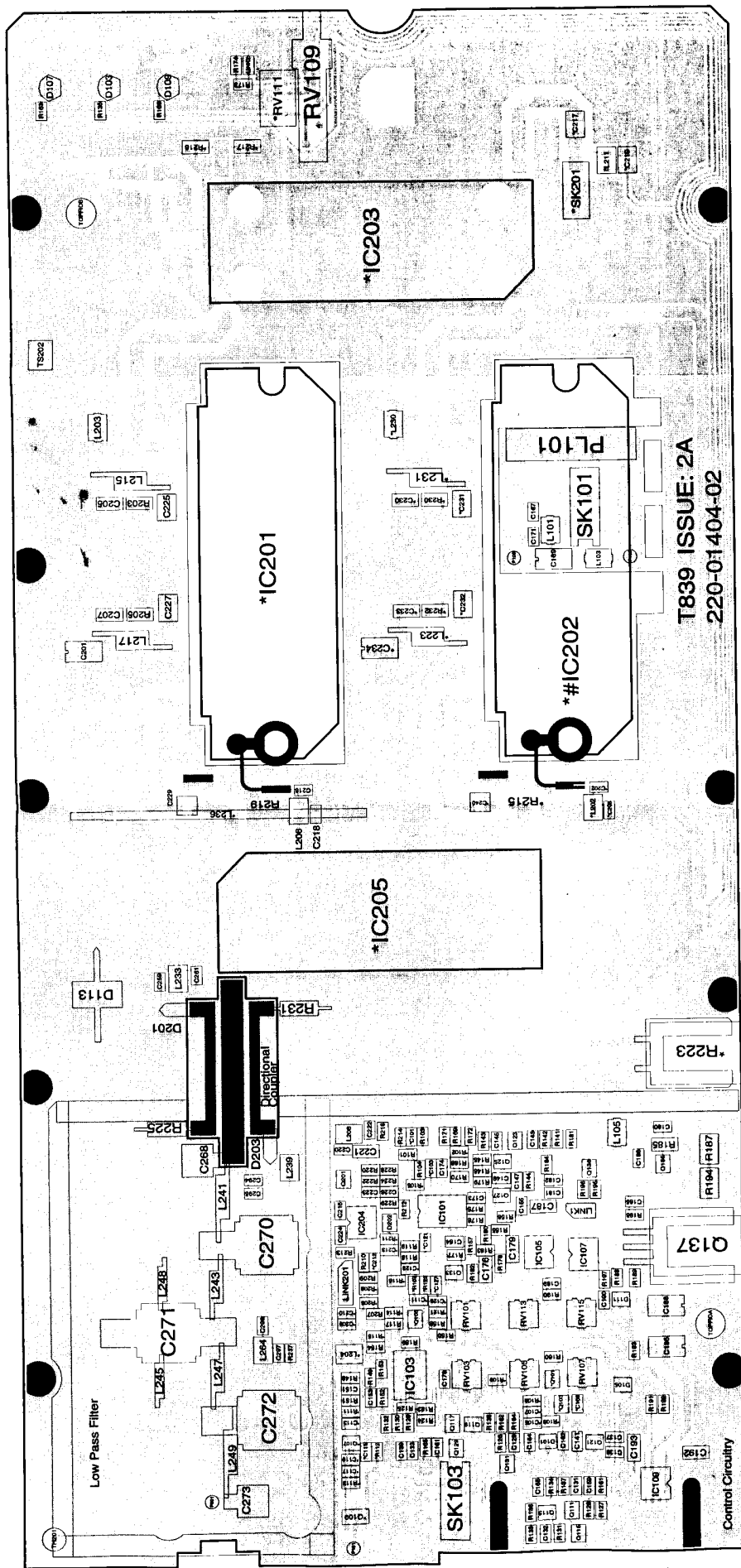




T839 ISSUE: 2A
220-01404-02

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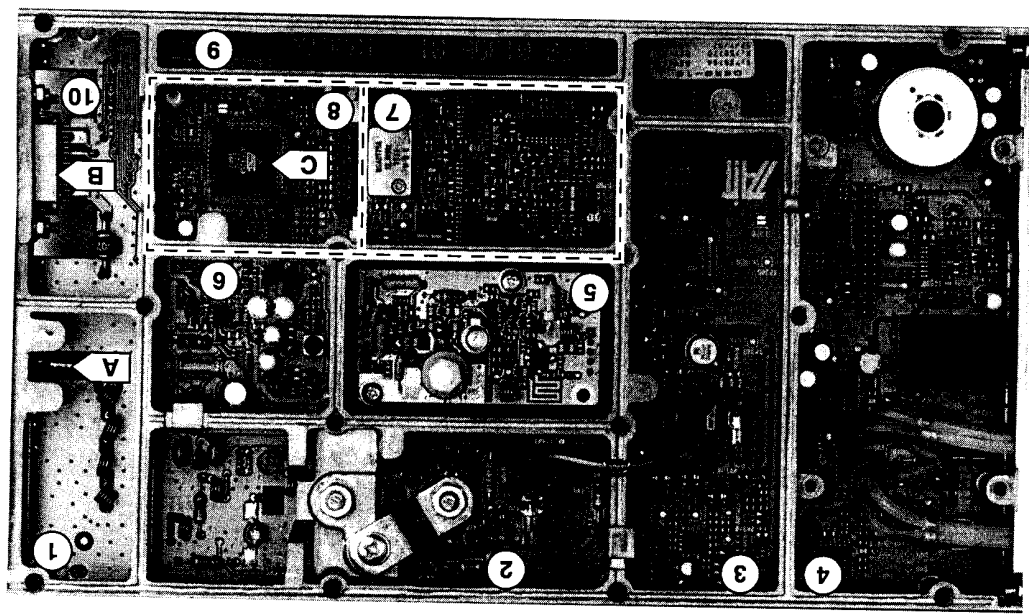


Figure 1.1 T836 Main Circuit Block Identification

- Key:**
- 1 low pass filter
 - 2 PA
 - 3 exciter drive amplifier
 - 4 audio processor
 - 5 VCO
 - 6 regulators
 - 7 synthesiser
 - 8 microcontroller and CTCSS
 - 9 duct for cabling to extra D-range (if fitted)
 - 10 D-range
 - A RF output
 - B D-range connector ("D-range 1") incl. audio in & DC in (refer to Section 2.2 in Part F)
 - C microcontroller

