

# Checklist of CEM TCM C25\_C25 CVF1

## TCM-C25 CVF1 CARD

### Isolation Checks

**Step1:** Isolation between Relay coil (chain 1, 2 & 3)

SL. No.	Pin Details	Pin Description	Observed		Expected
			ISRC	FSRC	
1	TMR 1-4 wrt TMR 2-4	28V coil live points	>100MΩ	>100MΩ	>100MΩ
2	TMR 1-4 wrt TMR 3-4		>100MΩ	>100MΩ	>100MΩ
3	TMR 2-4 wrt TMR 3-4		>100MΩ	>100MΩ	>100MΩ

**STEP 2-** TMR 1-4, TMR 2-4 & TMR 3-4 pins shorted together and its isolation to contact inputs, outputs & midpoints measured

SL.No	Pin Details	Pin Description	Observed		Expected
			ISRC	FSRC	
1.	TMR1-4 wrt TMR1-1	Coil & contact i/p (P)	>100MΩ	>100MΩ	>100MΩ
2.	TMR1-4 wrt TMR2-1	Coil & Inst Live	>100MΩ	>100MΩ	>100MΩ
3.	TMR1-4 wrt TMR3-1	Coil & contact i/p (R)	>100MΩ	>100MΩ	>100MΩ
4.	TMR1-4 wrt PO-1, 4 to10, 12,13,15 to 22, 45, 46, 47, 77	Coil & contact o/p	>100MΩ	>100MΩ	>100MΩ
5.	TMR1-4 wrt TMR1-35 to 42, TMR2-35 to 42, TMR3-35 to 42, PO-48 to 50, 23, 60	Coil & cmd Mid points	>100MΩ	>100MΩ	>100MΩ

**STEP 3 –**TMR 1-4, TMR 2-4 & TMR 3-4 (Relay coil live-chain1,2 & 3) isolated and isolation between the following points measured.

SL.No.	Pin Details	Pin Description	Observed		Expected
			ISRC	FSRC	
1.	TMR 2-1 wrt TMR 1-1	Inst Live & contact i/p (P)	>100MΩ	>100MΩ	>100MΩ
2.	TMR 2-1 wrt TMR 3-1	Inst Live & contact i/p (R)	>100MΩ	>100MΩ	>100MΩ
3.	TMR2-1 wrt PO-1, 4 to10, 12,13,15 to 22, 45, 46, 47, 77	Inst Live & contact o/p	>100MΩ	>100MΩ	>100MΩ
4.	TMR2-1 wrt TMR1-35 to 42, TMR2-35 to 42, TMR3-35 to 42, PO-48 to 50, 23, 60	Inst Live & cmd Mid points	>100MΩ	>100MΩ	>100MΩ

### Continuity Checks

SI No	Pin Details	Description	Expected	Results	
				ISRC	FSRC
1	TMR2-1 w.r.to TMR3-44	Inst Live	0.1 Ω -0.4 Ω	229mΩ	227mΩ
2	TMR2-1 w.r.to PO-24	Inst & CMD22 STS mon	1.039kΩ ± 2%	1.044kΩ	1.044kΩ
3	PO-24 w.r.to PO-25	CMD22 STS mon	2 kΩ ± 2%	2.000kΩ	2.000kΩ
4	PO-24 w.r.to PO-26	CMD22 STS mon	2 kΩ ± 2%	2.000kΩ	2.000kΩ
5	PO-25 w.r.to PO-26	CMD22 STS mon	2 kΩ ± 2%	2.000kΩ	2.000kΩ
6	PO-1 w.r.to RO-1	CMD22 O/Ps	0.3 Ω -0.7 Ω	538mΩ	534mΩ

