	48E35634S01	DIO RECT MURS120-SMB
D801	48E35634S01	DIO RECT MURS120-SMB
D803	48E35634S01	DIO RECT MURS120-SMB
D804	48E35634S01	DIO RECT MURS120-SMB
D805	48E35634S01	DIO RECT MURS120-SMB
D806	48E35634S01	DIO RECT MURS120-SMB
D807	48E35634S01	DIO RECT MURS120-SMB
D808	48E35634S01	DIO RECT MURS120-SMB
D809	48E35631S01	DIO RECT MUR1520-T220AC
D810	48E35631S01	DIO RECT MUR1520-T220AC
D811	48E35631S01	DIO RECT MUR1520-T220AC
D812	48E35631S01	DIO RECT MUR1520-T220AC
D813	48T15540Y01	DIO,MA2S111-TX-CP
D814	48T25651W02	DIO,MA152WK-TX-CP
D815	48T15540Y01	DIO,MA2S111-TX-CP
D816	48T25651W02	DIO,MA152WK-TX-CP
D817	48T15540Y01	DIO,MA2S111-TX-CP
D818	48T25651W02	DIO,MA152WK-TX-CP
D819	48T94335F02	DIO,MA153A-TX-CP
D820	48T94335F02	DIO,MA153A-TX-CP
SD800	48T15702W01	DIO,CP SB05-05CP
SD801	48T15702W01	DIO,CP SB05-05CP
SD802	48T15702W01	DIO,CP SB05-05CP
SD803	48T15702W01	DIO,CP SB05-05CP
ZD800	48T25766W09	DIO,ZEN,HZS 6C3L-R5
ZD801	48T25766W09	DIO,ZEN,HZS 6C3L-R5
ZD802	48T25766W49	DIO,ZEN HZS16-2L-R5
ZD803	48T25766W49	DIO,ZEN HZS16-2L-R5
ZD804	48T25766W09	DIO,ZEN,HZS 6C3L-R5
ZD805	48T25766W09	DIO,ZEN,HZS 6C3L-R5
ZD806	48T25766W49	DIO,ZEN HZS16-2L-R5
ZD807	48T25766W49	DIO,ZEN HZS16-2L-R5

TH803	48T25250Y06	TMT,ERTJ1VR223G-CP
T801	25T65683Y01	TRANS,R56X36X20-DB-PMF900
C100	08T45614Y02	CAP,ECHR 331G-1H-R5
C101	08T45614Y02	CAP,ECHR 331G-1H-R5
C102	08T35739Y25	CAP,UC 39RJ-2A-CP
C105	08E31932S01	CAP,CER 224-Z-F1C-CP
C108	08E31932S01	CAP,CER 224-Z-F1C-CP
C113	08E31932S01	CAP,CER 224-Z-F1C-CP
C116	08E31932S01	CAP,CER 224-Z-F1C-CP
C119	08E31932S01	CAP,CER 224-Z-F1C-CP
C120	08E31932S01	CAP,CER 224-Z-F1C-CP
C121	08E23600S01	CAP,CER.31-X7R-104-K-CP
C122	08T35739Y22	CAP,UC 30RJ-2A-CP
C123	08T35739Y22	CAP,UC 30RJ-2A-CP
C124	08T35739Y25	CAP,UC 39RJ-2A-CP
C200	08T35739Y25	CAP,UC 39RJ-2A-CP
C201	08T45614Y02	CAP,ECHR 331G-1H-R5
C202	08T45614Y02	CAP,ECHR 331G-1H-R5
C203	08T35739Y22	CAP,UC 30RJ-2A-CP
C206	08E31932S01	CAP,CER 224-Z-F1C-CP
C209	08E31932S01	CAP,CER 224-Z-F1C-CP
C214	08E31932S01	CAP,CER 224-Z-F1C-CP
C217	08E31932S01	CAP,CER 224-Z-F1C-CP
C220	08E31932S01	CAP,CER 224-Z-F1C-CP
C221	08E31932S01	CAP,CER 224-Z-F1C-CP
C222	08E23600S01	CAP,CER.31-X7R-104-K-CP
C223	08T35739Y22	CAP,UC 30RJ-2A-CP
C224	08T35739Y25	CAP,UC 39RJ-2A-CP
C800	08S45539Y04	CAP, CER 103KX7R2J-CP
C801	08E31820S01	CAP,CER 104-K-B1E-CP
C802	08S45539Y03	CAP,CER 472KX7R2J-CP
C803	08S45539Y03	CAP,CER 472KX7R2J-CP
C806	08T55390W25	CAP,TF 473-J-1H-R5
C807	08T55390W25	CAP,TF 473-J-1H-R5
C808	08T55390W25	CAP,TF 473-J-1H-R5
C809	08T55390W25	CAP,TF 473-J-1H-R5
C810	08S45539Y03	CAP,CER 472KX7R2J-CP
C811	08S45539Y03	CAP,CER 472KX7R2J-CP
C814	08T55390W25	CAP,TF 473-J-1H-R5
C815	08T55390W25	CAP,TF 473-J-1H-R5
C816	08T55390W25	CAP,TF 473-J-1H-R5
C817	08T55390W25	CAP,TF 473-J-1H-R5
C818	08E31820S01	CAP,CER 104-K-B1E-CP
C820	08E31820S01	CAP,CER 104-K-B1E-CP
C821	08E28769S01	CAP,CER 102-K-SL1H-CP
C822	08E28769S01	CAP,CER 102-K-SL1H-CP
C823	08E28769S01	CAP,CER 102-K-SL1H-CP
C824	08E28769S01	CAP,CER 102-K-SL1H-CP

=====Filters		
Z800	91T65112W04	EMI,BK2125 HS601-CP
Z801	91T65112W04	EMI,BK2125 HS601-CP
Z802	91T65112W04	EMI,BK2125 HS601-CP
Z803	91T65112W04	EMI,BK2125 HS601-CP

=====Thermistors		
TH800	48T25250Y06	TMT,ERTJ1VR223G-CP
TH801	48T25250Y01	TMT ERTJ1VV104J-CP
TH802	48T25250Y01	TMT ERTJ1VV104J-CP

## MRV-F900

C825	08E28769S01	CAP,CER 102-K-SL1H-CP
C826	08E28769S01	CAP,CER 102-K-SL1H-CP
C827	08T55401W45	CAP,TF 104G-1H-E2
C828	08T55401W45	CAP,TF 104G-1H-E2
C829	08T55401W45	CAP,TF 104G-1H-E2
C830	08T55401W45	CAP,TF 104G-1H-E2
C831	08T55401W45	CAP,TF 104G-1H-E2
C832	08T55401W45	CAP,TF 104G-1H-E2
E100	23T00149L25	CAP,SME,101-1C-R5
E101	23T45365W15	CAP SME,10R-1H-R2
E102	23T45365W15	CAP SME,10R-1H-R2
E103	23S65134W51	CAP,ELY 2R2-1V(3)-E2
E104	23S65134W41	CAP ELY 4R7-1E(3)-E2
E105	23S65134W51	CAP,ELY 2R2-1V(3)-E2
E200	23T00149L25	CAP,SME,101-1C-R5
E201	23T45365W15	CAP SME,10R-1H-R2
E202	23T45365W15	CAP SME,10R-1H-R2
E203	23S65134W51	CAP,ELY 2R2-1V(3)-E2
E204	23S65134W41	CAP ELY 4R7-1E(3)-E2
E205	23S65134W51	CAP,ELY 2R2-1V(3)-E2
E206	23T65371Y14	CAP,ARI 2R2-1H-R2
E800	23T45186Y04	CAP ,HD,222-1E
E801	23T45186Y04	CAP ,HD,222-1E
E802	23T45186Y04	CAP ,HD,222-1E
E803	23T45186Y04	CAP ,HD,222-1E
E804	23T45365W15	CAP SME,10R-1H-R2
E806	23T00134L85	CAP,SME 471-1J
E807	23T00134L85	CAP,SME 471-1J
E808	23T00149L39	CAP,SME 471-1E-R5
E809	23T00149L39	CAP,SME 471-1E-R5
E811	23T45365W13	CAP SME 3R3-1H-R2
E812	23T45365W13	CAP SME 3R3-1H-R2
E813	23T45437Y02	CAP,VNSN 103-1H
E814	23T45437Y02	CAP,VNSN 103-1H
E817	23T00149L61	CAP,SME 221-1H-R5
E818	23T00149L61	CAP,SME 221-1H-R5