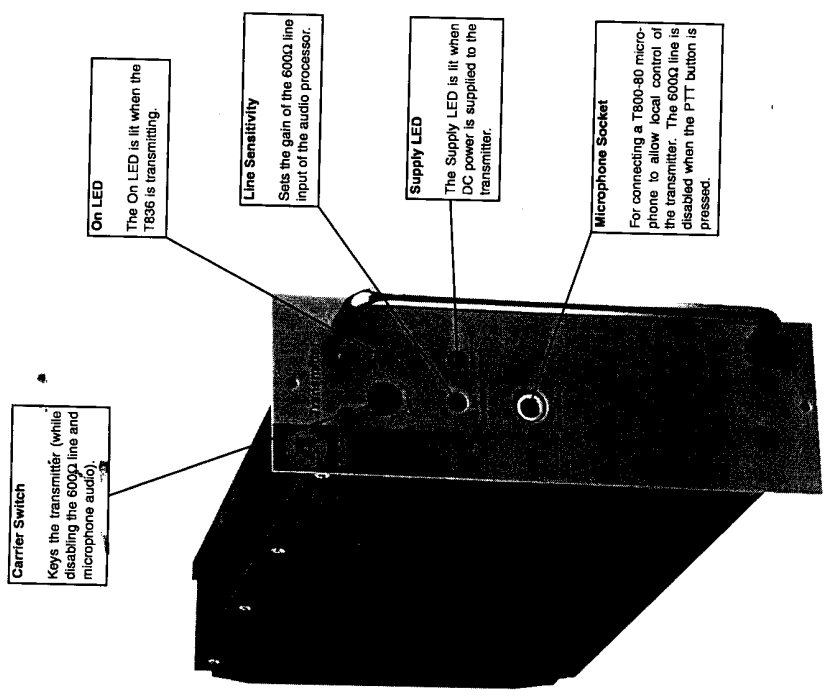
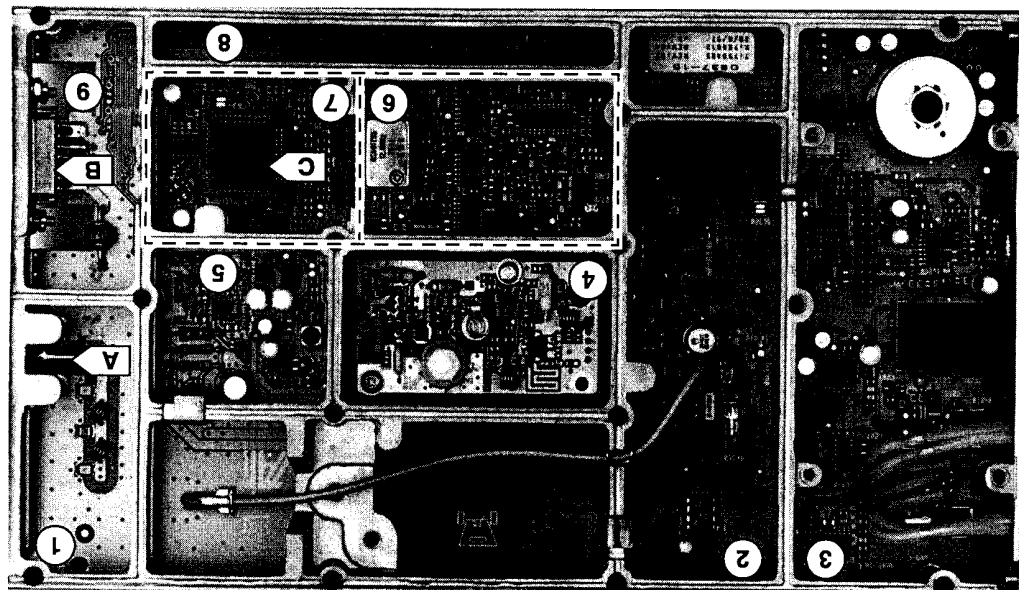


Figure 1.2 T836 Front Panel Controls



- Key:**
- 1 low pass filter
 - 2 exciter drive amplifier
 - 3 audio processor
 - 4 VCO
 - 5 regulators
 - 6 synthesiser
 - 7 microcontroller and CTCSS
 - 8 duct for cabling to extra D-range (if fitted)
 - 9 D-range
 - A RF output
 - B D-range connector ("D-range 1") incl. audio in & DC in (refer to Section 2.2 in Part F)
 - C microcontroller