7	PO-1 w.r.to PO-51	CMD22 O/P & mon	33.2k $\Omega$ $\pm$ 2%	33.168k $\Omega$	33.172k $\Omega$
8	PO-51 w.r.to PO-61	CMD22 mon & GND	2.21k $\Omega$ $\pm$ 2%	2.211k $\Omega$	2.211k $\Omega$
9	PO-61 w.r.to RO-61	GND	0.1 $\Omega$ -0.4 $\Omega$	174m $\Omega$	172m $\Omega$
10	TMR1-34 w.r.to TMR2-34	Inst rtn	0.7 $\Omega$ -1 $\Omega$	849m $\Omega$	842m $\Omega$
11	TMR1-1 w.r.to TMR1-2	Contact I/P (P)	<100m $\Omega$	96m $\Omega$	94m $\Omega$
12	TMR3-1 w.r.to TMR3-2	Contact I/P (R)	<100m $\Omega$	68m $\Omega$	67m $\Omega$
13	TMR2-1 w.r.to PO-27	Inst & CMD 40 STS mon	1.039K $\Omega$ $\pm$ 2%	1.044k $\Omega$	1.044k $\Omega$
14	PO-27 w.r.to PO-28	CMD 40 STS mon	2 k $\Omega$ $\pm$ 2%	2.000k $\Omega$	2.000k $\Omega$
15	PO-27 w.r.to PO-29	CMD 40 STS mon	2 k $\Omega$ $\pm$ 2%	2.000k $\Omega$	2.000k $\Omega$
16	PO-28 w.r.to PO-29	CMD 40 STS mon	2 k $\Omega$ $\pm$ 2%	2.000k $\Omega$	2.000k $\Omega$
17	PO-4 w.r.to RO-4	CMD40 O/Ps	0.3 $\Omega$ -0.7 $\Omega$	577m $\Omega$	572m $\Omega$
18	PO-4 w.r.to PO-54	CMD40 O/P& mon	33.2k $\Omega$ $\pm$ 2%	33.166k $\Omega$	33.171k $\Omega$
19	PO-54 w.r.to PO-64	CMD40 mon & GND	2.21k $\Omega$ $\pm$ 2%	2.211k $\Omega$	2.211k $\Omega$
20	PO-64 w.r.to RO-64	GND	0.1 $\Omega$ -0.4 $\Omega$	162m $\Omega$	160m $\Omega$
21	TMR1-1 w.r.to TMR3-1	Contact I/P (P&R)	>10M $\Omega$	47.934M $\Omega$	59.373M $\Omega$
22	TMR3-1 w.r.to TMR1-1	Contact I/P (P&R)	>10M $\Omega$	42.560M $\Omega$	51.589M $\Omega$
23	TMR2-1 w.r.to PO-30		1.039k $\Omega$ $\pm$ 2%	1.044k $\Omega$	1.044k $\Omega$
24	PO-30 w.r.to PO-31	Inst & CMD15 STS mon	2 k $\Omega$ $\pm$ 2%	2.000k $\Omega$	2.000k $\Omega$
25	PO-30 w.r.to PO-32	CMD15 STS mon	2 k $\Omega$ $\pm$ 2%	2.000k $\Omega$	2.000k $\Omega$
26	PO-31 w.r.to PO-32	CMD15 STS mon	2 k $\Omega$ $\pm$ 2%	2.000k $\Omega$	2.000k $\Omega$
27	PO-5 w.r.to RO-5	CMD15 STS mon	0.4 $\Omega$ -0.8 $\Omega$	600m $\Omega$	595m $\Omega$
28	PO-5 w.r.to PO-55	CMD15 O/Ps	33.2k $\Omega$ $\pm$ 2%	33.170k $\Omega$	33.175k $\Omega$
29	PO-55 w.r.to PO-65	CMD15 O/P & mon	2.21k $\Omega$ $\pm$ 2%	2.210k $\Omega$	2.210k $\Omega$
30	PO-65 w.r.to RO-65	CMD15 Mon & GND	0.1 $\Omega$ -0.4 $\Omega$	161m $\Omega$	159m $\Omega$
31	TMR2-1 w.r.to PO-33	GND	1.039k $\Omega$ $\pm$ 2%	1.044k $\Omega$	1.044k $\Omega$
32	PO-33 w.r.to PO-34	Inst & CMD 41 STS mon	2 k $\Omega$ $\pm$ 2%	2.000k $\Omega$	2.000k $\Omega$
33	PO-33 w.r.to PO-35	CMD 41 STS mon	2 k $\Omega$ $\pm$ 2%	2.000k $\Omega$	2.000k $\Omega$
34	PO-34 w.r.to PO-35	CMD 41 STS mon	2 k $\Omega$ $\pm$ 2%	2.000k $\Omega$	2.000k $\Omega$
35	PO-6 w.r.to RO-6	CMD 41 STS mon	0.5 $\Omega$ -0.8 $\Omega$	647m $\Omega$	642m $\Omega$
36	PO-6 w.r.to PO-56	CMD 41O/Ps	33.2k $\Omega$ + 2%	33.158k $\Omega$	33.160k $\Omega$
37	PO-66 w.r.to RO-66	CMD 41 O/P & mon	0.1 $\Omega$ -0.4 $\Omega$	163m $\Omega$	161m $\Omega$
38	PO-56 w.r.to RO-66	CMD 41 Mon & GND	2.21k $\Omega$ $\pm$ 2%	2.210k $\Omega$	2.210k $\Omega$
39	PO-7 w.r.to RO-7	CMD 48O/Ps	0.4 $\Omega$ -0.8 $\Omega$	577m $\Omega$	573m $\Omega$
40	PO-7 w.r.to PO-57	CMD 48 O/P & mon	33.2k $\Omega$ $\pm$ 2%	33.176k $\Omega$	33.181k $\Omega$
41	PO-57 w.r.to PO-67	CMD 48 Mon & GND	2.21k $\Omega$ $\pm$ 2%	2.210k $\Omega$	2.210k $\Omega$