=====Resistors		
R100	06T65466Y25	RES,RD 101J 1/4-A5
R101	06T65466Y25	RES,RD 101J 1/4-A5
R102	06T65466Y80	RES,RD 203J 1/4-A5
R103	06T65466Y80	RES,RD 203J 1/4-A5
R104	06T65466Y42	RES,RD 511J 1/4-A5
R105	06T65466Y42	RES,RD 511J 1/4-A5
R106	06T65466Y47	RES,RD 821J 1/4-A5
R107	06T65466Y44	RES,RD 621J 1/4-A5
R108	06T65466Y59	RES,RD 272J 1/4-A5
R111	06T65466Y30	RES,RD 161J 1/4-A5
R112	06T65466Y30	RES,RD 161J 1/4-A5
R113	06S15593Y35	RES,RK 271F 1/10-CP
R114	06T65638Y55	RES,RN 391J 1/2-A1
R115	06S15593Y35	RES,RK 271F 1/10-CP

R116	06T65638Y18	RES,RN 11RJ 1/2-A1
R117	06T65638Y18	RES,RN 11RJ 1/2-A1
R118	06S15593Y73	RES, RK 103F 1/10-CP
R119	06E35630S01	RES RW 0.1R-J-5W
R120	06E35630S01	RES RW 0.1R-J-5W
R121	06T65466Y30	RES,RD 161J 1/4-A5
R122	06T65466Y30	RES,RD 161J 1/4-A5
R123	06T65638Y55	RES,RN 391J 1/2-A1
R124	06T65638Y18	RES,RN 11RJ 1/2-A1
R125	06T65638Y18	RES,RN 11RJ 1/2-A1
R126	06S15593Y35	RES,RK 271F 1/10-CP
R127	06S15593Y35	RES,RK 271F 1/10-CP
R128	06E35630S01	RES RW 0.1R-J-5W
R129	06E35630S01	RES RW 0.1R-J-5W
R130	06S15593Y73	RES, RK 103F 1/10-CP
R131	06T65466Y30	RES,RD 161J 1/4-A5
R132	06T65466Y30	RES,RD 161J 1/4-A5
R133	06T65638Y55	RES,RN 391J 1/2-A1
R134	06T65638Y18	RES,RN 11RJ 1/2-A1
R135	06T65638Y18	RES,RN 11RJ 1/2-A1
R136	06E35630S01	RES RW 0.1R-J-5W
R137	06E35630S01	RES RW 0.1R-J-5W
R138	06S15593Y35	RES,RK 271F 1/10-CP
R139	06S15593Y35	RES,RK 271F 1/10-CP
R140	06S55362Y39	RES,RK JUMPER 1/4-CP
R141	06S15593Y73	RES, RK 103F 1/10-CP
R142	06S55365Y89	RES,RK 103J 1/10-CP
R143	06S15593Y49	RES,RK,102F1/10-CP
R144	06S15593Y49	RES,RK,102F1/10-CP
R145	06S55366Y39	RES,RK JUMPER1/10-CP
R146	06S55365Y65	RES,RK 102J 1/10-CP
R147	06S55365Y89	RES,RK 103J 1/10-CP
R148	06S15593Y49	RES,RK,102F1/10-CP
R149	06S15593Y49	RES,RK,102F1/10-CP
R150	06S55365Y65	RES,RK 102J 1/10-CP
R151	06S55365Y89	RES,RK 103J 1/10-CP
R152	06S15593Y49	RES,RK,102F1/10-CP
R153	06S15593Y49	RES,RK,102F1/10-CP
R154	06S55365Y65	RES,RK 102J 1/10-CP
R155	06S55365Y89	RES,RK 103J 1/10-CP
R156	06S15593Y53	RES, RK 152F 1/10-CP
R157	06S15593Y73	RES, RK 103F 1/10-CP
R158	06S55365Y89	RES,RK 103J 1/10-CP
R159	06S55365Y89	RES,RK 103J 1/10-CP
R160	06S55365Y97	RES,RK 223J 1/10-CP
R161	06S55365Y65	RES,RK 102J 1/10-CP
R162	06S55365Y89	RES,RK 103J 1/10-CP
R163	06S55365Y74	RES,RK 242J 1/10-CP
R164	06S55366Y08	RES,RK 563J 1/10-CP
R165	06S55365Y96	RES,RK 203J 1/10-CP
R167	06S55361Y97	RES,RK 223J 1/4-CP
R169	06S55366Y14	RES,RK 104J 1/10-CP

R171	06S55366Y14	RES,RK 104J 1/10-CP
R172	06S55365Y97	RES,RK 223J 1/10-CP
R173	06S55365Y97	RES,RK 223J 1/10-CP
R200	06T65466Y25	RES,RD 101J 1/4-A5
R201	06T65466Y25	RES,RD 101J 1/4-A5
R202	06T65466Y80	RES,RD 203J 1/4-A5
R203	06T65466Y80	RES,RD 203J 1/4-A5
R204	06T65466Y42	RES,RD 511J 1/4-A5
R205	06T65466Y42	RES,RD 511J 1/4-A5
R206	06T65466Y47	RES,RD 821J 1/4-A5
R207	06T65466Y59	RES,RD 272J 1/4-A5
R208	06T65466Y44	RES,RD 621J 1/4-A5
R209	06T65466Y30	RES,RD 161J 1/4-A5
R212	06T65466Y30	RES,RD 161J 1/4-A5
R213	06S15593Y35	RES,RK 271F 1/10-CP
R214	06T65638Y55	RES,RN 391J 1/2-A1
R215	06S15593Y35	RES,RK 271F 1/10-CP
R216	06S15593Y73	RES,RK 103F 1/10-CP
R217	06T65638Y18	RES,RN 11RJ 1/2-A1
R218	06T65638Y18	RES,RN 11RJ 1/2-A1
R219	06E35630S01	RES RW 0.1R-J-5W
R220	06E35630S01	RES RW 0.1R-J-5W
R221	06T65466Y30	RES,RD 161J 1/4-A5
R222	06T65466Y30	RES,RD 161J 1/4-A5
R223	06T65638Y55	RES,RN 391J 1/2-A1
R224	06S15593Y35	RES,RK 271F 1/10-CP
R225	06T65638Y18	RES,RN 11RJ 1/2-A1
R226	06T65638Y18	RES,RN 11RJ 1/2-A1
R227	06S15593Y35	RES,RK 271F 1/10-CP
R228	06S15593Y73	RES,RK 103F 1/10-CP
R229	06E35630S01	RES RW 0.1R-J-5W
R230	06E35630S01	RES RW 0.1R-J-5W
R231	06T65466Y30	RES,RD 161J 1/4-A5
R232	06T65466Y30	RES,RD 161J 1/4-A5
R233	06T65638Y55	RES,RN 391J 1/2-A1
R234	06T65638Y18	RES,RN 11RJ 1/2-A1
R235	06T65638Y18	RES,RN 11RJ 1/2-A1
R236	06E35630S01	RES RW 0.1R-J-5W
R237	06E35630S01	RES RW 0.1R-J-5W
R238	06S15593Y35	RES,RK 271F 1/10-CP
R239	06S15593Y35	RES,RK 271F 1/10-CP
R240	06S15593Y73	RES,RK 103F 1/10-CP
R241	06S55362Y39	RES,RK JUMPER 1/4-CP
R242	06S55365Y89	RES,RK 103J 1/10-CP
R243	06S55366Y39	RES,RK JUMPER1/10-CP
R244	06S15593Y49	RES,RK,102F1/10-CP
R245	06S15593Y49	RES,RK,102F1/10-CP
R246	06S55365Y65	RES,RK 102J 1/10-CP
R247	06S55365Y89	RES,RK 103J 1/10-CP
R248	06S15593Y49	RES,RK,102F1/10-CP
R249	06S15593Y49	RES,RK,102F1/10-CP
R250	06S55365Y65	RES,RK 102J 1/10-CP