Figure 1.3 T837 Main Circuit Block Identification

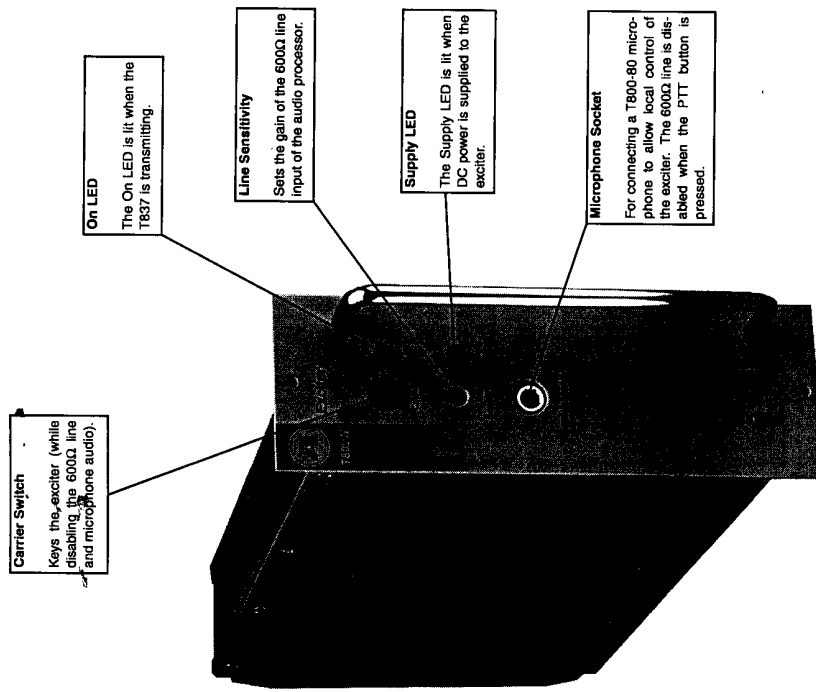


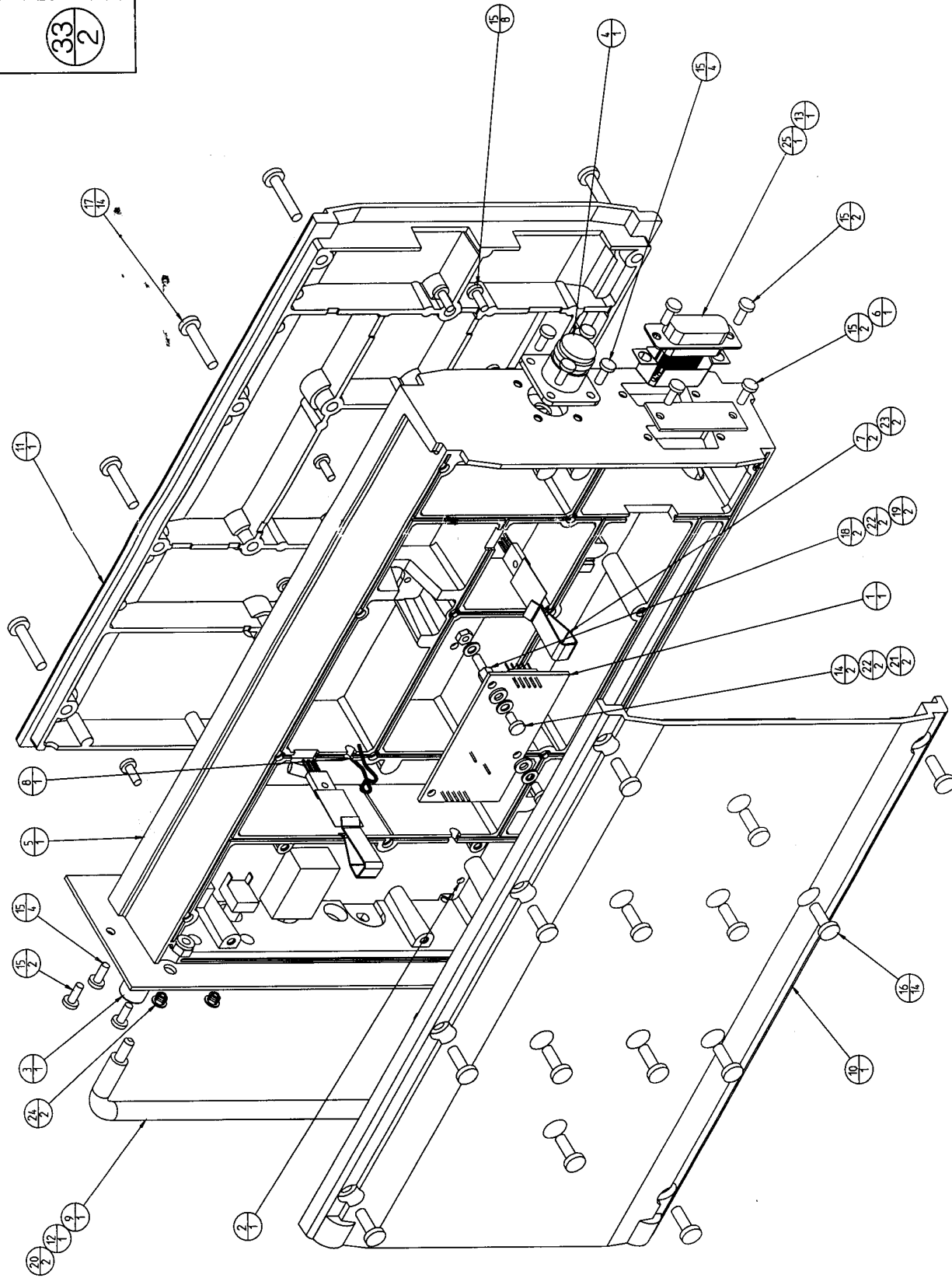
Figure 1.4 T837 Front Panel Controls

Key

The upper number is the component identification number which appears in the "Legend" column of the Mechanical & Miscellaneous Parts on the facing page.

