

SHARP PARTS GUIDE

No. S89B5LC32L600



LCD COLOUR TELEVISION

LC-32LE600E/RU/S

LC-40LE600E/RU/S

MODELS LC-46LE600E/RU/S

Note:

The reference numbers on the PWB are arranged in alphabetical order.

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Parts marked with "△" are important for maintaining the safety of the set. Be sure to replace these parts with specified ones for maintaining the safety and performance of the set.

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART DELIVERY	DESCRIPTION
[1] PRINTED WIRING BOARD ASSEMBLIES					
N	DUNTKE266FM18	AR	N	P	KEY Unit
N	DUNTKE111FM11	CA	N	P	MAIN Unit
N	DUNTKE308FM02	AL	N	P	R/C, LED Unit
N	RUNTKA619WJQZ	BS	N	P	POWER Unit (LC-32LE600E/RU/S)
N	RUNTKA609WJQZ	BW	N	P	POWER Unit (LC-40LE600E/RU/S)
N	RUNTKA611WJQZ	BZ	N	P	POWER Unit (LC-46LE600E/RU/S)
N	RUNTK4248TPZB	BL	N	P	LCD Control Unit (LC-32LE600E/RU/S)
N	RUNTK4248TPZA	BL	N	P	LCD Control Unit (LC-40LE600E/RU/S)
N	RUNTK4248TPZZ	BL	N	P	LCD Control Unit (LC-46LE600E/RU/S)
N	RUNTKA595WJ01	AX		P	LED5-PWB1 Unit
N	RUNTKA595WJ02	AX		P	LED5-PWB2 Unit
N	RUNTKA596WJ01	AY		P	LED6-PWB1 Unit (LC-40/46LE600E/RU/S)
N	RUNTKA596WJ02	AY		P	LED6-PWB2 Unit (LC-40/46LE600E/RU/S)
N	RUNTKA598WJ01			P	LED8-PWB1 Unit (LC-32/46LE600E/RU/S)
N	RUNTKA598WJ02			P	LED8-PWB2 Unit (LC-32/46LE600E/RU/S)
[2] LCD PANEL					
N	DLCUCA001FM02		N	P	32"LCD Panel Module Unit (LC-32LE600E/RU/S)
N	DLCUCA002FM02		N	P	40"LCD Panel Module Unit (LC-40LE600E/RU/S)
N	DLCUCA003FM02		N	P	46"LCD Panel Module Unit (LC-46LE600E/RU/S)
[3] DUNTKF111FM11 (MAIN Unit)					
C501	VCKYCZ1HB221KY	AA		J	Capacitor 220p 50V Ceramic
C502	VCKYCZ1HB221KY	AA		J	Capacitor 220p 50V Ceramic
C503	VCCCCZ1HH101JY	AB		J	Capacitor 100p 50V Ceramic
C507	VCCCCZ1HH101JY	AB		J	Capacitor 100p 50V Ceramic
C508	VCKYCZ1HB102KY	AB		J	Capacitor 1000p 50V Ceramic
C510	VCKYCZ1HB102KY	AB		J	Capacitor 1000p 50V Ceramic
C520	VCKYCZ1HB221KY	AA		J	Capacitor 220p 50V Ceramic
C521	VCKYCZ1EF104ZY	AA		J	Capacitor 0.1 25V Ceramic
C522	VCKYCZ1HB331KY	AA		J	Capacitor 330p 50V Ceramic
C523	VCKYCZ1HB331KY	AA		J	Capacitor 330p 50V Ceramic
C524	VCCCCZ1HH101JY	AB		J	Capacitor 100p 50V Ceramic
C525	VCCCCZ1HH101JY	AB		J	Capacitor 100p 50V Ceramic
C526	VCKYCZ1HB331KY	AA		J	Capacitor 330p 50V Ceramic
C527	VCKYCZ1HB331KY	AA		J	Capacitor 330p 50V Ceramic
C528	VCKYCZ1HB102KY	AB		J	Capacitor 1000p 50V Ceramic
C529	VCKYCZ1HB102KY	AB		J	Capacitor 1000p 50V Ceramic
C530	VCKYCZ1HB471KY	AB		J	Capacitor 470p 50V Ceramic
C531	VCKYCZ1HB471KY	AB		J	Capacitor 470p 50V Ceramic
C532	VCCCCZ1HH101JY	AB		J	Capacitor 100p 50V Ceramic
C533	VCCCCZ1HH101JY	AB		J	Capacitor 100p 50V Ceramic
C534	RC-KZA510WJPZY	AB		J	Capacitor
C535	RC-KZA510WJPZY	AB		J	Capacitor
C536	VCKYCZ1HB471KY	AB		J	Capacitor 470p 50V Ceramic
C537	VCKYCZ1HB471KY	AB		J	Capacitor 470p 50V Ceramic
C538	VCKYCZ1HB102KY	AB		J	Capacitor 1000p 50V Ceramic
C539	VCKYCZ1HB102KY	AB		J	Capacitor 1000p 50V Ceramic
C540	RC-KZA510WJPZY	AB		J	Capacitor
C541	RC-KZA510WJPZY	AB		J	Capacitor
C542	RC-KZA510WJPZY	AB		J	Capacitor
C543	RC-KZA510WJPZY	AB		J	Capacitor
C544	RC-KZA510WJPZY	AB		J	Capacitor
C545	RC-KZA510WJPZY	AB		J	Capacitor
C546	VCKYCZ1HB102KY	AB		J	Capacitor 1000p 50V Ceramic
C547	VCCCCZ1HH560JY	AB		J	Capacitor 56p 50V Ceramic
C548	VCCCCZ1HH560JY	AB		J	Capacitor 56p 50V Ceramic
C549	VCKYCZ1HB102KY	AB		J	Capacitor 1000p 50V Ceramic
C550	VCCCCZ1HH100DY	AB		J	Capacitor 10p 50V Ceramic
C551	VGERMZ1CN477MY	AE		J	Capacitor 470 16V (AL)
C552	VCCCCZ1HH101JY	AB		J	Capacitor 100p 50V Ceramic
C553	VCCCCZ1HH100DY	AB		J	Capacitor 10p 50V Ceramic
C554	VCKYCZ1HB102KY	AB		J	Capacitor 1000p 50V Ceramic
C555	VCKYCZ1EF104ZY	AA		J	Capacitor 0.1 25V Ceramic
C556	VCCCCZ1HH100DY	AB		J	Capacitor 10p 50V Ceramic
C557	VCKYCZ1EF104ZY	AA		J	Capacitor 0.1 25V Ceramic
C558	VCKYCZ1HB102KY	AB		J	Capacitor 1000p 50V Ceramic
C559	VCKYCZ1HB102KY	AB		J	Capacitor 1000p 50V Ceramic
C560	VCKYCZ1HB102KY	AB		J	Capacitor 1000p 50V Ceramic
C561	VCKYCZ1EF104ZY	AA		J	Capacitor 0.1 25V Ceramic
C562	VCCCCZ1HH101JY	AB		J	Capacitor 100p 50V Ceramic
C564	RC-KZA616WJQZY	AB		J	Capacitor
C565	VCKYCZ1HB472KY	AA		J	Capacitor 4700p 50V Ceramic
C566	VCKYCZ1HB472KY	AA		J	Capacitor 4700p 50V Ceramic
C567	VCEASX1VN226MY	AC		J	Capacitor 22 35V Electrolytic
C568	VCEASX1VN226MY	AC		J	Capacitor 22 35V Electrolytic
C569	VCKYCY1AB105KY	AB		J	Capacitor 1 10V Ceramic
C570	RC-KZA067WJZZY	AB		J	Capacitor
C571	VCCCCZ1HH101JY	AB		J	Capacitor 100p 50V Ceramic
C572	VCCCCZ1HH101JY	AB		J	Capacitor 100p 50V Ceramic
C573	VCKYCZ1EF104ZY	AA		J	Capacitor 0.1 25V Ceramic
C575	VCKYCY1AB105KY	AB		J	Capacitor 1 10V Ceramic
C576	RC-KZA067WJZZY	AB		J	Capacitor
C577	RC-KZA616WJQZY	AB		J	Capacitor
C578	VCKYCZ1EF104ZY	AA		J	Capacitor 0.1 25V Ceramic

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART DELIVERY	DESCRIPTION
[3] DUNTKF111FM11 (MAIN Unit)					
C579	VCKYCZ1EF104ZY	AA		J	Capacitor 0.1 25V Ceramic
C580	VCKYCZ1EF104ZY	AA		J	Capacitor 0.1 25V Ceramic
C581	RC-KZA510WJPZY	AB		J	Capacitor
C582	VCKYCY1AB105KY	AB		J	Capacitor 1 10V Ceramic
C583	VCKYCY1AB105KY	AB		J	Capacitor 1 10V Ceramic
C584	VCKYCZ1EF104ZY	AA		J	Capacitor 0.1 25V Ceramic
C585	VCKYCY1AB105KY	AB		J	Capacitor 1 10V Ceramic
C586	VCKYCZ1EF104ZY	AA		J	Capacitor 0.1 25V Ceramic
C587	VCCCCZ1HH330JY	AB		J	Capacitor 33p 50V Ceramic
C588	VCCCCZ1HH330JY	AB		J	Capacitor 33p 50V Ceramic
C591	RC-KZA616WJQZY	AB		J	Capacitor
C592	VCKYCZ1AB104KY	AB		J	Capacitor 0.1 10V Ceramic
C593	RC-KZA616WJQZY	AB		J	Capacitor
C1102	VCKYCZ1HB102KY	AB		J	Capacitor 1000p 50V Ceramic
C1103	VCKYCZ1EB103KY	AA		J	Capacitor 0.01 25V Ceramic
C1104	VCERML1CN107MY	AC		J	Capacitor 100 16V (AL)
C1105	VCKYCZ1EB103KY	AA		J	Capacitor 0.01 25V Ceramic
C1106	RC-KZA510WJPZY	AB		J	Capacitor
C1107	VCERMZ1CN477MY	AE		J	Capacitor 470 16V (AL)
C1112	VCKYCZ1EF104ZY	AA		J	Capacitor 0.1 25V Ceramic
C1113	VCKYCZ1EB103KY	AA		J	Capacitor 0.01 25V Ceramic
C1114	RC-KZA510WJPZY	AB		J	Capacitor
C1115	VCKYCZ1EB103KY	AA		J	Capacitor 0.01 25V Ceramic
C1116	RC-KZA510WJPZY	AB		J	Capacitor
C1117	RC-KZA510WJPZY	AB		J	Capacitor
C1118	RC-KZA510WJPZY	AB		J	Capacitor
C1119	RC-KZA510WJPZY	AB		J	Capacitor
C1120	RC-KZA510WJPZY	AB		J	Capacitor
C1121	RC-KZA510WJPZY	AB		J	Capacitor
C1122	RC-KZA510WJPZY	AB		J	Capacitor
C1123	RC-KZA510WJPZY	AB		J	Capacitor
C1125	RC-KZA510WJPZY	AB		J	Capacitor
C1126	VCKYCZ1EB103KY	AA		J	Capacitor 0.01 25V Ceramic
C1127	RC-KZA114WJZZY	AB		J	Capacitor
C1128	VCKYCZ1EF104ZY	AA		J	Capacitor 0.1 25V Ceramic
C1129	VCCCCZ1HH101JY	AB		J	Capacitor 100p 50V Ceramic
C1130	VCCCCZ1HH330JY	AB		J	Capacitor 33p 50V Ceramic
C1131	VCCCCZ1HH330JY	AB		J	Capacitor 33p 50V Ceramic
C1137	VCKYCZ1EF104ZY	AA		J	Capacitor 0.1 25V Ceramic
C1301	RC-KZA510WJPZY	AB		J	Capacitor
C1302	RC-KZA510WJPZY	AB		J	Capacitor
C1303	VCKYCZ1EF104ZY	AA		J	Capacitor 0.1 25V Ceramic
C1304	RC-KZA510WJPZY	AB		J	Capacitor
C1305	VCKYCZ1EF104ZY	AA		J	Capacitor 0.1 25V Ceramic
C1306	RC-KZA510WJPZY	AB		J	Capacitor
C1307	RC-KZA510WJPZY	AB		J	Capacitor
C1308	RC-KZA510WJPZY	AB		J	Capacitor
C1309	RC-KZA510WJPZY	AB		J	Capacitor
C1310	RC-KZA510WJPZY	AB		J	Capacitor
C1311	RC-KZA510WJPZY	AB		J	Capacitor
C1312	RC-KZA510WJPZY	AB		J	Capacitor
C1313	RC-KZA510WJPZY	AB		J	Capacitor
C1314	RC-KZA510WJPZY	AB		J	Capacitor
C1315	RC-KZA510WJPZY	AB		J	Capacitor
C1316	VCKYCZ1EB103KY	AA		J	Capacitor 0.01 25V Ceramic
C1317	RC-KZA510WJPZY	AB		J	Capacitor
C1318	VCKYCZ1EB103KY	AA		J	Capacitor 0.01 25V Ceramic
C1319	RC-KZA510WJPZY	AB		J	Capacitor
C1320	RC-KZA510WJPZY	AB		J	Capacitor
C1321	VCKYCZ1EB103KY	AA		J	Capacitor 0.01 25V Ceramic
C1322	VCKYCZ1EB103KY	AA		J	Capacitor 0.01 25V Ceramic
C1323	RC-KZA510WJPZY	AB		J	Capacitor
C1324	VCKYCZ1HB472KY	AA		J	Capacitor 4700p 50V Ceramic
C1325	VCKYCZ1HB472KY	AA		J	Capacitor 4700p 50V Ceramic
C1326	VCKYCZ1HB472KY	AA		J	Capacitor 4700p 50V Ceramic
C1327	VCKYCZ1HB472KY	AA		J	Capacitor 4700p 50V Ceramic
C1328	VCKYCZ1HB472KY	AA		J	Capacitor 4700p 50V Ceramic
C1329	VCKYCZ1HB472KY	AA		J	Capacitor 4700p 50V Ceramic
C1330	VCKYCZ1EB103KY	AA		J	Capacitor 0.01 25V Ceramic
C1331	RC-KZA510WJPZY	AB		J	Capacitor
C1332	VCKYCZ1EF104ZY	AA		J	Capacitor 0.1 25V Ceramic
C1513	RC-KZA520WJQZY	AA		J	Capacitor
C1515	RC-KZA520WJQZY	AA		J	Capacitor
C1523	RC-KZA520WJQZY	AA		J	Capacitor
C1526	VCKYCZ1AB104KY	AB		J	Capacitor 0.1 10V Ceramic
C1527	VCKYCZ1AB104KY	AB		J	Capacitor 0.1 10V Ceramic
C1528	RC-KZA616WJQZY	AB		J	Capacitor
C1529	RC-KZA616WJQZY	AB		J	Capacitor
C1530	VCKYCZ1AB104KY	AB		J	Capacitor 0.1 10V Ceramic
C2601	VCKYCZ1AB104KY	AB		J	Capacitor 0.1 10V Ceramic
C2702	RC-KZA510WJPZY	AB		J	Capacitor
C2703	RC-KZA510WJPZY	AB		J	Capacitor
C2706	RC-KZA510WJPZY	AB		J	Capacitor
C2707	RC-KZA510WJPZY	AB		J	Capacitor
C2708	VCKYCZ1HB102KY	AB		J	Capacitor 1000p 50V Ceramic

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART DELIVERY	DESCRIPTION
[3] DUNTKF111FM11 (MAIN Unit)					
C2709	VCKYCZ1HB102KY	AB		J	Capacitor 1000p 50V Ceramic
C2710	VCEASY1EN107MY	AC		J	Capacitor 100 25V Electrolytic
C2711	VCKYCY1AB105KY	AB		J	Capacitor 1 10V Ceramic
C2712	VCKYCY1AB105KY	AB		J	Capacitor 1 10V Ceramic
C2713	VCKYCY1AB105KY	AB		J	Capacitor 1 10V Ceramic
C2714	VCKYCZ1EF104ZY	AA		J	Capacitor 0.1 25V Ceramic
C2715	VCEASY1EN107MY	AC		J	Capacitor 100 25V Electrolytic
C2716	RC-KZA114WJZZY	AB		J	Capacitor
C2717	RC-KZA114WJZZY	AB		J	Capacitor
C2718	VCKYTV1EB474KY	AC		J	Capacitor 0.47 25V Ceramic
C2719	VCKYTV1EB474KY	AC		J	Capacitor 0.47 25V Ceramic
C2720	VCKYTV1EB474KY	AC		J	Capacitor 0.47 25V Ceramic
C2721	VCKYTV1EB474KY	AC		J	Capacitor 0.47 25V Ceramic
C2723	RC-KZA114WJZZY	AB		J	Capacitor
C2724	RC-KZA114WJZZY	AB		J	Capacitor
C2729	VCKYCZ1HB102KY	AB		J	Capacitor 1000p 50V Ceramic
C2740	VCKYCZ1HB472KY	AA		J	Capacitor 4700p 50V Ceramic
C2741	VCKYCZ1HB472KY	AA		J	Capacitor 4700p 50V Ceramic
C3301	VCCCCZ1HH101JY	AB		J	Capacitor 100p 50V Ceramic
C3302	VCCCCZ1HH101JY	AB		J	Capacitor 100p 50V Ceramic
C3303	VCCCCZ1HH101JY	AB		J	Capacitor 100p 50V Ceramic
C3304	VCCCCZ1HH101JY	AB		J	Capacitor 100p 50V Ceramic
C3306	VCCCCZ1HH101JY	AB		J	Capacitor 100p 50V Ceramic
C3309	VCCCCZ1HH101JY	AB		J	Capacitor 100p 50V Ceramic
C3313	VCCCCZ1HH471JY	AA		J	Capacitor 470p 50V Ceramic
C3314	VCCCCZ1HH471JY	AA		J	Capacitor 470p 50V Ceramic
C3315	RC-KZA510WJPZY	AB		J	Capacitor
C3316	VCAAPE0JJ227MY	AE		J	Capacitor 220 6.3V Electrolytic
C3317	VCKYCZ1EF104ZY	AA		J	Capacitor 0.1 25V Ceramic
C3318	RC-KZA616WJQZY	AB		J	Capacitor
C3320	RC-KZA510WJPZY	AB		J	Capacitor
C3321	RC-KZA616WJQZY	AB		J	Capacitor
C3322	RC-KZA576WJQZY	AB		J	Capacitor
C3324	VCKYCZ1EF104ZY	AA		J	Capacitor 0.1 25V Ceramic
C3325	RC-KZA576WJQZY	AB		J	Capacitor
C3326	RC-KZA576WJQZY	AB		J	Capacitor
C3327	VCKYCZ1AB104KY	AB		J	Capacitor 0.1 10V Ceramic
C3329	VCKYCZ1AB104KY	AB		J	Capacitor 0.1 10V Ceramic
C3330	VCKYCZ1AB104KY	AB		J	Capacitor 0.1 10V Ceramic
C3331	VCKYCZ1AB104KY	AB		J	Capacitor 0.1 10V Ceramic
C3332	RC-KZA616WJQZY	AB		J	Capacitor
C3333	VCKYCZ1AB104KY	AB		J	Capacitor 0.1 10V Ceramic
C3334	RC-KZA576WJQZY	AB		J	Capacitor
C3336	RC-KZA616WJQZY	AB		J	Capacitor
C3337	VCKYCZ1AB104KY	AB		J	Capacitor 0.1 10V Ceramic
C3338	RC-KZA510WJPZY	AB		J	Capacitor
C3339	VCCCCZ1HH101JY	AB		J	Capacitor 100p 50V Ceramic
C3341	VCKYCZ1AB104KY	AB		J	Capacitor 0.1 10V Ceramic
C3342	VCKYCZ1AB104KY	AB		J	Capacitor 0.1 10V Ceramic
C3343	VCKYCZ1AB104KY	AB		J	Capacitor 0.1 10V Ceramic
C3344	RC-KZA576WJQZY	AB		J	Capacitor
C3345	RC-KZA616WJQZY	AB		J	Capacitor
C3346	VCKYCZ1AB104KY	AB		J	Capacitor 0.1 10V Ceramic
C3347	VCKYCZ1AB104KY	AB		J	Capacitor 0.1 10V Ceramic
C3348	RC-KZA616WJQZY	AB		J	Capacitor
C3350	RC-KZA576WJQZY	AB		J	Capacitor
C3351	VCKYCZ1HB472KY	AA		J	Capacitor 4700p 50V Ceramic
C3352	RC-KZA510WJPZY	AB		J	Capacitor
C3353	VCKYCZ1AB104KY	AB		J	Capacitor 0.1 10V Ceramic
C3354	VCKYCZ1AB104KY	AB		J	Capacitor 0.1 10V Ceramic
C3355	RC-KZA616WJQZY	AB		J	Capacitor
C3356	RC-KZA616WJQZY	AB		J	Capacitor
C3357	RC-KZA576WJQZY	AB		J	Capacitor
C3358	VCKYCZ1EB103KY	AA		J	Capacitor 0.01 25V Ceramic
C3359	VCKYCZ1HB472KY	AA		J	Capacitor 4700p 50V Ceramic
C3360	VCKYCZ1EB103KY	AA		J	Capacitor 0.01 25V Ceramic
C3361	VCKYCZ1AB104KY	AB		J	Capacitor 0.1 10V Ceramic
C3362	VCKYCZ1AB104KY	AB		J	Capacitor 0.1 10V Ceramic
C3363	VCKYCZ1EB103KY	AA		J	Capacitor 0.01 25V Ceramic
C3364	VCKYCZ1AB104KY	AB		J	Capacitor 0.1 10V Ceramic
C3365	VCKYCY1AB105KY	AB		J	Capacitor 1 10V Ceramic
C3366	RC-KZA576WJQZY	AB		J	Capacitor
C3367	VCKYCZ1AB104KY	AB		J	Capacitor 0.1 10V Ceramic
C3368	VCKYCZ1EB103KY	AA		J	Capacitor 0.01 25V Ceramic
C3369	VCKYCZ1EB103KY	AA		J	Capacitor 0.01 25V Ceramic
C3370	VCCCCZ1HH8R0DY	AA		J	Capacitor 80p 50V Ceramic
C3371	VCCCCZ1HH8R0DY	AA		J	Capacitor 80p 50V Ceramic
C3372	VCKYCZ1AB473KY	AB		J	Capacitor 0.047 10V Ceramic
C3373	VCKYCZ1AB473KY	AB		J	Capacitor 0.047 10V Ceramic
C3374	VCKYCZ1AB473KY	AB		J	Capacitor 0.047 10V Ceramic
C3375	VCKYCZ1AB473KY	AB		J	Capacitor 0.047 10V Ceramic
C3376	VCKYCZ1EB103KY	AA		J	Capacitor 0.01 25V Ceramic
C3377	VCKYCZ1EB103KY	AA		J	Capacitor 0.01 25V Ceramic
C3378	VCKYCZ1EB103KY	AA		J	Capacitor 0.01 25V Ceramic
C3379	VCKYCZ1EB103KY	AA		J	Capacitor 0.01 25V Ceramic

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART DELIVERY	DESCRIPTION
[3] DUNTKF111FM11 (MAIN Unit)					
C3380	VCKYCZ1EB103KY	AA		J	Capacitor 0.01 25V Ceramic
C3381	VCKYCZ1EB103KY	AA		J	Capacitor 0.01 25V Ceramic
C3382	VCKYCZ1AB473KY	AB		J	Capacitor 0.047 10V Ceramic
C3383	VCKYCZ1EB103KY	AA		J	Capacitor 0.01 25V Ceramic
C3384	VCKYCZ1EB103KY	AA		J	Capacitor 0.01 25V Ceramic
C3385	VCKYCZ1EB103KY	AA		J	Capacitor 0.01 25V Ceramic
C3386	VCKYCZ1EB103KY	AA		J	Capacitor 0.01 25V Ceramic
C3387	VCKYCZ1EB103KY	AA		J	Capacitor 0.01 25V Ceramic
C3388	VCKYCZ1EB103KY	AA		J	Capacitor 0.01 25V Ceramic
C3389	RC-KZA510WJPZY	AB		J	Capacitor
C3390	RC-KZA510WJPZY	AB		J	Capacitor
C3391	VCKYCZ1AB473KY	AB		J	Capacitor 0.047 10V Ceramic
C3392	RC-KZA510WJPZY	AB		J	Capacitor
C3393	RC-KZA510WJPZY	AB		J	Capacitor
C3394	RC-KZA510WJPZY	AB		J	Capacitor
C3395	RC-KZA510WJPZY	AB		J	Capacitor
C3396	RC-KZA510WJPZY	AB		J	Capacitor
C3397	RC-KZA510WJPZY	AB		J	Capacitor
C3399	VCKYCZ1CB223KY	AC		J	Capacitor 0.022 16V Ceramic
C3400	VCKYCZ1AB104KY	AB		J	Capacitor 0.1 10V Ceramic
C3401	RC-KZA067WJZZY	AB		J	Capacitor
C3402	RC-KZA616WJQZY	AB		J	Capacitor
C3403	VCKYCZ1AB104KY	AB		J	Capacitor 0.1 10V Ceramic
C3404	VCKYCZ1AB473KY	AB		J	Capacitor 0.047 10V Ceramic
C3501	VCKYCZ1EF104ZY	AA		J	Capacitor 0.1 25V Ceramic
C3502	VCKYCZ1EF104ZY	AA		J	Capacitor 0.1 25V Ceramic
C3503	VCAAPE0JJ107MY	AE		J	Capacitor 100 6.3V Electrolytic
C3504	RC-KZA510WJPZY	AB		J	Capacitor
C3505	VCKYCZ1EF104ZY	AA		J	Capacitor 0.1 25V Ceramic
C3506	VCKYCZ1EF104ZY	AA		J	Capacitor 0.1 25V Ceramic
C3507	VCKYCZ1EF104ZY	AA		J	Capacitor 0.1 25V Ceramic
C3508	RC-KZA576WJQZY	AB		J	Capacitor
C3509	RC-KZA576WJQZY	AB		J	Capacitor
C3510	RC-KZA576WJQZY	AB		J	Capacitor
C3511	RC-KZA576WJQZY	AB		J	Capacitor
C3512	VCKYCZ1EF104ZY	AA		J	Capacitor 0.1 25V Ceramic
C3513	VCKYCZ1EF104ZY	AA		J	Capacitor 0.1 25V Ceramic
C3514	RC-KZA510WJPZY	AB		J	Capacitor
C3515	RC-KZA510WJPZY	AB		J	Capacitor
C3516	VCKYCZ1EF104ZY	AA		J	Capacitor 0.1 25V Ceramic
C3517	VCKYCZ1EF104ZY	AA		J	Capacitor 0.1 25V Ceramic
C3518	VCKYCZ1EF104ZY	AA		J	Capacitor 0.1 25V Ceramic
C3519	RC-KZA576WJQZY	AB		J	Capacitor
C3520	RC-KZA576WJQZY	AB		J	Capacitor
C3521	RC-KZA576WJQZY	AB		J	Capacitor
C3522	RC-KZA576WJQZY	AB		J	Capacitor
C3523	RC-KZA576WJQZY	AB		J	Capacitor
C3524	RC-KZA510WJPZY	AB		J	Capacitor
C4401	VCCCCZ1HH120JY	AB		J	Capacitor 12p 50V Ceramic
C4402	RC-KZA510WJPZY	AB		J	Capacitor
C4403	VCCCCZ1HH100DY	AB		J	Capacitor 10p 50V Ceramic
C4404	VCKYCZ1EF104ZY	AA		J	Capacitor 0.1 25V Ceramic
C4405	RC-KZA510WJPZY	AB		J	Capacitor
C4406	VCKYCZ1EF104ZY	AA		J	Capacitor 0.1 25V Ceramic
C4407	RC-KZA510WJPZY	AB		J	Capacitor
C4408	VCKYCZ1EF104ZY	AA		J	Capacitor 0.1 25V Ceramic
C4409	VCKYCZ1EF104ZY	AA		J	Capacitor 0.1 25V Ceramic
C4410	RC-KZA510WJPZY	AB		J	Capacitor
C4411	RC-KZA510WJPZY	AB		J	Capacitor
C4412	VCKYCZ1EF104ZY	AA		J	Capacitor 0.1 25V Ceramic
C4413	VCKYCZ1EF104ZY	AA		J	Capacitor 0.1 25V Ceramic
C4416	VCKYCZ1EF104ZY	AA		J	Capacitor 0.1 25V Ceramic
C4417	VCKYCZ1EF104ZY	AA		J	Capacitor 0.1 25V Ceramic
C4418	VCKYCZ1EF104ZY	AA		J	Capacitor 0.1 25V Ceramic
C4419	RC-KZA510WJPZY	AB		J	Capacitor
C4420	VCAAPD1AJ686MY	AE		J	Capacitor 68 10V Electrolytic
C4421	RC-KZA510WJPZY	AB		J	Capacitor
C4424	VCKYCY1AB105KY	AB		J	Capacitor 1 10V Ceramic
C4425	VCKYCY1AB105KY	AB		J	Capacitor 1 10V Ceramic
C4426	RC-KZA510WJPZY	AB		J	Capacitor
C4428	RC-KZA510WJPZY	AB		J	Capacitor
C8455	VCKYCZ1AB104KY	AB		J	Capacitor 0.1 10V Ceramic
C8456	VCKYCZ1AB104KY	AB		J	Capacitor 0.1 10V Ceramic
C8457	VCKYCZ1EF104ZY	AA		J	Capacitor 0.1 25V Ceramic
C8460	VCKYCZ1AB104KY	AB		J	Capacitor 0.1 10V Ceramic
C9601	VCKYCZ1HB472KY	AA		J	Capacitor 4700p 50V Ceramic
C9602	RC-KZA114WJZZY	AB		J	Capacitor
C9604	RC-KZA616WJQZY	AB		J	Capacitor
C9607	RC-KZA616WJQZY	AB		J	Capacitor
C9608	VCKYCY1AB105KY	AB		J	Capacitor 1 10V Ceramic
C9609	RC-KZA616WJQZY	AB		J	Capacitor
C9610	RC-KZA616WJQZY	AB		J	Capacitor
C9611	RC-KZA616WJQZY	AB		J	Capacitor
C9612	VCKYCZ1EB103KY	AA		J	Capacitor 0.01 25V Ceramic
C9613	VCKYCZ1EF104ZY	AA		J	Capacitor 0.1 25V Ceramic