R251	06S55365Y89	RES,RK 103J 1/10-CP
R252	06S15593Y49	RES,RK,102F1/10-CP
R253	06S15593Y49	RES,RK,102F1/10-CP
R254	06S55365Y65	RES,RK 102J 1/10-CP
R255	06S55365Y89	RES,RK 103J 1/10-CP
R256	06S55365Y89	RES,RK 103J 1/10-CP
R257	06S55365Y89	RES,RK 103J 1/10-CP
R258	06S15593Y73	RES,RK 103F 1/10-CP
R259	06S15593Y53	RES,RK 152F 1/10-CP
R260	06S55365Y97	RES,RK 223J 1/10-CP
R261	06S55365Y65	RES,RK 102J 1/10-CP
R262	06S55365Y89	RES,RK 103J 1/10-CP
R263	06S55365Y74	RES,RK 242J 1/10-CP
R264	06S55366Y08	RES,RK 563J 1/10-CP
R265	06S55365Y96	RES,RK 203J 1/10-CP
R267	06S55366Y39	RES,RK JUMPER1/10-CP
R268	06S55366Y39	RES,RK JUMPER1/10-CP
R269	06S55361Y97	RES,RK 223J 1/4-CP
R271	06S55366Y14	RES,RK 104J 1/10-CP
R273	06S55366Y14	RES,RK 104J 1/10-CP
R274	06S55365Y97	RES,RK 223J 1/10-CP
R275	06S55365Y97	RES,RK 223J 1/10-CP
R800	06S55361Y89	RES,RK 103J 1/4-CP
R801	06S55361Y89	RES,RK 103J 1/4-CP
R802	06S55361Y23	RES,RK 18RJ 1/4-CP
R803	06S55362Y14	RES,RK 104J 1/4-CP
R804	06S55362Y14	RES,RK 104J 1/4-CP
R805	06S55361Y23	RES,RK 18RJ 1/4-CP
R806	06S55361Y23	RES,RK 18RJ 1/4-CP
R807	06S55362Y14	RES,RK 104J 1/4-CP
R808	06S55362Y14	RES,RK 104J 1/4-CP
R809	06S55361Y23	RES,RK 18RJ 1/4-CP
R810	06S55361Y24	RES,RK 20RJ 1/4-CP
R811	06S55361Y24	RES,RK 20RJ 1/4-CP
R821	06S55361Y59	RES,RK 561J 1/4-CP
R822	06S55361Y59	RES,RK 561J 1/4-CP
R823	06S55361Y49	RES,RK 221J 1/4-CP
R824	06S55361Y49	RES,RK 221J 1/4-CP
R825	06S55361Y37	RES,RK,68RJ 1/4-CP
R826	06S55361Y37	RES,RK,68RJ 1/4-CP
R827	06S55362Y16	RES,RK 124J 1/4-CP
R828	06S55362Y16	RES,RK 124J 1/4-CP
R829	06S55362Y02	RES,RK 333J 1/4-CP
R830	06S55361Y85	RES,RK 682J 1/4-CP
R831	06S55361Y85	RES,RK 682J 1/4-CP
R832	06S55362Y02	RES,RK 333J 1/4-CP
R835	06S55363Y97	RES,RK 223J 1/8-CP
R836	06S55363Y97	RES,RK 223J 1/8-CP
R837	06S55363Y97	RES,RK 223J 1/8-CP
R838	06S55363Y97	RES,RK 223J 1/8-CP
R839	06S55363Y97	RES,RK 223J 1/8-CP
R840	06S55363Y97	RES,RK 223J 1/8-CP

## MRV-F900

R841	06S55363Y97	RES,RK 223J 1/8-CP
R842	06S55363Y97	RES,RK 223J 1/8-CP
R843	06S55363Y97	RES,RK 223J 1/8-CP
R844	06S55362Y22	RES,RK224J 1/4-CP
R845	06S55361Y44	RES,RK,131J 1/4-CP
R846	06S55361Y44	RES,RK,131J 1/4-CP
R847	06S55361Y24	RES,RK 20RJ 1/4-CP
R848	06S55361Y24	RES,RK 20RJ 1/4-CP
R849	06S55361Y24	RES,RK 20RJ 1/4-CP
R850	06S55361Y24	RES,RK 20RJ 1/4-CP
R851	06S55361Y24	RES,RK 20RJ 1/4-CP
R852	06S55361Y24	RES,RK 20RJ 1/4-CP
R853	06S55361Y97	RES,RK 223J 1/4-CP
R854	06S55361Y97	RES,RK 223J 1/4-CP
R855	06S55365Y87	RES,RK 822J 1/10-CP
R856	06S55365Y87	RES,RK 822J 1/10-CP
VR100	18T55256W05	VAR,RH0683C 471-R5
VR200	18T55256W05	VAR,RH0683C 471-R5

### =====Connectors

CB100	09E35620S01	BTB IMSA-9110B-07Z900-ST
CB200	09E35620S01	BTB IMSA-9110B-07Z900-ST
CB205	09E35632S01	CONN BASE, 53014-1110
CB800	09E35633S01	BTB IMSA-9110B-10Z900-ST
CB801	09E34506S01	CONN BASE, 53014-0810
CB802	09E35620S01	BTB IMSA-9110B-07Z900-ST
CB803	09E30200S01	CONN BASE, 53014-0610
CB804	09E30200S01	CONN BASE, 53014-0610