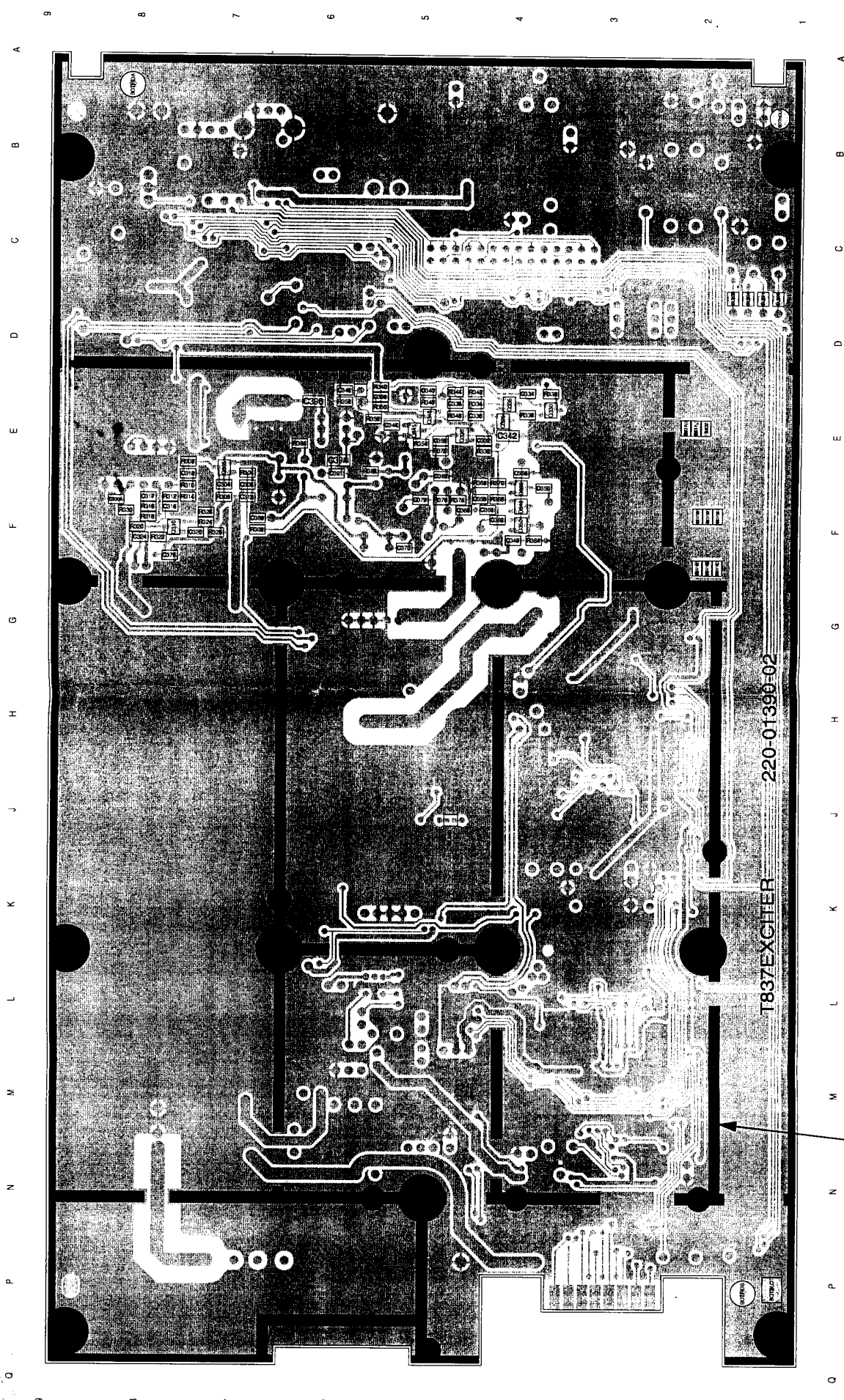
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The lower number indicates how many of this component are used in this location or function.



IPN 220-01390-02
C6.3.16 T837 PCB Information

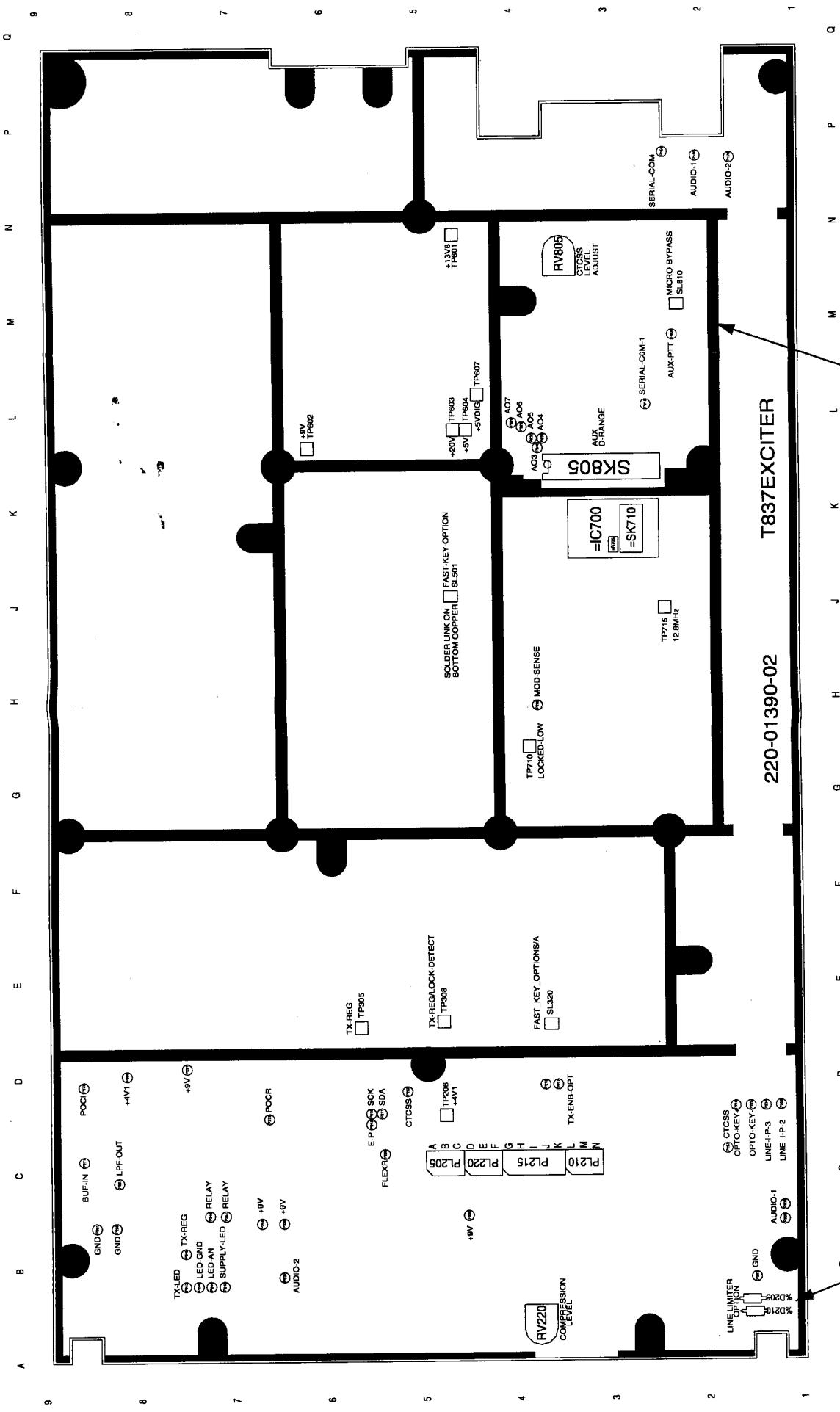
M830-00



T837 PCB Layout
Bottom Side
220-01390-02

The darker shading shows the footprint of the bottom cover.





T837 Test Points & Options Connections
Top & Bottom Side Shown
220-01390-02

The dark shading shows the outline of the chassis.

30/04/98

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%D210 and %D205 are shown incorrectly on the PCB encoding as #D210 and #D205.