42	PO-67 w.r.to RO-67	GND	0.1 $\Omega$ -0.4 $\Omega$	161m $\Omega$	160m $\Omega$
43	TMR2-1 w.r.to PO-36	Inst & CMD 48 STS mon	1.039k $\Omega$ $\pm$ 2%	1.044k $\Omega$	1.044k $\Omega$
44	PO-36 w.r.to PO-37	CMD 48 STS mon	2 k $\Omega$ $\pm$ 2%	2.000k $\Omega$	2.000k $\Omega$
45	PO-36 w.r.to PO-38	CMD 48 STS mon	2 k $\Omega$ $\pm$ 2%	2.000k $\Omega$	2.000k $\Omega$
46	PO-37 w.r.to PO-38	CMD 48 STS mon	2 k $\Omega$ $\pm$ 2%	2.000k $\Omega$	2.000k $\Omega$
47	PO-8 w.r.to RO-8	CMD 49 O/Ps	0.4 $\Omega$ -0.8 $\Omega$	568m $\Omega$	563m $\Omega$
48	PO-8 w.r.to PO-58	CMD 49 O/P & mon	33.2k $\Omega$ $\pm$ 2%	33.171k $\Omega$	33.174k $\Omega$
49	PO-58 w.r.to PO-68	CMD 49 Mon & GND	2.21k $\Omega$ $\pm$ 2%	2.210k $\Omega$	2.210k $\Omega$
50	PO-68 w.r.to RO-68	GND	0.1 $\Omega$ -0.4 $\Omega$	160m $\Omega$	159m $\Omega$
51	TMR2-1 w.r.to PO-39	Inst & CMD 49 STS mon	1.039k $\Omega$ $\pm$ 2%	1.044k $\Omega$	1.044k $\Omega$
52	PO-39 w.r.to PO-40	CMD 49 STS mon	2 k $\Omega$ $\pm$ 2%	2.000k $\Omega$	2.000k $\Omega$
53	PO-39 w.r.to PO-41	CMD 49 STS mon	2 k $\Omega$ $\pm$ 2%	2.000k $\Omega$	2.000k $\Omega$
54	PO-40 w.r.to PO-41	CMD 49 STS mon	2 k $\Omega$ $\pm$ 2%	2.000k $\Omega$	2.000k $\Omega$
55	PO-9 w.r.to RO-9	CMD 50 O/Ps	0.5 $\Omega$ -0.8 $\Omega$	612m $\Omega$	607m $\Omega$
56	PO-9 w.r.to PO-59	CMD 50 O/P & mon	33.2k $\Omega$ $\pm$ 2%	33.180k $\Omega$	33.182k $\Omega$
57	PO-59 w.r.to RO-69	CMD 50 Mon & GND	2.21k $\Omega$ $\pm$ 2%	2.210k $\Omega$	2.210k $\Omega$
58	PO-69 w.r.to RO-69	GND	0.1 $\Omega$ -0.4 $\Omega$	161m $\Omega$	159m $\Omega$
59	TMR2-1 w.r.to RO-24	Inst & CMD 50 STS mon	1.039k $\Omega$ $\pm$ 2%	1.044k $\Omega$	1.044k $\Omega$
60	RO-24 w.r.to RO-25	CMD 50 STS mon	2 k $\Omega$ $\pm$ 2%	2.000k $\Omega$	2.000k $\Omega$
61	RO-24 w.r.to RO-26	CMD 50 STS mon	2 k $\Omega$ $\pm$ 2%	2.000k $\Omega$	2.000k $\Omega$
62	RO-25 w.r.to RO-26	CMD 50 STS mon	2 k $\Omega$ $\pm$ 2%	2.000k $\Omega$	2.000k $\Omega$
63	TMR2-1 w.r.to RO-27	CMD 60 O/Ps	1.039k $\Omega$ $\pm$ 2%	1.044k $\Omega$	1.044k $\Omega$
64	RO-27 w.r.to RO-28	CMD 60 O/P & mon	2 k $\Omega$ $\pm$ 2%	2.000k $\Omega$	2.000k $\Omega$
65	RO-27 w.r.to RO-29	CMD 60 Mon & GND	2 k $\Omega$ $\pm$ 2%	2.000k $\Omega$	2.000k $\Omega$
66	RO-28 w.r.to RO-29	GND	2 k $\Omega$ $\pm$ 2%	2.000k $\Omega$	2.000k $\Omega$
67	PO-10 w.r.to RO-10	Inst & CMD 50 STS mon	0.3 $\Omega$ -0.7 $\Omega$	558m $\Omega$	554m $\Omega$
68	PO-10 w.r.to RO-51	CMD 60 STS mon	33.2k $\Omega$ + 2%	33.172k $\Omega$	33.178k $\Omega$
69	RO-51 w.r.to PO-70	CMD 60 STS mon	2.21k $\Omega$ $\pm$ 2%	2.211k $\Omega$	2.211k $\Omega$
70	PO-70 w.r.to RO-70	CMD 60 STS mon	0.1 $\Omega$ -0.4 $\Omega$	165m $\Omega$	163m $\Omega$
71	PO-12 w.r.to RO-12	Spare1 O/Ps	0.2 $\Omega$ -0.6 $\Omega$	417m $\Omega$	414m $\Omega$
72	PO-12 w.r.to RO-53	Spare1 O/P & mon	33.2k $\Omega$ $\pm$ 2%	33.167k $\Omega$	33.170k $\Omega$
73	RO-53 w.r.to RO-72	Spare1 Mon & GND	2.21k $\Omega$ $\pm$ 2%	2.210k $\Omega$	2.210k $\Omega$
74	PO-72 w.r.to RO-72	GND	0.1 $\Omega$ -0.4 $\Omega$	165m $\Omega$	164m $\Omega$
75	TMR2-1 w.r.to RO-30	Inst & Spare1	1.039k $\Omega$ $\pm$ 2%	1.044k $\Omega$	1.044k $\Omega$