### \*\*\*\*\*POWER2

#### P.W.Board

=====IC		
IC901	51T55433Y01	MC33152D

### =====Transistors

Q300	48T64376F03	TR,2SC3423-Y
Q301	48T35671Y01	TR 2SA1930
Q302	48T35674Y01	TR 2SC5171
Q303	48T75011Y02	TR,2SA1294-0-DB
Q304	48T75012Y02	TR,2SC3263-0-DB
Q305	48T65384Y03	TR,2SA1312-BL-85L-CP
Q306	48T65384Y03	TR,2SA1312-BL-85L-CP
Q307	48T75011Y02	TR,2SA1294-0-DB
Q308	48T75012Y02	TR,2SC3263-0-DB
Q309	48T64222F02	TR,UN2212 22-22-TX
Q310	48T64222F02	TR,UN2212 22-22-TX
Q311	48T65385Y03	TR,2SC3324-BL-85L-CP
Q312	48T35671Y01	TR 2SA1930
Q313	48T65385Y03	TR,2SC3324-BL-85L-CP
Q314	48T65385Y03	TR,2SC3324-BL-85L-CP
Q315	48T65385Y03	TR,2SC3324-BL-85L-CP
Q316	48T35674Y01	TR 2SC5171
Q317	48T65384Y03	TR,2SA1312-BL-85L-CP

Q319	48T65385Y03	TR,2SC3324-BL-85L-CP
Q320	48T65385Y03	TR,2SC3324-BL-85L-CP
Q321	48T64375F03	TR,2SA1360-Y
Q322	48T64376F03	TR,2SC3423-Y
Q323	48T64376F03	TR,2SC3423-Y
Q324	48T35671Y01	TR 2SA1930
Q325	48T35674Y01	TR 2SC5171
Q326	48T75011Y02	TR,2SA1294-0-DB
Q327	48T75012Y02	TR,2SC3263-0-DB
Q328	48T65385Y03	TR,2SC3324-BL-85L-CP
Q329	48T65385Y03	TR,2SC3324-BL-85L-CP
Q330	48E33332S01	TR,IMZ4 108-SMT6
Q331	48T64222F02	TR,UN2212 22-22-TX
Q332	48E33332S01	TR,IMZ4 108-SMT6
Q333	48T64222F02	TR,UN2212 22-22-TX
Q334	48E33332S01	TR,IMZ4 108-SMT6
Q335	48T64222F02	TR,UN2212 22-22-TX
Q400	48T64376F03	TR,2SC3423-Y
Q401	48T35674Y01	TR 2SC5171
Q402	48T35671Y01	TR 2SA1930
Q403	48T75012Y02	TR,2SC3263-0-DB
Q404	48T75011Y02	TR,2SA1294-0-DB
Q405	48T65384Y03	TR,2SA1312-BL-85L-CP
Q406	48T65384Y03	TR,2SA1312-BL-85L-CP
Q407	48T75012Y02	TR,2SC3263-0-DB
Q408	48T75011Y02	TR,2SA1294-0-DB
Q409	48T64222F02	TR,UN2212 22-22-TX
Q410	48T64222F02	TR,UN2212 22-22-TX
Q411	48T65385Y03	TR,2SC3324-BL-85L-CP
Q412	48T35674Y01	TR 2SC5171
Q413	48T65385Y03	TR,2SC3324-BL-85L-CP
Q414	48T65385Y03	TR,2SC3324-BL-85L-CP
Q415	48T65385Y03	TR,2SC3324-BL-85L-CP
Q416	48T35671Y01	TR 2SA1930
Q417	48T65384Y03	TR,2SA1312-BL-85L-CP
Q419	48T65385Y03	TR,2SC3324-BL-85L-CP
Q420	48T65385Y03	TR,2SC3324-BL-85L-CP
Q421	48T64376F03	TR,2SC3423-Y
Q422	48T64375F03	TR,2SA1360-Y
Q423	48T64376F03	TR,2SC3423-Y
Q424	48T35674Y01	TR 2SC5171
Q425	48T35671Y01	TR 2SA1930
Q426	48T75012Y02	TR,2SC3263-0-DB
Q427	48T75011Y02	TR,2SA1294-0-DB
Q428	48T65385Y03	TR,2SC3324-BL-85L-CP
Q429	48T65385Y03	TR,2SC3324-BL-85L-CP
Q430	48E33332S01	TR,IMZ4 108-SMT6
Q431	48T64222F02	TR,UN2212 22-22-TX
Q432	48E33332S01	TR,IMZ4 108-SMT6
Q433	48T64222F02	TR,UN2212 22-22-TX
Q434	48E33332S01	TR,IMZ4 108-SMT6
Q435	48T64222F02	TR,UN2212 22-22-TX

# MRV-F900

Q900	48E33387S01	FET, IRF3205
Q901	48E33387S01	FET, IRF3205
Q902	48E33387S01	FET, IRF3205
Q903	48E33387S01	FET, IRF3205
Q904	48T65384Y03	TR,2SA1312-BL-85L-CP
Q906	48T65385Y03	TR,2SC3324-BL-85L-CP
Q909	48T69176F02	TR,2SC3421-Y
Q910	48T69177F02	TR,2SA1358-Y
Q916	48T65385Y03	TR,2SC3324-BL-85L-CP
Q917	48T65384Y03	TR,2SA1312-BL-85L-CP
Q920	48T64222F02	TR,UN2212 22-22-TX
Q921	48T64222F02	TR,UN2212 22-22-TX
Q922	48T64222F02	TR,UN2212 22-22-TX
Q923	48T64222F02	TR,UN2212 22-22-TX
Q924	48T64222F02	TR,UN2212 22-22-TX
Q925	48T64222F02	TR,UN2212 22-22-TX
Q926	48T65385Y03	TR,2SC3324-BL-85L-CP
Q927	48T65384Y03	TR,2SA1312-BL-85L-CP

=====Filters		
Z900	91T65112W04	EMI,BK2125 HS601-CP
Z901	91T65112W04	EMI,BK2125 HS601-CP
Z902	91T65112W04	EMI,BK2125 HS601-CP
Z903	91T65112W04	EMI,BK2125 HS601-CP

=====Thermistors		
TH900	48T25250Y06	TMT,ERTJ1VR223G-CP
TH901	48T25250Y06	TMT,ERTJ1VR223G-CP
TH902	48T25250Y01	TMT ERTJ1VV104J-CP
TH903	48T25250Y01	TMT ERTJ1VV104J-CP