T837 Grid Reference Index (IPN 220-01390-02)

How To Use This Grid Reference Index

The first digit in the PCB layout reference is a "1" or "2", indicating the top or bottom side layout respectively, and the last two characters give the location of the component on that diagram.

The first digit in the circuit diagram reference is the sheet number, and the last two characters give the location of the component on that sheet.

Device	PCB	Circuit	Device	PCB	Circuit	Device	PCB	Circuit	Device	PCB	Circuit
C201	1:C1	2-B8	C318	2:F8	3-F9	C705	1:J3	7-B7	C611A	1:L5	6-H8
C202	1:C1	2-C8	C320	2:F7	3-G8	C706	1:J2	7-B5	C611B	1:M5	6-J8
C204	1:A2	2-E8	C324	2:F8	3-H9	%C707	1:K4	7-C8	C631A	1:M5	6-M6
C205	1:A2	2-E8	C332	2:E4	3-B5	C708	1:J2	7-C9	C740A	1:H2	7-B4
C207	1:C7	2-B6	C334	2:E4	3-D4	C709	1:K4	7-D9	C740B	1:H2	7-B3
C209	1:C6	2-D6	C336	2:E4	3-D6	C710	1:J3	7-E8	C741A	1:H2	7-C4
C210	1:C7	2-H0	C338	2:E5	3-F5	C712	1:H2	7-E7	C741B	1:G2	7-C3
C211	1:B7	2-F8	C340	2:E5	3-F5	%C713	1:H2	7-E6	C742A	1:H2	7-D4
C213	1:B6	2-G8	C342	2:E4	3-G6	C720	1:J3	7-F8	C742B	1:H3	7-D3
C215	1:B6	2-G8	C344	2:E5	3-J5	C722	1:J4	7-G8			
C217	1:C6	2-H8	C346	2:E6	3-J6	C724	1:J4	7-H6	D111	1:P4	1-R1
C219	1:C6	2-H7	C349	2:F4	3-C2	C725	1:J4	7-J6	%D205	1:B2	2-D9
C221	1:D5	2-G6	C350	2:F4	3-E3	C726	1:K4	7-J6	%D210	1:B2	2-E9
C223	1:C5	2-J6	C353	2:F4	3-D0	C727	1:J3	7-J8	D220	1:B4	2-P7
C225	1:C3	2-K7	C356	2:E4	3-F1	C729	1:H3	7-M8	D220	1:B4	2-P6
C227	1:B4	2-K7	C359	2:E5	3-F1	%C733	1:J3	7-M5	D230	1:B7	2-R5
C229	1:B3	2-L7	C362	2:F4	3-G2	C735	1:J2	7-A1	D240	1:D4	2-C4
C230	1:B4	2-H0	C365	2:F4	3-G2	C736	1:J2	7-B1	D240	1:D4	2-B2
C232	1:A4	2-M7	C368	2:F5	3-H2	C743	1:H2	7-B1	D250	1:D3	2-E2
C233	1:A5	2-N7	C370	2:F5	3-K3	C745	1:G3	7-D1	D250	1:D3	2-D3
C235	1:B5	2-K5	C373	1:E6	3-L4	C750	1:H4	7-Q7	D260	1:C2	2-C2
C237	1:C4	2-K5	C376	2:F8	3-L4	C757	1:G4	7-F5	D260	1:C2	2-C2
C239	1:C4	2-L4	C379	2:F5	3-K3	C759	1:G4	7-G4	D270	1:D2	2-C1
C241	1:B4	2-M6	C382	2:E5	3-L2	C761	1:G3	7-J4	D270	1:D2	2-C1
C242	1:B3	2-L6	C385	1:F6	3-P4	C762	1:G3	7-K4	D340	2:F4	3-D2
C243	1:B4	2-P6	C388	2:F7	3-P4	C764	1:H3	7-J2	D350	2:F4	3-E2
C245	1:C5	2-A4	C391	2:E6	3-P2	C765	1:G3	7-K2	D360	2:F4	3-E2
C247	1:D4	2-B4	C394	2:E6	3-P3	C767	1:H3	7-K3	D610	1:N6	6-L6
C249	1:D4	2-C4	C396	2:E6	3-Q3	C769	1:H4	7-N4	D610	1:N6	6-K6
C251	1:C3	2-E4	C399	2:E5	3-R4	C770	1:H4	7-N4	D620	1:N4	6-B1
C253	1:D3	2-E3	C503	1:K6	5-L9	C772	1:G4	7-N2	D620	1:N4	6-B2
C255	1:D3	2-D2	C505	1:K6	5-M6	C774	1:H4	7-P2	D630	1:M5	6-G2
C257	1:D3	2-F2	C510	1:J5	5-C0	C776	1:H4	7-N1	D630	1:M5	6-G3
C259	1:C6	2-J2	C513	1:H5	5-G2	C782	1:G2	7-N1	D635	1:M4	6-G3
C260	1:D8	2-G0	C535	1:K5	5-M2	C784	1:G2	7-Q1	D640	1:L5	6-M1
C261	1:C6	2-K2	C550	1:K4	5-L0	C786	1:G2	7-R1	D640	1:L5	6-M2
C263	1:D6	2-L3	C605	1:L6	6-D8	C788	1:G3	7-P0	D710	1:J3	7-L8
C265	1:D5	2-N4	C623	1:M6	6-N8	C790	1:G3	7-Q0	D710	1:J3	7-L8
C267	1:C8	2-P3	C625	1:M6	6-Q8	C792	1:G3	7-Q0	D720	1:H3	7-P8
&C269	1:C8	2-P3	C626	1:M6	6-R8	C810	1:L3	8-K8	D720	1:H3	7-P8
C271	1:C8	2-Q3	C628	1:M6	6-R8	C812	1:L2	8-F5	D730	1:H3	7-H1
C273	1:C8	2-Q4	C630	1:M5	6-K5	C813	1:K2	8-H5	D740	1:H3	7-K2
C275	1:D3	2-E1	C634	1:N5	6-M4	C822	1:M2	8-B2	D810	1:M2	8-B7
C277	1:C4	2-G1	C636	1:M5	6-M4	C823	1:M3	8-C2			
C279	1:B4	2-G1	C638	1:M6	6-P5	C824	1:M2	8-C1	IC210	1:C7	2-H0
C281	1:B5	2-J1	C640	1:M5	6-R6	C826	1:N3	8-C0	IC210	1:C7	2-Q0
C283	1:B5	2-K0	C655	1:M4	6-C1	C827	1:N3	8-D0	IC210	1:C7	2-K2
C285	1:D7	2-L0	C660	1:L5	6-K1	C828	1:N3	8-E0	IC210	1:C7	2-L1
C287	1:C6	2-M1	C665	1:L5	6-K1	C830	1:N3	8-R1	IC210	1:C7	2-C6
C289	1:C8	2-N1	C670	1:L6	6-L1	C838	1:N4	8-F0	IC220	1:D6	2-P0
C291	1:D7	2-P1	C673	1:L5	6-P2	C841	1:N2	8-K2	IC220	1:D6	2-M3
C293	1:D7	2-Q1	C677	1:L6	6-P1	C844	1:M2	8-L2	IC220	1:D6	2-D5
%C294	1:D7	2-Q0	C681	1:M5	6-R3	C910	1:P7	9-E4	IC230	1:B4	2-G0
%C295	1:D6	2-Q0	C684	1:M5	6-R3	C920	1:P7	9-F4	IC230	1:B4	2-J0
C304	2:F7	3-A8	C687	1:L6	6-Q1	C930	1:P6	9-G4	IC230	1:B4	2-L5
C308	2:F7	3-C8	C690	1:L6	6-R1	C330A	2:F8	3-N8	IC230	1:B4	2-N6
C312	2:F7	3-D8	C693	1:L6	6-R1	C330B	1:F8	3-N8	IC230	1:B4	2-G1
C316	2:E8	3-D9	C700	1:K4	7-A8	C610A	1:M5	6-F8	IC240	1:D4	2-F3
C317	2:F8	3-E8	C703	1:J3	7-B7	C610B	1:M5	6-G8	IC250	1:D3	2-E1