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART DELIVERY	DESCRIPTION
[3] DUNTKF111FM11 (MAIN Unit)					
C9614	RC-KZA616WJQZY	AB		J	Capacitor
C9615	VCKYCY1CB223KY	AC		J	Capacitor 0.022 16V Ceramic
C9616	RC-KZA616WJQZY	AB		J	Capacitor
C9618	RC-KZA616WJQZY	AB		J	Capacitor
C9619	VCKYCY1EB682KY	AB		J	Capacitor 6800p 25V Ceramic
C9620	RC-KZA616WJQZY	AB		J	Capacitor
C9621	VCKYCY1EF104ZY	AA		J	Capacitor 0.1 25V Ceramic
C9622	RC-KZA383WJZZY	AC		J	Capacitor
C9624	VCKYCY1EB682KY	AB		J	Capacitor 6800p 25V Ceramic
C9625	RC-KZA114WJZZY	AB		J	Capacitor
C9626	VCKYCY1CB223KY	AC		J	Capacitor 0.022 16V Ceramic
C9627	VCKYCY1EB682KY	AB		J	Capacitor 6800p 25V Ceramic
C9628	VCKYCY1EB103KY	AA		J	Capacitor 0.01 25V Ceramic
C9629	VCKYCY1CB223KY	AC		J	Capacitor 0.022 16V Ceramic
C9630	RC-KZA616WJQZY	AB		J	Capacitor
C9631	VCKYCY1EF104ZY	AA		J	Capacitor 0.1 25V Ceramic
C9632	VCKYCY1EB682KY	AB		J	Capacitor 6800p 25V Ceramic
C9633	RC-KZA616WJQZY	AB		J	Capacitor
C9634	RC-KZA383WJZZY	AC		J	Capacitor
C9635	RC-KZA616WJQZY	AB		J	Capacitor
C9636	VCKYCY1EF104ZY	AA		J	Capacitor 0.1 25V Ceramic
C9638	VCKYCY1EF104ZY	AA		J	Capacitor 0.1 25V Ceramic
C9639	RC-KZA114WJZZY	AB		J	Capacitor
C9640	RC-KZA383WJZZY	AC		J	Capacitor
C9641	RC-KZA114WJZZY	AB		J	Capacitor
C9642	VCKYCY1EB682KY	AB		J	Capacitor 6800p 25V Ceramic
C9643	VCKYCY1CB223KY	AC		J	Capacitor 0.022 16V Ceramic
C9644	RC-KZA616WJQZY	AB		J	Capacitor
C9645	VCKYCY1EB682KY	AB		J	Capacitor 6800p 25V Ceramic
C9646	RC-KZA510WJPZY	AB		J	Capacitor
C9647	VCKYCY1EF104ZY	AA		J	Capacitor 0.1 25V Ceramic
C9649	RC-KZA383WJZZY	AC		J	Capacitor
C9651	RC-KZA114WJZZY	AB		J	Capacitor
C9652	RC-KZA114WJZZY	AB		J	Capacitor
C9653	VCKYCY1EF104ZY	AA		J	Capacitor 0.1 25V Ceramic
C9654	VCAAPD1DJ476MY	AF		J	Capacitor 47 20V Electrolytic
C9655	VCCCCZ1HH101JY	AB		J	Capacitor 100p 50V Ceramic
C9656	VCKYCY1HB102KY	AB		J	Capacitor 1000p 50V Ceramic
C9657	VCCCCZ1HH101JY	AB		J	Capacitor 100p 50V Ceramic
C9658	VCCCCZ1HH101JY	AB		J	Capacitor 100p 50V Ceramic
C9659	VCCCCZ1HH101JY	AB		J	Capacitor 100p 50V Ceramic
C9666	RC-KZA616WJQZY	AB		J	Capacitor
C9667	VCKYCY1EF104ZY	AA		J	Capacitor 0.1 25V Ceramic
C9668	VCKYCY1AB105KY	AB		J	Capacitor 1 10V Ceramic
C9669	VCKYCY1EF104ZY	AA		J	Capacitor 0.1 25V Ceramic
C9673	VCKYCY1EF104ZY	AA		J	Capacitor 0.1 25V Ceramic
C9674	VCKYCY1AB105KY	AB		J	Capacitor 1 10V Ceramic
D504	RH-EXA512WJZZY	AB		J	Zener Diode MAZ8039GHL
D505	RH-EXA554WJZZY	AB		J	Zener Diode MAZ8150GML
D507	RH-EXA523WJZZY	AB		J	Zener Diode MAZ8056GML
D508	RH-EXA523WJZZY	AB		J	Zener Diode MAZ8056GML
D509	RH-EXA523WJZZY	AB		J	Zener Diode MAZ8056GML
D510	RH-EXA523WJZZY	AB		J	Zener Diode MAZ8056GML
D512	VHDKDS184/-1Y	AB		J	Diode KDS184-RTK/P
D513	RH-EXA554WJZZY	AB		J	Zener Diode MAZ8150GML
D515	RH-EXA523WJZZY	AB		J	Zener Diode MAZ8056GML
D516	RH-EXA535WJZZY	AM		J	Zener Diode MAZ8082GML
D517	RH-EXA535WJZZY	AM		J	Zener Diode MAZ8082GML
D518	RH-EXA535WJZZY	AM		J	Zener Diode MAZ8082GML
D519	RH-EXA535WJZZY	AM		J	Zener Diode MAZ8082GML
D520	VHPGPF5V51V-1	AG		J	Photo Diode
D521	RH-EXA520WJZZY	AB		J	Zener Diode MAZ8051GML
D522	RH-EXA520WJZZY	AB		J	Zener Diode MAZ8051GML
D523	VHDMAZ9120H-1Y	AC		J	Diode MAZ9120H0L
D524	VHDMAZ9120H-1Y	AC		J	Diode MAZ9120H0L
D525	RH-EXA523WJZZY	AB		J	Zener Diode MAZ8056GML
D528	RH-EXA550WJZZY	AB		J	Zener Diode MAZ8130GML
D1101	RH-EXA535WJZZY	AM		J	Zener Diode MAZ8082GML
D1102	VHDM111G+-1Y	AA		J	Diode MA2J1110GL
D1301	VHDM111G+-1Y	AA		J	Diode MA2J1110GL
D1508	VHDKDS184/-1Y	AB		J	Diode KDS184-RTK/P
D1509	VHDKDS184/-1Y	AB		J	Diode KDS184-RTK/P
D1510	VHDKDS184/-1Y	AB		J	Diode KDS184-RTK/P
D1513	VHDB520S30-1Y	AC		J	Diode RB520S-30TE61
D3306	RH-EXA535WJZZY	AM		J	Zener Diode MAZ8082GML
D3308	VHD1SS226/-1Y	AC		J	Diode 1SS226(T5L,F,T)
D3309	VHD1SS226/-1Y	AC		J	Diode 1SS226(T5L,F,T)
D3310	RH-EXA520WJZZY	AB		J	Zener Diode MAZ8051GML
D3311	VHD1SS226/-1Y	AC		J	Diode 1SS226(T5L,F,T)
D3312	RH-EXA520WJZZY	AB		J	Zener Diode MAZ8051GML
D3313	RH-EXA512WJZZY	AB		J	Zener Diode MAZ8039GHL
D3314	RH-EXA512WJZZY	AB		J	Zener Diode MAZ8039GHL
D3315	RH-EXA520WJZZY	AB		J	Zener Diode MAZ8051GML
D3316	RH-EXA512WJZZY	AB		J	Zener Diode MAZ8039GHL
D3317	RH-EXA512WJZZY	AB		J	Zener Diode MAZ8039GHL

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART DELIVERY	DESCRIPTION
[3] DUNTKF111FM11 (MAIN Unit)					
D3318	RH-EXA520WJZZY	AB		J	Zener Diode MAZ8051GML
D3319	RH-EXA512WJZZY	AB		J	Zener Diode MAZ8039GHL
D3320	RH-EXA512WJZZY	AB		J	Zener Diode MAZ8039GHL
D3321	RH-EXA512WJZZY	AB		J	Zener Diode MAZ8039GHL
D3322	RH-PXA037WJZZY	AB		J	Zener Diode SML-310MTT86
D3323	RH-EXA512WJZZY	AB		J	Zener Diode MAZ8039GHL
D3324	VHD1SS226//--1Y	AC		J	Diode 1SS226(T5L,F,T)
D9601	VHDM111G++-1Y	AA		J	Diode MA2J1110GL
D9602	RH-EXA526WJZZY	AB		J	Zener Diode MAZ8062GML
D9603	VHDM111G++-1Y	AA		J	Diode MA2J1110GL
D9604	VHDM111G++-1Y	AA		J	Diode MA2J1110GL
D9605	RH-EXA514WJZZY	AB		J	Zener Diode MAZ8043GML
D9606	VHD1SS226//--1Y	AC		J	Diode 1SS226(T5L,F,T)
D9607	VHDM111G++-1Y	AA		J	Diode MA2J1110GL
D9608	Not Available	-		-	Zener Diode *PWB replacement item
D9609	VHDM111G++-1Y	AA		J	Diode MA2J1110GL
D9610	VHDB056L40-1Y	AC		J	Diode RB056L-40TE25
D9611	VHDB056L40-1Y	AC		J	Diode RB056L-40TE25
D9612	VHDB056L40-1Y	AC		J	Diode RB056L-40TE25
D9613	VHDB056L40-1Y	AC		J	Diode RB056L-40TE25
D9616	VHDM111G++-1Y	AA		J	Diode MA2J1110GL
FB501	RBLN-0077TAZZY	AB		J	Ferrite Core
FB502	RBLN-0077TAZZY	AB		J	Ferrite Core
FB503	RBLN-0077TAZZY	AB		J	Ferrite Core
FB504	RBLN-0061TAZZY	AD		J	Ferrite Core
FB505	RBLN-0061TAZZY	AD		J	Ferrite Core
FB506	RBLN-0061TAZZY	AD		J	Ferrite Core
FB507	RBLN-0061TAZZY	AD		J	Ferrite Core
FB508	RBLN-0077TAZZY	AB		J	Ferrite Core
FB510	RBLN-0077TAZZY	AB		J	Ferrite Core
FB511	RBLN-0077TAZZY	AB		J	Ferrite Core
FB512	RBLN-0077TAZZY	AB		J	Ferrite Core
FB513	RBLN-0077TAZZY	AB		J	Ferrite Core
FB514	RBLN-0077TAZZY	AB		J	Ferrite Core
FB515	RBLN-0077TAZZY	AB		J	Ferrite Core
FB516	RBLN-0077TAZZY	AB		J	Ferrite Core
FB517	RBLN-0077TAZZY	AB		J	Ferrite Core
FB518	RBLN-0077TAZZY	AB		J	Ferrite Core
FB519	RBLN-0077TAZZY	AB		J	Ferrite Core
FB520	RBLN-0077TAZZY	AB		J	Ferrite Core
FB521	RBLN-0077TAZZY	AB		J	Ferrite Core
FB522	RBLN-0077TAZZY	AB		J	Ferrite Core
FB523	RBLN-0061TAZZY	AD		J	Ferrite Core
FB524	RBLN-0077TAZZY	AB		J	Ferrite Core
FB525	RBLN-0061TAZZY	AD		J	Ferrite Core
FB526	RBLN-0077TAZZY	AB		J	Ferrite Core
FB527	RBLN-0061TAZZY	AD		J	Ferrite Core
FB528	RBLN-0077TAZZY	AB		J	Ferrite Core
FB529	RBLN-0077TAZZY	AB		J	Ferrite Core
FB1504	RBLN-A192WJZZY	AA		J	Ferrite Core
FB2602	RBLN-A375WJQZY	AA		J	Ferrite Core
FB2604	RBLN-A375WJQZY	AA		J	Ferrite Core
FB2605	RBLN-A375WJQZY	AA		J	Ferrite Core
FB2606	RBLN-A375WJQZY	AA		J	Ferrite Core
FB2607	RBLN-A375WJQZY	AA		J	Ferrite Core
FB2608	RBLN-A375WJQZY	AA		J	Ferrite Core
FB2609	RBLN-0077TAZZY	AB		J	Ferrite Core
FB2610	RBLN-0077TAZZY	AB		J	Ferrite Core
FB2611	RBLN-0077TAZZY	AB		J	Ferrite Core
FB2612	RBLN-0077TAZZY	AB		J	Ferrite Core
FB2614	RBLN-0077TAZZY	AB		J	Ferrite Core
FB2616	RBLN-0077TAZZY	AB		J	Ferrite Core
FB2617	RBLN-0077TAZZY	AB		J	Ferrite Core
FB2623	RBLN-0077TAZZY	AB		J	Ferrite Core
FB3301	RBLN-0061TAZZY	AD		J	Ferrite Core
FB3302	RBLN-0061TAZZY	AD		J	Ferrite Core
FB3303	RBLN-A192WJZZY	AA		J	Ferrite Core
FB3304	RBLN-0061TAZZY	AD		J	Ferrite Core
FB3305	RBLN-0061TAZZY	AD		J	Ferrite Core
FB3306	RBLN-0061TAZZY	AD		J	Ferrite Core
FB3307	RBLN-A188WJZZY	AA		J	Ferrite Core
FB3308	RBLN-0061TAZZY	AD		J	Ferrite Core
FB3309	RBLN-A188WJZZY	AA		J	Ferrite Core
FB3310	RBLN-0061TAZZY	AD		J	Ferrite Core
FB3311	RBLN-A188WJZZY	AA		J	Ferrite Core
FB3312	RBLN-0061TAZZY	AD		J	Ferrite Core
FB3314	RBLN-A188WJZZY	AA		J	Ferrite Core
FB3315	RBLN-A188WJZZY	AA		J	Ferrite Core
FB3316	RBLN-A188WJZZY	AA		J	Ferrite Core
FB3317	RBLN-A188WJZZY	AA		J	Ferrite Core
FB3318	RBLN-A192WJZZY	AA		J	Ferrite Core
FB4401	RBLN-A192WJZZY	AA		J	Ferrite Core
FB4402	RBLN-A192WJZZY	AA		J	Ferrite Core
FB4403	RBLN-A192WJZZY	AA		J	Ferrite Core
FB4405	RBLN-A192WJZZY	AA		J	Ferrite Core

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART DELIVERY	DESCRIPTION
[3] DUNTKF111FM11 (MAIN Unit)					
FB4406	RBLN-A192WJZZY	AA		J	Ferrite Core
FB9601	Not Available	-		-	Ferrite Core *PWB replacement item
FB9610	RBLN-0207TAZZY	AB		J	Ferrite Core
FB9611	RBLN-0207TAZZY	AB		J	Ferrite Core
FB9614	Not Available	-		-	Ferrite Core *PWB replacement item
FB9615	RBLN-0207TAZZY	AB		J	Ferrite Core
FB9616	RBLN-0207TAZZY	AB		J	Ferrite Core
FB9617	RBLN-0207TAZZY	AB		J	Ferrite Core
FB9618	RBLN-0207TAZZY	AB		J	Ferrite Core
FL501	RFILN0003TAZZY	AD		J	Filter
FL502	RFILN0003TAZZY	AD		J	Filter
FL503	RFILN0003TAZZY	AD		J	Filter
FL504	RFILN0017TAZZY	AC		J	Filter
FL507	RFILN0017TAZZY	AC		J	Filter
FL508	RFILN0017TAZZY	AC		J	Filter
FL509	RFILN0017TAZZY	AC		J	Filter
FL510	RFILN0017TAZZY	AC		J	Filter
FL511	RFILN0017TAZZY	AC		J	Filter
FL512	RFILN0017TAZZY	AC		J	Filter
FL513	RFILN0017TAZZY	AC		J	Filter
FL514	RFILN0003TAZZY	AD		J	Filter
FL515	RFILN0003TAZZY	AD		J	Filter
FL516	RFILN0003TAZZY	AD		J	Filter
FL517	RFILN0017TAZZY	AC		J	Filter
FL3301	RFILNA119WJZZY	AC		J	Filter
FL3302	RFILNA119WJZZY	AC		J	Filter
FL3303	RFILNA119WJZZY	AC		J	Filter
FL3304	RFILNA119WJZZY	AC		J	Filter
FL3501	RFILNA119WJZZY	AC		J	Filter
FL3502	RFILNA119WJZZY	AC		J	Filter
IC501	RH-IXC206WJQZS			J	IC EDID (PC)
IC503	VHIT7SET08U1EY	AC		J	IC TC7SET08FU(5L,JF,T
IC504	VHIMM1506XN-1Y	AD		J	IC MM1506XNRE
IC506	VHIM32221EIP-1Y	AK		J	IC MAX3221EIPWR
IC507	VHIMM1507XN-1Y	AD		J	IC MM1507XNRE
IC508	VHIMM1756AU-1Y	AD		J	IC MM1756AURE
IC1104	VHIPQ1LA505-1Y	AC		J	IC PQ1LA505MSPQ
IC1301	VHIAK4341ED-1Y	AF		P	IC AK4341ETD
IC1302	VHIMT8292N+-1Q	AK		P	IC MT8292N
IC1303	VHIS80944NM-1Y	AC		J	IC S-80944CNMC-G9ET2G
IC1508	VHISII91873-1Q	AN		P	IC Si9187ACNU
IC2602	VHHC2G66DP-1Y	AD		J	IC 74HC2G66DP,125
IC2701	VHIYDA148QZ-1Y	AL		J	IC YDA148-QZE2
IC3302	VHIBD6538G+-1Y	AD		P	IC BD6538G-TR
IC3303	RH-IXC758WJQZQ	BF		J	IC MT5362ANG-B
IC3304	Not Available	-		-	IC *PWB replacement item
IC3305	Not Available	-		-	IC *PWB replacement item
IC3501	RH-IXC505WJQZQ	AY		J	IC K4T51163QG-HCF7
IC3502	RH-IXC505WJQZQ	AY		J	IC K4T51163QG-HCF7
IC4401	VHIMT8295AE-1Q	AM		P	IC MT8295AE
IC4402	VHIAOZ1320C-1Y	AE		J	IC AOZ1320CI-04
IC8401	RH-IXC721WJQZQ	AR		J	IC HY27US08121B-TPCB
IC8403	Not Available	-		-	IC *PWB replacement item
IC8455	Not Available	-		-	IC * PWB replacement item
IC9601	VHHC2G66DP-1Y	AD		J	IC 74HC2G66DP,125
IC9603	VHIMM3141YN-1Y	AC		J	IC MM3141YNRE
IC9604	Not Available	-		-	IC *PWB replacement item
IC9605	VHILV5893M+-1Y	AE		J	IC LV5893M-TE-L-E
IC9606	VHILV5805M+-1Y	AG		J	IC LV5805M-TE-L-E
IC9608	VHILV5893M+-1Y	AE		J	IC LV5893M-TE-L-E
IC9610	VHIPQ1LAX95-1Y	AD		J	IC PQ1LAX95MSPQ
IC9611	VHITCR5SB25-1Y	AD		J	IC TCR5SB25(TE85L,F)
IC9612	VHITCR5SB33-1Y	AC		J	IC TCR5SB33(TE85L,F)
IC9613	VHHC2G66DP-1Y	AD		J	IC 74HC2G66DP,125
IC9614	Not Available	-		-	IC *PWB replacement item
J501	QJAKJ0008GEZZ	AD		J	Jack
J502	QJAKFA061WJZZ	AE		J	Jack
J503	QJAKGA131WJZZ	AG		J	Jack
J504	QJAKJ0047CEZZ	AD		J	Jack
J505	QJAKGA079WJZZ	AD		J	Jack
J506	QJAKFA061WJZZ	AE		J	Jack
J3301	QSOCA172WJQZ	AD		J	Socket
L501	VPCNN120J1R9NY	AB		J	Peaking Coil 12μH
L502	VPCNN120J1R9NY	AB		J	Peaking Coil 12μH
L503	VPCNN2R2JR77NY	AB		J	Peaking Coil 2.2μH
L504	VPCNN2R2JR77NY	AB		J	Peaking Coil 2.2μH
L1102	VPSBN2R2JR54NY	AB		J	Peaking Coil 2.2μH
L1103	VPSBN100J1R2NY	AB		J	Peaking Coil 10μH
L1104	VPSBN2R2JR54NY	AB		J	Peaking Coil 2.2μH
L1301	VPSBN2R2JR54NY	AB		J	Peaking Coil 2.2μH
L1302	VPSBN2R2JR54NY	AB		J	Peaking Coil 2.2μH
L2613	RCILFA119WJZZY	AE		J	Coil
L2614	RCILFA119WJZZY	AE		J	Coil
L2615	RCILFA119WJZZY	AE		J	Coil
L2616	RCILFA119WJZZY	AE		J	Coil

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART DELIVERY	DESCRIPTION
[3] DUNTKF111FM11 (MAIN Unit)					
L2617	RCiLFA119WJZZY	AE		J	Coil
L2618	RCiLFA119WJZZY	AE		J	Coil
L2701	RCiLPA899WJZZY	AC		J	Coil
L2702	RCiLPA899WJZZY	AC		J	Coil
L2703	RCiLPA899WJZZY	AC		J	Coil
L2704	RCiLPA899WJZZY	AC		J	Coil
L3301	RCiLFA228WJZZY	AD		J	Coil
L9601	RCiLPA758WJQZY	AC		J	Coil
L9602	RCiLPA899WJZZY	AC		J	Coil
L9603	RCiLPA760WJQZY	AD		J	Coil
L9604	RCiLPA899WJZZY	AC		J	Coil
LUG9602	QLUGHA009WJZZY	AC		J	Ground Part
LUG9603	QLUGHA009WJZZY	AC		J	Ground Part
LUG9605	QLUGHA009WJZZY	AC		J	Ground Part
LUG9609	QLUGHA009WJZZY	AC		J	Ground Part
LUG9610	QLUGHA009WJZZY	AC		J	Ground Part
LUG9611	QLUGHA009WJZZY	AC		J	Ground Part
LUG9612	QLUGHA009WJZZY	AC		J	Ground Part
P2601	QCNCWA671WJQZY	AH		J	Connector
P2602	QPLGNA349WJZZY	AE		J	Plug
P2701	QPLGNA173WJZZY	AD		J	Plug
P3302	QPLGNA333WJZZY	AD		J	Plug
P9601	QPLGNA168WJZZY	AF		J	Plug
P9602	QPLGNA328WJZZY	AD		J	Plug
Q501	VSIMH23T110-1Y	AC		J	Transistor IMH23T110
Q502	VSIMH23T110-1Y	AC		J	Transistor IMH23T110
Q503	VS2SA1530AR-1Y	AB		J	Transistor 2SA1530A-T112-1R
Q504	VS2SA1530AR-1Y	AB		J	Transistor 2SA1530A-T112-1R
Q505	VSLTC144EEB-1Y	AA		J	Transistor LTC144EEBFS8TL
Q506	VSIMH23T110-1Y	AC		J	Transistor IMH23T110
Q507	VS2SA1530AR-1Y	AB		J	Transistor 2SA1530A-T112-1R
Q508	VS2SA1530AR-1Y	AB		J	Transistor 2SA1530A-T112-1R
Q509	VSIMH23T110-1Y	AC		J	Transistor IMH23T110
Q1101	VS2SC3928AR-1Y	AB		J	Transistor 2SC3928A-T112-1R
Q1102	VS2SA1530AR-1Y	AB		J	Transistor 2SA1530A-T112-1R
Q1105	RH-TXA026WJZZY	AD		J	Transistor PBL52001D,115
Q1106	VSLTA124EEB-1Y	AA		J	Transistor LTA124EEBFS8TL
Q1301	VS2SC3928AR-1Y	AB		J	Transistor 2SC3928A-T112-1R
Q1508	VSKTA1535T+-1Y	AC		J	Transistor KTA1535T-RTK/P
Q1509	VSKRC402E+-1Y	AB		J	Transistor
Q2701	VSDTC614TK+-1Y	AB		J	Transistor DTC614TKT146
Q9601	VSLTC144EEB-1Y	AA		J	Transistor LTC144EEBFS8TL
Q9602	VSLTA124EEB-1Y	AA		J	Transistor LTA124EEBFS8TL
Q9607	VS2SC3928AR-1Y	AB		J	Transistor 2SC3928A-T112-1R
Q9608	VSLTA124EEB-1Y	AA		J	Transistor LTA124EEBFS8TL
R504	VRS-CZ1JF222FY	AA		J	Resistor 2.2k 1/16W Metal Oxide
R505	VRS-TQ2EF750JY	AA		J	Resistor 75 1/4W Metal Oxide
R506	VRS-TQ2EF750JY	AA		J	Resistor 75 1/4W Metal Oxide
R507	VRS-TQ2EF750JY	AA		J	Resistor 75 1/4W Metal Oxide
R508	VRS-CZ1JF682FY	AA		J	Resistor 6.8k 1/16W Metal Oxide
R511	VRS-CZ1JF102JY	AA		J	Resistor 1k 1/16W Metal Oxide
R512	VRS-CZ1JF102JY	AA		J	Resistor 1k 1/16W Metal Oxide
R513	VRS-TQ2EF680JY	AA		J	Resistor 68 1/4W Metal Oxide
R514	VRS-CZ1JF104JY	AA		J	Resistor 100k 1/16W Metal Oxide
R515	VRS-CZ1JF222FY	AA		J	Resistor 2.2k 1/16W Metal Oxide
R516	VRS-TQ2EF101JY	AA		J	Resistor 100 1/4W Metal Oxide
R517	VRS-CZ1JF104JY	AA		J	Resistor 100k 1/16W Metal Oxide
R518	VRS-TQ2EF680JY	AA		J	Resistor 68 1/4W Metal Oxide
R519	VRS-TQ2EF750JY	AA		J	Resistor 75 1/4W Metal Oxide
R520	VRS-CZ1JF682FY	AA		J	Resistor 6.8k 1/16W Metal Oxide
R522	VRS-CZ1JF561JY	AA		J	Resistor 560 1/16W Metal Oxide
R523	VRS-CZ1JF102JY	AA		J	Resistor 1k 1/16W Metal Oxide
R524	VRS-CZ1JF102JY	AA		J	Resistor 1k 1/16W Metal Oxide
R530	VRS-TQ2EF750JY	AA		J	Resistor 75 1/4W Metal Oxide
R531	VRS-TQ2EF750JY	AA		J	Resistor 75 1/4W Metal Oxide
R533	VRS-CZ1JF561JY	AA		J	Resistor 560 1/16W Metal Oxide
R535	VRS-TQ2EF750JY	AA		J	Resistor 75 1/4W Metal Oxide
R537	VRS-TQ2EF750JY	AA		J	Resistor 75 1/4W Metal Oxide
R538	VRK-SA1JF472JY	AA		J	Resistor 4.7k 1/16W Metal Composition
R541	VRS-TQ2EF750JY	AA		J	Resistor 75 1/4W Metal Oxide
R544	VRS-TQ2EF750JY	AA		J	Resistor 75 1/4W Metal Oxide
R547	VRK-SB1FF101JY	AA		J	Resistor 100 1/32W Metal Composition
R549	VRS-CZ1JF102JY	AA		J	Resistor 1k 1/16W Metal Oxide
R551	VRS-CZ1JF102JY	AA		J	Resistor 1k 1/16W Metal Oxide
R552	VRS-TV1JD221JY	AA		J	Resistor 220 1/16W Metal Oxide
R553	VRS-TV1JD221JY	AA		J	Resistor 220 1/16W Metal Oxide
R554	VRS-CZ1JF104JY	AA		J	Resistor 100k 1/16W Metal Oxide
R555	VRS-CZ1JF104JY	AA		J	Resistor 100k 1/16W Metal Oxide
R556	VRS-TV1JD221JY	AA		J	Resistor 220 1/16W Metal Oxide
R557	VRS-CZ1JF102JY	AA		J	Resistor 1k 1/16W Metal Oxide
R558	VRS-CZ1JF102JY	AA		J	Resistor 1k 1/16W Metal Oxide
R559	VRS-TV1JD221JY	AA		J	Resistor 220 1/16W Metal Oxide
R560	VRS-CZ1JF104JY	AA		J	Resistor 100k 1/16W Metal Oxide
R561	VRS-CZ1JF104JY	AA		J	Resistor 100k 1/16W Metal Oxide
R562	VRS-CZ1JF104JY	AA		J	Resistor 100k 1/16W Metal Oxide

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART DELIVERY	DESCRIPTION
[3] DUNTKF111FM11 (MAIN Unit)					
R563	VRS-CZ1JF104JY	AA		J	Resistor 100k 1/16W Metal Oxide
R564	VRS-CZ1JF102JY	AA		J	Resistor 1k 1/16W Metal Oxide
R565	VRS-CZ1JF102JY	AA		J	Resistor 1k 1/16W Metal Oxide
R566	VRS-CZ1JF564JY	AB		J	Resistor 560k 1/16W Metal Oxide
R567	VRS-CZ1JF104JY	AA		J	Resistor 100k 1/16W Metal Oxide
R568	VRS-CZ1JF104JY	AA		J	Resistor 100k 1/16W Metal Oxide
R569	VRS-CZ1JF564JY	AB		J	Resistor 560k 1/16W Metal Oxide
R570	VRS-CZ1JF564JY	AB		J	Resistor 560k 1/16W Metal Oxide
R571	VRS-CZ1JF564JY	AB		J	Resistor 560k 1/16W Metal Oxide
R572	VRK-SA1JF331JY	AA		J	Resistor 330 1/16W Metal Composition
R573	VRK-SA1JF331JY	AA		J	Resistor 330 1/16W Metal Composition
R574	VRS-CZ1JF104JY	AA		J	Resistor 100k 1/16W Metal Oxide
R575	VRS-CZ1JF102JY	AA		J	Resistor 1k 1/16W Metal Oxide
R576	VRS-CZ1JF102JY	AA		J	Resistor 1k 1/16W Metal Oxide
R577	VRK-SA1JF272JY	AA		J	Resistor 2.7k 1/16W Metal Composition
R578	VRS-CZ1JF102JY	AA		J	Resistor 1k 1/16W Metal Oxide
R579	VRS-CZ1JF102JY	AA		J	Resistor 1k 1/16W Metal Oxide
R580	VRS-CZ1JF104JY	AA		J	Resistor 100k 1/16W Metal Oxide
R581	VRS-CZ1JF101JY	AA		J	Resistor 100 1/16W Metal Oxide
R582	VRS-CZ1JF472JY	AA		J	Resistor 4.7k 1/16W Metal Oxide
R584	VRS-TQ2EF560JY	AA		J	Resistor 56 1/4W Metal Oxide
R586	VRS-TQ2EF560JY	AA		J	Resistor 56 1/4W Metal Oxide
R588	VRS-CZ1JF102JY	AA		J	Resistor 1k 1/16W Metal Oxide
R589	VRS-TQ2EF560JY	AA		J	Resistor 56 1/4W Metal Oxide
R590	VRS-TW2ED101JY	AA		J	Resistor 100 1/4W Metal Oxide
R591	VRS-CZ1JF104JY	AA		J	Resistor 100k 1/16W Metal Oxide
R592	VRS-CZ1JF101JY	AA		J	Resistor 100 1/16W Metal Oxide
R593	VRS-TW2ED101JY	AA		J	Resistor 100 1/4W Metal Oxide
R594	VRS-CZ1JF104JY	AA		J	Resistor 100k 1/16W Metal Oxide
R595	VRS-CZ1JF472JY	AA		J	Resistor 4.7k 1/16W Metal Oxide
R597	VRS-CZ1JF101JY	AA		J	Resistor 100 1/16W Metal Oxide
R599	VRS-TQ2EF750JY	AA		J	Resistor 75 1/4W Metal Oxide
R600	VRS-CZ1JF104JY	AA		J	Resistor 100k 1/16W Metal Oxide
R601	VRS-CY1JF000JY	AA		J	Resistor 0 1/16W Metal Oxide
R602	VRS-CZ1JF473JY	AA		J	Resistor 47k 1/16W Metal Oxide
R603	VRS-CY1JF000JY	AA		J	Resistor 0 1/16W Metal Oxide
R604	VRS-CZ1JF103JY	AA		J	Resistor 10k 1/16W Metal Oxide
R605	VRS-CZ1JF104JY	AA		J	Resistor 100k 1/16W Metal Oxide
R606	VRS-TW2ED101JY	AA		J	Resistor 100 1/4W Metal Oxide
R607	VRS-TW2ED101JY	AA		J	Resistor 100 1/4W Metal Oxide
R608	VRS-TV1JD101JY	AA		J	Resistor 100 1/16W Metal Oxide
R609	VRS-TV1JD101JY	AA		J	Resistor 100 1/16W Metal Oxide
R610	VRS-CZ1JF104JY	AA		J	Resistor 100k 1/16W Metal Oxide
R611	VRS-CZ1JF221JY	AA		J	Resistor 220 1/16W Metal Oxide
R612	VRS-CZ1JF561JY	AA		J	Resistor 560 1/16W Metal Oxide
R613	VRS-TV1JD101JY	AA		J	Resistor 100 1/16W Metal Oxide
R614	VRS-CZ1JF102JY	AA		J	Resistor 1k 1/16W Metal Oxide
R615	VRS-CZ1JF470JY	AA		J	Resistor 47 1/16W Metal Oxide
R616	VRS-CZ1JF104JY	AA		J	Resistor 100k 1/16W Metal Oxide
R617	VRS-CZ1JF221JY	AA		J	Resistor 220 1/16W Metal Oxide
R618	VRS-CZ1JF561JY	AA		J	Resistor 560 1/16W Metal Oxide
R619	VRS-CZ1JF102JY	AA		J	Resistor 1k 1/16W Metal Oxide
R620	VRS-CZ1JF103JY	AA		J	Resistor 10k 1/16W Metal Oxide
R621	VRS-CZ1JF564JY	AB		J	Resistor 560k 1/16W Metal Oxide
R622	VRS-CZ1JF564JY	AB		J	Resistor 560k 1/16W Metal Oxide
R623	VRS-CZ1JF472JY	AA		J	Resistor 4.7k 1/16W Metal Oxide
R624	VRS-CZ1JF472JY	AA		J	Resistor 4.7k 1/16W Metal Oxide
R625	VRS-CZ1JF102JY	AA		J	Resistor 1k 1/16W Metal Oxide
R626	VRS-CZ1JF101JY	AA		J	Resistor 100 1/16W Metal Oxide
R629	VRS-CZ1JF180JY	AA		J	Resistor 18 1/16W Metal Oxide
R630	VRS-CZ1JF180JY	AA		J	Resistor 18 1/16W Metal Oxide
R631	VRS-CZ1JF180JY	AA		J	Resistor 18 1/16W Metal Oxide
R633	VRS-CY1JF000JY	AA		J	Resistor 0 1/16W Metal Oxide
R635	VRS-CY1JF000JY	AA		J	Resistor 0 1/16W Metal Oxide
R636	VRS-CY1JF000JY	AA		J	Resistor 0 1/16W Metal Oxide
R639	VRS-CZ1JF221JY	AA		J	Resistor 220 1/16W Metal Oxide
R640	VRS-CZ1JF472JY	AA		J	Resistor 4.7k 1/16W Metal Oxide
R1102	VRK-SA1JF101JY	AC		J	Resistor 100 1/16W Metal Composition
R1103	VRS-CZ1JF000JY	AA		J	Resistor 0 1/16W Metal Oxide
R1109	VRS-CZ1JF103JY	AA		J	Resistor 10k 1/16W Metal Oxide
R1110	VRS-CZ1JF392JY	AA		J	Resistor 3.9k 1/16W Metal Oxide
R1112	VRS-CZ1JF391JY	AA		J	Resistor 390 1/16W Metal Oxide
R1113	VRS-CZ1JF151JY	AA		J	Resistor 150 1/16W Metal Oxide
R1114	VRS-CZ1JF100JY	AA		J	Resistor 10 1/16W Metal Oxide
R1115	VRS-CZ1JF391JY	AA		J	Resistor 390 1/16W Metal Oxide
R1118	VRK-SA1JF472JY	AA		J	Resistor 4.7k 1/16W Metal Composition
R1120	VRS-CZ1JF103JY	AA		J	Resistor 10k 1/16W Metal Oxide
R1121	VRS-CZ1JF103JY	AA		J	Resistor 10k 1/16W Metal Oxide
R1122	VRS-CZ1JF273JY	AA		J	Resistor 27k 1/16W Metal Oxide
R1123	VRS-CZ1JF273JY	AA		J	Resistor 27k 1/16W Metal Oxide
R1124	VRS-CZ1JF273JY	AA		J	Resistor 27k 1/16W Metal Oxide
R1125	VRS-CZ1JF273JY	AA		J	Resistor 27k 1/16W Metal Oxide
R1126	VRS-CZ1JF273JY	AA		J	Resistor 27k 1/16W Metal Oxide
R1127	VRS-CZ1JF273JY	AA		J	Resistor 27k 1/16W Metal Oxide
R1128	VRS-CZ1JF273JY	AA		J	Resistor 27k 1/16W Metal Oxide