=====Transformer		
T902	25T65683Y01	TRANS,R56X36X20-DB-PMF900

=====Capacitors		
C300	08T45614Y02	CAP,ECHR 331G-1H-R5
C301	08T45614Y02	CAP,ECHR 331G-1H-R5
C309	08E23600S01	CAP,CER.31-X7R-104-K-CP
C310	08E31932S01	CAP,CER 224-Z-F1C-CP
C311	08E31932S01	CAP,CER 224-Z-F1C-CP
C312	08E31932S01	CAP,CER 224-Z-F1C-CP
C313	08E31932S01	CAP,CER 224-Z-F1C-CP
C314	08E31932S01	CAP,CER 224-Z-F1C-CP
C321	08E31932S01	CAP,CER 224-Z-F1C-CP
C322	08T35739Y25	CAP,UC 39RJ-2A-CP
C323	08T35739Y22	CAP,UC 30RJ-2A-CP
C324	08T35739Y22	CAP,UC 30RJ-2A-CP
C325	08T35739Y25	CAP,UC 39RJ-2A-CP
C400	08T45614Y02	CAP,ECHR 331G-1H-R5
C401	08T45614Y02	CAP,ECHR 331G-1H-R5
C409	08E23600S01	CAP,CER.31-X7R-104-K-CP
C416	08E31932S01	CAP,CER 224-Z-F1C-CP
C417	08E31932S01	CAP,CER 224-Z-F1C-CP
C418	08E31932S01	CAP,CER 224-Z-F1C-CP
C419	08E31932S01	CAP,CER 224-Z-F1C-CP
C420	08E31932S01	CAP,CER 224-Z-F1C-CP
C421	08E31932S01	CAP,CER 224-Z-F1C-CP
C422	08T35739Y25	CAP,UC 39RJ-2A-CP
C423	08T35739Y22	CAP,UC 30RJ-2A-CP
C424	08T35739Y22	CAP,UC 30RJ-2A-CP
C425	08T35739Y25	CAP,UC 39RJ-2A-CP
C900	08S45539Y04	CAP, CER 103KX7R2J-CP
C902	08E31820S01	CAP,CER 104-K-B1E-CP
C904	08S45539Y03	CAP,CER 472KX7R2J-CP
C905	08S45539Y03	CAP,CER 472KX7R2J-CP
C908	08T55390W25	CAP,TF 473-J-1H-R5
C909	08T55390W25	CAP,TF 473-J-1H-R5
C910	08T55390W25	CAP,TF 473-J-1H-R5
C911	08T55390W25	CAP,TF 473-J-1H-R5
C914	08T55390W25	CAP,TF 473-J-1H-R5
C915	08T55390W25	CAP,TF 473-J-1H-R5

=====Diodes		
D900	48E35631S01	DIO RECT MUR1520-T220AC
D901	48E35631S01	DIO RECT MUR1520-T220AC
D903	48E35634S01	DIO RECT MURS120-SMB
D904	48E35634S01	DIO RECT MURS120-SMB
D905	48E35634S01	DIO RECT MURS120-SMB
D906	48E35634S01	DIO RECT MURS120-SMB
D907	48E35634S01	DIO RECT MURS120-SMB
D908	48E35634S01	DIO RECT MURS120-SMB
D909	48E35634S01	DIO RECT MURS120-SMB
D910	48E35634S01	DIO RECT MURS120-SMB
D911	48T15540Y01	DIO,MA2S111-TX-CP
D912	48T25651W02	DIO,MA152WK-TX-CP
D913	48T15540Y01	DIO,MA2S111-TX-CP
D914	48T25651W02	DIO,MA152WK-TX-CP
D915	48T15540Y01	DIO,MA2S111-TX-CP
D916	48T25651W02	DIO,MA152WK-TX-CP
D917	48E35631S01	DIO RECT MUR1520-T220AC
D918	48E35631S01	DIO RECT MUR1520-T220AC
D919	48T94335F02	DIO,MA153A-TX-CP
D920	48T94335F02	DIO,MA153A-TX-CP
SD900	48T15702W01	DIO,CP SB05-05CP
SD901	48T15702W01	DIO,CP SB05-05CP
SD902	48T15702W01	DIO,CP SB05-05CP
SD903	48T15702W01	DIO,CP SB05-05CP
ZD900	48T25766W09	DIO,ZEN,HZS 6C3L-R5
ZD901	48T25766W09	DIO,ZEN,HZS 6C3L-R5
ZD904	48T25766W09	DIO,ZEN,HZS 6C3L-R5
ZD905	48T25766W49	DIO,ZEN HZS16-2L-R5
ZD906	48T25766W49	DIO,ZEN HZS16-2L-R5
ZD907	48T25766W49	DIO,ZEN HZS16-2L-R5
ZD908	48T25766W49	DIO,ZEN HZS16-2L-R5
ZD909	48T25766W09	DIO,ZEN,HZS 6C3L-R5

## MRV-F900

C916	08T55390W25	CAP,TF 473-J-1H-R5
C917	08T55390W25	CAP,TF 473-J-1H-R5
C918	08S45539Y03	CAP,CER 472KX7R2J-CP
C919	08S45539Y03	CAP,CER 472KX7R2J-CP
C920	08E31820S01	CAP,CER 104-K-B1E-CP
C922	08E31820S01	CAP,CER 104-K-B1E-CP
C923	08E28769S01	CAP,CER 102-K-SL1H-CP
C924	08E28769S01	CAP,CER 102-K-SL1H-CP
C925	08E28769S01	CAP,CER 102-K-SL1H-CP
C926	08E28769S01	CAP,CER 102-K-SL1H-CP
C927	08E28769S01	CAP,CER 102-K-SL1H-CP
C928	08E28769S01	CAP,CER 102-K-SL1H-CP
C929	08T55401W45	CAP,TF 104G-1H-E2
C930	08T55401W45	CAP,TF 104G-1H-E2
C931	08T55401W45	CAP,TF 104G-1H-E2
C932	08T55401W45	CAP,TF 104G-1H-E2
C933	08T55401W45	CAP,TF 104G-1H-E2
C934	08T55401W45	CAP,TF 104G-1H-E2
E300	23T00149L25	CAP,SME,101-1C-R5
E301	23T45365W15	CAP SME,10R-1H-R2
E302	23T45365W15	CAP SME,10R-1H-R2
E303	23S65134W41	CAP ELY 4R7-1E(3)-E2
E304	23S65134W51	CAP,ELY 2R2-1V(3)-E2
E305	23S65134W51	CAP,ELY 2R2-1V(3)-E2
E400	23T00149L25	CAP,SME,101-1C-R5
E401	23T45365W15	CAP SME,10R-1H-R2
E402	23T45365W15	CAP SME,10R-1H-R2
E403	23S65134W41	CAP ELY 4R7-1E(3)-E2
E404	23S65134W51	CAP,ELY 2R2-1V(3)-E2
E405	23S65134W51	CAP,ELY 2R2-1V(3)-E2
E900	23T45186Y04	CAP ,HD,222-1E
E901	23T45186Y04	CAP ,HD,222-1E
E902	23T45186Y04	CAP ,HD,222-1E
E903	23T45186Y04	CAP ,HD,222-1E
E906	23T00134L85	CAP,SME 471-1J
E907	23T00134L85	CAP,SME 471-1J
E908	23T00149L39	CAP,SME 471-1E-R5
E909	23T00149L39	CAP,SME 471-1E-R5
E913	23T45437Y02	CAP,VNSN 103-1H
E914	23T45437Y02	CAP,VNSN 103-1H
E915	23T45365W13	CAP SME 3R3-1H-R2
E916	23T45365W13	CAP SME 3R3-1H-R2
E919	23T00149L61	CAP,SME 221-1H-R5
E920	23T00149L61	CAP,SME 221-1H-R5
E924	23T45365W15	CAP SME,10R-1H-R2
E927	23T65371Y14	CAP,ARI 2R2-1H-R2

=====Resistors		
R300	06T65466Y25	RES,RD 101J 1/4-A5
R301	06T65466Y25	RES,RD 101J 1/4-A5
R302	06T65466Y80	RES,RD 203J 1/4-A5
R303	06T65466Y80	RES,RD 203J 1/4-A5