		STS mon			
76	RO-30 w.r.to RO-31	Spare1 STS mon	2 k $\Omega$ $\pm$ 2%	2.000k $\Omega$	2.000k $\Omega$
77	RO-30 w.r.to RO-32	Spare1 STS mon	2 k $\Omega$ $\pm$ 2%	2.000k $\Omega$	2.000k $\Omega$
78	RO-31 w.r.to RO-32	Spare1 STS mon	2 k $\Omega$ $\pm$ 2%	2.000k $\Omega$	2.000k $\Omega$
79	TMR2-1 w.r.to RO-33	Inst & CMD 72 STS mon	1.039k $\Omega$ $\pm$ 2%	1.044k $\Omega$	1.044k $\Omega$
80	RO-33 w.r.to RO-34	CMD 72 STS mon	2 k $\Omega$ $\pm$ 2%	2.000k $\Omega$	2.000k $\Omega$
81	RO-33 w.r.to RO-35	CMD 72 STS mon	2 k $\Omega$ $\pm$ 2%	2.000k $\Omega$	2.000k $\Omega$
82	RO-34 w.r.to RO-35	CMD 72 STS mon	2 k $\Omega$ $\pm$ 2%	2.000k $\Omega$	2.000k $\Omega$
83	PO-13 w.r.to RO-13	CMD 72 O/Ps	0.1 $\Omega$ -0.4 $\Omega$	224m $\Omega$	222m $\Omega$
84	RO-13 w.r.to RO-54	CMD 72 O/P & mon	33.2k $\Omega$ $\pm$ 2%	33.164k $\Omega$	33.169k $\Omega$
85	RO-54 w.r.to RO-73	CMD 72 Mon & GND	2.21k $\Omega$ $\pm$ 2%	2.210k $\Omega$	2.210k $\Omega$
86	PO-73 w.r.to RO-73	GND	0.1 $\Omega$ -0.4 $\Omega$	161m $\Omega$	160m $\Omega$
87	TMR2-1 w.r.to RO-36	Inst & CMD 58 STS mon	1.039k $\Omega$ $\pm$ 2%	1.044k $\Omega$	1.044k $\Omega$
88	RO-36 w.r.to RO-37	CMD 58 STS mon	2 k $\Omega$ $\pm$ 2%	2.000k $\Omega$	2.000k $\Omega$
89	RO-36 w.r.to RO-38	CMD 58 STS mon	2 k $\Omega$ $\pm$ 2%	2.000k $\Omega$	2.000k $\Omega$
90	RO-37 w.r.to RO-38	CMD 58 STS mon	2 k $\Omega$ $\pm$ 2%	2.000k $\Omega$	2.000k $\Omega$
91	PO-15 w.r.to RO-15	CMD 58 O/Ps	0.3 $\Omega$ -0.7 $\Omega$	489m $\Omega$	484m $\Omega$
92	PO-15 w.r.to RO-56	CMD 58 O/P & mon	33.2k $\Omega$ $\pm$ 2%	33.180k $\Omega$	33.183k $\Omega$