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART DELIVERY	DESCRIPTION
[3] DUNTKF111FM11 (MAIN Unit)					
R1129	VRS-CZ1JF273JY	AA		J	Resistor 27k 1/16W Metal Oxide
R1130	VRS-CZ1JF273JY	AA		J	Resistor 27k 1/16W Metal Oxide
R1131	VRS-CZ1JF273JY	AA		J	Resistor 27k 1/16W Metal Oxide
R1143	VRS-CZ1JF472JY	AA		J	Resistor 4.7k 1/16W Metal Oxide
R1144	VRS-CZ1JF000JY	AA		J	Resistor 0 1/16W Metal Oxide
R1145	VRS-CZ1JF000JY	AA		J	Resistor 0 1/16W Metal Oxide
R1152	VRS-CZ1JF000JY	AA		J	Resistor 0 1/16W Metal Oxide
R1153	VRS-CZ1JF000JY	AA		J	Resistor 0 1/16W Metal Oxide
R1154	VRS-CZ1JF561JY	AA		J	Resistor 560 1/16W Metal Oxide
R1155	VRS-CZ1JF103JY	AA		J	Resistor 10k 1/16W Metal Oxide
R1157	VRS-CZ1JF000JY	AA		J	Resistor 0 1/16W Metal Oxide
R1301	VRS-CZ1JF102JY	AA		J	Resistor 1k 1/16W Metal Oxide
R1302	VRS-CZ1JF103JY	AA		J	Resistor 10k 1/16W Metal Oxide
R1304	VRS-CZ1JF103JY	AA		J	Resistor 10k 1/16W Metal Oxide
R1305	VRS-CZ1JF103JY	AA		J	Resistor 10k 1/16W Metal Oxide
R1306	VRS-CZ1JF000JY	AA		J	Resistor 0 1/16W Metal Oxide
R1307	VRS-CZ1JF000JY	AA		J	Resistor 0 1/16W Metal Oxide
R1308	VRS-CZ1JF391JY	AA		J	Resistor 390 1/16W Metal Oxide
R1309	VRS-CZ1JF391JY	AA		J	Resistor 390 1/16W Metal Oxide
R1310	VRS-CZ1JF391JY	AA		J	Resistor 390 1/16W Metal Oxide
R1311	VRS-CZ1JF391JY	AA		J	Resistor 390 1/16W Metal Oxide
R1312	VRS-CZ1JF391JY	AA		J	Resistor 390 1/16W Metal Oxide
R1313	VRS-CZ1JF391JY	AA		J	Resistor 390 1/16W Metal Oxide
R1314	VRS-CZ1JF473JY	AA		J	Resistor 47k 1/16W Metal Oxide
R1315	VRS-CZ1JF473JY	AA		J	Resistor 47k 1/16W Metal Oxide
R1316	VRS-CZ1JF473JY	AA		J	Resistor 47k 1/16W Metal Oxide
R1317	VRS-CZ1JF473JY	AA		J	Resistor 47k 1/16W Metal Oxide
R1318	VRS-CZ1JF473JY	AA		J	Resistor 47k 1/16W Metal Oxide
R1319	VRS-CZ1JF473JY	AA		J	Resistor 47k 1/16W Metal Oxide
R1336	VRS-CZ1JF153JY	AA		J	Resistor 15k 1/16W Metal Oxide
R1337	VRS-CZ1JF123JY	AA		J	Resistor 12k 1/16W Metal Oxide
R1338	VRS-CZ1JF103JY	AA		J	Resistor 10k 1/16W Metal Oxide
R1339	VRS-CZ1JF102JY	AA		J	Resistor 1k 1/16W Metal Oxide
R1507	VRS-CZ1JF273JY	AA		J	Resistor 27k 1/16W Metal Oxide
R1508	VRK-SA1JF473JY	AC		J	Resistor 47k 1/16W Metal Composition
R1509	VRK-SA1JF473JY	AC		J	Resistor 47k 1/16W Metal Composition
R1510	VRK-SA1JF473JY	AC		J	Resistor 47k 1/16W Metal Composition
R1515	VRS-CZ1JF000JY	AA		J	Resistor 0 1/16W Metal Oxide
R1520	VRS-CZ1JF000JY	AA		J	Resistor 0 1/16W Metal Oxide
R1523	VRS-CZ1JF000JY	AA		J	Resistor 0 1/16W Metal Oxide
R1538	VRS-CZ1JF331JY	AA		J	Resistor 330 1/16W Metal Oxide
R1539	VRS-CZ1JF103JY	AA		J	Resistor 10k 1/16W Metal Oxide
R1544	VRK-SA1JF473JY	AC		J	Resistor 47k 1/16W Metal Composition
R1545	VRK-SA1JF100JY	AB		J	Resistor 10 1/16W Metal Composition
R1547	VRS-CZ1JF103JY	AA		J	Resistor 10k 1/16W Metal Oxide
R1548	VRS-CZ1JF472JY	AA		J	Resistor 4.7k 1/16W Metal Oxide
R1549	VRS-CZ1JF222JY	AA		J	Resistor 2.2k 1/16W Metal Oxide
R1550	VRS-CZ1JF100JY	AA		J	Resistor 10 1/16W Metal Oxide
R1551	VRS-CZ1JF332JY	AA		J	Resistor 3.3k 1/16W Metal Oxide
R1552	VRS-CZ1JF332JY	AA		J	Resistor 3.3k 1/16W Metal Oxide
R1554	VRK-SA1JF100JY	AB		J	Resistor 10 1/16W Metal Composition
R1555	VRK-SA1JF100JY	AB		J	Resistor 10 1/16W Metal Composition
R1556	VRK-SA1JF473JY	AC		J	Resistor 47k 1/16W Metal Composition
R1564	VRS-CZ1JF103JY	AA		J	Resistor 10k 1/16W Metal Oxide
R1565	VRS-CZ1JF103JY	AA		J	Resistor 10k 1/16W Metal Oxide
R1567	VRS-CZ1JF332JY	AA		J	Resistor 3.3k 1/16W Metal Oxide
R1569	VRS-CZ1JF100JY	AA		J	Resistor 10 1/16W Metal Oxide
R1570	VRK-SA1JF100JY	AB		J	Resistor 10 1/16W Metal Composition
R1572	VRS-CZ1JF332JY	AA		J	Resistor 3.3k 1/16W Metal Oxide
R1573	VRS-CZ1JF100JY	AA		J	Resistor 10 1/16W Metal Oxide
R1574	VRS-CZ1JF103JY	AA		J	Resistor 10k 1/16W Metal Oxide
R1575	VRS-CZ1JF100JY	AA		J	Resistor 10 1/16W Metal Oxide
R2607	VRS-CZ1JF103JY	AA		J	Resistor 10k 1/16W Metal Oxide
R2608	VRS-CZ1JF103JY	AA		J	Resistor 10k 1/16W Metal Oxide
R2609	VRS-CZ1JF103JY	AA		J	Resistor 10k 1/16W Metal Oxide
R2610	VRS-CZ1JF103JY	AA		J	Resistor 10k 1/16W Metal Oxide
R2611	VRS-CZ1JF470JY	AA		J	Resistor 47 1/16W Metal Oxide
R2612	VRS-CZ1JF103JY	AA		J	Resistor 10k 1/16W Metal Oxide
R2636	VRS-CZ1JF104JY	AA		J	Resistor 100k 1/16W Metal Oxide
R2639	VRS-CZ1JF104JY	AA		J	Resistor 100k 1/16W Metal Oxide
R2702	VRK-SA1JF331JY	AA		J	Resistor 330 1/16W Metal Composition
R2710	VRK-SA1JF103JY	AB		J	Resistor 10k 1/16W Metal Composition
R2711	VRS-CZ1JF274FY	AA		J	Resistor 270k 1/16W Metal Oxide
R2712	VRS-CZ1JF104FY	AB		J	Resistor 100k 1/16W Metal Oxide
R2713	VRS-CZ1JF000JY	AA		J	Resistor 0 1/16W Metal Oxide
R2714	VRS-CZ1JF474JY	AA		J	Resistor 470k 1/16W Metal Oxide
R2716	VRS-CZ1JF103JY	AA		J	Resistor 10k 1/16W Metal Oxide
R2718	VRS-CZ1JF562JY	AA		J	Resistor 5.6k 1/16W Metal Oxide
R2720	VRS-TV1JD000JY	AA		J	Resistor 0 1/16W Metal Oxide
R2721	VRS-TV1JD000JY	AA		J	Resistor 0 1/16W Metal Oxide
R2722	VRS-TV1JD000JY	AA		J	Resistor 0 1/16W Metal Oxide
R2723	VRS-TV1JD000JY	AA		J	Resistor 0 1/16W Metal Oxide
R2725	VRS-CZ1JF224JY	AA		J	Resistor 220k 1/16W Metal Oxide
R2726	VRS-CZ1JF103JY	AA		J	Resistor 10k 1/16W Metal Oxide
R2727	VRS-CZ1JF472JY	AA		J	Resistor 4.7k 1/16W Metal Oxide

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART DELIVERY	DESCRIPTION
[3] DUNTKF111FM11 (MAIN Unit)					
R2728	VRK-SA1JF473JY	AC		J	Resistor 47k 1/16W Metal Composition
R3302	VRK-CZ1JF102FY	AA		J	Resistor 1k 1/16W Metal Oxide
R3304	VRK-CZ1JF393FY	AA		J	Resistor 39k 1/16W Metal Oxide
R3306	VRK-CZ1JF000JY	AA		J	Resistor 0 1/16W Metal Oxide
R3308	VRK-CZ1JF103FY	AB		J	Resistor 10k 1/16W Metal Oxide
R3309	VRK-CZ1JF333FY	AA		J	Resistor 33k 1/16W Metal Oxide
R3310	VRK-CZ1JF333FY	AA		J	Resistor 33k 1/16W Metal Oxide
R3312	VRK-CZ1JF102FY	AA		J	Resistor 1k 1/16W Metal Oxide
R3313	VRK-CZ1JF102FY	AA		J	Resistor 1k 1/16W Metal Oxide
R3314	VRK-CZ1JF102FY	AA		J	Resistor 1k 1/16W Metal Oxide
R3315	VRK-CZ1JF103JY	AA		J	Resistor 10k 1/16W Metal Oxide
R3317	VRK-CZ1JF101JY	AA		J	Resistor 100 1/16W Metal Oxide
R3318	VRK-CZ1JF512FY	AA		J	Resistor 5.1k 1/16W Metal Oxide
R3319	VRK-CZ1JF330JY	AA		J	Resistor 33 1/16W Metal Oxide
R3320	VRK-CZ1JF330JY	AA		J	Resistor 33 1/16W Metal Oxide
R3321	VRK-CZ1JF470JY	AA		J	Resistor 47 1/16W Metal Oxide
R3322	VRK-CZ1JF1R0JY	AA		J	Resistor 1 1/16W Metal Oxide
R3323	VRK-CZ1JF470JY	AA		J	Resistor 47 1/16W Metal Oxide
R3324	VRK-CZ1JF470JY	AA		J	Resistor 47 1/16W Metal Oxide
R3325	VRK-CZ1JF561FY	AA		J	Resistor 560 1/16W Metal Oxide
R3326	VRK-CZ1JF470JY	AA		J	Resistor 47 1/16W Metal Oxide
R3327	VRK-CZ1JF000JY	AA		J	Resistor 0 1/16W Metal Oxide
R3328	VRK-CZ1JF470JY	AA		J	Resistor 47 1/16W Metal Oxide
R3329	VRK-CZ1JF103JY	AA		J	Resistor 10k 1/16W Metal Oxide
R3330	VRK-CZ1JF470JY	AA		J	Resistor 47 1/16W Metal Oxide
R3333	VRK-CZ1JF470JY	AA		J	Resistor 47 1/16W Metal Oxide
R3334	VRK-CZ1JF472JY	AA		J	Resistor 4.7k 1/16W Metal Oxide
R3339	VRK-CZ1JF105JY	AA		J	Resistor 1M 1/16W Metal Oxide
R3340	VRK-CZ1JF391JY	AA		J	Resistor 390 1/16W Metal Oxide
R3341	VRK-CZ1JF390JY	AA		J	Resistor 39 1/16W Metal Oxide
R3342	VRK-CZ1JF390JY	AA		J	Resistor 39 1/16W Metal Oxide
R3343	VRK-SB1FF470JY	AA		J	Resistor 47 1/32W Metal Composition
R3344	VRK-CZ1JF472JY	AA		J	Resistor 4.7k 1/16W Metal Oxide
R3346	VRK-CZ1JF472JY	AA		J	Resistor 4.7k 1/16W Metal Oxide
R3348	VRK-CZ1JF472JY	AA		J	Resistor 4.7k 1/16W Metal Oxide
R3350	VRK-CZ1JF472JY	AA		J	Resistor 4.7k 1/16W Metal Oxide
R3352	VRK-CZ1JF472JY	AA		J	Resistor 4.7k 1/16W Metal Oxide
R3353	VRK-CZ1JF103JY	AA		J	Resistor 10k 1/16W Metal Oxide
R3355	VRK-CZ1JF472JY	AA		J	Resistor 4.7k 1/16W Metal Oxide
R3356	VRK-SA1JF472JY	AA		J	Resistor 4.7k 1/16W Metal Composition
R3357	VRK-CZ1JF472JY	AA		J	Resistor 4.7k 1/16W Metal Oxide
R3360	VRK-CZ1JF472JY	AA		J	Resistor 4.7k 1/16W Metal Oxide
R3361	VRK-CZ1JF103JY	AA		J	Resistor 10k 1/16W Metal Oxide
R3362	VRK-CZ1JF680JY	AB		J	Resistor 68 1/16W Metal Oxide
R3363	VRK-CZ1JF680JY	AB		J	Resistor 68 1/16W Metal Oxide
R3364	VRK-CZ1JF680JY	AB		J	Resistor 68 1/16W Metal Oxide
R3365	VRK-CZ1JF101JY	AA		J	Resistor 100 1/16W Metal Oxide
R3366	VRK-CZ1JF101JY	AA		J	Resistor 100 1/16W Metal Oxide
R3367	VRK-CZ1JF101JY	AA		J	Resistor 100 1/16W Metal Oxide
R3368	VRK-CZ1JF101JY	AA		J	Resistor 100 1/16W Metal Oxide
R3369	VRK-CZ1JF680JY	AB		J	Resistor 68 1/16W Metal Oxide
R3370	VRK-CZ1JF680JY	AB		J	Resistor 68 1/16W Metal Oxide
R3371	VRK-CZ1JF680JY	AB		J	Resistor 68 1/16W Metal Oxide
R3372	VRK-CZ1JF000JY	AA		J	Resistor 0 1/16W Metal Oxide
R3373	VRK-CZ1JF273JY	AA		J	Resistor 27k 1/16W Metal Oxide
R3374	VRK-CZ1JF000JY	AA		J	Resistor 0 1/16W Metal Oxide
R3376	VRK-CZ1JF101JY	AA		J	Resistor 100 1/16W Metal Oxide
R3377	VRK-CZ1JF101JY	AA		J	Resistor 100 1/16W Metal Oxide
R3378	VRK-CZ1JF101JY	AA		J	Resistor 100 1/16W Metal Oxide
R3379	VRK-CZ1JF470JY	AA		J	Resistor 47 1/16W Metal Oxide
R3380	VRK-CZ1JF470JY	AA		J	Resistor 47 1/16W Metal Oxide
R3381	VRK-CZ1JF470JY	AA		J	Resistor 47 1/16W Metal Oxide
R3382	VRK-CZ1JF470JY	AA		J	Resistor 47 1/16W Metal Oxide
R3383	VRK-CZ1JF470JY	AA		J	Resistor 47 1/16W Metal Oxide
R3384	VRK-CZ1JF470JY	AA		J	Resistor 47 1/16W Metal Oxide
R3385	VRK-CZ1JF101JY	AA		J	Resistor 100 1/16W Metal Oxide
R3386	VRK-CZ1JF103JY	AA		J	Resistor 10k 1/16W Metal Oxide
R3388	VRK-CZ1JF680JY	AB		J	Resistor 68 1/16W Metal Oxide
R3389	VRK-CZ1JF680JY	AB		J	Resistor 68 1/16W Metal Oxide
R3390	VRK-CZ1JF680JY	AB		J	Resistor 68 1/16W Metal Oxide
R3391	VRK-CZ1JF470JY	AA		J	Resistor 47 1/16W Metal Oxide
R3392	VRK-CZ1JF470JY	AA		J	Resistor 47 1/16W Metal Oxide
R3393	VRK-CZ1JF470JY	AA		J	Resistor 47 1/16W Metal Oxide
R3394	VRK-CZ1JF470JY	AA		J	Resistor 47 1/16W Metal Oxide
R3395	VRK-CZ1JF470JY	AA		J	Resistor 47 1/16W Metal Oxide
R3396	VRK-CZ1JF470JY	AA		J	Resistor 47 1/16W Metal Oxide
R3397	VRK-CZ1JF470JY	AA		J	Resistor 47 1/16W Metal Oxide
R3398	VRK-CZ1JF101JY	AA		J	Resistor 100 1/16W Metal Oxide
R3400	VRK-CZ1JF472JY	AA		J	Resistor 4.7k 1/16W Metal Oxide
R3401	VRK-CZ1JF472JY	AA		J	Resistor 4.7k 1/16W Metal Oxide
R3402	VRK-CZ1JF472JY	AA		J	Resistor 4.7k 1/16W Metal Oxide
R3404	VRK-CZ1JF472JY	AA		J	Resistor 4.7k 1/16W Metal Oxide
R3405	VRK-CZ1JF472JY	AA		J	Resistor 4.7k 1/16W Metal Oxide
R3407	VRK-CZ1JF102JY	AA		J	Resistor 1k 1/16W Metal Oxide
R3408	VRK-CZ1JF220JY	AA		J	Resistor 22 1/16W Metal Oxide

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART DELIVERY	DESCRIPTION
[3] DUNTKF111FM11 (MAIN Unit)					
R3409	VRS-CZ1JF220JY	AA		J	Resistor 22 1/16W Metal Oxide
R3410	VRS-CZ1JF472JY	AA		J	Resistor 4.7k 1/16W Metal Oxide
R3501	VRS-CZ1JF220JY	AA		J	Resistor 22 1/16W Metal Oxide
R3502	VRS-CZ1JF220JY	AA		J	Resistor 22 1/16W Metal Oxide
R3504	VRS-CZ1JF220JY	AA		J	Resistor 22 1/16W Metal Oxide
R3505	VRS-CZ1JF220JY	AA		J	Resistor 22 1/16W Metal Oxide
R3506	VRS-CZ1JF220JY	AA		J	Resistor 22 1/16W Metal Oxide
R3507	VRS-CZ1JF220JY	AA		J	Resistor 22 1/16W Metal Oxide
R3508	VRK-SA1JF000JY	AB		J	Resistor 0 1/16W Metal Composition
R3509	VRK-SA1JF000JY	AB		J	Resistor 0 1/16W Metal Composition
R3510	VRK-SB1FF220JY	AA		J	Resistor 22 1/32W Metal Composition
R3513	VRK-SB1FF220JY	AA		J	Resistor 22 1/32W Metal Composition
R3514	VRK-SB1FF220JY	AA		J	Resistor 22 1/32W Metal Composition
R3515	VRS-CZ1JF102FY	AA		J	Resistor 1k 1/16W Metal Oxide
R3516	VRS-CZ1JF102FY	AA		J	Resistor 1k 1/16W Metal Oxide
R3517	VRK-SB1FF220JY	AA		J	Resistor 22 1/32W Metal Composition
R3527	VRS-CZ1JF101JY	AA		J	Resistor 100 1/16W Metal Oxide
R3550	VRS-CZ1JF101JY	AA		J	Resistor 100 1/16W Metal Oxide
R4401	VRK-SB1FF470JY	AA		J	Resistor 47 1/32W Metal Composition
R4402	VRS-CZ1JF105JY	AA		J	Resistor 1M 1/16W Metal Oxide
R4403	VRS-CZ1JF472FY	AA		J	Resistor 4.7k 1/16W Metal Oxide
R4404	VRS-CZ1JF000JY	AA		J	Resistor 0 1/16W Metal Oxide
R4405	VRS-CZ1JF472FY	AA		J	Resistor 4.7k 1/16W Metal Oxide
R4406	VRK-SB1FF470JY	AA		J	Resistor 47 1/32W Metal Composition
R4407	VRK-SB1FF470JY	AA		J	Resistor 47 1/32W Metal Composition
R4408	VRK-SB1FF470JY	AA		J	Resistor 47 1/32W Metal Composition
R4409	VRK-SB1FF470JY	AA		J	Resistor 47 1/32W Metal Composition
R4410	VRK-SB1FF470JY	AA		J	Resistor 47 1/32W Metal Composition
R4411	VRK-SB1FF470JY	AA		J	Resistor 47 1/32W Metal Composition
R4412	VRK-SB1FF470JY	AA		J	Resistor 47 1/32W Metal Composition
R4413	VRK-SB1FF470JY	AA		J	Resistor 47 1/32W Metal Composition
R4414	VRK-SB1FF470JY	AA		J	Resistor 47 1/32W Metal Composition
R4415	VRS-CZ1JF103JY	AA		J	Resistor 10k 1/16W Metal Oxide
R4416	VRS-CZ1JF103JY	AA		J	Resistor 10k 1/16W Metal Oxide
R4417	VRS-CZ1JF103JY	AA		J	Resistor 10k 1/16W Metal Oxide
R4418	VRS-CZ1JF103JY	AA		J	Resistor 10k 1/16W Metal Oxide
R4420	VRS-CZ1JF103JY	AA		J	Resistor 10k 1/16W Metal Oxide
R4421	VRS-CZ1JF103JY	AA		J	Resistor 10k 1/16W Metal Oxide
R4422	VRS-CZ1JF101JY	AA		J	Resistor 100 1/16W Metal Oxide
R4423	VRS-CZ1JF103JY	AA		J	Resistor 10k 1/16W Metal Oxide
R4424	VRS-CZ1JF333JY	AA		J	Resistor 33k 1/16W Metal Oxide
R4425	VRS-CZ1JF103JY	AA		J	Resistor 10k 1/16W Metal Oxide
R4426	VRK-SB1FF470JY	AA		J	Resistor 47 1/32W Metal Composition
R4427	VRK-SB1FF470JY	AA		J	Resistor 47 1/32W Metal Composition
R4428	VRK-SB1FF470JY	AA		J	Resistor 47 1/32W Metal Composition
R4429	VRS-CZ1JF103JY	AA		J	Resistor 10k 1/16W Metal Oxide
R4430	VRS-CZ1JF103JY	AA		J	Resistor 10k 1/16W Metal Oxide
R4432	VRS-CZ1JF103JY	AA		J	Resistor 10k 1/16W Metal Oxide
R4433	VRS-CZ1JF103JY	AA		J	Resistor 10k 1/16W Metal Oxide
R4434	VRS-CZ1JF103JY	AA		J	Resistor 10k 1/16W Metal Oxide
R4435	VRS-CZ1JF103JY	AA		J	Resistor 10k 1/16W Metal Oxide
R4437	VRS-CZ1JF470JY	AA		J	Resistor 47 1/16W Metal Oxide
R4438	VRS-CZ1JF472FY	AA		J	Resistor 4.7k 1/16W Metal Oxide
R4439	VRK-SA1JF472JY	AA		J	Resistor 4.7k 1/16W Metal Composition
R4440	VRK-SB1FF470JY	AA		J	Resistor 47 1/32W Metal Composition
R4441	VRK-SB1FF470JY	AA		J	Resistor 47 1/32W Metal Composition
R4442	VRK-SB1FF470JY	AA		J	Resistor 47 1/32W Metal Composition
R4443	VRK-SB1FF470JY	AA		J	Resistor 47 1/32W Metal Composition
R4444	VRS-CZ1JF472FY	AA		J	Resistor 4.7k 1/16W Metal Oxide
R4447	VRS-CZ1JF472FY	AA		J	Resistor 4.7k 1/16W Metal Oxide
R4448	VRS-CZ1JF472FY	AA		J	Resistor 4.7k 1/16W Metal Oxide
R4449	VRS-CZ1JF472FY	AA		J	Resistor 4.7k 1/16W Metal Oxide
R8451	VRS-CZ1JF470JY	AA		J	Resistor 47 1/16W Metal Oxide
R8452	VRS-CZ1JF000JY	AA		J	Resistor 0 1/16W Metal Oxide
R8453	VRS-CZ1JF472FY	AA		J	Resistor 4.7k 1/16W Metal Oxide
R8455	VRS-CZ1JF472FY	AA		J	Resistor 4.7k 1/16W Metal Oxide
R8458	VRK-SB1FF000JY	AA		J	Resistor 0 1/32W Metal Composition
R8459	VRK-SB1FF000JY	AA		J	Resistor 0 1/32W Metal Composition
R8462	VRS-CZ1JF000JY	AA		J	Resistor 0 1/16W Metal Oxide
R8463	VRS-CZ1JF000JY	AA		J	Resistor 0 1/16W Metal Oxide
R8475	VRK-SA1JF222JY	AB		J	Resistor 2.2k 1/16W Metal Composition
R8476	VRK-SA1JF000JY	AB		J	Resistor 0 1/16W Metal Composition
R8480	VRK-SA1JF100JY	AB		J	Resistor 10 1/16W Metal Composition
R9602	VRS-CY1JF000JY	AA		J	Resistor 0 1/16W Metal Oxide
R9603	VRS-CZ1JF000JY	AA		J	Resistor 0 1/16W Metal Oxide
R9605	VRS-CZ1JF101JY	AA		J	Resistor 100 1/16W Metal Oxide
R9606	VRS-CZ1JF102JY	AA		J	Resistor 1k 1/16W Metal Oxide
R9610	VRS-CZ1JF472JY	AA		J	Resistor 4.7k 1/16W Metal Oxide
R9612	VRS-CZ1JF101JY	AA		J	Resistor 100 1/16W Metal Oxide
R9613	VRS-CZ1JF101JY	AA		J	Resistor 100 1/16W Metal Oxide
R9614	VRS-CZ1JF000JY	AA		J	Resistor 0 1/16W Metal Oxide
R9617	VRS-CZ1JF101JY	AA		J	Resistor 100 1/16W Metal Oxide
R9620	VRS-CZ1JF432FY	AA		J	Resistor 4.3k 1/16W Metal Oxide
R9621	VRS-CZ1JF103FY	AB		J	Resistor 10k 1/16W Metal Oxide
R9623	VRS-CY1JF000JY	AA		J	Resistor 0 1/16W Metal Oxide

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART DELIVERY	DESCRIPTION
[3] DUNTKF111FM11 (MAIN Unit)					
R9624	VRS-CZ1JF101JY	AA		J	Resistor 100 1/16W Metal Oxide
R9626	VRS-CZ1JF101JY	AA		J	Resistor 100 1/16W Metal Oxide
R9627	VRS-CZ1JF000JY	AA		J	Resistor 0 1/16W Metal Oxide
R9628	VRS-CZ1JF473FY	AA		J	Resistor 47k 1/16W Metal Oxide
R9629	VRS-CZ1JF153FY	AA		J	Resistor 15k 1/16W Metal Oxide
R9630	VRS-CZ1JF153FY	AA		J	Resistor 15k 1/16W Metal Oxide
R9631	VRS-CZ1JF123FY	AA		J	Resistor 12k 1/16W Metal Oxide
R9632	VRS-CZ1JF102JY	AA		J	Resistor 1k 1/16W Metal Oxide
R9633	VRS-CZ1JF101JY	AA		J	Resistor 100 1/16W Metal Oxide
R9634	VRS-CZ1JF3R9JY	AA		J	Resistor 3.9 1/16W Metal Oxide
R9635	VRS-CZ1JF103JY	AA		J	Resistor 10k 1/16W Metal Oxide
R9636	VRS-CZ1JF103JY	AA		J	Resistor 10k 1/16W Metal Oxide
R9637	VRS-CZ1JF101JY	AA		J	Resistor 100 1/16W Metal Oxide
R9638	VRS-CZ1JF303FY	AA		J	Resistor 30k 1/16W Metal Oxide
R9639	VRS-CZ1JF562JY	AA		J	Resistor 5.6k 1/16W Metal Oxide
R9640	VRS-CZ1JF562FY	AA		J	Resistor 5.6k 1/16W Metal Oxide
R9641	VRS-CZ1JF101JY	AA		J	Resistor 100 1/16W Metal Oxide
R9643	VRS-CZ1JF101JY	AA		J	Resistor 100 1/16W Metal Oxide
R9645	VRS-CZ1JF102JY	AA		J	Resistor 1k 1/16W Metal Oxide
R9646	VRS-CZ1JF000JY	AA		J	Resistor 0 1/16W Metal Oxide
R9648	VRS-CZ1JF103JY	AA		J	Resistor 10k 1/16W Metal Oxide
R9650	VRS-CZ1JF101JY	AA		J	Resistor 100 1/16W Metal Oxide
R9652	VRS-CZ1JF101JY	AA		J	Resistor 100 1/16W Metal Oxide
R9653	VRS-TW2HF1R0JY	AA		J	Resistor 1 1/2W Metal Oxide
R9654	VRS-TW2HF1R0JY	AA		J	Resistor 1 1/2W Metal Oxide
R9655	VRS-TW2HF1R0JY	AA		J	Resistor 1 1/2W Metal Oxide
R9656	VRS-CZ1JF101JY	AA		J	Resistor 100 1/16W Metal Oxide
R9657	VRS-CZ1JF753FY	AA		J	Resistor 75k 1/16W Metal Oxide
R9658	VRS-CZ1JF123FY	AA		J	Resistor 12k 1/16W Metal Oxide
R9659	VRS-TW2HF1R0JY	AA		J	Resistor 1 1/2W Metal Oxide
R9660	VRS-TW2HF1R0JY	AA		J	Resistor 1 1/2W Metal Oxide
R9661	VRS-TW2HF3R3JY	AA		J	Resistor 3.3 1/2W Metal Oxide
R9662	VRS-TW2HF3R3JY	AA		J	Resistor 3.3 1/2W Metal Oxide
R9664	VRS-CZ1JF105JY	AA		J	Resistor 1M 1/16W Metal Oxide
R9665	VRS-CZ1JF101JY	AA		J	Resistor 100 1/16W Metal Oxide
R9666	VRS-CZ1JF102JY	AA		J	Resistor 1k 1/16W Metal Oxide
R9680	VRS-CZ1JF103JY	AA		J	Resistor 10k 1/16W Metal Oxide
R9681	VRS-CZ1JF102JY	AA		J	Resistor 1k 1/16W Metal Oxide
RDA3301	PRDARA577WJFW	AF		J	Heat Sink
SC501	QSOCNA770WJZZ	AG		J	Socket
SC502	QSOCZA161WJZZ	AG		J	Socket
SC503	QSOCZA161WJZZ	AG		J	Socket
SC504	QSOCNA769WJZZ	AG		J	Socket
SC1501	QSOCZA173WJQZY	AG		J	Socket
SC1502	QSOCZA173WJQZY	AG		J	Socket
SC1503	QSOCZA072WJZZQ	AH		J	Socket
SC4401	Not Available	-		-	Connector *PWB replacement item
TH3301	VHHM1103J03-1Y	AC		J	Thermistor
TU1102	RTUDAA019WJQZ	AZ		J	Tuner
VA3301	RH-VXA194WJZZY	AC		J	Varistor AVRL161A1R1NTB
VA3302	RH-VXA194WJZZY	AC		J	Varistor AVRL161A1R1NTB
X3301	Not Available	-		-	Crystal *PWB replacement item
X4401	RCRSCA039WJZZY	AG		J	Crystal
N	PSPA3B312WJKZ	AD		J	Spacer
[4] CABINET AND MECHANICAL PARTS (LC-32LE600E/RU/S)					
1	CCABAC371WJ12	BG	N	P	Front Cabinet Ass'y
2	CCABBB619WJ12	BG	N	P	Rear Cabinet Ass'y
2-2	Not Available	-	N	-	Terminal Label
5	CANGKC375WJ02	AL	N	P	Side Terminal Angle Ass'y
5-1	Not Available	-	N	-	Side Terminal Label
8	LHLDWA289WJKZ	AC	N	J	Wire Holder, x2
17	QCNW-J895WJQZ		N	P	Connecting Cord Main-Power(PD)
18	QCNW-J896WJQZ	AF	N	P	Connecting Cord Main-Power(LB)
21	QCNW-G182WJQZ	AF		J	Connecting Cord Main-Power(PL)
24	QCNW-J712WJQZ	AF		P	Connecting Cord Main-LCD Control(LP)
22	QCNW-K027WJQZ	AW	N	P	Connecting Cord Main-LCD Control(LW)
26	QCNW-J996WJQZ		N	P	Connecting Cord(AS)
33	TLABZC352WJZZ	AK	N	P	POP Label (except for Russia)
33	TLABZC353WJZZ	AP	N	P	POP Label (for Russia)
35	XBPS730P06000	AA		J	Screw for HDMI, x3
N	GCOVAD472WJ1A	AH	S	P	Bottom Cover
N	QCNW-J892WJQZ	AH	N	P	Connecting Cord Main-R/C, LED-Key(RA/KM)
[5] LCD PANEL MODULE UNIT (LC-32LE600E/RU/S)					
1	DLCUCA001FM02		N	P	32"LCD Panel Module Unit (LC-32LE600E/RU/S)
1-4	RUNTK4248TPZB	BL	N	P	LCD Control Unit
1-5	XHPS730P06WS0	AA		J	Screw, x4
1-22	R1LK315D3FZF0Y	CP	N	P	32" LCD Panel
1-28	LX-HZA039WJF7	AB		J	Screw, x8
N	LX-HZA064WJF7	AB	N	P	Wsher Screw, x2