R304	06T65466Y44	RES,RD 621J 1/4-A5
R305	06T65466Y59	RES,RD 272J 1/4-A5
R306	06T65466Y30	RES,RD 161J 1/4-A5
R307	06T65466Y30	RES,RD 161J 1/4-A5
R308	06T65638Y18	RES,RN 11RJ 1/2-A1
R309	06T65638Y18	RES,RN 11RJ 1/2-A1
R310	06T65466Y30	RES,RD 161J 1/4-A5
R311	06T65466Y30	RES,RD 161J 1/4-A5
R312	06T65638Y18	RES,RN 11RJ 1/2-A1
R313	06T65638Y18	RES,RN 11RJ 1/2-A1
R314	06E35630S01	RES RW 0.1R-J-5W
R315	06E35630S01	RES RW 0.1R-J-5W
R316	06E35630S01	RES RW 0.1R-J-5W
R317	06E35630S01	RES RW 0.1R-J-5W
R318	06E35630S01	RES RW 0.1R-J-5W
R319	06E35630S01	RES RW 0.1R-J-5W
R320	06S15593Y49	RES,RK,102F1/10-CP
R321	06S15593Y49	RES,RK,102F1/10-CP
R322	06S55365Y65	RES,RK 102J 1/10-CP
R323	06S55365Y65	RES,RK 102J 1/10-CP
R324	06S55366Y08	RES,RK 563J 1/10-CP
R325	06S55365Y89	RES,RK 103J 1/10-CP
R326	06S55361Y97	RES,RK 223J 1/4-CP
R328	06S55365Y96	RES,RK 203J 1/10-CP
R330	06S15593Y49	RES,RK,102F1/10-CP
R331	06S15593Y49	RES,RK,102F1/10-CP
R332	06S55365Y65	RES,RK 102J 1/10-CP
R333	06S55365Y89	RES,RK 103J 1/10-CP
R334	06S55362Y39	RES,RK JUMPER 1/4-CP
R335	06S15593Y49	RES,RK,102F1/10-CP
R336	06S15593Y49	RES,RK,102F1/10-CP
R337	06S55365Y65	RES,RK 102J 1/10-CP
R338	06S55365Y89	RES,RK 103J 1/10-CP
R339	06S55365Y89	RES,RK 103J 1/10-CP
R340	06S55365Y89	RES,RK 103J 1/10-CP
R341	06S15593Y53	RES, RK 152F 1/10-CP
R342	06S55365Y89	RES,RK 103J 1/10-CP
R343	06S55365Y97	RES,RK 223J 1/10-CP
R344	06S55365Y89	RES,RK 103J 1/10-CP
R345	06S55366Y14	RES,RK 104J 1/10-CP
R346	06S55365Y74	RES,RK 242J 1/10-CP
R347	06S55366Y14	RES,RK 104J 1/10-CP
R348	06S55365Y97	RES,RK 223J 1/10-CP
R349	06S55365Y97	RES,RK 223J 1/10-CP
R350	06T65466Y42	RES,RD 511J 1/4-A5
R351	06T65466Y42	RES,RD 511J 1/4-A5
R352	06T65466Y47	RES,RD 821J 1/4-A5
R353	06T65638Y18	RES,RN 11RJ 1/2-A1
R354	06T65638Y18	RES,RN 11RJ 1/2-A1
R355	06S15593Y35	RES,RK 271F 1/10-CP
R356	06S15593Y35	RES,RK 271F 1/10-CP
R357	06S15593Y73	RES, RK 103F 1/10-CP

**MRV-F900**

R358	06S15593Y35	RES,RK 271F 1/10-CP
R359	06T65466Y30	RES,RD 161J 1/4-A5
R360	06T65466Y30	RES,RD 161J 1/4-A5
R361	06S15593Y35	RES,RK 271F 1/10-CP
R362	06S15593Y73	RES, RK 103F 1/10-CP
R363	06S55366Y39	RES,RK JUMPER1/10-CP
R364	06S15593Y35	RES,RK 271F 1/10-CP
R365	06S15593Y35	RES,RK 271F 1/10-CP
R366	06S15593Y73	RES, RK 103F 1/10-CP
R367	06S55365Y89	RES,RK 103J 1/10-CP
R368	06S55366Y39	RES,RK JUMPER1/10-CP
R370	06T65638Y55	RES,RN 391J 1/2-A1
R371	06T65638Y55	RES,RN 391J 1/2-A1
R372	06T65638Y55	RES,RN 391J 1/2-A1
R400	06T65466Y25	RES,RD 101J 1/4-A5
R401	06T65466Y25	RES,RD 101J 1/4-A5
R402	06T65466Y80	RES,RD 203J 1/4-A5
R403	06T65466Y80	RES,RD 203J 1/4-A5
R404	06T65466Y59	RES,RD 272J 1/4-A5
R405	06T65466Y44	RES,RD 621J 1/4-A5
R406	06T65466Y30	RES,RD 161J 1/4-A5
R407	06T65466Y30	RES,RD 161J 1/4-A5
R408	06T65638Y18	RES,RN 11RJ 1/2-A1
R409	06T65638Y18	RES,RN 11RJ 1/2-A1
R410	06T65466Y30	RES,RD 161J 1/4-A5
R411	06S55365Y65	RES,RK 102J 1/10-CP
R412	06T65638Y18	RES,RN 11RJ 1/2-A1
R413	06E35630S01	RES RW 0.1R-J-5W
R414	06E35630S01	RES RW 0.1R-J-5W
R415	06T65638Y18	RES,RN 11RJ 1/2-A1
R416	06E35630S01	RES RW 0.1R-J-5W
R417	06E35630S01	RES RW 0.1R-J-5W
R418	06S55365Y96	RES,RK 203J 1/10-CP
R420	06S55366Y08	RES,RK 563J 1/10-CP
R422	06S55366Y14	RES,RK 104J 1/10-CP
R424	06S55366Y14	RES,RK 104J 1/10-CP
R425	06S55365Y97	RES,RK 223J 1/10-CP
R426	06S55365Y97	RES,RK 223J 1/10-CP
R427	06T65466Y42	RES,RD 511J 1/4-A5
R428	06T65466Y42	RES,RD 511J 1/4-A5
R430	06S15593Y49	RES,RK,102F1/10-CP
R431	06S15593Y49	RES,RK,102F1/10-CP
R432	06S55365Y65	RES,RK 102J 1/10-CP
R433	06S55365Y89	RES,RK 103J 1/10-CP
R434	06S15593Y49	RES,RK,102F1/10-CP
R435	06S15593Y49	RES,RK,102F1/10-CP
R436	06S55365Y65	RES,RK 102J 1/10-CP
R437	06S55365Y89	RES,RK 103J 1/10-CP
R438	06S55362Y39	RES,RK JUMPER 1/4-CP
R439	06S55365Y89	RES,RK 103J 1/10-CP
R440	06S15593Y73	RES, RK 103F 1/10-CP
R441	06T65466Y30	RES,RD 161J 1/4-A5