Device	PCB	Circuit	Device	PCB	Circuit	Device	PCB	Circuit	Device	PCB	Circuit
R560	1:K5	5-M0	R785	1:G3	7-Q1	SK533	1:K5	5-N4			
R609	1:L6	6-B8	R786	1:G2	7-Q1	SK534	1:K5	5-N3			
R613	1:L6	6-C8	R787	1:G2	7-R2	SK535	1:K5	5-N2			
R615	1:M5	6-F9	R790	1:G3	7-P0	=SK710	1:K3	7-A7			
R617	1:M5	6-J8	R791	1:G3	7-Q0	SK805	1:K3	8-Q9			
R619	1:M6	6-L8	R792	1:G3	7-Q0	SK805	1:K3	8-Q7			
R621	1:M6	6-L8	R801	1:M2	8-D7	SK805	1:K3	8-Q5			
R625	1:N6	6-L7	R802	1:M2	8-D7	SK805	1:K3	8-Q7			
R629	1:M5	6-P6	R808	1:L2	8-B4	SK805	1:K3	8-Q8			
R633	1:M5	6-Q8	R809	1:L2	8-D5	SK805	1:K3	8-Q7			
R637	1:N5	6-K6	R810	1:L2	8-D6	SK805	1:K3	8-Q8			
R641	1:N5	6-L4	R811	1:L2	8-E6	SK805	1:K3	8-Q6			
R645	1:N5	6-L5	R812	1:L2	8-D5	SK805	1:K3	8-Q8			
R649	1:M5	6-M5	R813	1:L2	8-D4	SK805	1:K3	8-Q6			
R653	1:M5	6-Q4	R815	1:L2	8-F4	SK805	1:K3	8-Q6			
R657	1:M5	6-D1	R816	1:L2	8-F4	SK805	1:K3	8-Q9			
R661	1:M5	6-E3	R818	1:M2	8-F5	SK805	1:K3	8-Q6			
R665	1:M5	6-E2	R819	1:M2	8-F5	SK805	1:K3	8-Q9			
R669	1:M5	6-E2	R821	1:M4	8-B3	SK805	1:K3	8-Q7			
R673	1:M5	6-E0	R822	1:M4	8-E3	SK805	1:K3	8-Q8			
R677	1:M4	6-F4	R824	1:L4	8-L8	SK810	1:M3	8-H5			
R681	1:L5	6-L2	R825	1:L4	8-L8						
R685	1:L5	6-N2	R826	1:L4	8-L8	SL201	2:D1	2-B9			
R689	1:L6	6-Q3	R827	1:L4	8-L7	SL202	2:D1	2-B8			
R693	1:L6	6-Q1	R828	1:L4	8-L7	SL203	2:D2	2-B2			
R696	1:M6	6-Q1	R829	1:L4	8-P9	SL204	2:D2	2-B1			
R701	1:K4	7-A9	R830	1:L3	8-P9	SL320	1:E4	3-E4			
R702	1:K4	7-C9	R831	1:L3	8-P9	SL501	2:J5	5-F0			
R703	1:J3	7-C8	R832	1:L3	8-P8	SL810	1:M2	8-C7			
=R705	1:K3	7-A7	R833	1:L3	8-P8						
R706	1:J3	7-B6	R835	1:L3	8-P8	SW230	1:B8	2-B4			
R708	1:H3	7-C7	R836	1:L3	8-P8						
R710	1:H2	7-E7	R837	1:L3	8-P7	T210	1:B2	2-C8			
R711	1:J2	7-B6	R840	1:L3	8-P7	T610	1:L5	6-N2			
R712	1:J3	7-D9	R841	1:L3	8-P7						
R713	1:J4	7-F8	R842	1:L3	8-P6	TP206	1:D5	2-H7			
%R715	1:K4	7-H6	R843	1:L3	8-P6	TP305	2:E6	3-L6			
R717	1:J4	7-H7	R845	1:M4	8-Q5	TP308	1:E5	3-G6			
R718	1:J4	7-H7	R846	1:K2	8-Q4	TP601	1:N5	6-K9			
R719	1:J4	7-J6	R847	1:K2	8-Q4	TP602	1:L6	6-R9			
R720	1:J3	7-K7	R848	1:L2	8-J4	TP603	1:L5	6-J2			
R721	1:J3	7-K9	R849	1:M4	8-Q3	TP604	1:L5	6-M6			
R722	1:J3	7-K8	R850	1:K2	8-Q4	TP607	1:L4	6-J9			
R723	1:H3	7-M7	R853	1:M4	8-N3	TP710	1:H4	7-H5			
R725	1:J4	7-N7	R854	1:M4	8-N3	TP715	1:J2	7-C6			
%R726	1:J3	7-N6	R855	1:M2	8-B0						
R727	1:H3	7-N9	R859	1:N2	8-C1						
R728	1:H3	7-N8	R861	1:N2	8-D1						
R742	1:H2	7-B4	R863	1:N3	8-E1						
R743	1:H2	7-C5	R865	1:N4	8-E0						
R744	1:G2	7-D4	R867	1:N3	8-E1						
R746	1:H3	7-E4	R871	1:N3	8-G2						
R747	1:H3	7-E5	R872	1:M4	8-H1						
R748	1:J2	7-A1	R873	1:N3	8-G1						
R749	1:J2	7-B1	R874	1:N3	8-H0						
R750	1:H4	7-Q7	R875	1:N3	8-G0						
R752	1:G4	7-F5	R876	1:N3	8-H0						
R753	1:G4	7-F3	R877	1:M2	8-K2						
R754	1:G3	7-F3	R879	1:N2	8-L3						
R756	1:G3	7-G5									
R757	1:G4	7-G4	RV210	1:B7	2-F9						
R758	1:H3	7-H4	RV220	1:A4	2-M6						
R759	1:H3	7-J4	RV805	1:N4	8-F1						
R760	1:H3	7-K4									
R762	1:H3	7-K4	SK205	1:B5	2-A5						
R763	1:H4	7-L4	SK310	1:E7	3-R3						
R765	1:H3	7-H2	SK420	1:M8	1-M8						
R766	1:G3	7-J3	SK501	1:G6	5-D6						
R767	1:H3	7-K2	SK502	1:G6	5-D5						
R769	1:H3	7-L3	SK503	1:G6	5-D4						
R771	1:H4	7-M3	SK504	1:G5	5-D3						
R772	1:G4	7-M2	SK505	1:G5	5-D2						
R774	1:H4	7-M2	SK513	1:H5	5-H3						
R775	1:H4	7-N2	SK522	1:H6	5-K5						
R777	1:H4	7-R3	SK531	1:K6	5-N6						
R784	1:G3	7-P1	SK532	1:K5	5-N5						