93	RO-56 w.r.to RO-75	CMD 58 Mon & GND	2.21k $\Omega$ $\pm$ 2%	2.211k $\Omega$	2.211k $\Omega$
94	PO-75 w.r.to RO-75	GND	0.1 $\Omega$ -0.4 $\Omega$	161m $\Omega$	160m $\Omega$
95	PO-16 w.r.to RO-16	CMD 51 O/Ps	<100m $\Omega$	83m $\Omega$	82m $\Omega$
96	PO-16 w.r.to RO-57	CMD 51 O/P & mon	>100M $\Omega$	>100M $\Omega$	>100M $\Omega$
97	RO-57 w.r.to RO-76	CMD 51 Mon & GND	>100M $\Omega$	>100M $\Omega$	>100M $\Omega$
98	RO-76 w.r.to PO-76	GND	0.1 $\Omega$ -0.4 $\Omega$	161m $\Omega$	159m $\Omega$
99	TMR2-1 w.r.to RO-39	Inst & CMD 51 STS mon	1.475k $\Omega$ $\pm$ 2%	1.475k $\Omega$	1.475k $\Omega$
100	RO-39 w.r.to RO-40	CMD 51 STS mon	2 k $\Omega$ $\pm$ 2%	2.001k $\Omega$	2.001k $\Omega$
101	RO-39 w.r.to RO-41	CMD 51 STS mon	2 k $\Omega$ $\pm$ 2%	2.000k $\Omega$	2.000k $\Omega$
102	RO-40 w.r.to RO-41	CMD 51 STS mon	2 k $\Omega$ $\pm$ 2%	2.001k $\Omega$	2.001k $\Omega$
103	PO-22 w.r.to RO-22	CMD 30 BAT I/P	<1 $\Omega$	841m $\Omega$	834m $\Omega$
104	PO-17 w.r.to RO-17	CMD 30 O/Ps	<1 $\Omega$	776m $\Omega$	769m $\Omega$
105	PO-45 w.r.to RO-45	CMD 31 BAT I/P	<1 $\Omega$	703m $\Omega$	697m $\Omega$
106	PO-18 w.r.to RO-18	CMD 31 O/Ps	0.4 $\Omega$ -1 $\Omega$	544m $\Omega$	539m $\Omega$
107	PO-46 w.r.to RO-46	CMD 33 BAT I/P	<1 $\Omega$	816m $\Omega$	809m $\Omega$
108	PO-19 w.r.to RO-19	CMD 33 O/Ps	<1 $\Omega$	906m $\Omega$	899m $\Omega$
109	PO-77 w.r.to RO-77	CMD 10 BAT I/P	<1 $\Omega$	706m $\Omega$	700m $\Omega$
110	PO-20 w.r.to RO-20	CMD 10 O/Ps	<1 $\Omega$	869m $\Omega$	863m $\Omega$
111	PO-47 w.r.to RO-47	CMD 76 BAT I/P	0.8 $\Omega$ -1.2 $\Omega$	970m $\Omega$	961m $\Omega$