R442	06T65638Y55	RES,RN 391J 1/2-A1
R443	06T65638Y18	RES,RN 11RJ 1/2-A1
R444	06T65638Y55	RES,RN 391J 1/2-A1
R445	06S15593Y73	RES, RK 103F 1/10-CP
R446	06S15593Y53	RES, RK 152F 1/10-CP
R447	06T65638Y18	RES,RN 11RJ 1/2-A1
R448	06E35630S01	RES RW 0.1R-J-5W
R449	06S55365Y97	RES,RK 223J 1/10-CP
R450	06E35630S01	RES RW 0.1R-J-5W
R451	06T65466Y30	RES,RD 161J 1/4-A5
R452	06S55365Y89	RES,RK 103J 1/10-CP
R453	06T65466Y30	RES,RD 161J 1/4-A5
R454	06S15593Y49	RES,RK,102F1/10-CP
R455	06S55365Y74	RES,RK 242J 1/10-CP
R456	06S15593Y49	RES,RK,102F1/10-CP
R457	06S55365Y65	RES,RK 102J 1/10-CP
R458	06S55365Y89	RES,RK 103J 1/10-CP
R459	06S55361Y97	RES,RK 223J 1/4-CP
R460	06S15593Y35	RES,RK 271F 1/10-CP
R461	06S55366Y39	RES,RK JUMPER1/10-CP
R462	06S15593Y35	RES,RK 271F 1/10-CP
R463	06S15593Y73	RES, RK 103F 1/10-CP
R464	06S15593Y35	RES,RK 271F 1/10-CP
R465	06S15593Y35	RES,RK 271F 1/10-CP
R466	06S15593Y73	RES, RK 103F 1/10-CP
R467	06S15593Y35	RES,RK 271F 1/10-CP
R468	06S15593Y35	RES,RK 271F 1/10-CP
R469	06S15593Y73	RES, RK 103F 1/10-CP
R470	06S55365Y89	RES,RK 103J 1/10-CP
R471	06S55366Y39	RES,RK JUMPER1/10-CP
R472	06T65466Y47	RES,RD 821J 1/4-A5
R474	06T65638Y55	RES,RN 391J 1/2-A1
R902	06S55362Y16	RES,RK 124J 1/4-CP
R903	06S55362Y16	RES,RK 124J 1/4-CP
R904	06S55361Y24	RES,RK 20RJ 1/4-CP
R905	06S55361Y24	RES,RK 20RJ 1/4-CP
R906	06S55361Y89	RES,RK 103J 1/4-CP
R907	06S55361Y89	RES,RK 103J 1/4-CP
R908	06S55361Y23	RES,RK 18RJ 1/4-CP
R909	06S55362Y14	RES,RK 104J 1/4-CP
R910	06S55362Y14	RES,RK 104J 1/4-CP
R911	06S55361Y23	RES,RK 18RJ 1/4-CP
R912	06S55361Y23	RES,RK 18RJ 1/4-CP
R913	06S55362Y14	RES,RK 104J 1/4-CP
R914	06S55362Y14	RES,RK 104J 1/4-CP
R915	06S55361Y23	RES,RK 18RJ 1/4-CP
R916	06S55361Y24	RES,RK 20RJ 1/4-CP
R917	06S55361Y24	RES,RK 20RJ 1/4-CP
R918	06S55361Y59	RES,RK 561J 1/4-CP
R919	06S55361Y24	RES,RK 20RJ 1/4-CP
R923	06S55361Y59	RES,RK 561J 1/4-CP
R924	06S55361Y24	RES,RK 20RJ 1/4-CP

## MRV-F900

R926	06S55361Y37	RES,RK,68RJ 1/4-CP
R927	06S55361Y37	RES,RK,68RJ 1/4-CP
R928	06S55361Y24	RES,RK 20RJ 1/4-CP
R929	06S55362Y22	RES,RK224J 1/4-CP
R935	06S55362Y02	RES,RK 333J 1/4-CP
R936	06S55362Y02	RES,RK 333J 1/4-CP
R937	06S55361Y85	RES,RK 682J 1/4-CP
R938	06S55361Y85	RES,RK 682J 1/4-CP
R939	06S55361Y44	RES,RK,131J 1/4-CP
R940	06S55361Y44	RES,RK,131J 1/4-CP
R943	06S55363Y97	RES,RK 223J 1/8-CP
R944	06S55363Y97	RES,RK 223J 1/8-CP
R945	06S55363Y97	RES,RK 223J 1/8-CP
R946	06S55363Y97	RES,RK 223J 1/8-CP
R947	06S55363Y97	RES,RK 223J 1/8-CP
R948	06S55363Y97	RES,RK 223J 1/8-CP
R949	06S55363Y97	RES,RK 223J 1/8-CP
R950	06S55363Y97	RES,RK 223J 1/8-CP
R951	06S55363Y97	RES,RK 223J 1/8-CP
R952	06S55361Y49	RES,RK 221J 1/4-CP
R957	06S55361Y49	RES,RK 221J 1/4-CP
R962	06S55361Y24	RES,RK 20RJ 1/4-CP
R963	06S55361Y97	RES,RK 223J 1/4-CP
R964	06S55361Y97	RES,RK 223J 1/4-CP
R966	06S55365Y87	RES,RK 822J 1/10-CP
R967	06S55365Y87	RES,RK 822J 1/10-CP
VR300	18T55256W05	VAR,RH0683C 471-R5
VR400	18T55256W05	VAR,RH0683C 471-R5

Q1509	48T52438F04	TR, 2SD601A-S/TX-CP
Q1510	48T52438F04	TR, 2SD601A-S/TX-CP
Q1511	48T64222F03	TR,UN2213 47-47-TX
Q1512	48T64222F03	TR,UN2213 47-47-TX

=====Diodes		
D1512	48E35641S01	DIO RECT 1SR156-400-PMDS
D1513	48E35641S01	DIO RECT 1SR156-400-PMDS
SD1501	48E35640S01	DIO SHT RB050L-40-PMDS-CP
SD1502	48E35640S01	DIO SHT RB050L-40-PMDS-CP

=====Relays		
RL1500	80T65235Y01	RELAY,AW3027-9V-DB
RL1501	80T65235Y01	RELAY,AW3027-9V-DB

=====Capacitors		
C1500	08T25628Y03	CAP,TF 224M-1C-CP
C1501	08T55390W34	CAP, TF 274J-1H-R5
C1502	08T55390W34	CAP, TF 274J-1H-R5
C1503	08T55390W34	CAP, TF 274J-1H-R5
C1509	08T65690Y10	CAP,TF 104J-1H
C1510	08T65690Y10	CAP,TF 104J-1H
C1513	08T55390W34	CAP, TF 274J-1H-R5
C1518	08T55390W05	CAP,PF 102J-1H-R5
C1519	08T55390W05	CAP,PF 102J-1H-R5
C1520	08T55390W05	CAP,PF 102J-1H-R5
C1521	08T55390W05	CAP,PF 102J-1H-R5
E1502	23T00149L39	CAP,SME 471-1E-R5
E1507	23T45365W05	CAP SME,101-1E-R2
E1508	23T45174W04	CAP,SME.101-1A-BP-R5
E1509	23T45174W04	CAP,SME.101-1A-BP-R5
E1511	23T45365W05	CAP SME,101-1E-R2

=====Resistors		
R1500	06S55365Y99	RES,RK 273J 1/10-CP
R1501	06S55365Y97	RES,RK 223J 1/10-CP
R1502	06S55361Y72	RES,RK 202J 1/4-CP
R1503	06S55365Y97	RES,RK 223J 1/10-CP
R1504	06S55361Y72	RES,RK 202J 1/4-CP
R1505	06S55366Y06	RES,RK 473J 1/10-CP
R1506	06S55365Y97	RES,RK 223J 1/10-CP
R1507	06S55361Y77	RES,RK 332J 1/4-CP
R1508	06S55365Y65	RES,RK 102J 1/10-CP
R1519	06S55365Y65	RES,RK 102J 1/10-CP
R1520	06S55365Y65	RES,RK 102J 1/10-CP
R1521	06S55365Y65	RES,RK 102J 1/10-CP
R1522	06S55365Y65	RES,RK 102J 1/10-CP
R1523	06S55365Y91	RES,RK 123J 1/10-CP
R1524	06S55365Y91	RES,RK 123J 1/10-CP
R1536	06T65632Y17	RES,RN 10RJ 1W
R1537	06T65632Y17	RES,RN 10RJ 1W
R1545	06T65478Y22	RES,RD 105J 1/4-A5