Device	PCB	Circuit	Device	PCB	Circuit	Device	PCB	Circuit	Device	PCB	Circuit
IC260	1:D8	2-N0	P239	1:C7	2-R8	Q820	1:L2	8-D5	R284	1:D7	2-L0
IC260	1:D8	2-F0	P240	1:C7	2-R8	Q830	1:L2	8-D5	R285	1:C8	2-M0
IC260	1:D8	2-Q2	P243	1:B7	2-R7	Q840	1:L2	8-F5	R286	1:C7	2-M0
IC260	1:D8	2-Q3	P244	1:B7	2-R7	Q850	1:M2	8-G5	R287	1:D9	2-M0
IC260	1:D8	2-N3	P245	1:B8	2-R6	Q860	1:L4	8-B3	R288	1:C6	2-M2
IC330	1:E8	3-E9	P247	1:B8	2-R6				R289	1:D9	2-M0
IC330	1:E8	3-M8	P248	1:B7	2-R6	%R150	1:P2	1-R4	R290	1:C8	2-N2
IC330	1:E8	3-M0	P249	1:C7	2-R5	R160	1:P2	1-R3	R291	1:C8	2-N1
IC610	1:M5	6-G8	P251	1:C7	2-R5	R201	1:B2	2-E9	R292	1:D8	2-Q2
IC630	1:N5	6-K5	P255	1:D5	2-R4	R202	1:C1	2-F9	R293	1:D9	2-Q2
IC640	1:M5	6-F1	P257	1:C2	2-R4	R204	1:C7	2-B6	R294	1:D9	2-Q1
IC640	1:M5	6-Q6	P259	1:B8	2-R3	R205	1:C7	2-D6	R295	1:D8	2-R1
IC640	1:M5	6-N6	P261	1:B8	2-R3	R206	1:B7	2-G8	R296	1:D6	2-P0
IC650	1:L5	6-F4	P263	1:B2	2-R2	R207	1:B6	2-G8	R297	1:D7	2-P1
=IC700	1:K3	7-A8	P265	1:C5	2-M0	R208	1:B6	2-G8	%R298	1:D7	2-Q0
IC710	1:J2	7-E8	P267	1:C8	2-N2	R209	1:C6	2-H8	R299	1:C7	2-R0
IC710	1:J2	7-C6	P269	1:D8	2-P2	R210	1:B6	2-H7	R302	2:F7	3-A7
IC710	1:J2	7-G0	P271	1:C9	2-N1	R212	1:D4	2-F6	R304	2:E7	3-B7
IC710	1:J2	7-D6	P273	1:D9	2-P0	R213	1:C4	2-G6	R306	2:F7	3-C8
IC710	1:J2	7-D7	P275	1:D7	2-Q0	R214	1:D4	2-G6	R308	2:E8	3-C9
IC710	1:J2	7-D6	P750	1:H4	7-R3	R215	1:C4	2-H6	R310	2:F8	3-C9
IC710	1:J2	7-C6	P805	1:M2	8-A7	R216	1:C3	2-K7	R312	2:F8	3-D8
IC720	1:J3	7-P6	P810	1:L3	8-A5	R217	1:A4	2-M8	R314	2:F8	3-D7
IC720	1:J3	7-J0	P820	1:L4	8-M8	R218	1:A4	2-N7	R316	2:F8	3-E8
IC720	1:J3	7-N7	P825	1:L4	8-M8	R219	1:B4	2-N8	R318	2:F8	3-E9
IC720	1:J3	7-M7	P830	1:L4	8-M8	R221	1:B7	2-R7	R320	2:F8	3-G9
IC720	1:J3	7-K7	P835	1:L4	8-M7	R223	1:B4	2-K6	R322	2:F8	3-H8
IC720	1:J3	7-F8	P840	1:L4	8-M7	R224	1:C4	2-K5	R324	2:F7	3-J8
IC720	1:J3	7-K0				R225	1:B4	2-L5	R326	2:F7	3-J7
IC730	1:J4	7-H8	PL100	1:P3	1-F0	R226	1:B4	2-L4	R328	2:F7	3-K8
IC730	1:J4	7-G7	PL205	1:C5	2-J8	R227	1:B4	2-M4	R330	2:F8	3-M8
IC740	1:H2	7-D1	PL210	1:C3	2-H4	R229	1:B4	2-M7	R332	2:E4	3-C5
IC750	1:H4	7-N3	PL215	1:C4	2-K3	R230	1:B4	2-M6	R334	2:E4	3-D6
IC750	1:H4	7-H5	PL220	1:C4	2-H2	R231	1:B4	2-M6	R336	2:E4	3-D5
IC750	1:H4	7-Q7				R232	1:B4	2-M5	R338	2:E4	3-D4
IC820	1:L4	8-N2	Q210	1:C6	2-J8	R233	1:B4	2-M6	R340	2:E5	3-D5
IC830	1:N3	8-J0	Q220	1:B3	2-L7	R235	1:B4	2-P6	R342	2:E4	3-F5