NO.	PARTS CODE	PRICE RANK	NEW MARK	PART DELIVERY	DESCRIPTION
[6] CABINET AND MECHANICAL PARTS (LC-40LE600E/RU/S)					
1	CCABAC372WJ12	BK	N	P	Front Cabinet Ass'y
1-2	Not Available	-	N	-	Front Decoration Ass'y
2	CCABBB618WJ12	BH	N	P	Rear Cabinet Ass'y
2-2	Not Available	-	N	-	Terminal Label
5	CANGKC375WJ02	AL	S	P	Side Terminal Angle Ass'y
5-1	Not Available	-	N	-	Side Terminal Label
17	QCNW-J903WJQZ	AK	N	J	Connecting Cord Main-Power(PD)
18	QCNW-J904WJQZ	AG	N	P	Connecting Cord Main-Power(LB)
21	QCNW-J906WJQZ			P	Connecting Cord Main-Power(PL)
22	QCNW-K029WJQZ	AX	N	P	Connecting Cord Main-LCD Control(LW)
24	QCNW-J801WJQZ	AG	N	P	Connecting Cord Main-LCD Control(LP)
26	QCNW-J996WJQZ		N	P	Connecting Cord(AS)
33	TLABZC322WJZZ	AH	N	P	POP Label (except for Russia)
33	TLABZC323WJZZ	AP	N	P	POP Label (for Russia)
35	XBPS730P06000	AA		J	Screw for HDMI, x3
N	GCOVAD464WJ1A	AL	S	P	Bottom Cover
N	LHLDQA001WJ1A	AF	S	P	Wire Holder
N	PSLDMB651WJZZ	AC	S	P	Conductor: 10x60
N	QCNW-J900WJQZ	AH	N	P	Connecting Cord Main-R/C, LED-Key(RA/KM)
[7] LCD PANEL MODULE UNIT (LC-40LE600E/RU/S)					
1	DLCUCA002FM02		N	P	40"LCD Panel Module Unit (LC-40LE600E/RU/S)
1-3	RUNTK4248TPZA	BL	N	P	LCD Control Unit
1-4	XBPS730P06WS0	AA		J	Screw, x4
1-24	R1LK400D3FZC0Y	CR	N	P	40" LCD Panel
1-31	LX-BZA213WJF7	AA		J	Screw, x10
N	LX-BZA348WJF7	AB	N	P	Wsher Screw, x4
[8] CABINET AND MECHANICAL PARTS (LC-46LE600E/RU/S)					
1	CCABAC378WJ12	BL	N	P	Front Cabinet Ass'y
1-2	Not Available	-	N	-	Front Decoration Ass'y
2	CCABBB617WJ12	BM	N	P	Rear Cabinet Ass'y
2-2	Not Available	-	N	-	Terminal Label
5	CANGKC375WJ02	AL	S	P	Side Terminal Angle Ass'y
5-1	Not Available	-	N	-	Side Terminal Label
17	PSLDMB651WJZZ	AC		P	Conductor: 10x60, x2
20	QCNW-H973WJQZ	AG		P	Connecting Cord Main-Power(PL)
21	QCNW-J911WJQZ		N	P	Connecting Cord Main-Power(PD)
22	QCNW-J912WJQZ	AG	N	P	Connecting Cord Main-Power(LB)
24	QCNW-K031WJQZ	AX	N	P	Connecting Cord Main-LCD Control(LW)
26	QCNW-J801WJQZ	AG		P	Connecting Cord Main-LCD Control(LP)
28	QCNW-K104WJQZ	AU	N	P	Connecting Cord Power(AS)
34	TLABZC322WJZZ	AH	N	P	POP Label (except for Russia)
34	TLABZC323WJZZ	AP	N	P	POP Label (for Russia)
36	XBPS730P06000	AM		J	Screw for HDMI, x3
N	GCOVAD479WJ1A	AM		P	Bottom Cover
N	QCNW-J908WJQZ	AH	N	P	Connecting Cord Main-R/C, LED-Key(RA/KM)
N	LHLDQA001WJ1A	AF	S	P	Wire Holder
N	RCORFA038WJZZ	AH		J	Ferrite Core
[9] LCD PANEL MODULE UNIT (LC-46LE600E/RU/S)					
1	DLCUCA003FM02		N	P	46"LCD Panel Module Unit (LC-46LE600E/RU/S)
1-3	RUNTK4248TPZZ	BL	N	P	LCD Control Unit
1-4	XHPS730P06WS0	AA		J	Screw, x4
1-5	QCNW-K183WJQZ	AN	N	P	Connecting Cord, x2
1-26	R1LK460D3FZN0Y	CT	N	P	46" LCD Panel
N	LX-HZA064WJF7	AB	N	P	Wsher Screw, x4
[10] SUPPLIED ACCESSORIES					
X4	CDAI-A584WJ02	BG	N	P	Stand Unit (LC-32LE600E/RU/S)
X4	CDAI-A586WJ02	BH	N	P	Stand Unit (LC-40LE600E/RU/S)
X4	CDAI-A588WJ02	BL	N	P	Stand Unit (LC-46LE600E/RU/S)
X5	TINS-E285WJZZ	AG	N	P	Operation Manual (for Europe except East Europe)
X5	TINS-E286WJZZ	AF	N	P	Operation Manual (for Sweden)
X5	TINS-E287WJZZ	AL	N	P	Operation Manual (for East Europe)
X5	TINS-E288WJZZ	AD	N	P	Operation Manual (for Russia)
[11] SERVICE JIGS (USE FOR SERVICING)					
N	QCNW-K037WJQZ			J	Main+LCD Control-Power(LB)
N	QCNW-K039WJQZ			J	Main-R/C, LED-Key(RA/KM)
N	QCNW-G616WJQZ	BK		J	Connecting Cord Main-LCD Control(LW)
N	QCNW-H347WJQZ	AY		J	Connecting Cord Main-LCD Control(LP)
N	QCNW-G625WJQZ	AP		J	Connecting Cord Main-Power(PL)
N	QCNW-H184WJQZ	AX		J	Connecting Cord Main-Power(PD)
N	QCNW-J413WJPZ	AQ		J	Connecting Cord Main-Speaker(SP)

OUTLINE AND DIFFERENCES FROM BASE MODEL

OUTLINE

This model is based on the LC-32LE700E/RU/S, LC-40LE700E/RU/S, LC-46LE700E/RU/S and is changed some parts. This Service Manual covers the modifications alone. For the other points, refer to the LC-32LE700E/RU/S, LC-40LE700E/RU/S and LC-46LE700E/RU/S (No. S89B4LC32L700) Service Manual.

DIFFERENCES FROM BASE MODEL

■LIST OF CHANGED PARTS (LC-32LE600E/RU/S)

Ref. No.	Description	LC-32LE700E/RU/S (No. S89B4LC32L700)	LC-32LE600E/RU/S (No. S89B5LC32L600)	Interchangeability	Note
PRINTED WIRING BOARD ASSEMBLIES					
	KEY Unit	DUNTKE266FM18	←	—	—
	MAIN Unit	DUNTKE306FM01	DUNTKE311FM11	D	Changed
	R/C, LED Unit	DUNTKE308FM02	←	—	—
	ICON Unit	DUNTKE314FM02	—	—	Abolish
	POWER Unit	RUNTKA619WJQZ	←	—	—
	LCD Control Unit	RUNTK4225TPZE	RUNTK4248TPZB	D	Changed
	LED5 PWB1 Unit	RUNTKA595WJ01	←	—	—
	LED5 PWB2 Unit	RUNTKA595WJ02	←	—	—
	LED8 PWB1 Unit	RUNTKA598WJ01	←	—	—
	LED8 PWB2 Unit	RUNTKA598WJ02	←	—	—
LCD PANEL					
	32" LCD Panel Module Unit	DLCUCA001FM03	DLCUCA001FM02	D	Some parts changed
CABINET AND MECHANICAL PARTS					
1	Front Cabinet Ass'y	CCABAC371WJ11	CCABAC371WJ12	D	Changed
1-4	Diffusion Sheet	PSHEPB007WJKZ	—	—	Abolish
2	Rear Cabinet Ass'y	CCABBB619WJ11	CCABBB619WJ12	D	Changed
2-2	Terminal Label	HINDPD390WJSA	HINDPD391WJSA	D	Changed
4	Bottom Cover Ass'y	CCOVAD472WJ11	—	—	Abolish
5	Side Terminal Angle Ass'y	CANGKC375WJ01	CANGKC375WJ02	D	Changed
5-1	Side Terminal Label	HINDPD408WJSA	HINDPD470WJSA	D	Changed
8	Wire Holder	LHLDWA289WJKZ, x3	LHLDWA289WJKZ, x2	—	Abolish (3→2)
18	Connecting Cord Main-Power(LB)	QCNW-J915WJQZ	QCNW-J896WJQZ	D	Changed
19	Connecting Cord Main-Key(KM)	QCNW-J977WJQZ	—	—	Abolish
20	Connecting Cord Main-R/C, LED(RA)	QCNW-J976WJQZ	—	—	Abolish
21	Connecting Cord Main-Power(PL)	QCNW-J898WJQZ	QCNW-G182WJQZ	D	Changed
22	Connecting Cord Main-LCD Control(LW)	QCNW-J894WJQZ	QCNW-K027WJQZ	D	Changed
24	Connecting Cord Main-LCD Control(LP)	QCNW-J897WJQZ	QCNW-J712WJQZ	D	Changed
25	Connecting Cord R/C, LED-ICON(IM)	QCNW-J916WJQZ	—	—	Abolish
33	POP Label (except for Russia)	TLABZC319WJZZ	TLABZC352WJZZ	D	Changed
33	POP Label (for Russia)	TLABZC320WJZZ	TLABZC353WJZZ	D	Changed
35	Screw (for HDMI)	XBPS730P06000, x4	XBPS730P06000, x3	—	Abolish (4→3)
N	Bottom Cover	—	GCOVAD472WJ1A	—	Addition
N	Connecting Cord Main-R/C, LED-Key(RA/KM)	—	QCNW-J892WJQZ	—	Addition
LCD PANEL MODULE UNIT					
1	32" LCD Panel Module Unit	DLCUCA001FM03	DLCUCA001FM02	D	Some parts changed
1-4	LCD Control Unit	RUNTK4225TPZE	RUNTK4248TPZB	D	Changed
1-5	Screw	XHPS730P06WS0, x6	XHPS730P06WS0, x4	—	Abolish (6→4)
1-22	32" LCD Panel	R1LK315D3FZE0Y	R1LK315D3FZF0Y	D	Changed
1-28	Screw	LX-HZA039WJF7, x10	LX-HZA039WJF7, x8	—	Abolish (10→8)
N	Washer Screw	—	LX-HZA064WJF7	—	Addition
SUPPLIED ACCESSORIES					
X4	Stand Unit	CDAI-A595WJ02	CDAI-A584WJ02	D	Changed
X5	Operation Manual (for Europe except E-Europe)	TINS-E281WJZZ	TINS-E285WJZZ	D	Changed
X5	Operation Manual (for Sweden)	TINS-E282WJZZ	TINS-E286WJZZ	D	Changed
X5	Operation Manual (for East Europe)	TINS-E283WJZZ	TINS-E287WJZZ	D	Changed
X5	Operation Manual (for Russia)	TINS-E284WJZZ	TINS-E288WJZZ	D	Changed
SERVICE JIGS (USE FOR SERVICING)					
	Main+LCD Control-Power(LB)	QCNW-K036WJQZ	QCNW-K037WJQZ	D	Changed
	Main-Key(KM)	QCNW-G440WJQZ	—	—	Abolish
	Main-R/C, LED(RA)	QCNW-H184WJQZ	—	—	Abolish
	Main-R/C, LED-Key(RA/KM)	—	QCNW-K039WJQZ	—	Addition
	R/C, LED-ICON(IM)	QCNW-G442WJPZ	—	—	Abolish
MAIN Unit: Please refer to a Parts list.					

■LIST OF CHANGED PARTS (LC-40LE600E/RU/S)

Ref. No.	Description	LC-40LE700E/RU/S (No. S89B4LC32L700)	LC-40LE600E/RU/S (No. S89B5LC32L600)	Interchange-ability	Note
PRINTED WIRING BOARD ASSEMBLIES					
	KEY Unit	DUNTKE266FM18	←	—	—
	MAIN Unit	DUNTKE306FM01	DUNTKE306FM01	D	Changed
	R/C, LED Unit	DUNTKE308FM02	←	—	—
	ICON Unit	DUNTKE314FM02	—	—	Abolish
	POWER Unit	RUNTKA609WJQZ	←	—	—
	LCD Control Unit	RUNTK4225TPZE	RUNTK4248TPZA	D	Changed
	LED5 PWB1 Unit	RUNTKA595WJ01	←	—	—
	LED5 PWB2 Unit	RUNTKA595WJ02	←	—	—
	LED6 PWB1 Unit	RUNTKA596WJ01	←	—	—
	LED6 PWB2 Unit	RUNTKA596WJ02	←	—	—
LCD PANEL					
	40" LCD Panel Module Unit	DLCUCA002FM03	DLCUCA002FM02	D	Some parts changed
CABINET AND MECHANICAL PARTS					
1	Front Cabinet Ass'y	CCABAC372WJ11	CCABAC372WJ12	D	Changed
1-2	Front Decoration Ass'y	CDECQB299WJ11	CDECQB299WJ12	D	Changed
1-4	Diffusion Sheet	PSHEPB007WJKZ	—	—	Abolish
2	Rear Cabinet Ass'y	CCABBB618WJ11	CCABBB618WJ12	D	Changed
2-2	Terminal Label	HiNDPD390WJSA	HiNDPD391WJSA	D	Changed
4	Bottom Cover Ass'y	CCOVAD464WJ11	—	—	Abolish
5	Side Terminal Angle Ass'y	CANGKC375WJ01	CANGKC375WJ02	D	Changed
5-1	Side Terminal Label	HiNDPD408WJSA	HiNDPD470WJSA	D	Changed
18	Connecting Cord Main-Power(LB)	QCNW-J917WJQZ	QCNW-J904WJQZ	D	Changed
19	Connecting Cord Main-Key(KM)	QCNW-J979WJQZ	—	—	Abolish
20	Connecting Cord Main-R/C, LED(RA)	QCNW-J978WJQZ	—	—	Abolish
21	Connecting Cord Main-Power(PL)	QCNW-G178WJQZ	QCNW-J906WJQZ	D	Changed
22	Connecting Cord Main-LCD Control(LW)	QCNW-J902WJQZ	QCNW-K029WJQZ	D	Changed
24	Connecting Cord Main-LCD Control(LP)	QCNW-J905WJQZ	QCNW-J801WJQZ	D	Changed
25	Connecting Cord R/C, LED-ICON(IM)	QCNW-J918WJQZ	—	—	Abolish
33	POP Label (except for Russia)	TLABZC319WJZZ	TLABZC322WJZZ	D	Changed
33	POP Label (for Russia)	TLABZC320WJZZ	TLABZC323WJZZ	D	Changed
35	Screw (for HDMI)	XBPS730P06000, x4	XBPS730P06000, x3	—	Abolish (4→3)
N	Bottom Cover	—	GCOVAD464WJ1A	—	Addition
N	Connecting Cord Main-R/C, LED-Key(RA/KM)	—	QCNW-J900WJQZ	—	Addition
N	Wire Holder	—	LHLDW1033CE00	—	Addition
N	Conductor-10x60	—	PSLDMB651WJZZ	—	Addition
LCD PANEL MODULE UNIT					
1	40" LCD Panel Module Unit	DLCUCA002FM03	DLCUCA002FM02	D	Some parts changed
1-3	LCD Control Unit	RUNTK4225TPZE	RUNTK4248TPZA	D	Changed
1-4	Screw	XHPS730P06WS0, x6	XHPS730P06WS0, x4	—	Abolish (6→4)
1-24	40" LCD Panel	R1LK400D3FZB0Y	R1LK400D3FZC0Y	D	Changed
1-31	Screw	LX-BZA213WJF7, x14	LX-BZA213WJF7, x10	—	Abolish (14→10)
N	Washer Screw	—	LX-BZA348WJF7	—	Addition
SUPPLIED ACCESSORIES					
X4	Stand Unit	CDAi-A600WJ02	CDAi-A586WJ02	D	Changed
X5	Operation Manual (for Europe except E-Europe)	TiNS-E281WJZZ	TiNS-E285WJZZ	D	Changed
X5	Operation Manual (for Sweden)	TiNS-E282WJZZ	TiNS-E286WJZZ	D	Changed
X5	Operation Manual (for East Europe)	TiNS-E283WJZZ	TiNS-E287WJZZ	D	Changed
X5	Operation Manual (for Russia)	TiNS-E284WJZZ	TiNS-E288WJZZ	D	Changed
SERVICE JIGS (USE FOR SERVICING)					
	Main+LCD Control-Power(LB)	QCNW-K036WJQZ	QCNW-K037WJQZ	D	Changed
	Main-Key(KM)	QCNW-G440WJQZ	—	—	Abolish
	Main-R/C, LED(RA)	QCNW-H184WJQZ	—	—	Abolish
	Main-R/C, LED-Key(RA/KM)	—	QCNW-K039WJQZ	—	Addition
	R/C, LED-ICON(IM)	QCNW-G442WJPZ	—	—	Abolish
MAIN Unit: Please refer to a Parts list.					

■LIST OF CHANGED PARTS (LC-46LE600E/RU/S)

Ref. No.	Description	LC-46LE700E/RU/S (No. S89B4LC32L700)	LC-46LE600E/RU/S (No. S89B5LC32L600)	Interchange-ability	Note
PRINTED WIRING BOARD ASSEMBLIES					
	KEY Unit	DUNTKE266FM18	←	—	—
	MAIN Unit	DUNTKE306FM01	DUNTKF111FM11	D	Changed
	R/C, LED Unit	DUNTKE308FM02	←	—	—
	ICON Unit	DUNTKF314FM02	—	—	Abolish
	POWER Unit	RUNTKA611WJQZ	←	—	—
	LCD Control Unit	RUNTK4225TPZE	RUNTK4248TPZZ	D	Changed
	LED5 PWB1 Unit	RUNTKA595WJ01	←	—	—
	LED5 PWB2 Unit	RUNTKA595WJ02	←	—	—
	LED6 PWB1 Unit	RUNTKA596WJ01	←	—	—
	LED6 PWB2 Unit	RUNTKA596WJ02	←	—	—
	LED8 PWB1 Unit	RUNTKA598WJ01	←	—	—
	LED8 PWB2 Unit	RUNTKA598WJ02	←	—	—
LCD PANEL					
	46" LCD Panel Module Unit	DLCUCA003FM03	DLCUCA003FM02	D	Some parts changed
CABINET AND MECHANICAL PARTS					
1	Front Cabinet Ass'y	CCABAC378WJ11	CCABAC378WJ12	D	Changed
1-2	Front Decoration Ass'y	CDECQB309WJ11	CDECQB309WJ12	D	Changed
1-4	Diffusion Sheet	PSHEPB007WJKZ	—	—	Abolish
2	Rear Cabinet Ass'y	CCABBB617WJ11	CCABBB617WJ12	D	Changed
2-2	Terminal Label	HiNDPD390WJSA	HiNDPD391WJSA	D	Changed
4	Bottom Cover Ass'y	CCOVAD479WJ11	—	—	Abolish
5	Side Terminal Angle Ass'y	CANGKC375WJ01	CANGKC375WJ02	D	Changed
5-1	Side Terminal Label	HiNDPD408WJSA	HiNDPD470WJSA	D	Changed
17	Conductor-10x60	PSLDMB651WJZZ, x1	PSLDMB651WJZZ, x2	—	Addition (1→2)
19	Connecting Cord Main-Key(KM)	QCNW-J981WJQZ	—	—	Abolish
20	Connecting Cord Main-Power(PL)	QCNW-J914WJQZ	QCNW-H973WJQZ	D	Changed
22	Connecting Cord Main-Power(LB)	QCNW-J919WJQZ	QCNW-J912WJQZ	D	Changed
23	Connecting Cord Main-R/C, LED(RA)	QCNW-J980WJQZ	—	—	Abolish
24	Connecting Cord Main-LCD Control(LW)	QCNW-J910WJQZ	QCNW-K031WJQZ	D	Changed
26	Connecting Cord Main-LCD Control(LP)	QCNW-J913WJQZ	QCNW-J801WJQZ	D	Changed
27	Connecting Cord R/C, LED-ICON(IM)	QCNW-J920WJQZ	—	—	Abolish
28	Connecting Cord Power(AS)	QCNW-J966WJQZ	QCNW-K104WJQZ	D	Changed
34	POP Label (except for Russia)	TLABZC319WJZZ	TLABZC322WJZZ	D	Changed
34	POP Label (for Russia)	TLABZC320WJZZ	TLABZC323WJZZ	D	Changed
36	Screw (for HDMI)	XBPS730P06000, x4	XBPS730P06000, x3	—	Abolish (4→3)
N	Bottom Cover	—	GCOVAD479WJ1A	—	Addition
N	Connecting Cord Main-R/C, LED-Key(RA/KM)	—	QCNW-J908WJQZ	—	Addition
N	Wire Holder	—	LHLDW1033CE00	—	Addition
N	Ferrite Core	—	RCORFA038WJZZ	—	Addition
LCD PANEL MODULE UNIT					
1	46" LCD Panel Module Unit	DLCUCA003FM03	DLCUCA003FM02	D	Some parts changed
1-3	LCD Control Unit	RUNTK4225TPZE	RUNTK4248TPZZ	D	Changed
1-4	Screw	XHPS730P06WS0, x6	XHPS730P06WS0, x4	—	Abolish (6→4)
1-5	Connecting Cord	QCNW-H089WJQZ	QCNW-K183WJQZ	D	Changed
1-6	Ferrite Core	RCORFA061WJZZ	—	—	Abolish
1-26	46" LCD Panel	R1LK460D3FZL0Y	R1LK460D3FZN0Y	D	Changed
N	Washer Screw	—	LX-HZA064WJF7	—	Addition
SUPPLIED ACCESSORIES					
X4	Stand Unit	CDAi-A593WJ02	CDAi-A588WJ02	D	Changed
X5	Operation Manual (for Europe except E-Europe)	TiNS-E281WJZZ	TiNS-E285WJZZ	D	Changed
X5	Operation Manual (for Sweden)	TiNS-E282WJZZ	TiNS-E286WJZZ	D	Changed
X5	Operation Manual (for East Europe)	TiNS-E283WJZZ	TiNS-E287WJZZ	D	Changed
X5	Operation Manual (for Russia)	TiNS-E284WJZZ	TiNS-E288WJZZ	D	Changed
SERVICE JIGS (USE FOR SERVICING)					
	Main+LCD Control-Power(LB)	QCNW-K036WJQZ	QCNW-K037WJQZ	D	Changed
	Main-Key(KM)	QCNW-G440WJQZ	—	—	Abolish
	Main-R/C, LED(RA)	QCNW-H184WJQZ	—	—	Abolish
	Main-R/C, LED-Key(RA/KM)	—	QCNW-K039WJQZ	—	Addition
	R/C-ICON(IM)	QCNW-G442WJPZ	—	—	Abolish
MAIN Unit: Please refer to a Parts list.					

Interchangeability	
A: Completely interchangeable $\boxed{\text{OLD}} = \boxed{\text{NEW}}$	C: Interchangeable from NEW to OLD $\boxed{\text{NEW}} \rightarrow \boxed{\text{OLD}}$
B: Interchangeable from OLD to NEW $\boxed{\text{OLD}} \rightarrow \boxed{\text{NEW}}$	D: Not interchangeable $\boxed{\text{NEW}} \times \boxed{\text{OLD}}$

CHAPTER 4. ADJUSTMENT PROCEDURE

[1] ADJUSTMENT PROCEDURE

1. Adjustment method after PWB and/or IC replacement due to repair

The unit is set to the optimum at the time of shipment from the factory. If any value should become improper or any adjustment is necessary due to the part replacement, make an adjustment according to the following procedure.

1. Procure the following units in order to replace the main unit, E2PROM (IC8455).

MAIN UNIT: DUNTKF111FM11

NOTE: [Caution when replacing ICs in the main unit (IC501)]

The above ICs are EEPROMs storing the EDID data of PC data.

Before replacing the relevant part, procure the following parts in which the data have been rewritten.

IC501 RH-iXC206WJQZS EDID (PC) ANALOG-RGB

2. Entering and exiting the adjustment process mode

1. Press the "MAIN POWER" key on the set of running TV set to force power off.
(Or, unplug the AC power cord of running TV set to force power off.)
2. While holding down the " (-)" and "INPUT" keys on the set at once, press the "MAIN POWER" key on the set to turn on the power.
The letter "K" appears on the screen.
3. Next, hold down the " (-)" and "P ()" keys on the set at once.
Multiple lines of orange characters appearing on the screen indicate that the set is now in the adjustment process mode.
If you fail to enter the adjustment process mode (the display is the same as normal start up), retry the procedure.
4. To exit the adjustment process mode after the adjustment is done, press the MAIN POWER key and turn off a power supply. or unplug the AC power cord to force power off.
(When the power is turned off with the remote controller, once unplug the AC power cord and wait for 10 seconds before plug it in again.)

CAUTION: Use due care in handling the information described here lest the users should know how to enter the adjustment process mode.
If the settings are tampered with in this mode, unrecoverable system damage may result.

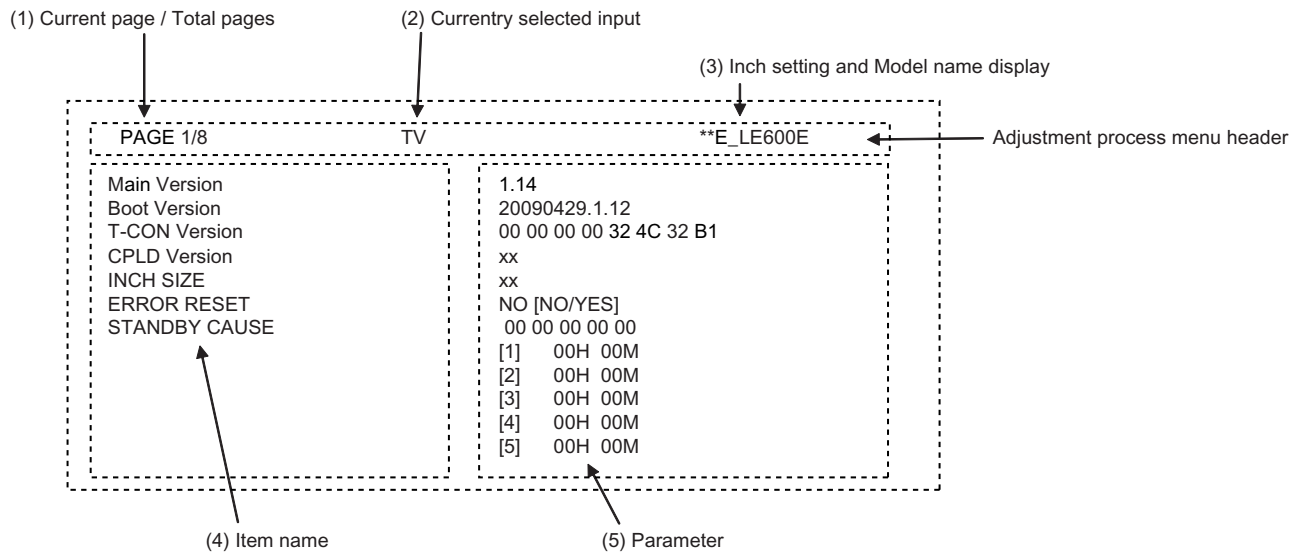
3. Remote controller key operation in adjustment process mode.

1. key operation

Remote controller key	Main unit key	Remote controller key Main unit key Function
P ( / )	P ( / )	Moving an item (line) by one (UP/DOWN)
 (+/-)	 (+/-)	Changing a selected item setting (+1/-1)
Cursor ( / )	—	Turning a page (PREVIOUS/NEXT)
Cursor ( / )	—	Changing a selected line setting (+10/-10)
 Input button	 Input button	Input source switching (toggle switching) (TV→EXT1→EXT2→EXT3→EXT4→HDMI1→HDMI2→HDMI3→EXT8)
OK	—	Executing a function

Input mode is switched automatically when relevant adjustment is started so far as the necessary input signal is available.

4. Description of display



No.	Description	Display specification
(1)	Current page/total pages	2char/2char Decimal Number mark.
(2)	Currently selected input	TV→EXT1→EXT2→EXT3→EXT4→HDMI1→HDMI2→HDMI3→EXT8
(3)	Inch setting and destination display	32/40/46
(4)	Item name	Max. 30 char
(5)	Parameter table	Max. 60 char (Preset value of each item)

5. Adjustment process mode menu

The character string in brackets [] will appear as a page title in the adjustment process menu header.

Page	Line	Item	Description	Remarks (adjustment detail, etc.)
1/8				
	1	Main Version	1.14	Main microprocessor version
	2	Boot Version	20090429.1.12	Boot version of the main microprocessor
	3	T-CON Version	00 00 00 00 32 4C 32 B1	T-CON microprocessor version
	4	CPLD Version	xx	CPLD Version for Backlight controller
	5	INCH SIZE	32/40/46	Initial Setting of panel size
	6	ERROR RESET	NO [NO/YES]	Lamp error reset. (Select "YES" and press "OK" key.)
	7	STANDBY CAUSE	00 00 00 00 00 1) 00H 00M 2) 00H 00M 3) 00H 00M 4) 00H 00M 5) 00H 00M	Error standby cause. Total operating time before error. (5 times histories)
2/8				
	1	INDUSTRY INIT	[NO/YES(E)/YES(I)/YES(F)/YES(R)]	Initialization to factory settings execution.
	2	PUBLIC MODE	OFF [OFF/ON]	ON/OFF setting of hotel mode
	3	I2C DATA	000000000000	Write and read of data in I2C BUS control IC.
	4	I2C STATE	WAIT [STANDBY/WAIT]	Execution of write and read of I2C DATA
3/8				
	1	INSPECT USB TERM	ENTER	Reading inspection of USB memory terminal
	2	HDMI CEC TEST	ENTER	HDMI CEC test
4/8				
	1	TUNER ADJ	ENTER	VIDEO level adjustment execution
	2	CHANNEL	E-12/E-9(SMPTE)/E-12(SMPTE)	
	3	GAIN	31	Gain adjustment
	4	ADJ RESET	NO [NO/YES]	Reset of adjustment
5/8				
	1	VIDEO ADJ	ENTER	VIDEO level adjustment execution
	2	GAIN	31	
6/8				
	1	COM-ADJ	ENTER	COMPONENT level adjustment execution
	2	Y OFF SET	70	Y CUTOFF adjustment value
	3	PB OFF SET	128	PB CUTOFF adjustment value
	4	PR OFF SET	128	PR CUTOFF adjustment value
	5	Y GAIN	140	Y GAIN adjustment value
	6	PB GAIN	140	PB GAIN adjustment value
	7	PR GAIN	140	PR GAIN adjustment value
	8	ADJ RESET	NO [NO/YES]	Reset of adjustment
7/8				
	1	RGB-ADJ	ENTER	SCART RGB level adjustment execution
	2	R OFF SET	128	R OFF SET adjustment value
	3	G OFF SET	128	G OFF SET adjustment value
	4	B OFF SET	128	B OFF SET adjustment value
	5	R GAIN	80	R DRIVE adjustment value
	6	G GAIN	80	G DRIVE adjustment value
	7	B GAIN	80	B DRIVE adjustment value
	8	ADJ RESET	NO [NO/YES]	Reset of adjustment
8/8				
	1	COM BIAS	67	Common Bias auto adjustment execution
	2	LCD TEST PATTERN	0	Pattern with built-in LCD controller display
	3	WB Point A	1280	W/B adjustment, gradation Point A input setting
	4	Point B	3712	W/B adjustment, gradation Point B input setting
	5	Point A ADJ R	1280	W/B adjustment, gradation Point A R_ adjustment value
	6	ADJ G	1280	W/B adjustment, gradation Point A G_ adjustment value
	7	ADJ B	1280	W/B adjustment, gradation Point A B_ adjustment value
	8	Point B ADJ R	3712	W/B adjustment, gradation Point B R_ adjustment value
	9	ADJ G	3712	W/B adjustment, gradation Point B G_ adjustment value
	10	ADJ B	3712	W/B adjustment, gradation Point B B_ adjustment value
	11	WB WRITE	NO [NO/YES]	W/B writing of adjustment values
	12	WB RESET	NO [NO/YES]	Reset of W/B adjustment value

6. Special features

1. STANDBY CAUSE (Page 1/8)

Display of a cause (code) of the last standby.

The cause of the last standby is recorded in EEPROM whenever possible.