112	PO-21 w.r.to RO-21	CMD 76 O/Ps	0.8 $\Omega$ -1.2 $\Omega$	929m $\Omega$	922m $\Omega$
113	PO-42 w.r.to PO-43	GND	<100m $\Omega$	32m $\Omega$	32m $\Omega$
114	PO-42 w.r.to PO-44		<100m $\Omega$	34m $\Omega$	34m $\Omega$
115	PO-42 w.r.to RO-42	GND	<750m $\Omega$	168m $\Omega$	167m $\Omega$
116	PO-42 w.r.to RO-43		<750m $\Omega$	167m $\Omega$	166m $\Omega$
117	PO-42 w.r.to RO-44		<750m $\Omega$	165m $\Omega$	163m $\Omega$
118	TMR1-3 w.r.to TMR1-4	SPS1 (H)	<100m $\Omega$	31m $\Omega$	30m $\Omega$
119	TMR2-3 w.r.to TMR2-4	SPS2 (H)	<100m $\Omega$	30m $\Omega$	30m $\Omega$
120	TMR3-3 w.r.to TMR3-4	SPS3 (H)	<100m $\Omega$	33m $\Omega$	33m $\Omega$
121	TMR2-43 w.r.to TMR2-44	GND	<100m $\Omega$	30m $\Omega$	29m $\Omega$
122	TMR2-43 w.r.to TMR1-43		0.1 $\Omega$ -0.5 $\Omega$	254m $\Omega$	252m $\Omega$
123	TMR2-43 w.r.to TMR1-44		0.1 $\Omega$ -0.5 $\Omega$	253m $\Omega$	251m $\Omega$
124	TMR2-43 w.r.to PO-42		0.1 $\Omega$ -0.5 $\Omega$	399m $\Omega$	396m $\Omega$
125	TMR2-43 w.r.to PO-61		0.1 $\Omega$ -0.5 $\Omega$	402m $\Omega$	399m $\Omega$
126	TMR2-43 w.r.to PO-64		0.1 $\Omega$ -0.5 $\Omega$	401m $\Omega$	398m $\Omega$
127	TMR2-43 w.r.to PO-65		0.1 $\Omega$ -0.5 $\Omega$	393m $\Omega$	389m $\Omega$
128	TMR2-43 w.r.to PO-66		0.1 $\Omega$ -0.5 $\Omega$	391m $\Omega$	387m $\Omega$
129	TMR2-43 w.r.to PO-67		0.1 $\Omega$ -0.5 $\Omega$	389m $\Omega$	386m $\Omega$
130	TMR2-43 w.r.to PO-68		0.1 $\Omega$ -0.5 $\Omega$	387m $\Omega$	384m $\Omega$
131	TMR2-43 w.r.to PO-69		0.1 $\Omega$ -0.5 $\Omega$	385m $\Omega$	382m $\Omega$
132	TMR2-43 w.r.to PO-70		0.1 $\Omega$ -0.5 $\Omega$	383m $\Omega$	380m $\Omega$
133	TMR2-43 w.r.to PO-72		0.1 $\Omega$ -0.5 $\Omega$	386m $\Omega$	382m $\Omega$
134	TMR2-43 w.r.to PO-73		0.1 $\Omega$ -0.5 $\Omega$	372m $\Omega$	368m $\Omega$
135	TMR2-43 w.r.to PO-75		0.1 $\Omega$ -0.5 $\Omega$	370m $\Omega$	366m $\Omega$
136	TMR2-43 w.r.to PO-76		0.1 $\Omega$ -0.5 $\Omega$	362m $\Omega$	358m $\Omega$
137	All pins w.r.t chassis		>100M $\Omega$	>100M $\Omega$	>100M $\Omega$
138	All connector mounting post w.r.t chassis		<100m $\Omega$	<100m $\Omega$	<100m $\Omega$
139	PO-2 w.r.to RO-2		<100M $\Omega$	43m $\Omega$	55m $\Omega$
140	PO-16 w.r.to RO-16		<100M $\Omega$	71m $\Omega$	82m $\Omega$

**List of Connectors in the package**

- 1. TMR1 ,TMR2 and TMR3=44 pin M,**
- 2.PO,RO=78 pin Female**