IC830	1:N3	8-Q1	Q230	1:A4	2-M8	R237	1:B7	2-Q7	R344	2:E5	3-F6
IC830	1:N3	8-J0	Q240	1:B7	2-Q7	R238	1:B7	2-R7	R346	2:E5	3-F6
IC830	1:N3	8-J1	Q250	1:B7	2-R5	R239	1:B8	2-R6	R348	2:E5	3-G5
IC830	1:N3	8-C0	Q260	1:C4	2-F3	R241	1:B8	2-Q6	R350	2:E5	3-H5
			Q270	1:D2	2-D1	R242	1:B7	2-Q5	R352	2:E6	3-J6
L335	1:F4	3-E3	Q305	2:E7	3-B8	R244	1:C6	2-A5	R354	2:E5	3-J6
L340	1:E4	3-F2	Q310	2:F8	3-G8	R245	1:D4	2-D4	R356	2:E6	3-K6
L345	1:F5	3-H2	Q315	1:F8	3-J8	R247	1:D3	2-E4	R359	1:F5	3-B2
L350	1:F5	3-H2	Q320	2:E5	3-A5	R248	1:C3	2-E3	R360	1:F4	3-C2
L355	1:F5	3-J3	Q325	2:E4	3-C5	R249	1:D4	2-F3	R362	1:F4	3-C2
L360	1:F5	3-K3	Q330	2:E4	3-D4	R251	1:C4	2-G4	R364	2:F4	3-D2
L365	1:E5	3-L3	Q335	2:E4	3-E6	R253	1:C6	2-J2	R366	2:F4	3-D1
L370	1:E5	3-M2	Q340	2:E5	3-G6	R254	1:C6	2-K3	R368	2:F4	3-D0
L375	1:E6	3-M4	Q345	2:E5	3-H6	R255	1:C7	2-K2	R370	2:F4	3-E1
L380	1:F6	3-N4	Q365	1:F5	3-J2	R256	1:D8	2-M3	R372	2:E5	3-G1
L385	1:F6	3-N3	Q370	1:E5	3-N3	R257	1:D8	2-N5	R374	2:F5	3-J2
L390	1:E6	3-R4	Q510	1:J5	5-D1	R258	1:D8	2-N4	R376	2:F5	3-J2
L750	1:G4	7-R0	Q520	1:J5	5-H2	R259	1:D5	2-P4	R378	1:F5	3-J3
L910	1:P7	9-F4	Q530	1:J5	5-H0	R260	1:D8	2-N4	R380	1:F5	3-J4
L920	1:P7	9-G4	Q540	1:K5	5-L2	R262	1:D8	2-N3	R382	1:F5	3-J4
			Q550	1:K5	5-L0	R263	1:C8	2-P3	R384	2:E6	3-L4
P100	1:P6	1-R8	Q610	1:L6	6-E8	&R264	1:C8	2-P3	R386	2:E6	3-L2
P150	1:P2	1-Q4	Q620	1:N6	6-P8	&R265	1:C8	2-P3	R388	1:F6	3-M4
P160	1:P2	1-Q4	Q630	1:M6	6-P5	&R266	1:C8	2-P3	R390	1:E6	3-Q3
P170	1:P2	1-Q3	Q660	1:L5	6-N1	R267	1:C8	2-R2	R392	1:E6	3-P2
P204	1:D1	2-A8	Q670	1:L6	6-Q2	R268	1:D2	2-C0	R394	1:E6	3-Q3
P208	1:D1	2-A8	Q710	1:J3	7-K8	R269	1:C2	2-C1	R396	1:E6	3-Q2
P210	1:D6	2-A7	Q720	1:J3	7-K8	R270	1:C2	2-D1	R502	1:K6	5-K9
P211	1:D5	2-A7	Q730	1:H3	7-N8	R271	1:C3	2-E1	R505	1:K6	5-L8
P212	1:D6	2-A6	Q740	1:H3	7-N8	R272	1:C4	2-F2	R510	1:K6	5-L7
P215	1:D4	2-A2	Q750	1:G4	7-F3	R273	1:B5	2-G2	R515	1:H6	5-J5
P217	1:D4	2-A2	Q760	1:H3	7-H3	R274	1:C4	2-G1	R520	1:J5	5-C1
P219	1:D2	2-A1	Q770	1:H3	7-H1	R275	1:C4	2-H0	R525	1:J5	5-D1
P225	1:D2	2-A0	Q775	1:H3	7-K3	R277	1:B5	2-J1	R530	1:J5	5-D0
P230	1:C5	2-B0	Q780	1:H3	7-K3	R278	1:B5	2-J0	R535	1:J5	5-E1
P231	1:D8	2-B0	Q785	1:H3	7-K2	R279	1:B5	2-K0	R540	1:K5	5-H2
P233	1:C1	2-R9	Q790	1:H4	7-M3	R280	1:B5	2-K0	R545	1:K5	5-J1
P235	1:C1	2-R9	Q795	1:G3	7-P0	R282	1:D7	2-K1	R550	1:K5	5-K2
P237	1:B7	2-R8	Q810	1:M2	8-E7	R283	1:D7	2-L1	R555	1:K5	5-K1