Checking this code will be useful in finding a problem when you repair the troubled set.

7. ROM Writing (HDMI_EDID)

1. EDID writing

1) Get ready the PC with COM port (RS-232C) running on Windows 95/98/ME/2000/XP operating system, as well as the RS-232C cross cable.

2) Start the set with the set connected with the personal computer with the RS232C cross cable.

3) Start the terminal software. (The free ware readily available on the Internet will do.)

4) Make the following settings.

Baud rate	: 9600 bps
Data LENGTH	: 8bit
Parity bit	: none
Stop bit	: 1 bit
Flow control	: none

5) Input following commands to terminal software.

"KRSW0001"

PC replies "ERR" (you should ignore this replay)

"KKT10037"

PC replies "OK"

"WRED0000"

PC replies "OK"... At that time, EDID writing finish with success.

6) It usually returns to a state by AC-OFF/ON.

Disconnect and connect AC cable, then TV wakes up with normal mode.

2. Software version

(1) Mainmicon Software	Ver. 1.14	*1
(2) Boot version of mainmicon Software	Ver. 1.12	*1
(3) T-CON Monitor micon Software	Ver. 1.0	*1
(4) CPLD Version	XX	*1

*1 Please refer to the change report document for the latest version (Issued it to SEES).

8. Adjustment procedure

1. Inch Setting

	Adjustment point	Adjustment conditions	Adjustment procedure
1	Inch Setting	Adjustment process mode Adjustment process "INCH SIZE" menu page 1/8	1) Inch Setting with adjustment process mode. 2) Enter the adjustment process mode, referring to the 2nd item. 3) By using P ($\wedge$ / $\vee$) key of R/C, Move the cursor to "INCH SIZE" on page 1/8. 4) Select inch size 32/40/46 with the Volume (+)/(-) key of remote control. 5) Press the "OK" key of remote control. 6) After a while, If "**** OK ****" is displayed, the setting is completed.

2. COMB-BIAS Adjustment

	Adjustment point	Adjustment conditions	Adjustment procedure
1	COM-BIAS Adjustment	A visual check Adjustment process "COM BIAS" menu page 8/8	1) COM-BIAS Adjustment with adjustment process mode. 2) Enter to the adjustment process mode, referring to the 2nd item. 3) By using $\blacktriangle$ / $\blacktriangledown$ key and P ($\wedge$ / $\vee$) key of R/C, Move the cursor to "COM-BIAS" on page 8/8. 4) Press the "OK" key. then, you can check that the pattern for adjustment is displayed. 5) Adjust so that the flicker for the central part of a screen becomes the minimum using the volume (+)/(-) key of R/C. 6) In order to exit from this process, press the "OK" key of remote control again.

9. Video signal adjustment procedure

* The adjustment process mode menu is listed in 5th item.

Signal generator level adjustment check (Adjustment to the specified level)

- Composite signal PAL/SECAM : 0.7Vp-p $\pm$ 0.02Vp-p (White level from pedestal)
- PC (Analog D_sub15pin) signal : 0.7Vp-p $\pm$ 0.02Vp-p (White level from pedestal)
- 33K component signal : Y level 0.7Vp-p $\pm$ 0.02Vp-p (White level from pedestal)
: PB,PR level 0.7Vp-p $\pm$ 0.02Vp-p

1. Picture Adjustment

1) Entering the adjustment process mode

Adjustment point	Adjustment conditions	Adjustment procedure
		Enter to the adjustment process mode, referring to the 2nd item.

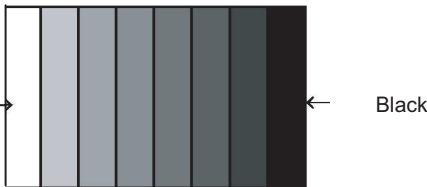
2) TUNER adjustment

Adjustment point	Adjustment conditions	Adjustment procedure
1 Setting	[Signal] PAL split colour Bar In-house UV [Terminal] TUNER	• Feed the In-house signal (PAL color bar) to TUNER. • Make sure the PAL colour bar pattern has the sync level of 7:3 with the picture level. • Feed the SMPTE color bar signal to TUNER. JABIL: 203.25MHz [SMPTE pattern]
2 Auto adjustment performance	Adjustment process [VIDEO ADJ] menu page 4/8	Bring the cursor on [VIDEO ADJ] and press OK key [*** OK ***] appears when finished.

3) PAL signal adjustment

Adjustment point	Adjustment conditions	Adjustment procedure
1 Setting	[Signal] PAL full colour Bar [Terminal] EXT1 SCART Video input	• Feed the PAL full field colour bar (color saturation level 100%) signal to the SCART video input of EXT1. [VIDEO input signal]
2 Auto adjustment performance	Adjustment process [VIDEO ADJ] menu page 5/8	Bring the cursor on [VIDEO ADJ] and press OK key [*** OK ***] appears when finished.

4) ADC adjustment (Component 33K)

	Adjustment point	Adjustment conditions	Adjustment procedure
1	Setting	[Signal] COMP 33K 50Hz 100% Full field colour bar [Terminal] EXT3 COMPONENT input	Feed the COMPONENT 33K 100% Full field colour bar (colour saturation level 100%) signal to the COMPONENT video input of EXT3. 
2	Auto adjustment performance	Adjustment process [COM ADJ] menu page 6/8	Bring the cursor on [COM ADJ] and press OK key [*** OK ***] appears when finished.

5) PC signal adjustment (Analog D-SUB15pin)

	Adjustment point	Adjustment conditions	Adjustment procedure
1	Setting	[Signal] XGA 60 Hz 100% Full field colour bar [Terminal] EXT4 PC input	Feed the XGA 60Hz 100% Full field colour bar (colour saturation level 100%) signal to the EXT4 PC input. 
2	Auto adjustment performance	Adjustment process [RGB ADJ] menu page 7/8	Bring the cursor on [RGB ADJ] and press OK key [*** OK ***] appears when finished.

10. White Balance Adjustment

Adjustment gradation values (INFO) appear on page 8/8 3-4 lines of process adjustment, and adjustment initial values (offset value) appear on pages 8/8 5-10 lines. For white balance adjustment, adjust the offset values on pages 8/8 5-10 lines.

1. Preparation

- 1) Luminance meter reference device :Minolta CA-210
- 2) Condition of the unit for adjustment and inspection: Modulated light: MAX (+16)

2. Setting

- 1) The luminance meter is set to the center of the screen of the set.
- 2) In "INCH SIZE" on the process adjustment page 1/8, sets it to the size of each panel with the ◀/▶ key to R/C.

3. Adjustment method

Check that the values of point A and B on page 8/8 of process adjustment are set as below. If not, change them accordingly.

WB Point A	1280	WB Point B	3712
------------	------	------------	------

- 1) Display the current adjustment status at point B. (Page 8/8 of process adjustment)

The display for checking the adjustment status is toggled by pressing the "OK" button on the remote control.

(Normal OSD display → "B" → display for check (OSD disappears) → "B" → normal OSD display → ...)

- 2) Read the value of the luminance meter.

- 3) Change Point B ADJ R/Point B ADJ B (Adjustment offset value) on page 8/8 of process adjustment so that the values of the luminance meter approach $x = 0.272$ and $y = 0.277$.

(Basically, Point B ADJ G is not changed.)

- 4) Follow Point A as well as item 3).

Change Point A ADJ R/Point A ADJ B (Adjustment offset value) on page 8/8 of process adjustment so that the values of the luminance meter approach $x = 0.272$ and $y = 0.277$.

- 5) Select "WB WRITE" on page 8/8 in the process, set "YES", and press the OK key of remote control.

The adjustment value is written. and then shut down the AC power.

- * Initial value of RGB of point B: 3712
- * Initial value of RGB of point A: based on calculated of each G point

- 6) [Adjustment value]

- * Teaching set send by engineering dept is set as reference

4. Adjustment reference standard value

	Level	Spec Data	Adjustment Spec	Inspection Spec
Point A ref. value	1280	$x=0.272$ $y=0.277$	± 0.001	± 0.002
Point B ref. value	3712	$x=0.272$ $y=0.277$	± 0.002	± 0.004

Adjustment spec ± 0.004 Inspection spec ± 0.006 (point 1)
Adjustment spec ± 0.002 Inspection spec ± 0.004 (Excluding the above-mentioned)

11. QS Temperature NVM Data Confirmation

During servicing of the LCD TV set, by software upgrading or by any cleaning NVM, it's mandatory select the "INCH SIZE" in Service Mode, Page 1, according to the size of the TV set.

PAGE1/8	TV	32E_LE600E
Main Version	-	
Boot Version	-	
T-CON Version	-	
CPLD Version	-	
INCH SIZE	-	
ERROR RESET	NO	
STANDBY CAUSE	00 00 00 00 00	
	1) 00H 00M	

Default picture after cleaning NVM.

PAGE1/8	TV	32E_LE600E
Main Version	-	
Boot Version	-	
T-CON Version	-	
CPLD Version	-	
INCH SIZE	32	
ERROR RESET	NO	
STANDBY CAUSE	00 00 00 00 00	
	1) 00H 00M	

Picture with [Inch Setting] to 32. (It is actually set as each inch.)

12. Initialization to factory settings

After a factory setting, It ends with the AC power supply OFF.

After a factory settings, Do not turn on the power supply. If you turn on the power supply. execute the factory settings again.

Do not do power supply OFF by remote control.

CAUTION: When the factory settings have been made, all user setting data, including the channel settings, are initialized.
(The adjustments done in the adjustment process mode are not initialized.) Keep this in mind when initializing these settings.

	Adjustment item	Adjustment conditions	Adjustment procedure
1	Factory settings	Ends in AC power supply OFF. (See to below caution)	[Factory setting with adjustment process mode] - Enter the adjustment process mode. - Move the cursor to "INDUSTRY INIT" on page 2/8. - Use the ◀/▶ key of R/C to select a region from "YES (E)/YES (I)/YES (F)/YES (R)" and press the [OK] key. "EXECUTING" display appears and initialization starts. - After a while, "OK" display appears, the setting is completed. When succeeding: The background color becomes green. When failing: The background color becomes red. NOTE: Never turn the power off during initialization. When performing factory settings (while displaying page 2 of adjustment process), confirm that the item "INCH SIZE" or the panel size displayed in the upper right corner corresponds to each panel size. The following items are initialized in the factory setting. 1) User settings 2) Channel data (e.g. broadcast frequencies) 3) Manufacturer option setting 4) Password data

After adjustments, exit the adjustment process mode.

To exit the adjustment process mode, turn off the MAIN power key.

When the power is turned off with the remote control, unplug the AC power cord and plug it back in.

(wait approximately 10 seconds before plugging in the AC power cord)

13. Functional explanation of STANDBY CAUSE

13.1. [display method]

It is displayed in the top page of the process adjustment mode. (Page displayed first when entering process mode)

13.2. [Content of display]

1. NORMAL STANDBY CAUSE

The reason that became a power-off by the specification of usual use and the main body is displayed.

(Only the one latest) It is not displayed when power supply OFF is carried out with remote control.

Display code	Display character string	Reason
00	00 00 00 00 00	When based on No error
0x01	1 RC_STANDBY	When based on RC Standby OFF
0x05	5 PC_OUT_OF_RANGE	When based on out of range for pc OFF
0x06	6 NO_OPERATION	When based on non-operated OFF
0x07	7 NO_SIGNAL	When based on non-signal OFF
0x0A	a SLEEP_TIMER	When based on an sleep-timer OFF
0x0C	c RS232C	When based on the command from RS232C (standby)
0x18	18 AV_LINK	When based on the command from AV-LINK (standby)

2. ERROR STANDBY CAUSE

When main CPU becomes a power-off detecting some abnormalities, the use time of the set at the time of the reason and the power-off is displayed five times.

When time information can be acquired from digital broadcasting, the date and time when the error occurs at the same time is recorded, displayed and when time information cannot be acquired, it becomes the above-mentioned display.

"00" is displayed when abnormality has not been detected even once.

Display error code	Display character string	Reason
0x1A	1a TEMP_ERROR	When temperature (high temperature) is abnormal.
0x1B	1b LAMP_ERROR	When lamp is abnormal
0x1C	1c POWER_ERROR	When power module is abnormal status.

14. Lamp error detection

1. Function description

This LCD colour television has a function (lamp error detection) to be turned OFF automatically for safety when the lamp or lamp circuit is abnormal.

If the lamp or lamp circuit is abnormal, or some other errors happen, and the lamp error detection is executed, the following occur.

- 1) The main unit of television is turned OFF about 5 seconds after it is turned ON.

(The power LED on the front side of TV turns from green to red.)

- 2) If the situation "1" happens 5 times sequentially, the power is turned on (relay is turned ON).

However, the backlight is not turned on, and then the relay is turned OFF after 5 to 6 seconds. (The power LED remains red.)

2. Countermeasures

When television is turned OFF by the lamp error detection mentioned above, it enters the adjustment process with the power LED red.

Entering the adjustment process, turns OFF the error detection and turns ON TV.

This enables the operation check to detect errors in the lamp or lamp circuit.

Check whether "STANDBY CAUSE" on line 7, page 1/8 of the adjustment process is "1B". it indicates the lamp error detection was executed.

After confirming that the lamp or lamp circuit is normal, reset the lamp error counter pushing "OK" in the R/C.

After resetting counter the green bar appears on Screen.

3. Reset standby cause error list

After confirming that the lamp error counter has been erased, select "ERROR RESET", page 1/8 of the adjustment process and select YES using the right cursor. For execute press "OK" in the R/C and the label "****OK****" appears on Screen.

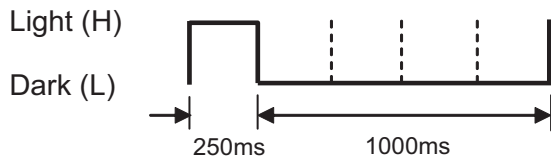
15. Blinking display when error is detected

When system received error report, Standby LED (red) blinks as follows.

POWER LED should keep dark while error indication.

1) Lamp error

Blink timing (1 blink/1 period)



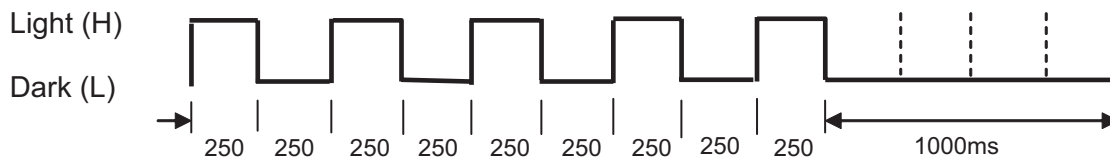
2) Power module error

Blink timing (2 blink/1 period)



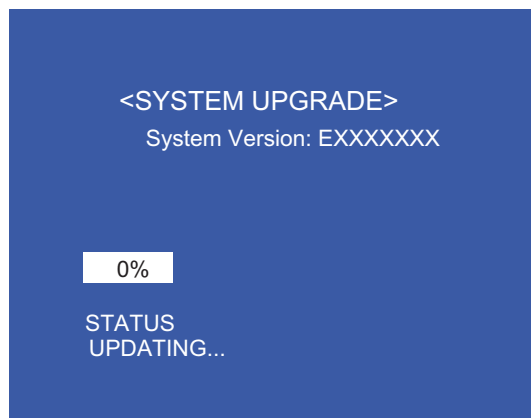
3) High temperature

Blink timing (5 blink/1 period)

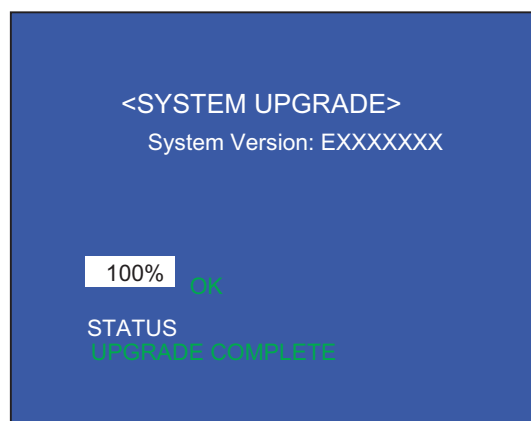


16. Upgrading the software

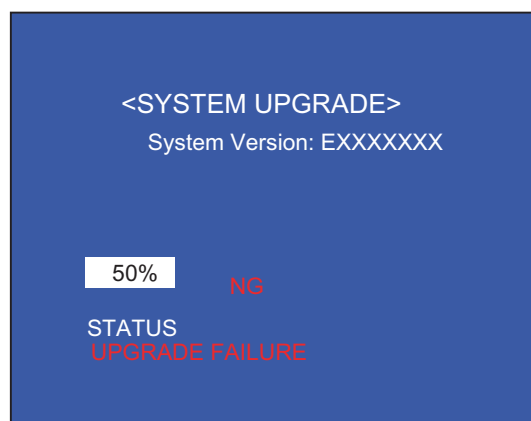
1. Unplug AC cable from outlet.
2. Insert an USB memory that is written a new software to USB port.
3. Keep pressing POWER button on LCD panel and plug AC cable to outlet.
4. POWER LED on panel automatically start blinking.
(POWER LED: Both red and green light blinking with sync. In other word, it looks, /blinking period is short ... 2 cycle - light - out - light - out / 1 sec.)
5. After a while (about 2 min.) following screen appears. Indicated percentage means progress of version up.



6. After the progress becomes 100%, then STATUS area changes "UPGRADE COMPLETE" as followings (POWER LED: Only green blinks slowly ... 2 sec./time).



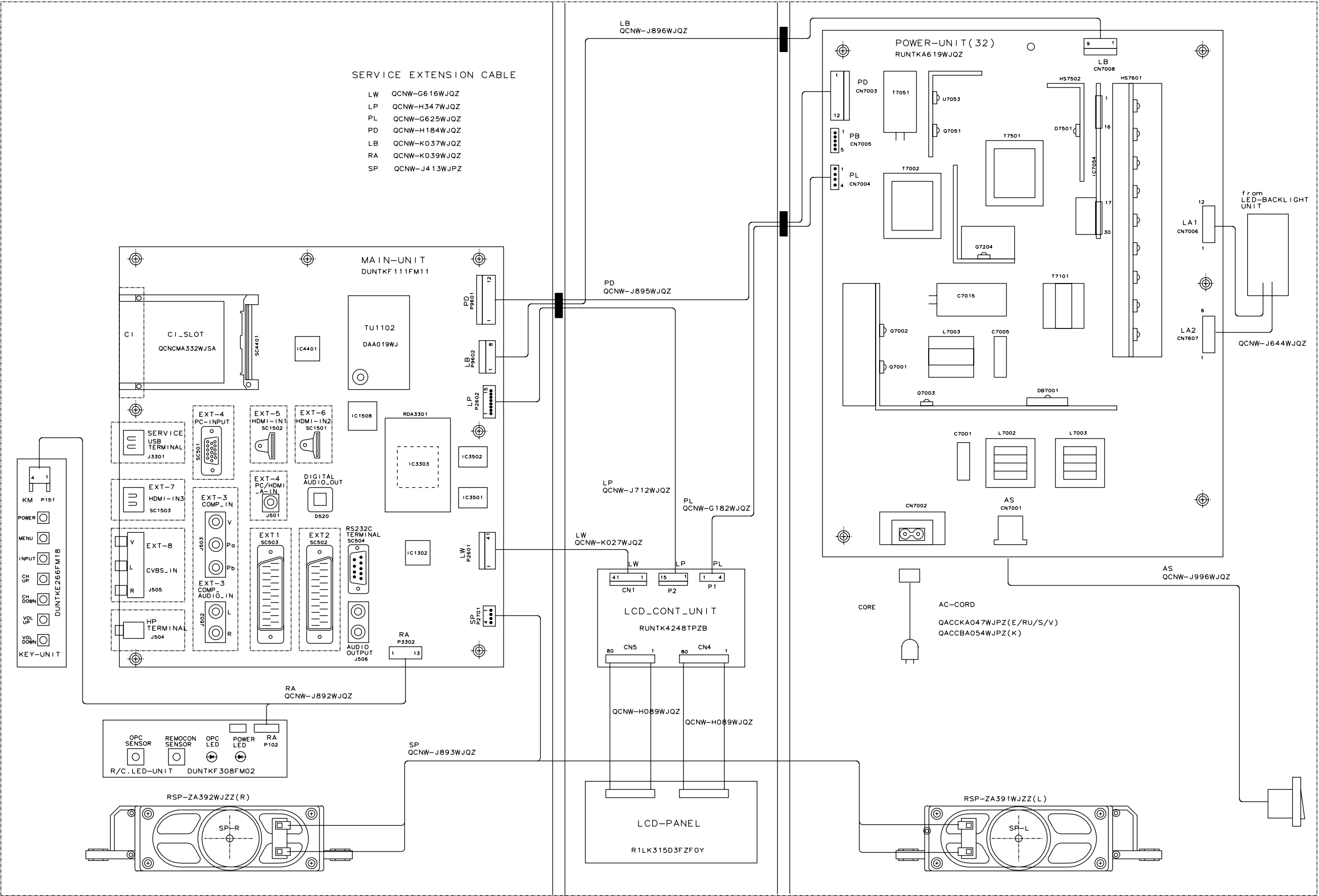
- * If above screen is not appeared and "UPGRADE FAILURE" is indicated in STATUS area, at that time update failure. Please repeat from step 1.
(POWER LED: Only red blinks slowly ... 2 sec./time).



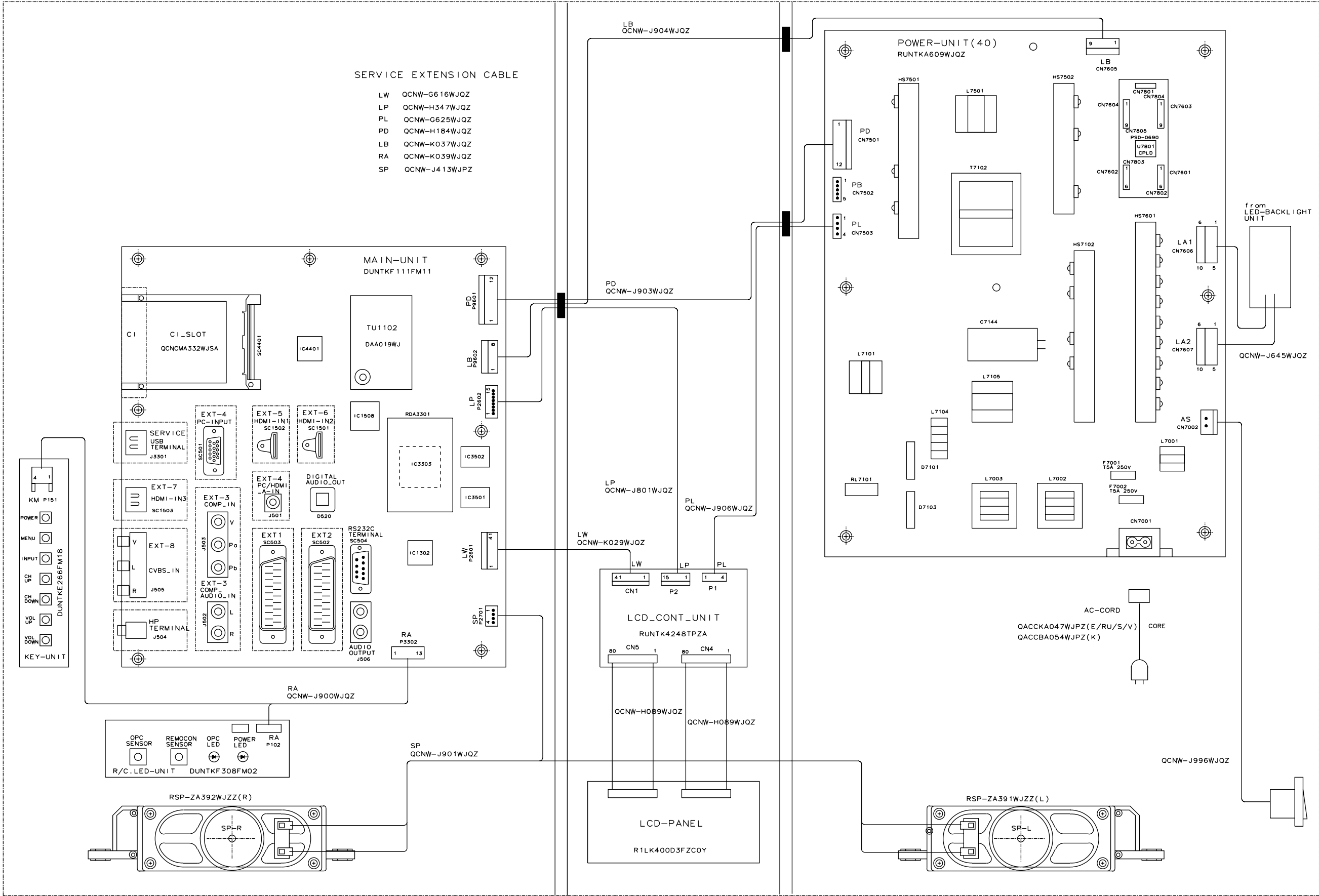
7. Unplug AC cable from outlet.
8. Remove USB memory from USB port.

CHAPTER 7. OVERALL WIRING/SYSTEM BLOCK DIAGRAM

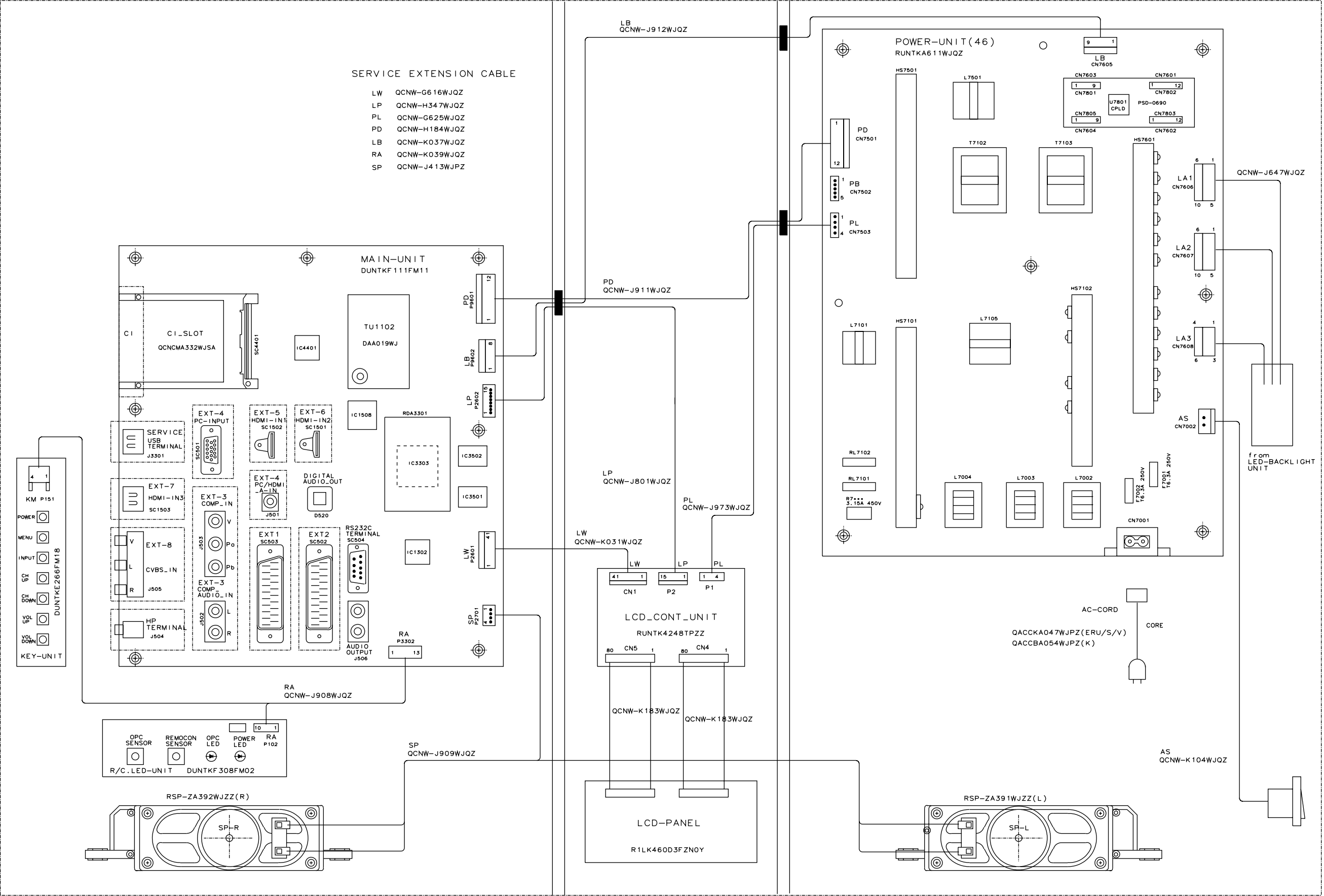
[1] OVERALL WIRING DIAGRAM (LC-32LE600E/RU/S)



[2] OVERALL WIRING DIAGRAM (LC-40LE600E/RU/S)

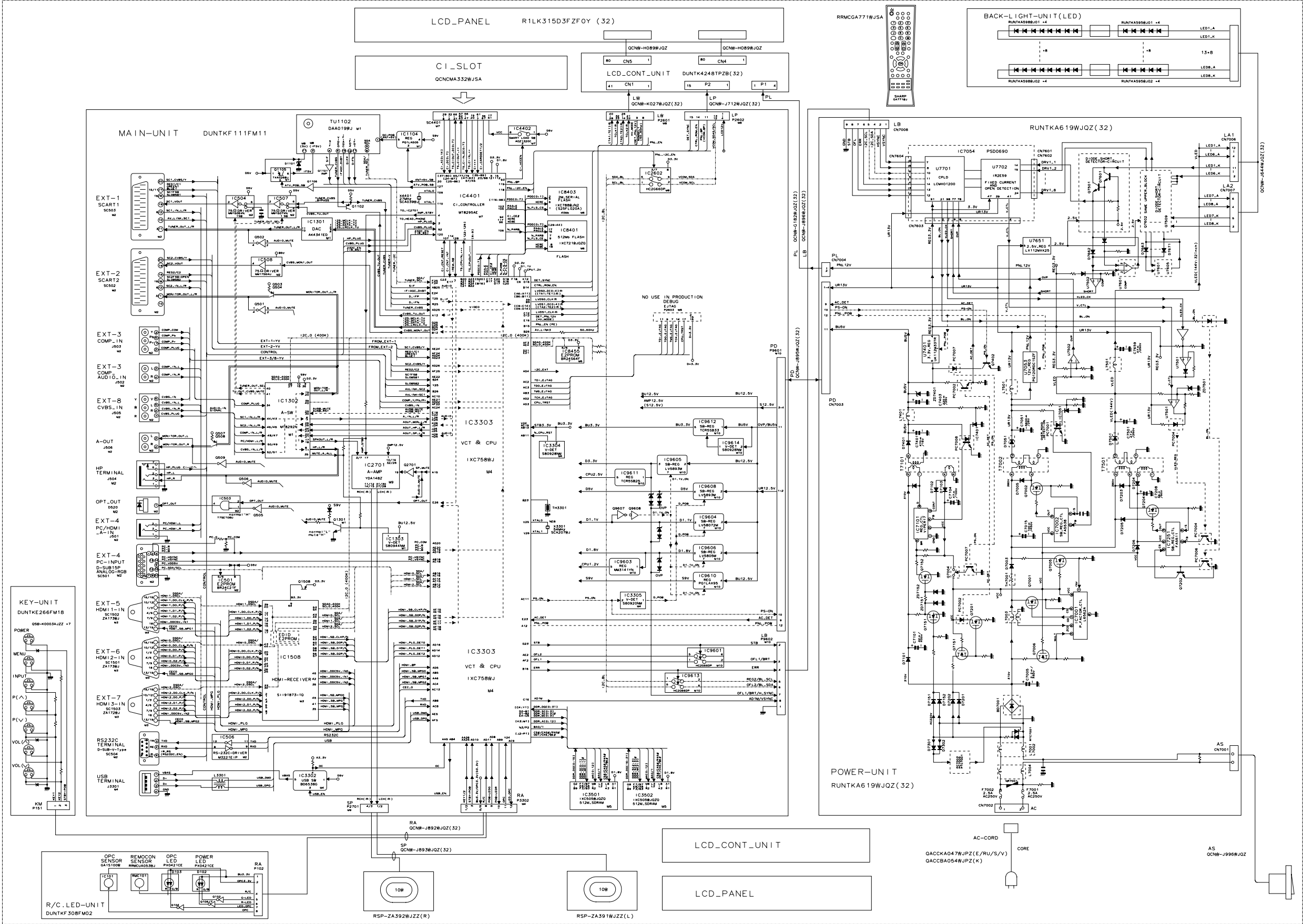


[3] OVERALL WIRING DIAGRAM (LC-46LE600E/RU/S)



LC-32/40/46LE600E/RU/S

[4] SYSTEM BLOCK DIAGRAM (LC-32LE600E/RU/S)







CHAPTER 9. SCHEMATIC DIAGRAM

[1] DESCRIPTION OF SCHEMATIC DIAGRAM

1. VOLTAGE MEASUREMENT CONDITION:

- 1) The voltages at test points are measured on exclusive AC adaptor and the stable supply voltage of AC 220-240V. Signals are fed by a color bar signal generator for servicing purpose and the above voltages are measured with a 20k ohm/V tester.