=====Connectors		
CB300	09E35620S01	BTB IMSA-9110B-07Z900-ST
CB301	09E30200S01	CONN BASE, 53014-0610
CB400	09E35620S01	BTB IMSA-9110B-07Z900-ST
CB401	09E35632S01	CONN BASE, 53014-1110
CB402	09E30200S01	CONN BASE, 53014-0610
CB901	09E35633S01	BTB IMSA-9110B-10Z900-ST
CB902	09E34506S01	CONN BASE, 53014-0810
CB903	09E35620S01	BTB IMSA-9110B-07Z900-ST

### \*\*\*\*\*OUTPUT1

#### P.W.Board

=====IC's		
IC1500	51T25570Y03	BA09T-NS
IC1501	51T25570Y03	BA09T-NS

=====Transistors		
Q1500	48E09399S01	TR,2SB 1243,P,Q,R-TV4-RD
Q1501	48T69177F02	TR,2SA1358-Y
Q1502	48T69177F02	TR,2SA1358-Y
Q1504	48T52437F05	TR, 2SB709A-S/TX-CP
Q1506	48T52438F04	TR, 2SD601A-S/TX-CP
Q1507	48T52438F04	TR, 2SD601A-S/TX-CP
Q1508	48T52438F04	TR, 2SD601A-S/TX-CP

# MRV-F900

R1548	06T65478Y22	RES,RD 105J 1/4-A5
R1549	06S55361Y81	RES,RK 472J 1/4-CP
R1550	06S55361Y81	RES,RK 472J 1/4-CP

E1407	23T45365W05	CAP SME,101-1E-R2
E1408	23T45174W04	CAP,SME.101-1A-BP-R5
E1409	23T45174W04	CAP,SME.101-1A-BP-R5
E1411	23T45365W05	CAP SME,101-1E-R2

=====Connectors		
CB1500	09E30128S01	CONN BASE, 53014-0910
CB1501	09E30200S01	CONN BASE, 53014-0610
CB1502	09T95487W02	WTB 53047-0210-DB
CB1503	09E34506S01	CONN BASE, 53014-0810
W1606	01E35626S01	ASS'Y WIRE 8P-9P AWG#26

## \*\*\*\*\*OUTPUT2 P.W.Board

=====IC's		
IC1401	51T25570Y03	BA09T-NS
IC1402	51T25570Y03	BA09T-NS

=====Transistors		
Q1401	48T69177F02	TR,2SA1358-Y
Q1403	48T52438F04	TR, 2SD601A-S/TX-CP
Q1405	48T52437F05	TR, 2SB709A-S/TX-CP
Q1408	48T52438F04	TR, 2SD601A-S/TX-CP
Q1409	48T52438F04	TR, 2SD601A-S/TX-CP
Q1410	48T52438F04	TR, 2SD601A-S/TX-CP
Q1411	48T52438F04	TR, 2SD601A-S/TX-CP
Q1425	48T69177F02	TR,2SA1358-Y
Q1426	48T64222F03	TR,UN2213 47-47-TX
Q1427	48E09399S01	TR,2SB 1243,P,Q,R-TV4-RD
Q1428	48T64222F03	TR,UN2213 47-47-TX

=====Diodes		
D1412	48E35641S01	DIO RECT 1SR156-400-PMDS
D1413	48E35641S01	DIO RECT 1SR156-400-PMDS
SD1401	48E35640S01	DIO SHT RB050L-40-PMDS-CP
SD1402	48E35640S01	DIO SHT RB050L-40-PMDS-CP

=====Relays		
RL1400	80T65235Y01	RELAY,AW3027-9V-DB
RL1401	80T65235Y01	RELAY,AW3027-9V-DB

=====Capacitors		
C1400	08T25628Y03	CAP,TF 224M-1C-CP
C1401	08T55390W34	CAP, TF 274J-1H-R5
C1403	08T55390W34	CAP, TF 274J-1H-R5
C1408	08T55390W34	CAP, TF 274J-1H-R5
C1411	08T55390W34	CAP, TF 274J-1H-R5
C1414	08T45162Y12	CAP,TF 104J-1H
C1415	08T45162Y12	CAP,TF 104J-1H
C1416	08T55390W05	CAP,PF 102J-1H-R5
C1417	08T55390W05	CAP,PF 102J-1H-R5
C1418	08T55390W05	CAP,PF 102J-1H-R5
C1419	08T55390W05	CAP,PF 102J-1H-R5
E1402	23T00149L39	CAP,SME 471-1E-R5

=====Resistors		
R1401	06S55365Y97	RES,RK 223J 1/10-CP
R1404	06S55365Y97	RES,RK 223J 1/10-CP
R1407	06S55361Y77	RES,RK 332J 1/4-CP
R1408	06S55361Y65	RES,RK 102J 1/4-CP
R1409	06S55361Y72	RES,RK 202J 1/4-CP
R1419	06S55365Y65	RES,RK 102J 1/10-CP
R1420	06S55365Y65	RES,RK 102J 1/10-CP
R1421	06S55365Y65	RES,RK 102J 1/10-CP
R1422	06S55365Y65	RES,RK 102J 1/10-CP
R1423	06S55365Y91	RES,RK 123J 1/10-CP
R1424	06S55365Y91	RES,RK 123J 1/10-CP
R1429	06S55365Y99	RES,RK 273J 1/10-CP
R1443	06T65478Y22	RES,RD 105J 1/4-A5
R1446	06T65478Y22	RES,RD 105J 1/4-A5
R1449	06T65632Y17	RES,RN 10RJ 1W
R1450	06T65632Y17	RES,RN 10RJ 1W
R1451	06S55361Y72	RES,RK 202J 1/4-CP
R1452	06S55365Y97	RES,RK 223J 1/10-CP
R1453	06S55366Y06	RES,RK 473J 1/10-CP
R1454	06S55361Y81	RES,RK 472J 1/4-CP
R1455	06S55361Y81	RES,RK 472J 1/4-CP

=====Connectors		
CB1400	09E30128S01	CONN BASE, 53014-0910
CB1401	09E30200S01	CONN BASE, 53014-0610
CB1402	09T95487W02	WTB 53047-0210-DB
CB1403	09E34506S01	CONN BASE, 53014-0810
W1605	01E35626S01	ASS'Y WIRE 8P-9P AWG#26

*****Miscellaneous		
FAN1601	59T55190Y12	MOTOR,F4010BQ-12RCV (FAN MOTOR/12V-110mA)
FAN1602	59T55190Y12	MOTOR,F4010BQ-12RCV (FAN MOTOR/12V-110mA)
JK1201	09T65543Y01	RCA,T6998-AAAB-DB (INPUT CH-3/CH-4)
JK1301	09T65543Y01	RCA,T6998-AAAB-DB (INPUT CH-1/CH-2)
TML1400	29T15244Y01	TERMINAL, 4P-M4(INS)
TML1504	29T15244Y01	TERMINAL, 4P-M4(INS)
TML1600	07E35153S01	BKT,POWER TERMINAL(3P) (POWER SUPPLY)