2. INDICATION OF RESISTOR & CAPACITOR:

RESISTOR

- 1) The unit of resistance "Ω" is omitted.
(K=kΩ=1000Ω, M=MΩ).
- 2) All resistors are ± 5%, unless otherwise noted.
(K= ± 10%, F= ± 1%, D= ± 0.5%)
- 3) All resistors are 1/16W, unless otherwise noted.

CAPACITOR

- 1) All capacitors are μF, unless otherwise noted.
(P=pF=μμF).
- 2) All capacitors are 50V, unless otherwise noted.

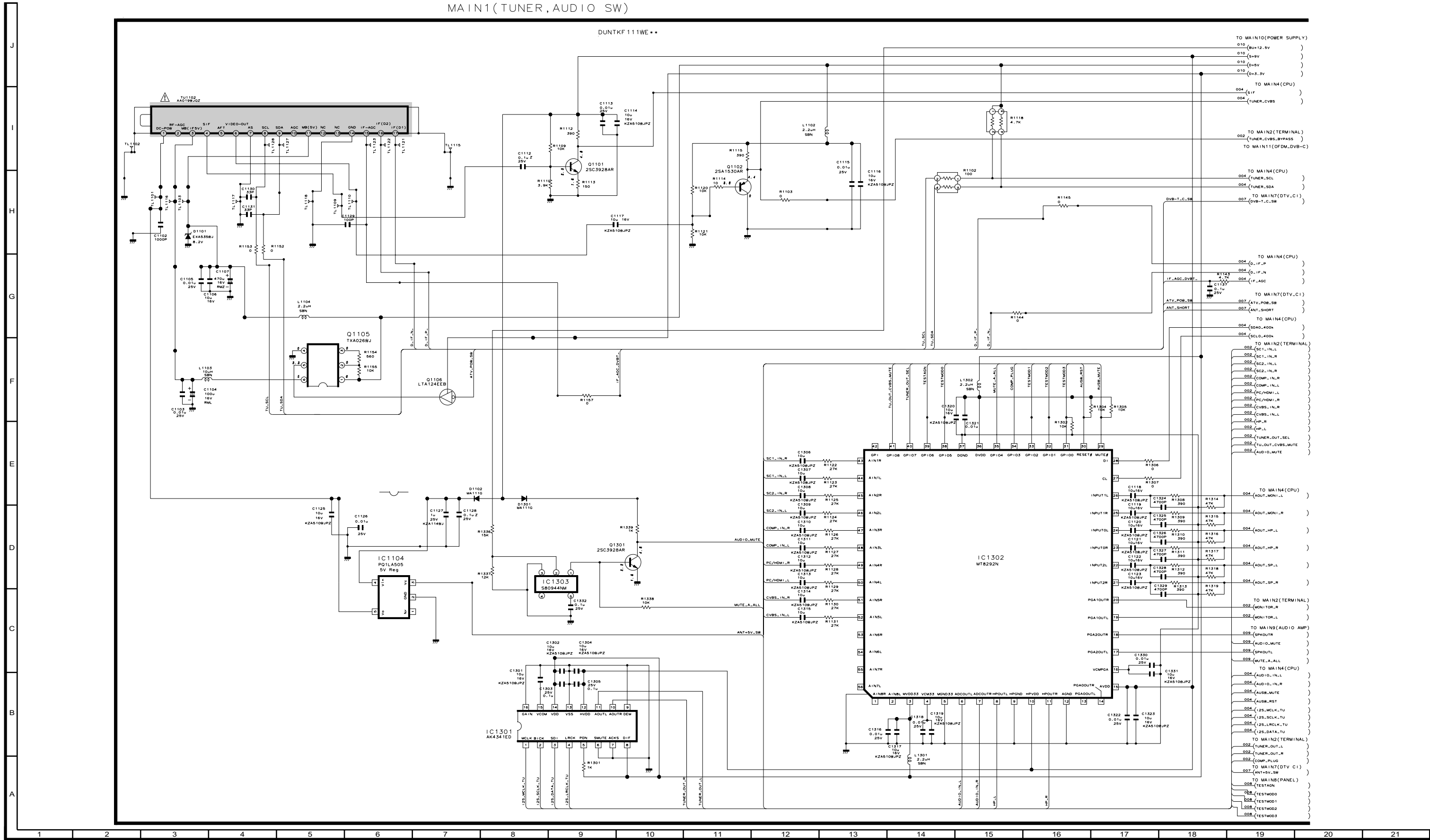
CAUTION:
This circuit diagram is original one, therefore there may be a slight difference from yours.

SAFETY NOTES:
1) DISCONNECT THE AC PLUG FROM THE AC OUTLET BEFORE REPLACING PARTS.
2) SEMICONDUCTOR HEAT SINKS SHOULD BE REGARDED AS POTENTIAL SHOCK HAZARDS WHEN THE CHASSIS IS OPERATING.

IMPORTANT SAFETY NOTICE:
PARTS MARKED WITH " ⚠ " () ARE IMPORTANT FOR MAINTAINING THE SAFETY OF THE SET. BE SURE TO REPLACE THESE PARTS WITH SPECIFIED ONES FOR MAINTAINING THE SAFETY AND PERFORMANCE OF THE SET.

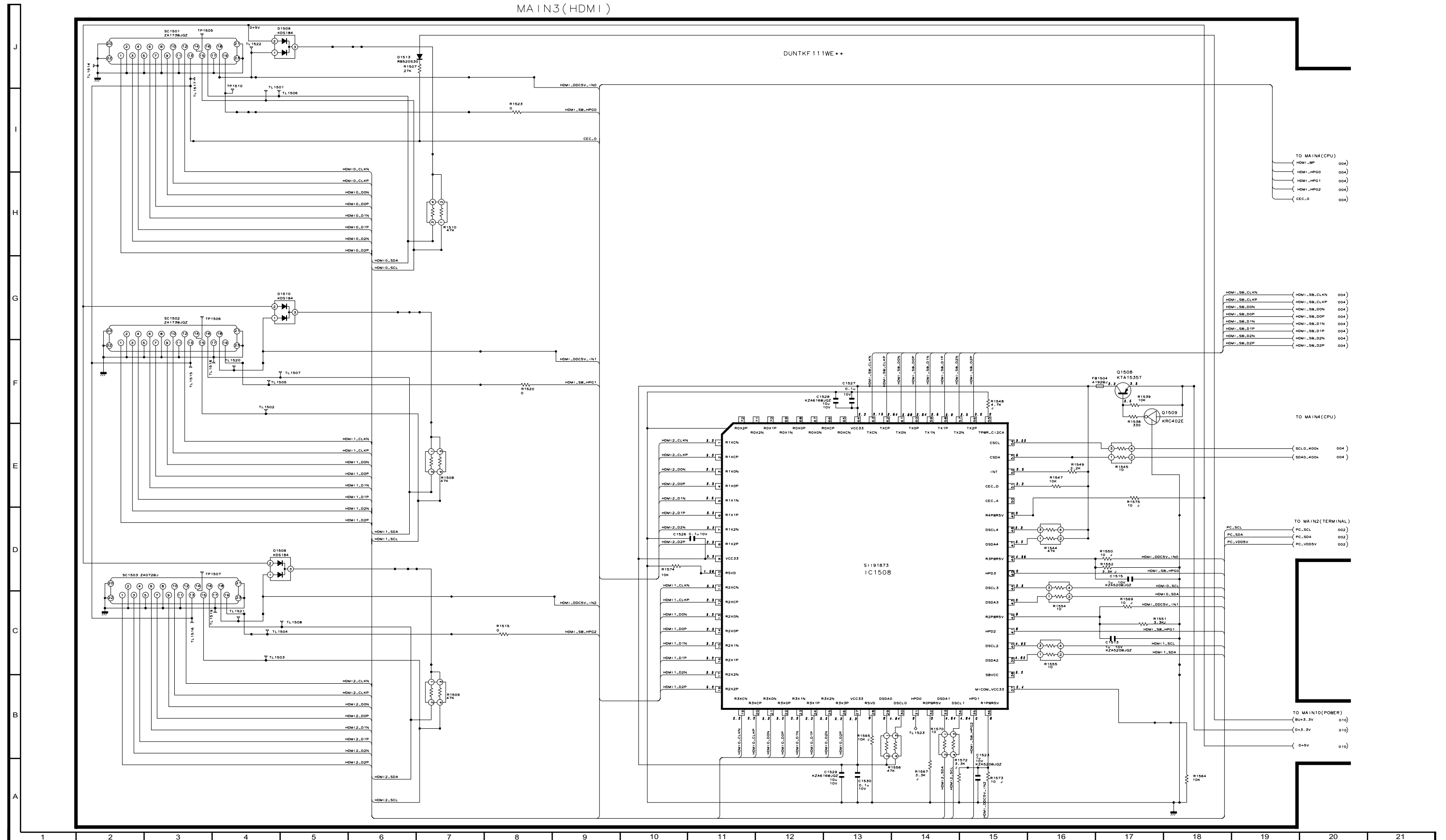
LC-32/40/46LE600E/RU/S
[2] SCHEMATIC DIAGRAM

1. MAIN Unit-1

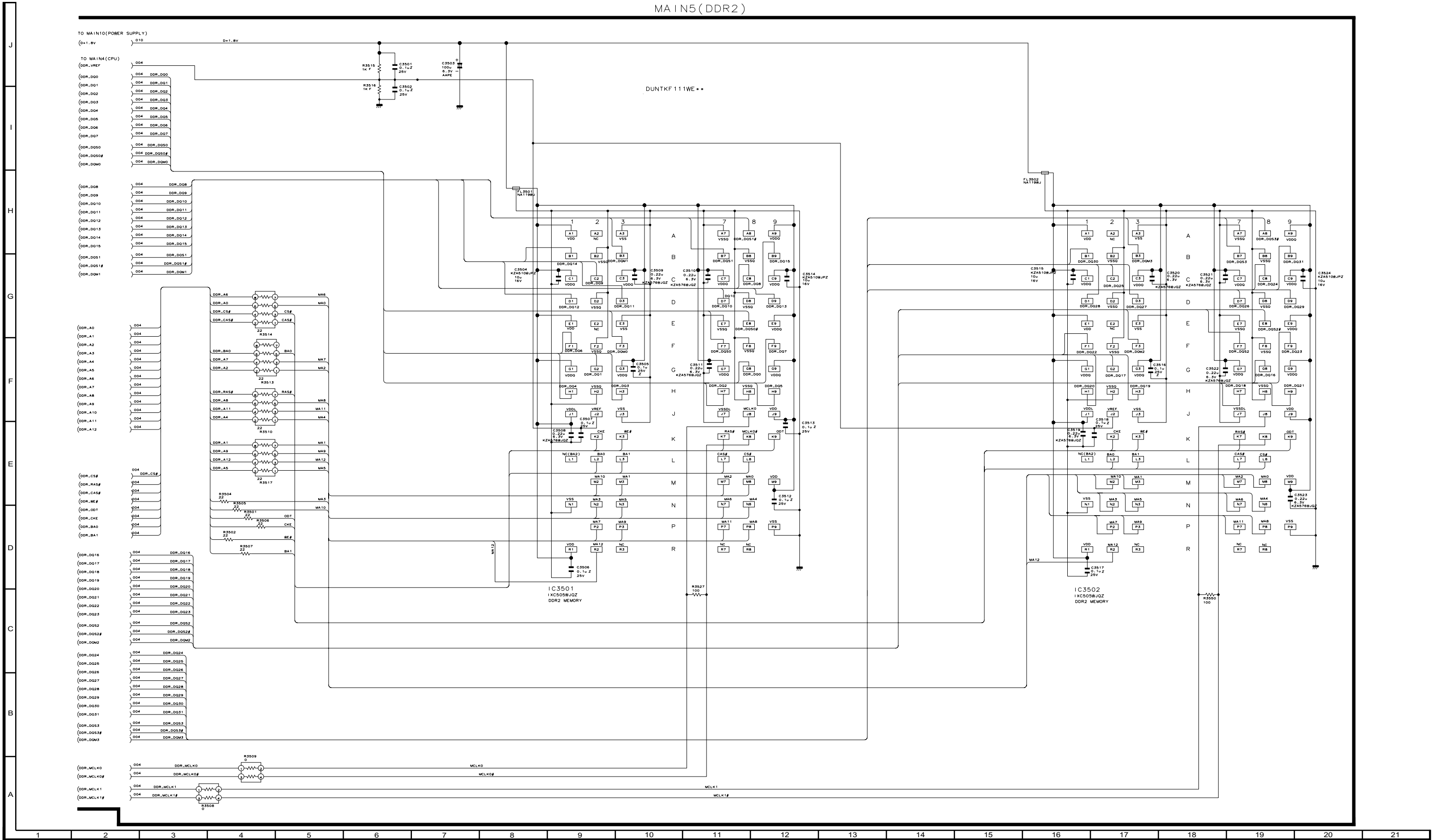




MAIN3(HDMI)







6. MAIN Unit-6

MAIN6 (FLASH)

DUNTKF111WE**

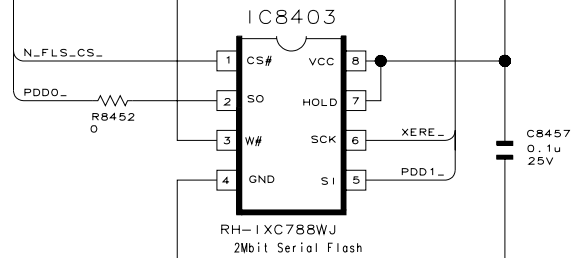
TO MAIN10(POWER SUPPLY)

TO MAIN4(CPU)

(D+3.3V)⁰¹⁰

TO MAIN7(DTV-C1)

N_FLS_CE_ 007
 N_FLS_CS_ 007
 XERE_ 007
 PDD0_ 007
 PDD1_ 007
 PDD2_ 007
 PDD3_ 007
 PDD4_ 007
 PDD5_ 007
 PDD6_ 007
 PDD7_ 007
 PALE_ 007
 PACLE_ 007
 N_PARB_ 007
 XEWE_ 007

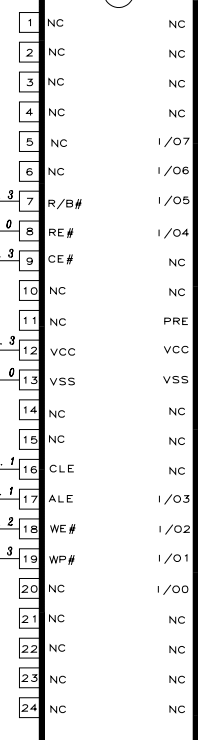


R8455 4.7K
 R8451 47
 R8453 4.7K

N_PARB_ 47
 XERE_ 08
 N_FLS_CE_ 3.3

PACLE_ 0.1
 PALE_ 0.1
 XEWE_ 3.2

IC8401
 FLASH
 IXC721WJQZ
 512Mbit NAND Flash



I/O7 0.1
 I/O6 2.2
 I/O5 0.1
 I/O4 2.2

PDD7_ 0
 PDD6_ 0
 PDD5_ 0
 PDD4_ 0

I/O3 2.2
 I/O2 2.2
 I/O1 0
 I/O0 0

PDD3_ 0
 PDD2_ 0
 PDD1_ 0
 PDD0_ 0

R8458 0
 R8459 0

C8456 0.1u
 C8460 0.1u CZB

R8462 0
 R8463 0

IC8455
 BR24S64F
 EEPROM

A0 3.3
 A1 3.3
 A2 3.3
 GND 0

SCL 3.3
 SDA 3.3

TL8404
 TL8405
 R8480 10

R8476 0
 R8475 2.2K

SCL1 004
 SDA1 004

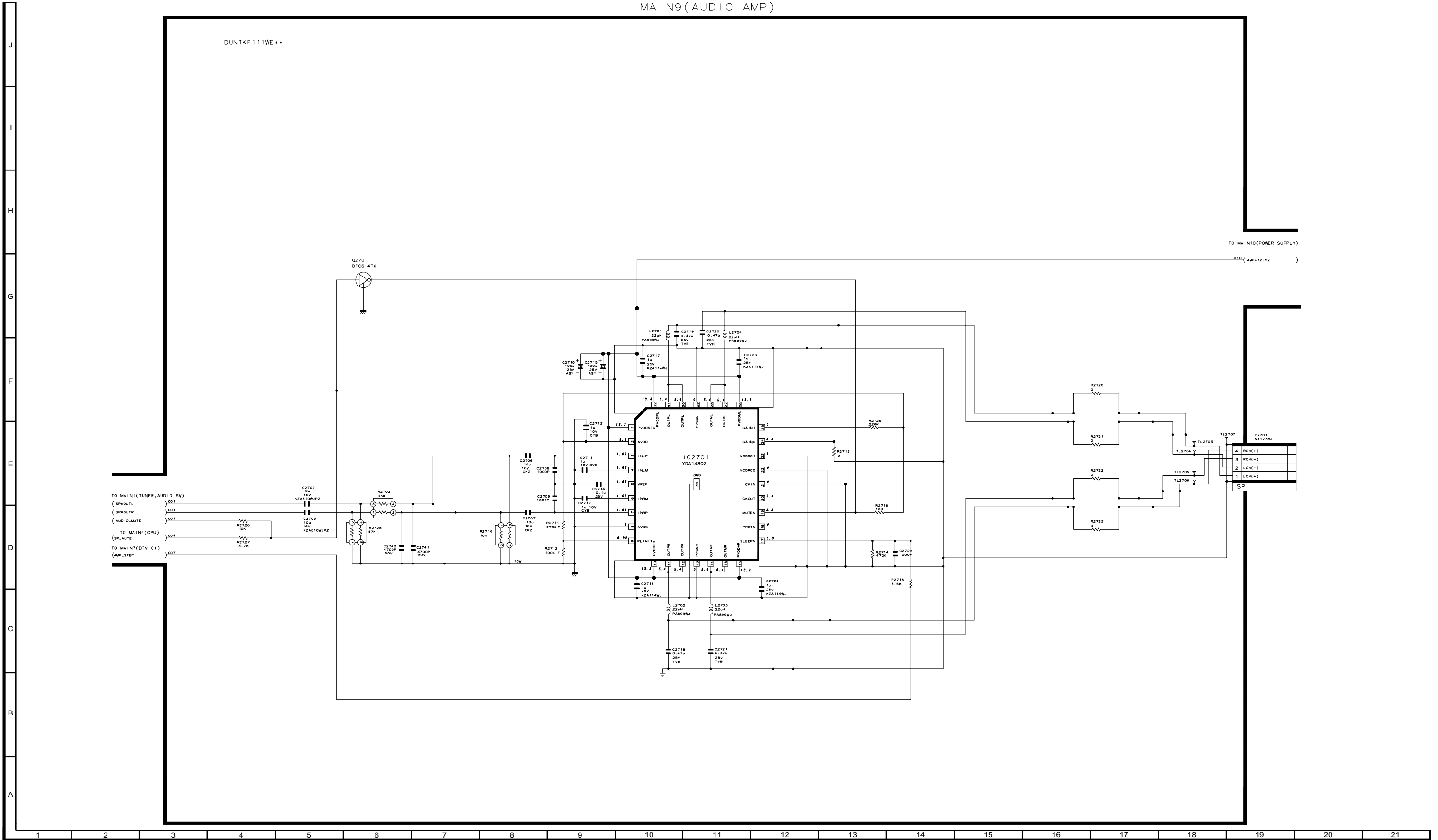
TO MAIN8(PANEL)
 SCL_BL 008
 SDA_BL 008

TO MAIN10(POWER)
 SCL_BL 010
 SDA_BL 010

TO MAIN4(CPU)
 SCL0_400k 004
 SDA0_400k 004

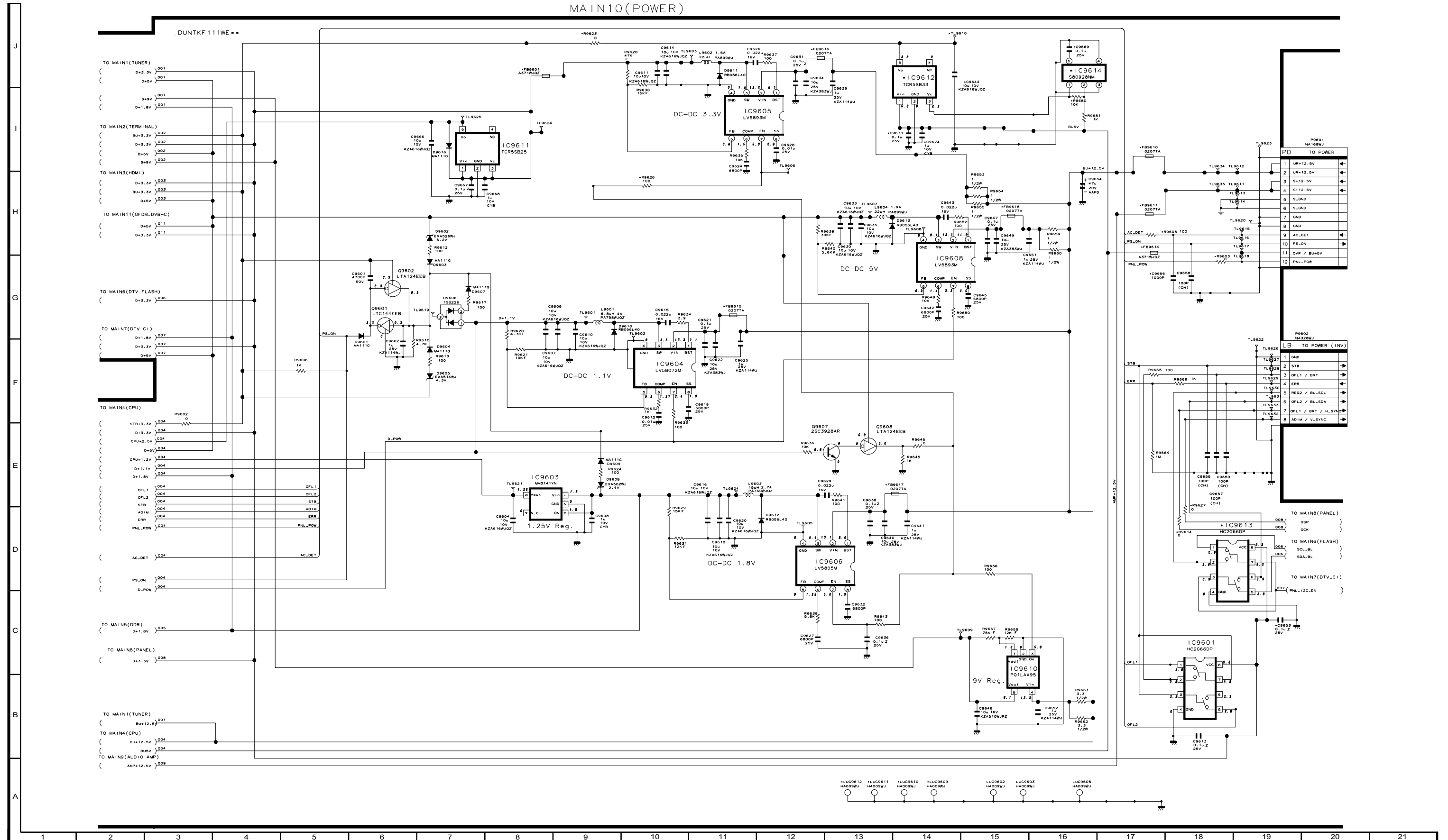






10. MAIN Unit-10

MAIN10(POWER)



CHAPTER 6. MAJOR IC INFORMATIONS

[1] MAJOR IC INFORMATIONS

1. DESCRIPTION OF MAJOR ICs

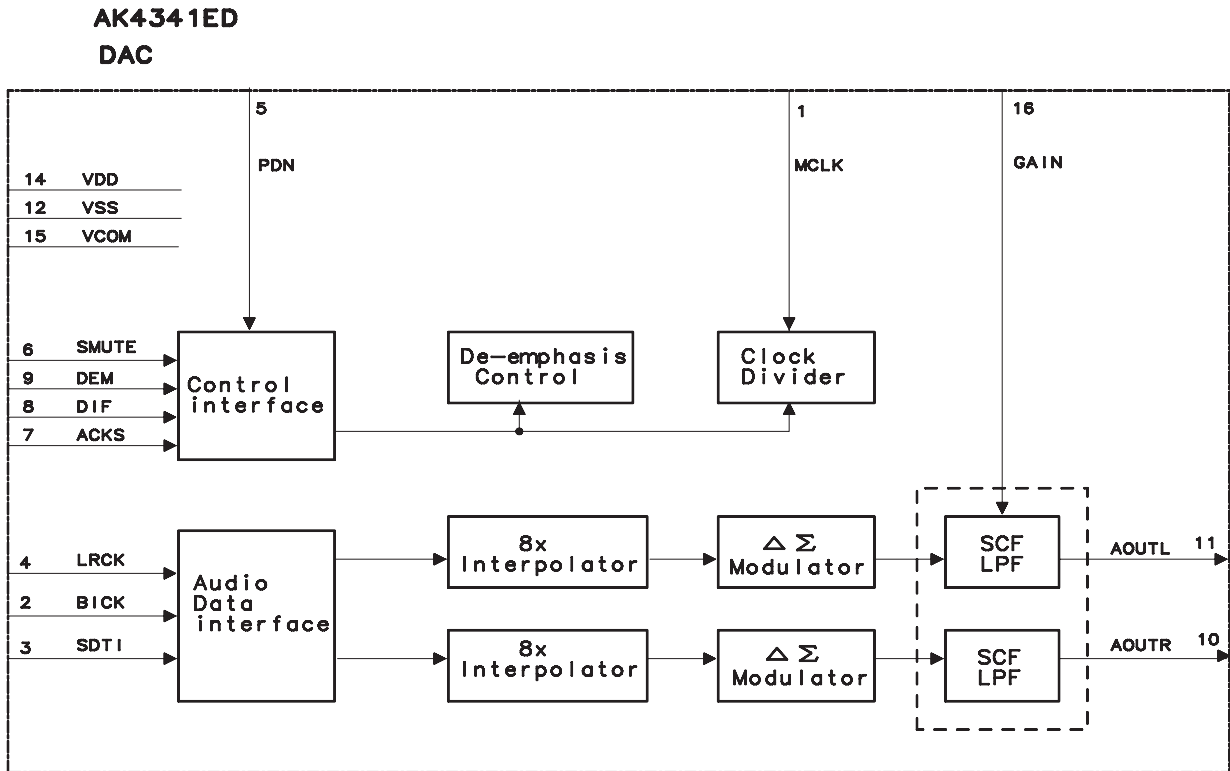
Ref No.	Name	Part Code	Description
[MAIN UNIT]			
IC1301	VHiAK4341ED-1Y	DAC	AK4341 is 24 bits DAC of 2Vrms output. A newly developed advanced multiple bit system is adopted in the $\Delta\Sigma$ modulator. In this model, this IC is used to use the audio signal from a digital tuner as an audio output signal of SCART1.
IC1302	VHiMT8292N+-1Q	Audio multiplexer	The MediaTek MT8292 introduces the advantages of an input multiplexer, the headphone driver and the PGA outputs. The analog input pins can either independently support GPIO function or provide extra GPIO pins to use. The analog input pins can either independently support GPIO function or provide extra GPIO pins to use.
IC1303	VHiS80944NM-1Y	Voltage detector with built-in delay circuit	This IC is a highly precision voltage detector (4.4V) with built-in delay circuit. In this model, It used as voltage detector of MUTE signal.
IC1104	VHiPQ1LA505-1Y	ANT5V-REG	PQ1LA505 is series regulator with an on/off function and the over current protection function. In this model, it generate 5V.
IC501	VHi2BR24C21F-1Y for service (RH-iXC206WJQZS)	1K E2PROM	This IC is a 1Kbit-2-wire (I2C bus type) serial EEPROM that can be programmed electrically. The EEPROM chip stores the EDID data of PC input. This data is controlled through I2C signals.
IC506	VHiM3221EiP-1Y	RS232C-DRIVER	The MAX3221E is a single driver, single receiver RS-232 solution operating from a single Vcc supply. The RS-232 pins provide IEC G1000-4-2 ESD Protection. The device meets the requirements of TIA/EIA-232-F and provides the electrical interface between an asynchronous communication controller and the serial-port connector. The charge pump and four small external capacitors allow operation from a single 3V to 5.5V supply.
IC1508	VHiSi91873-1Q	HDMI_Port_Processor	The Si91873 HDMI port processor is the second generation of HDMI devices that support revision 1.3 of the HDMI specification. The main feature is as follows. 1) 4-input, 1-output HDMI port processor. 2) Integrated TMDS receiver and transmitter cores capable of receiving and transmitting at 2.25Gbps. 3) Supports video resolutions up to 1080p, 60Hz, 12bit or 720p/1080i, 120Hz, 12bit. 4) Receiver fully comply with DVI1.0, HDCP1.1 and HDMI1.3 specifications.
IC3302	VHiBD6538G+-1Y	USB high side SW	BD6538G is single channel high side powers switch with low ON resistance Nch power MOSFET. Rich safety functions such as over current detection, Thermal shutdown (TSD), under voltage lock out (UVLO) and soft start function which are required for the power supply port protection are integrated into 1chip.
IC3303	RH-iXC758WJQZQ	VCT & Main CPU	This IC is Video Processor & MAIN CPU. In this IC, the decode processing and the video signal processing are done. Moreover, OSD is generated here and added to a picture signal.
IC3304	VHiS80928NM-1Y	Voltage detector with built-in delay circuit	This IC is a highly precision voltage detector (2.8V) with built-in delay circuit. In this model, It uses as RESET signal of IC3303.
IC3305	VHiS80920NM-1Y	Voltage detector with built-in delay circuit	This IC is a highly precision voltage detector (2.0V) with built-in delay circuit. In this model, It used as a D-POW signal generator.
IC3501/2	RH-iXC505WJQZQ	512Mb-DDR2-SDRAM	This IC is 512Mb DDR2 SDRAM. This IC operates as a memory of IC3303 (Video Processor). ***
IC8403	RH-iXC788WJN2Y	2Mb-Serial-FLASH	This IC is 2Mbit CMOS 3.0 Volt Flash Memory with 50-MHz SPI (Serial Peripheral Interface) Bus and Small Sector for Boot and Parameter Storage.
IC8401	RH-iXC721WJQZQ	512Mb-NAND-FLASH	This IC is 512Mb NAND flash memory. This IC stores the software data that processes the system of TV such as the graphic processing, the LCD controls, and backlights etc.
IC8455	VHiBR24S64F-1Y	I2C bus type-64K E2PROM	The BR24S64F is a 64Kbit-2-wire (I2C bus type) serial EEPROM that can be programmed electrically. This IC stores the menu data and the adjustment value data of adjustment process mode etc. The data is given out by commands from the main microprocessor.
IC4402	VHiAOZ1320C-1Y	SMART LOAD SW	The AOZ1320 is a P-channel high-side load switch with controlled slew rate. AOZ1320-04 have a slew rate of 1ms.

Ref No.	Name	Part Code	Description
IC4401	VHIMT8295AE-1Q	CI_controller	This is a control IC for PCMCIA cards. This controls information on IC cards inserted into the PCMCIA card slot (SC4401) or information on software version upgrade cards saved on flash memories to transfer the data to CPUs and memories.
IC2701	VHIYDA148QZ-1Y	A-AMP	This IC is a digital audio power amplifier. It is mounted by 32QFN small package with 15W or less stereo. it drives by 10W in 26, and 32 types.
IC9612	VHITCR5SB33-1Y	1CH-SW-REG BU3.3V-REG	The TCR5SB33 is CMOS general-purpose single-output voltage regulators with an on/off control input, featuring low dropout voltage and low quiescent bias current. The output current is possible up to 200mA or less. In this model, it generate BU3.3V.
IC9614	VHIS80928NM-1Y	Voltage detector with built-in delay circuit	This IC is a highly precision voltage detector(2.8V) with built-in delay circuit. In this model, It used as enable signal of BU3.3V_REG.
IC9605	VHiLV5893M+-1Y	1CH-SW-REG D3.3V-REG	LV5893M is 1.8A 1ch step down switching regulator. In this model, it generate D3.3V.
IC9611	VHITCR5SB25-1Y	1CH-SW-REG 2.5V-REG	The TCR5SB25 is CMOS general-purpose single-output voltage regulators with an on/off control input, featuring low dropout voltage and low quiescent bias current. The output current is possible up to 200mA or less. In this model, it generate CPU2.5V.
IC9608	VHiLV5893M+-1Y	1CH-SW-REG D5V-REG	LV5893M is 1.8A 1ch step down switching regulator. In this model, it generate D5V.
IC9604	VHiLV58072M-1Y	1CH-SW-REG D1.1V-REG	LV58072M is 3A 1ch step down switching regulator. In this model, it generate D1.1V.
IC9606	VHiLV5805M+-1Y	1CH-SW-REG D1.8V-REG	LV5805M is 2A 1ch step down switching regulator. In this model, it generate D1.8V.
IC9603	VHiMM3141YN-1Y	CPU1.25V-REG	MM3141 is single-output voltage regulators with an on/off control input. In this model, it generate CPU1.25V.
IC9610	VHIPQ1LAX95-1Y	S9V-REG	PQ1LAX95 is the low power loss regulator equipped with the on/off function and the over current protection function. In this model, it generate S9V.
IC2602 IC9601 IC9613	VHiHC2G66DP-1Y	Bilateral Switch	This IC is provides a dual analog switch. Each switch has two pins for input or output and an active HIGH enable input.
[POWER UNIT]			
IC7102	TNY274PN	BU5V SW-REG-CTL for 40"/46"	This IC is IC for the switching regulator with Enhanced Flexibility and Extended Power Range In this model, non-reg BU5V power supply is generated.
IC7101	UCC28061	UR13V P-FACTOR for 46"	This IC is IC that improves Power-Factor in 13V_Regulator circuit of 46 type power supply circuit. The protection functions such as UVLO, Brounout, OVP and AOC are built into in this IC.
IC7200	NCP1606B	UR13V P-FACTOR for 40"	This IC is IC that improves Power-Factor in 13V_Regulator circuit of 40 type power supply circuit. The protection functions such as UVLO, Brounout, OVP and AOC are built into in this IC.
IC7104	SSC9502S	UR13V SW-REG-CTL for 40"/46"	This IC is switching power supply IC of a monolithic type. In this model, non-reg UR13V power supply is generated.
IC7505	FA5573	VLCD LOW-STANDBY for 40"/46"	This IC is IC for the low standby power requirement type switching power supply control. In this model, backlight LED power supply (VLED=187/209V) is generated.
IC7101	VIPER17	BU5V SW-REG-CTL for 32"	This IC is switching power supply IC of the off-line converter type with a PWM control. In this model, non-reg BU5V power supply is generated.
IC7001	L6562A	UR13V P-FACTOR for 32"	This IC is IC that improves Power-Factor in 13V_Regulator circuit of 32 type power supply circuit. The protection functions such as UVLO, Brounout, OVP and AOC are built into in this IC.
IC7002	FA5538	UR13V SW-REG-CTL for 32"	This IC is switching-power-supply control IC of the current mode system where power MOSFET drives directly. In this model, UR13V (32 types) is generated.
IC7251	FA5511	VLCD SW-REG-CTL for 32"	This IC is IC for the PWM type switching power supply control. In this model, backlight LED power supply (VLED=144V) is generated.

2. Detailed ICs Information

2.1. IC1301 (VHiAK4341ED-1Y)

2.1.1 Block Diagram

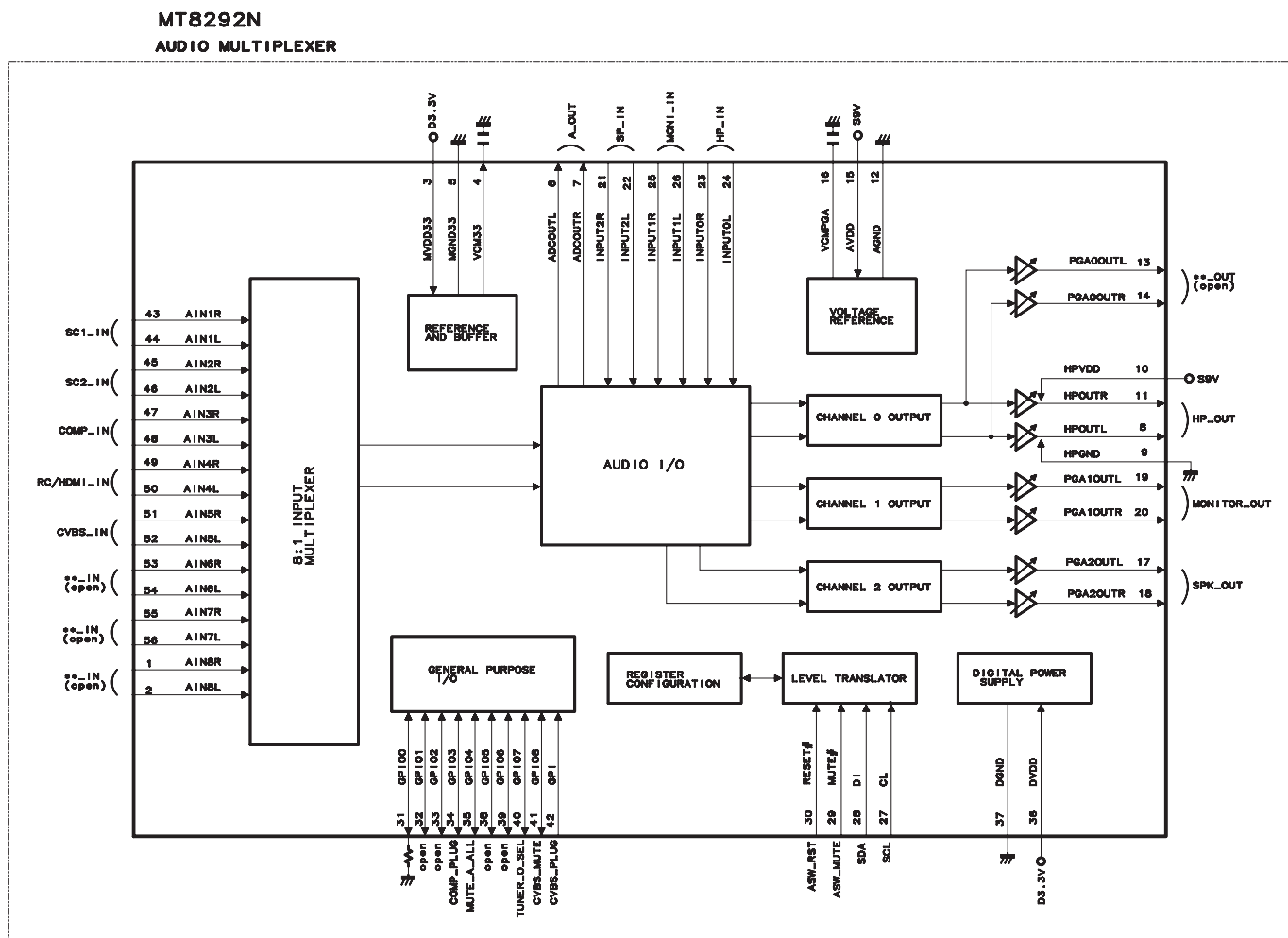


2.1.2 Pin Connections and short description

Pin No.	Pin Name	I/O	Pin Function
1	MCLK	I	Master clock input pin. An external TTL clock should be input on this pin.
2	BICK	I	Audio serial data clock pin.
3	SDTI	I	Audio serial data input pin.
4	LRCK	I	L/R clock pin.
5	RDN	I	Power-down mode pin. When at "L", the AK4341 is in the power-down mode, held in reset and AOUTL/R are held in VCOM. The AK4341 must be reset once upon power-up.
6	SMUTE	I	Soft mute pin in parallel control mode. "H": Enable, "L": Disable
7	ACKS	I	Auto setting mode pin. "L": Manual setting mode, "H": Auto setting mode.
8	DIF	I	Audio data interface format pin. "L": 24bit MSB justified, "H": I2S.
9	DEM	I	De-emphasis enable pin. "H": Enable, "L": Disable
10	AOUTR	O	Rch analog output pin. When PDN pin = "L", outputs VCOM voltage.
11	AOUTL	O	Lch analog output pin. When PDN pin = "L", outputs VCOM voltage.
12	HVDD	I	Output buffer power supply pin. Normally connected to VSS with a 0.1μF ceramic capacitor in parallel with a 10μF electrolytic cap.
13	VSS	—	Ground pin.
14	VDD	—	DAC power supply pin.
15	VCOM	O	DAC common voltage pin. Normally connected to VSS with a 10μF electrolytic cap. Outputs VCOM VDD voltage either PDN pin = "L" or "H".
16	GAIN	I	Gain control pin. "H": +6dB, "L": 0dB, open: +12dB. When PDN = "H", the gain pin is connected to VDD and VSS with 50kΩ resistor and held to VDD/2 when open. When PDN = "L", connected to VSS with 50kΩ resistor.

2.2. IC1302 (VHiMT8292N+-1Y)

2.2.1 Block Diagram



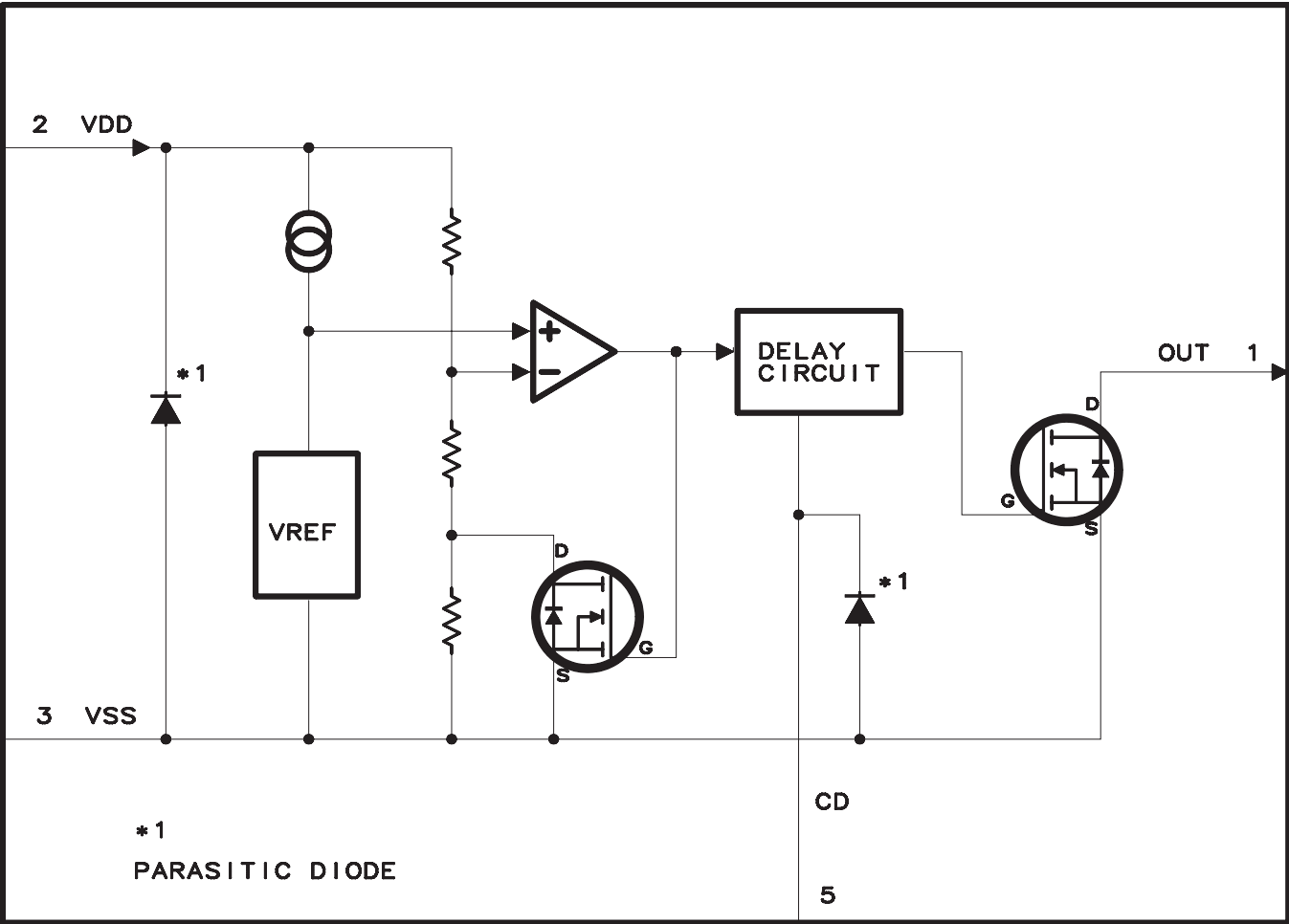
2.2.2 Pin Connections and short description

Pin No.	Pin Name	I/O	Pin Function	sheet name
1	AIN8R	I	Channel 8 right input.	open
2	AIN8L	I	Channel 8 left input.	open
3	MVDD33	—	Multiplexer positive supply 3.3 voltage.	—
4	VCM33	O	Multiplexer midrail divider de coupling pin.	C-GND
5	MGND33	—	Multiplexer negative supply.	GND
6	ADCOU TL	O	Analog multiplexer left output.	AUDIO_IN_L
7	ADCOU TR	O	Analog multiplexer right output.	AUDIO_IN_R
8	HPOU TL	O	Headphone right channel output.	HP_L
9	HPGND	—	Headphone ground supply pin.	GND
10	HPVDD	—	Headphone power supply pin.	S9V
11	HPOU TR	O	Headphone right channel output.	HP_R
12	AGND	—	Analog negative supply.	GND
13	PGA0OU TL	O	PGA channel 0 left output.	open
14	PGA0OU TR	O	PGA channel 0 right output.	open
15	AVDD	—	Analog positive supply 12 voltage or 9 voltage.	S9V
16	VCMPGA	O	PGA midrail divider de coupling pin.	C-GND
17	PGA2OU TL	O	PGA channel 2 left output.	SPK_OUT_L
18	PGA2OU TR	O	PGA channel 2 right output.	SPK_OUT_R
19	PGA1OU TL	O	PGA channel 1 left output.	MONITOR_L
20	PGA1OU TR	O	PGA channel 1 right output.	MONITOR_R
21	INPUT2R	I	Channel 2 right input to PGA gain module.	AOUT_SP_R
22	INPUT2L	I	Channel 2 left input to PGA gain module.	AOUT_SP_L
23	INPUT0R	I	Channel 0 right input to PGA gain module.	AOUT_HP_R
24	INPUT0L	I	Channel 0 left input to PGA gain module.	AOUT_HP_L
25	INPUT1R	I	Channel 1 right input to PGA gain module.	AOUT_MONI_R
26	INPUT1L	I	Channel 1 left input to PGA gain module.	AOUT_MONI_L
27	CL	I	Control clock pin in serial mode.	SCLO_400K
28	DI	I/O	Control data pin in serial mode.	SDAO_400K
29	MUTE#	I	Hardware mute function when this pin is driven low.	AUSW_MUTE
30	RESET#	I	The device enters a low power mode when this pin is driven low.	AUSW_RST
31	GPIO0	I	General Purpose I/O 0 and also shares hardware trapped function.	R-GND
32	GPIO1	I	General Purpose I/O 1.	open
33	GPIO2	I	General Purpose I/O 2.	open
34	GPIO3	I	General Purpose I/O 3.	COMP_PLUG
35	GPIO4	I	General Purpose I/O 4.	MUTE_A_ALL
36	DVDD	—	Digital positive supply 3.3 voltage.	D3.3V
37	DGND	—	Digital negative supply.	ground
38	GPIO5	I	General Purpose I/O 5.	open
39	GPIO6	I	General Purpose I/O 6.	open
40	GPIO7	I	General Purpose I/O 7.	TUNER_OUT_SEL
41	GPIO8	I	General Purpose I/O 8.	TUNER_OUT_CVBS_MUTE
42	GPI	I	Only General Purpose Input and support internal digital scan mode.	CVBS_PLUG
43	AIN1R	I	Channel 1 right input (default).	SC1_IN_R
44	AIN1L	I	Channel 1 left input (default).	SC1_IN_L
45	AIN2R	I	Channel 2 right input.	SC2_IN_R
46	AIN2L	I	Channel 2 left input.	SC2_IN_L
47	AIN3R	I	Channel 3 right input.	COMP_IN_R
48	AIN3L	I	Channel 3 left input.	COMP_IN_L
49	AIN4R	I	Channel 4 right input.	RC/HDMI_IN_R
50	AIN4L	I	Channel 4 left input.	RC/HDMI_IN_L
51	AIN5R	I	Channel 5 right input.	CVBS_IN_R
52	AIN5L	I	Channel 5 left input.	CVBS_IN_L
53	AIN6R	I	Channel 6 right input.	open
54	AIN6L	I	Channel 6 left input.	open
55	AIN7R	I	Channel 7 right input.	open
56	AIN7L	I	Channel 7 left input.	open

2.3. IC1303, IC9607 (VHiS80944NM-1Y)

2.3.1 Block Diagram

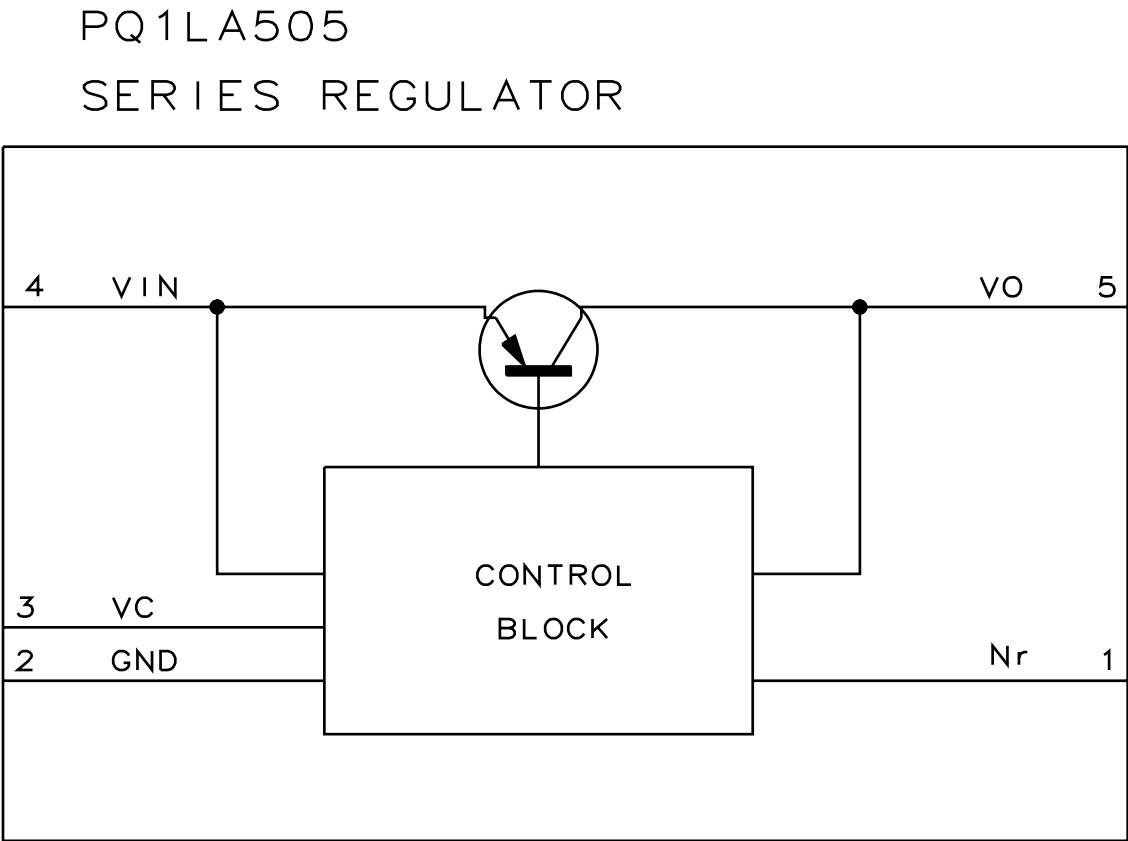
S80944NM
VOLTAGE DETECTOR(4.4V)



2.3.2 Pin Connections and short description

Pin No.	Pin Name	I/O	Pin Function
1	OUT	O	Voltage detection output terminal (RESET detecting voltage).
2	VDD	—	Voltage input terminal.
3	VSS	—	Ground terminal.
4	NC	—	No connection (It is an opening electrically.)
5	CD	I	External capacitor connection terminal for delay.

2.4.1 Block Diagram



2.4.2 Pin Connections and short description

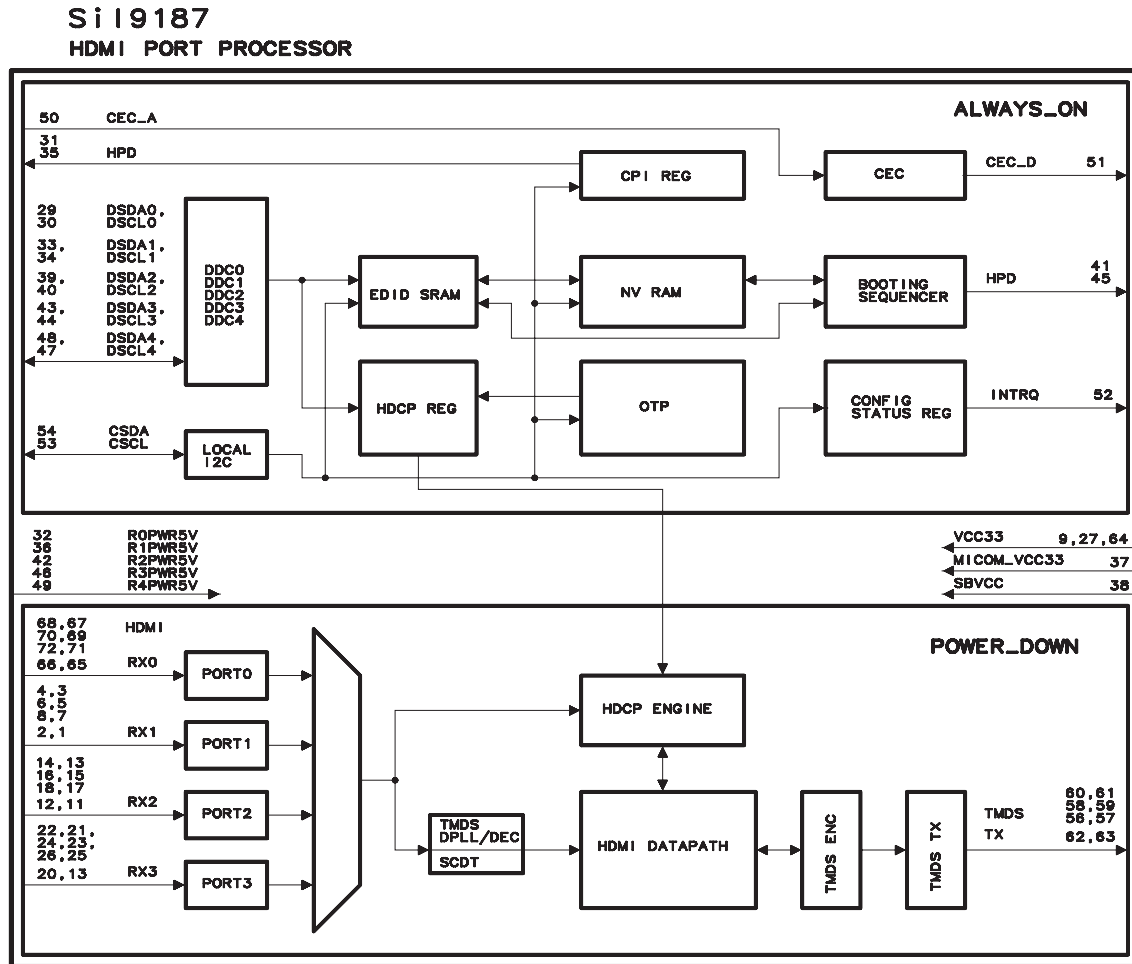
Pin No.	Pin Name	I/O	Pin Function
1	Nr	I	Noise Control
2	GND	-	Ground pin
3	Vc	I	ON/OFF Control
4	Vin	I	DC input
5	Vo	O	DC Output

2.5. IC501 (VHiBR24C21F-1Y)

This IC is a block diagram and description LC-32/40/46LE700E (S89B4LC32L700) please see the service manual.

2.6. IC506 (VHiM3221EiP-1Y)

This IC is a block diagram and description LC-32/40/46LE700E (S89B4LC32L700) please see the service manual.

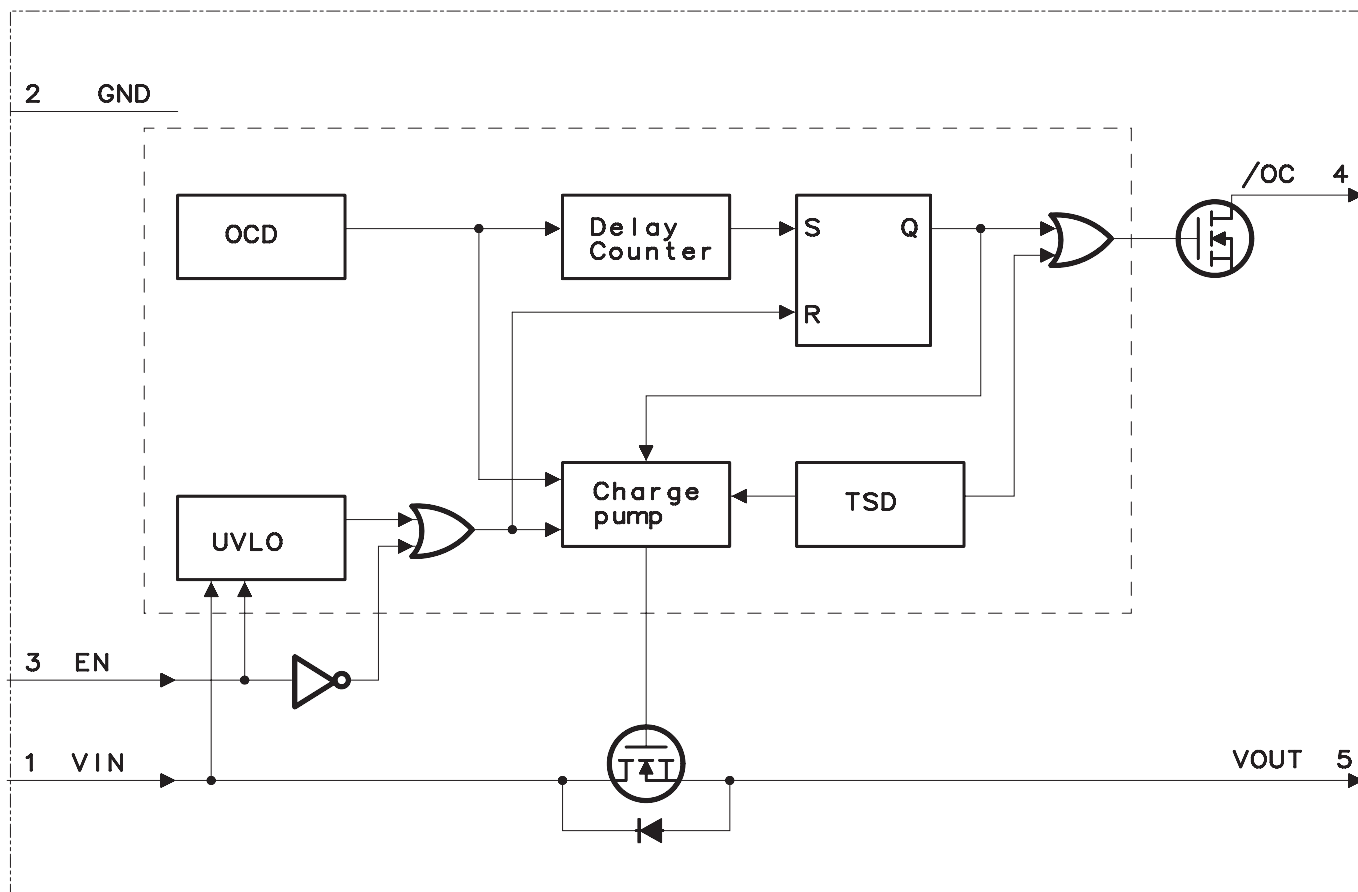
2.7. IC1508 (VHiSii91873-1Q)**2.7.1 Block Diagram**

2.7.2 Pin Connections and short description

Pin No.	Pin Name	I/O	Pin Function
HDMI RX Port Pins			
68	R0X0P	I	TMDS input port 0 data pairs.
67	R0X0N	I	
70	R0X1P	I	
69	R0X1N	I	
72	R0X2P	I	
71	R0X2N	I	
66	R0XCP	I	TMDS input port 0 clock pair.
65	R0XCN	I	
4	R1X0P	I	TMDS input port 1 data pairs.
3	R1X0N	I	
6	R1X1P	I	
5	R1X1N	I	
8	R1X2P	I	
7	R1X2N	I	
2	R1XCP	I	TMDS input port 1 clock pair
1	R1XCN	I	
14	R2X0P	I	TMDS input port 2 data pairs.
13	R2X0N	I	
16	R2X1P	I	
15	R2X1N	I	
18	R2X2P	I	
17	R2X2N	I	
12	R2XCP	I	TMDS input port 2 clock pair.
11	R2XCN	I	
22	R3X0P	I	TMDS input port 3 data pairs.
21	R3X0N	I	
24	R3X1P	I	
23	R3X1N	I	
26	R3X2P	I	
25	R3X2N	I	
20	R3XCP	I	TMDS input port 3 clock pair
19	R3XCN	I	
HDMI Tx Port Pins			
60	TX0P	O	HDMI Tx Output port data.
61	TX0N	O	TMDS Low Voltage Differential Signal output data pairs.
58	TX1P	O	
59	TX1N	O	
56	TX2P	O	
57	TX2N	O	
62	TXCP	O	
63	TXCN	O	
System Switching Pins			
29	DSDA0	I/O	DDC I2C Data for respective port. These signals are true open drain, and do not pull-down to ground when power is not applied to the device. These pins require an external pull-up resistor.
33	DSDA1	I/O	
39	DSDA2	I/O	
43	DSDA3	I/O	
30	DSCL0	I	DDC I2C Clock for respective port. These signals are true open drain, and do not pull-down to ground when power is not applied to the device. These pins require an external pull-up resistor.
34	DSCL1	I	
40	DSCL2	I	
44	DSCL3	I	
32	R0PWR5V	—	5-V Port detection input for respective port. Connect to 5-V signal from HDMI input connector.
36	R1PWR5V	—	
42	R2PWR5V	—	
46	R3PWR5V	—	
31	HPD0	O	Hot Plug Detect Output for respective port. Connect to HOTPLUG of HDMI input connector.
35	HPD1	O	
41	HPD2	O	
45	HPD3	O	
49	R4PWR5V	—	5V power from 5th Rx port.

Pin No.	Pin Name	I/O	Pin Function
Control Pins			
54	CSCL	I	Local Configuration/Status I2C Clock. Chip configuration/status is accessed via this I2C port. This pin is a true open drain, so it does not pull to ground if power is not applied.
53	CSDA	I/O	Local Configuration/Status I2C Data. Chip configuration/status is accessed via this I2C port. This pin is a true open drain, so it does not pull to ground if power is not applied.
48	DSCL4	I	DDC I2C Clock for VGA port. HDCP KSV, Aa, and Ri values are exchanged over this I2C port during authentication. This pin is a true open drain, so it does not pull to ground if power is not applied. The R4PWR5V (VREF) pad will provide a reference voltage for the PROT input pin.
47	DSDA4	I/O	DDC I2C Data for VGA port. HDCP KSV, Aa, and Ri values are exchanged over this I2C port during authentication. This pin is a true open drain, so it does not pull to ground if power is not applied. The R4PWR5V (VREF) pad will provide a reference voltage for the PROT input pin.
Configuration Pins			
55	TPWR_C12CA	I/O	I2C Slave Address input/Transmit Power Sense Output. When RESET# is LOW, this pin is used as an input to latch the I2C sub_address. The level on this pin is latched when the RESET# pin transition from LOW to HIGH. When RESET# is HIGH, this pin is used as the TPWR output, indicating that the receive port has 5V present.
52	INT	O	Interrupt Output. This is an open_drain output and requires an external pull_up resistor.
10	RSVD	—	When SBVCC (pin38) = 5V, RSVD pin #10 must be tied to GND with less than 10K resistor. When SBVCC (pin38) = 3.3V, RSVD pin #10 must be tied to GND with 1M ohm resistor.
28	RSVD	—	These pins must be tied to GND during normal operation.
CEC Pins			
50	CEC_A	I/O	HDMI compliant CEC I/O used for interfacing to CEC devices. The signal is electrically compliant with CEC specification. This pin connects to the CEC signal of all HDMI connectors in the system. As an input, the pin acts as a LVTTTL, Schmitt triggered input and is 5V tolerant. As an output, the pin acts as an NMOS driver with resistive pull-up. This pin has an internal pull-up resistor.
51	CEC_D	I/O	This pin is configurable through NVRAM. For CEC_D use, this pin interfaces to the CEC master. Usually connected to Micro-controller.
Power and Ground Pins			
9,27,64	VCC33	—	TMDS Core VCC. Must be supplied at 3.3V
37	MICOM_VCC33	—	During normal mode, this pin provides 3.3V power to external micro-controller. Maximum output current is 30mA.
38	SBVCC	—	Local Power from TV. When SBVCC (pin38) = 5V, RSVD pin #10 must be tied to GND with less than 10K resistor. When SBVCC (pin38) = 3.3V, RSVD pin #10 must be tied to GND with 1M ohm resistor.
ePad	Epad	—	ePad must be connected to ground. All ground planes, analog and digital, must be tied together to the ePad, which must be connected to ground.

USB highside switch

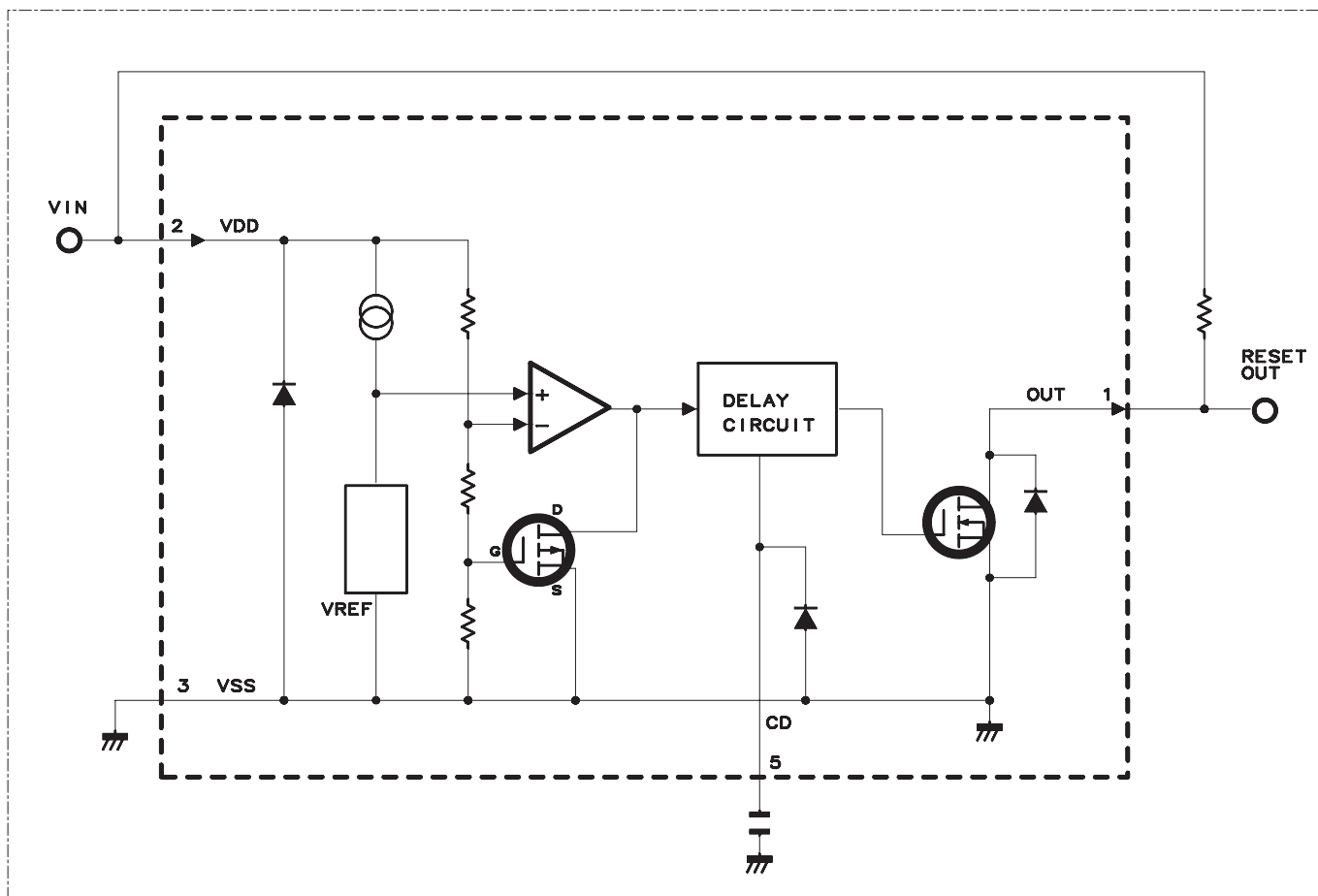


Pin No.	Pin Name	I/O	Pin Function
1	VIN	I	Power supply input terminal. It is an input terminal to the switch and a power supply input terminal of an internal circuit.
2	GND	—	Ground
3	EN	I	Switch enable input terminal. The switch is turned on by inputting the high level.
4	/OC	O	Over current notification terminal. When the over current is detected, it becomes a low level. Open drain output.
5	VOUT	O	Switch output terminal.

2.9. IC3304 (VHiS80928NM-1Y), IC3305 (VHiS80920NM-1Y)

2.9.1 Block Diagram

S80920NM 2.0V
S80928NM 2.8V
VOLTAGE-DETECTOR

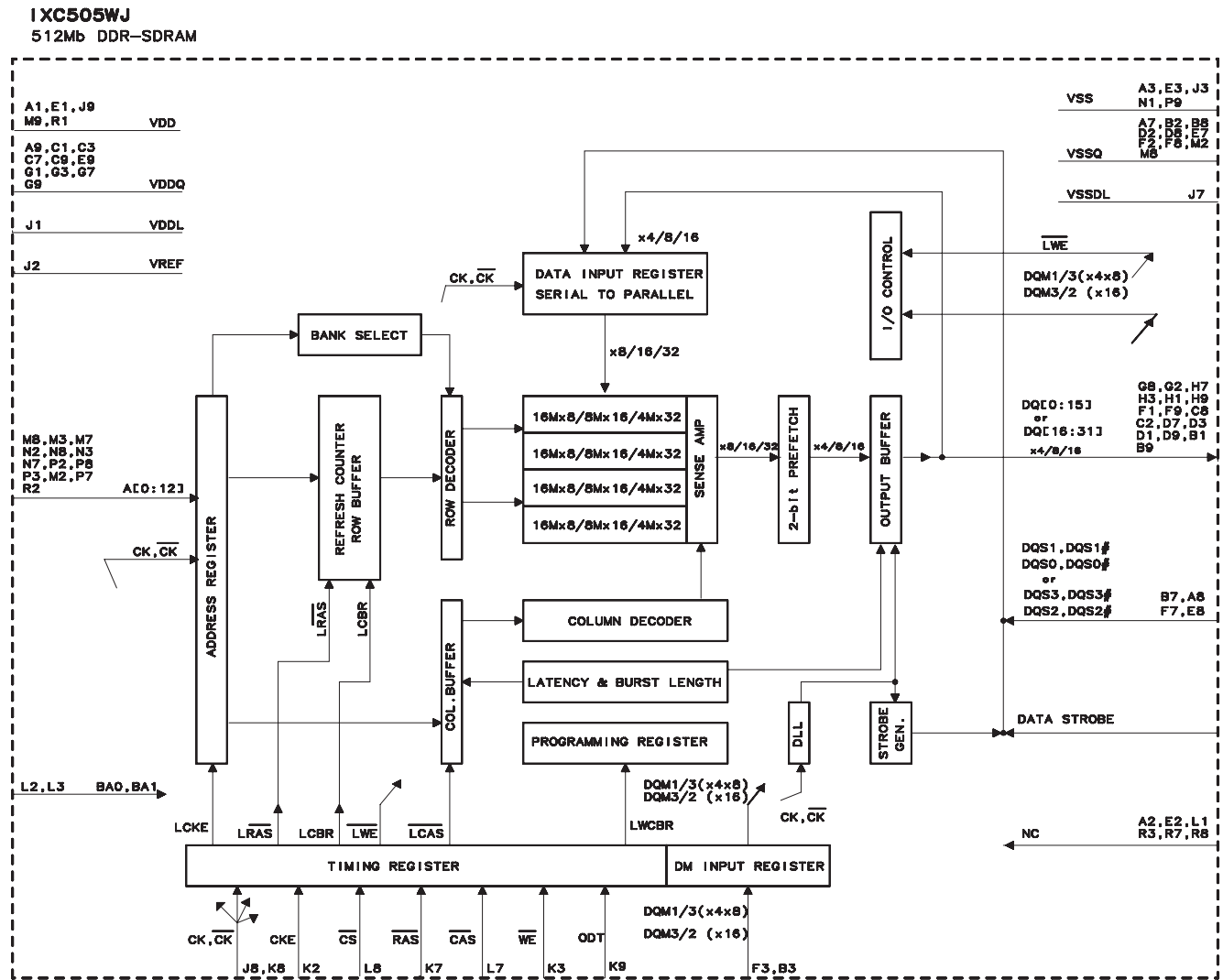


2.9.2 Pin Connections and short description

Pin No.	Pin Name	I/O	Pin Function
1	OUT	O	Voltage detection output terminal. (RESET detecting voltage)
2	VDD	—	Voltage input terminal.
3	VSS	—	Ground terminal.
4	NC	—	No connection (It is an opening electrically.)
5	CD	I	External capacitor connection terminal for delay.

2.10. IC3501, IC3502 (RH-iXC505WJQZQ)

2.10.1 Block Diagram



IXC505WJ-512M-SDRAM

2.10.2 Pin Connections and short description

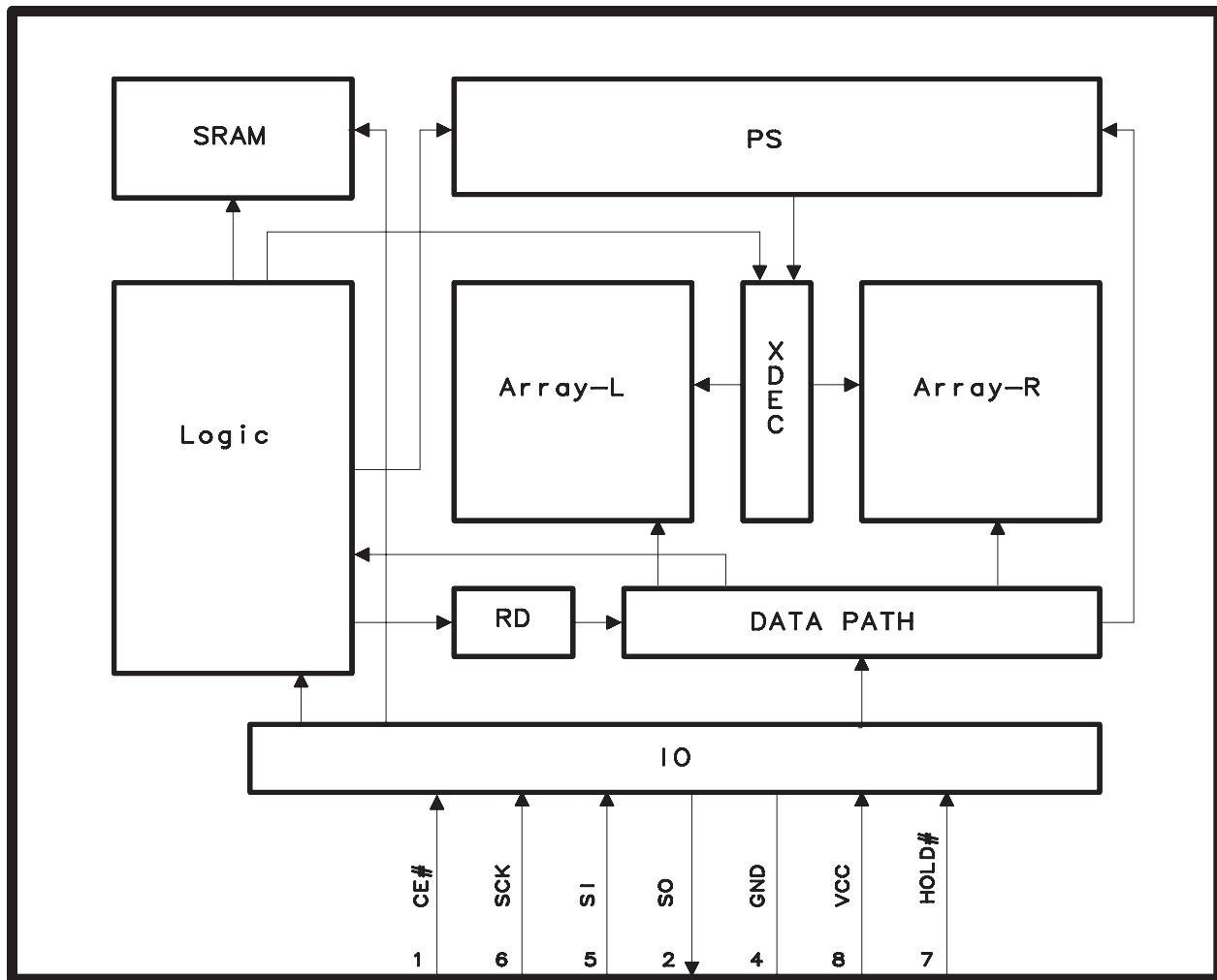
Pin No.	Pin Name	I/O	Pin Function
J8, K8	CK, CK#	I	Clock: CK and CK# are differential clock inputs. All address and control input signals are sampled on the crossing of the positive edge of CK and negative edge of CK#. Output (read) data is referenced to the crossings of CK and CK# (both directions of crossing).
K2	CKE	I	Clock Enable: CKE HIGH activates, and CKE Low deactivates, internal clock signals and device input buffers and output drivers. Taking CKE Low provides Pre charge Power-Down and Self Refresh operation (all bank idle), or Active Power-Down (row Active in any bank). CKE is synchronous for power down entry and exit, and for self refresh entry. CKE is asynchronous for self refresh exit. After VREF has become stable during the power on and initialization sequence, it must be maintained for proper operation of the CKE receiver. For proper self-refresh entry and exit, VREF must be maintained to this input. CKE must be maintained high throughout read and write accesses. Input buffers, excluding CK, CK#, ODT and CKE are disabled during power-down. Input buffers, excluding CKE are disabled during self refresh.
L8	CS#	I	Chip Select: All commands are masked when CS# is registered HIGH. CS# provides for external bank selection on systems with multiple banks. CS# is considered part of the command code.

Pin No.	Pin Name	I/O	Pin Function
K9	ODT	I	On Die Termination: ODT (registered HIGH) enables termination resistance internal to the DDR2 SDRAM. When enabled, ODT is only applied to each DQ, DQS, DQS#, RDQS, RDQS#, and DM signal for x4/x8 configuration. For x16 configuration, ODT is applied to each DQ, UDQS/UDQS#. LDQS/LDQS#, UDM and LDM signal. The ODT pin will be ignored if the Extended Mode Register Set (EMRS) is programmed to disable ODT.
K7, L7, K3	RAS#, CAS#, WE#	I	Command Inputs: RAS#, CAS# and WE# (along with CS#) define the command being entered.
F3, B3	DM (UQM3) (DQM1) or (UQM2) (DQM3)	I	Input Data Mask: DM is an input mask signal for write data. Input data is masked when DM is sampled HIGH coincident with that input data during a Write access. DM is sampled on both edges of DQS. Although DM pins are input only, the DM loading matches the DQ and DQS loading. For x8 device, the function of DM or RDQS/RDQS# is enabled by EMRS command.
L2, L3	BA0, BA1	I	Bank Address Inputs: BA0 and BA1 define to which bank an Active, Read, Write or Pre charge command is being applied. Bank address also determines if the mode register or extended mode register is to be accessed during a MRS or EMRS cycle.
M8, M3, M7, N2, N8, N3, N7, P2, P8, P3, M2, P7, R2	A [0:12]	I	Address Inputs: Provide the row address for Active commands, and the column address and Auto Pre charge bit for Read/Write commands to select one location out of the memory array in the respective bank. A10 is sampled during a pre charge command to determine whether the PRECHARGE applies to one bank (A10 LOW) or all banks (A10 HIGH). If only one bank is to be pre charged, the bank is selected by BA0, BA1. The address inputs also provide the op-code during a Mode Register Set command.
G8, G2, H7, H3, H1, H9, F1, F9, C8, C2, D7, D3, D1, D9, B1, B9	DQ [0:15] or DQ [16:31]	I/O	Data Input/Output: Bi-directional data bus.
B7, A8, F7, E8	(DQS1), (DQS1#) (DQS0), (DQS0#) or (DQS3), (DQS3#) (DQS2), (DQS2#)	I/O	Data Strobe: Output with read data, input with write data. Edge-aligned with read data, centered in write data. For the x16, DQS1 corresponds to the data on DQ0>DQ7; DQS0 corresponds to the data on DQ8>DQ15. For the x8, an DQS2 option using DM pin can be enabled via the EMRS (1) to simply read timing. The data strobes DQS1, DQS0, DQS3, and DQS2 may be used in single ended mode or paired with optional complementary signals DQS1#, DQS0#, DQS3# and DQS2# to provide differential pair signaling to the system during both reads and writes. A control bit at EMRS (1) [A10] enables or disables all complementary data strobe signals. In this data sheet, "differential DQS signals" refers to any of the following with A10=0 of EMRS (1) x4 DQS1/DQS1# x8 DQS1/DQS1# if EMRS (1) [A11] =0 x8 DQS1/DQS1#, DQS2/DQS2# x16 DQS0/DQS0# and DQS3/DQS3#
A2, E2, L1, R3, R7, R8	NC	—	No Connect: No internal electrical connection is present.
A1, E1, J9, M9, R1	VDD	—	Power Supply: +1.8V ± 0.1V.
A9, C1, C3, C7, C9, E9, G1, G3, G7, G9	VDDQ	—	DQ Power Supply: +1.8V ± 0.1V.
A3, E3, J3, N1, P9	VSS	—	Ground.
A7, B2, B8, D2, D8, E7, F2, F8, H2, H8	VSSQ	—	Ground. DQ Ground.
J1	VDDL	—	DLL Power Supply: +1.8V ± 0.1V.
J7	VSSDL	—	DLL Ground.
J2	VREF	I	Reference voltage for inputs for SSTL interface.

2.11.1 Block Diagram

IXC788WJ

2M FLASH MEMORY



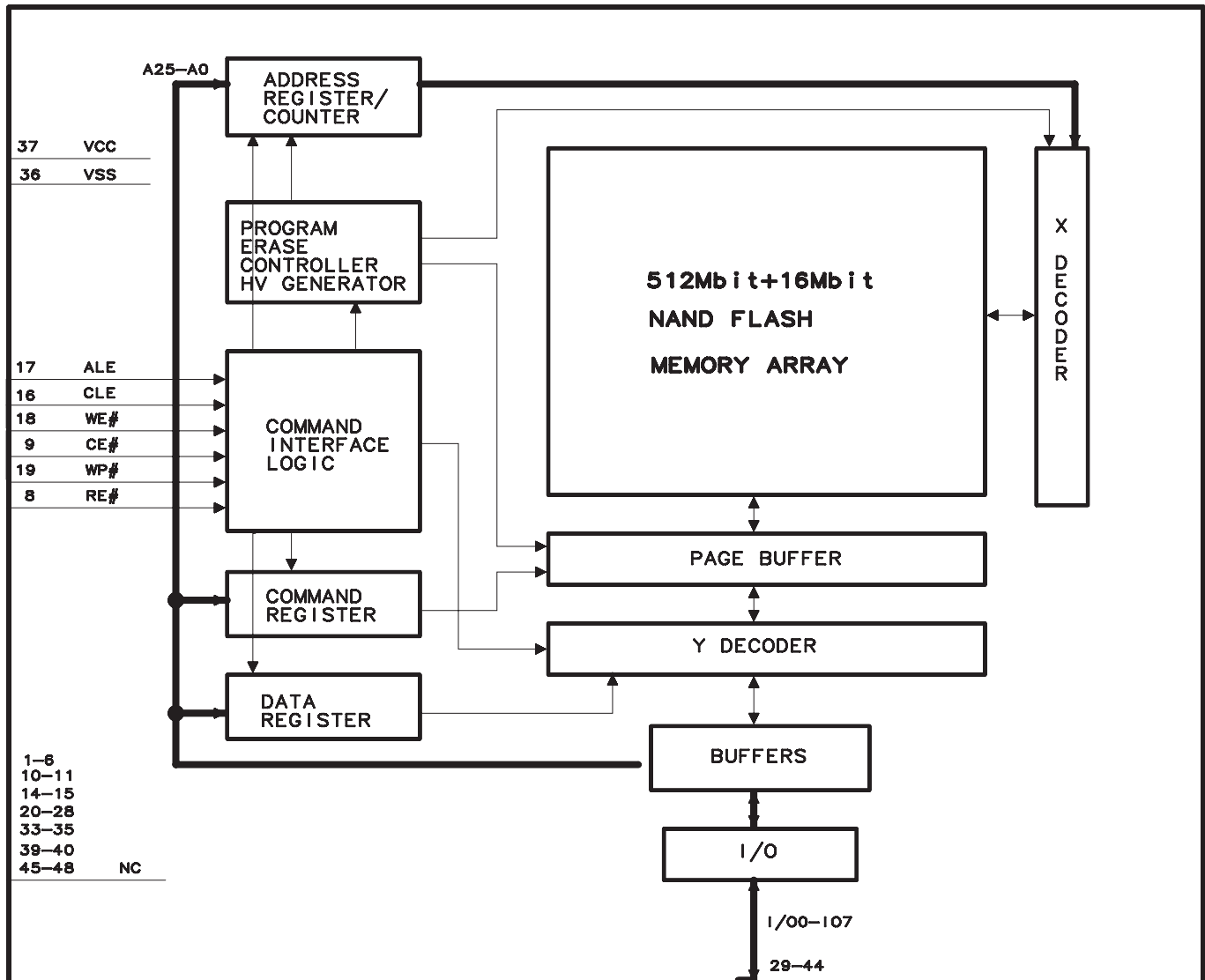
2.11.2 Pin Connections and short description

Pin No.	Pin Name	I/O	Pin Function
1	CS# (Chip Select)	I	Places device in active power mode when driven low. Deselects device and places SO at high impedance when high. After power-up, device requires a falling edge on CS# before any command is written. Device is in standby mode when a program, erase, or Write Status Register operation is not in progress.
2	SO (Signal data Output)	O	Transfers data serially out of the device on the falling edge of SCK.
3	W# (Write Protect)	I	Protects the memory area specified by Status Register bits BP2:BP0. When driven low, prevents any program or erase command from altering the data in the protected memory area.
4	GND	—	Ground
5	SI (Serial Data Input)	I	Transfers data serially into the device. Device latches commands, addresses, and program data on SI on the rising edge of SCK.
6	SCK (Serial Clock)	I	Provides serial interface timing. Latches commands, addresses, and data on SI on rising edge of SCK. Triggers output on SO after the falling edge of SCK.
7	HOLD#	I	Pauses any serial communication with the device without deselecting it. When driven low, SO is at high impedance, and all input at SI and SCK are ignored. Requires that CS# also be driven low.
8	VCC	—	Supply Voltage

2.12. IC8401 (RH-iXC721WJQZQ)

2.12.1 Block Diagram

IXC721WJ 512Mb FLASH



2.12.2 Pin Connections and short description

Pin No.	Pin Name	I/O	Pin Function
29-44	IO0-IO7	I/O	DATA INPUTS/OUTPUTS The IO pins allow to input command, address and data and to output data during read/program operations. The inputs are latched on the rising edge of Write Enable (WE#). The I/O buffer float to High-Z when the device is deselected or the outputs are disabled.
16	CLE	I	COMMAND LATCH ENABLE This input activates the latching of the IO inputs inside the Command Register on the Rising edge of Write Enable (WE#).
17	ALE	I	ADDRESS LATCH ENABLE This input activates the latching of the IO inputs inside the Address Register on the Rising edge of Write Enable (WE#).
9	CE#	I	CHIP ENABLE This input controls the selection of the device. When the device is busy CE# low does not deselect the memory.
18	WE#	I	WRITE ENABLE This input acts as clock to latch Command, Address and Data. The IO inputs are latched on the rise edge of WE#.
8	RE#	I	READ ENABLE The RE# input is the serial data-out control, and when active drives the data onto the I/O bus. Data is valid REA after the falling edge of RE# which also increments the internal column address counter by one.
19	WP#	I	WRITE PROTECT The WP# pin, when Low, provides an Hardware protection against undesired modify (program/erase) operations.
7	A/B#	I	READY BUSY The Ready/Busy output is an Open Drain pin that signals the state of the memory.
37	VCC	—	SUPPLY VOLTAGE The VCC supplies the power for all the operations (Read, Write, Erase).
36	VSS	—	GROUND
1-6, 10-11, 14-15, 20-28, 33-35, 39-40, 45-48	NC	—	NO CONNECTION

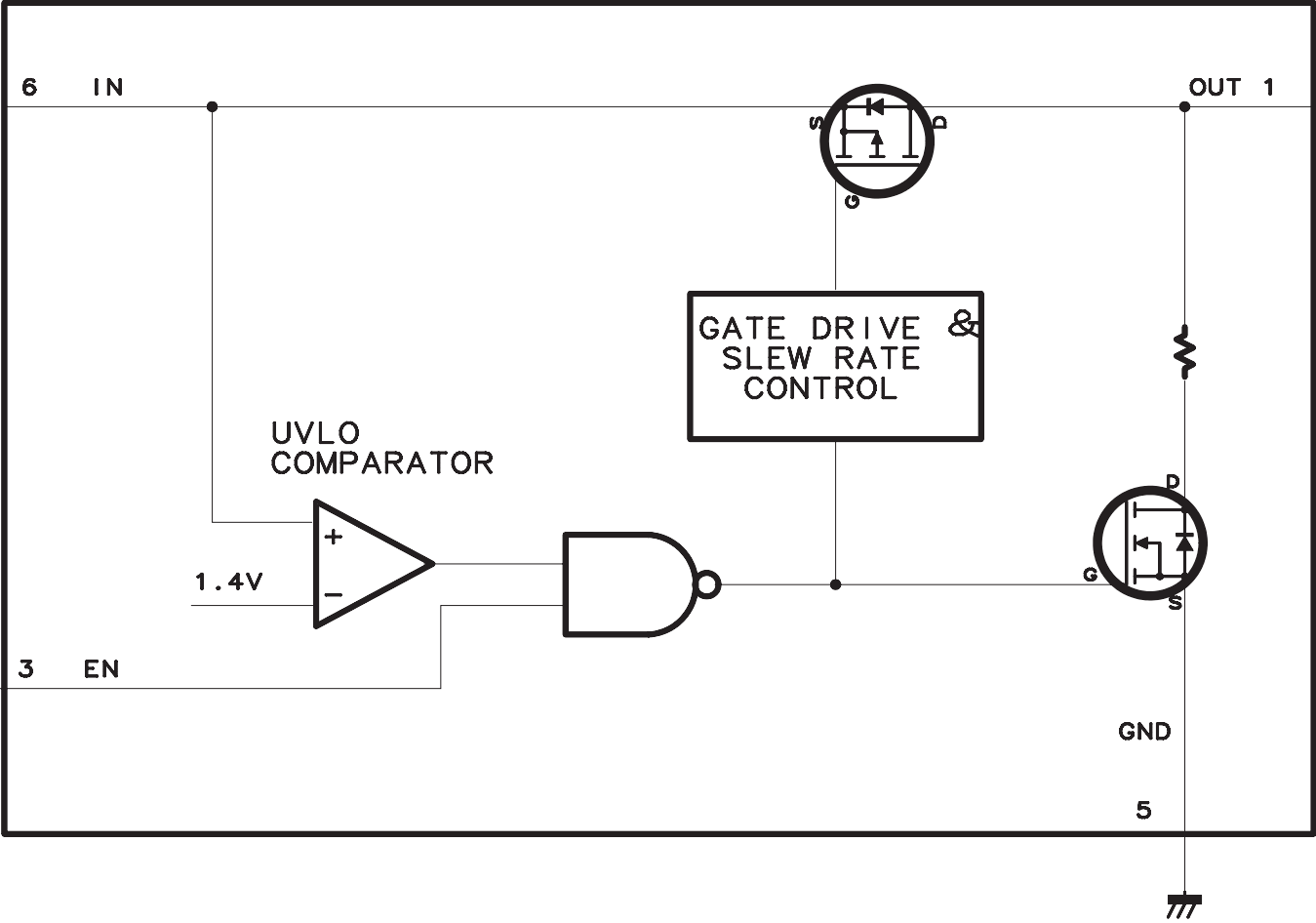
2.13. IC8455 (VHiBR24S64F-1Y)

This IC is a block diagram and description LC-32A47E/RU/V (S59Z4LC32A47E) please see the service manual.

2.14. IC4402 (VHiAOZ1320C-1Y)

2.14.1 Block Diagram

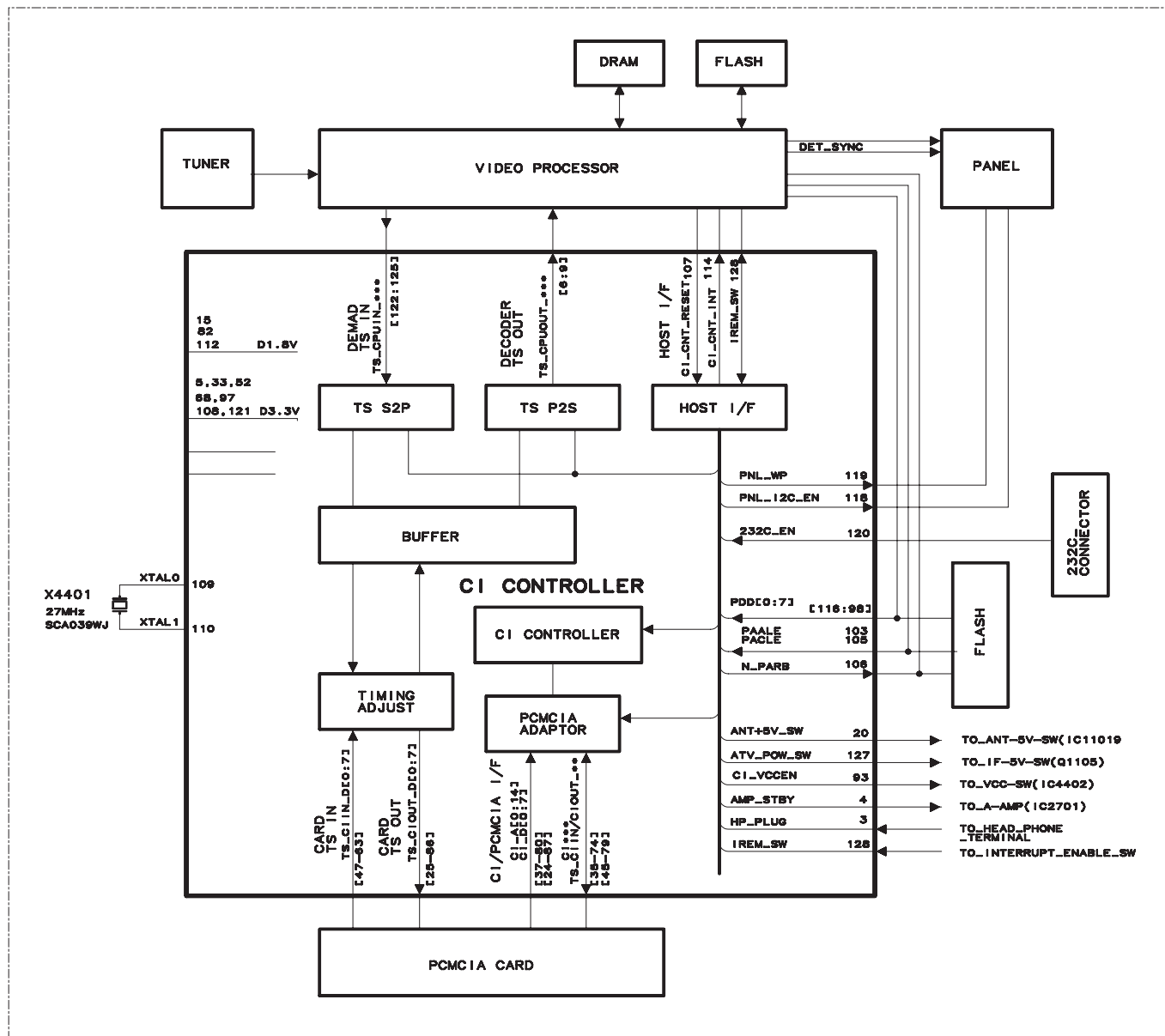
AOZ1320C
SW



2.14.2 Pin Connections and short description

Pin No.	Pin Name	I/O	Pin Function
1	OUT	O	Output. OUT is the source of the P-channel MOSFET.
2	GND	—	Ground
3	EN	I	Enable. The P-channel MOSFET turns on when EN is logic HIGH.
4	NC	—	No connect. This pin is not internally connected.
5	GND	—	Ground
6	IN	I	Input. IN is the drain of the P-channel MOS FET. It is the supply input of the IC.

MT8295AE
CI CONTROLLER



Pin No.	Pin Name	I/O	Pin Function	Sheet Name
Miscellaneous				
107	RESETB	I	Chip reset.	CI_CNT_RESET
114	CI_INT	O	interrupt.	CI_CNT_INT
NAND flash				
116	CI_DATA0	I/O	NAND Flash Data bit 0.	PDD0_
115	CI_DATA1	I/O	NAND Flash Data bit 1.	PDD1_
95	CI_DATA2	I/O	NAND Flash Data bit 2.	PDD2_
102	CI_DATA3	I/O	NAND Flash Data bit 3.	PDD3_
101	CI_DATA4	I/O	NAND Flash Data bit 4.	PDD4_
100	CI_DATA5	I/O	NAND Flash Data bit 5.	PDD5_
99	CI_DATA6	I/O	NAND Flash Data bit 6.	PDD6_
98	CI_DATA7	I/O	NAND Flash Data bit 7.	PDD7_
94	CI_CEB	I	NAND Flash Chip enable.	CI_CE#

Pin No.	Pin Name	I/O	Pin Function	Sheet Name
106	CI_RB	O	NAND Flash Ready.	N_PARB_
96	CI_WEB	I	NAND Flash Write enable.	XEWE_
103	CI_ALE	I	NAND Flash Address Latch enable.	PAALE_
105	CI_CLE	I	NAND Flash Command Latch enable.	PACLE_
117	CI_OEB	I	NAND Flash Output enable.	XERE_
CLK/Crystal				
109	XTALO	O	Crystal output.	XTAL_O
110	XTALI	I	Crystal input.	XTAL_I
Transport stream (TS)				
6	TOCLK	I	Transport stream 1 input clock.	TS_CPUOUT_CLK
7	TOSYNC	I	Transport stream 1 input sync.	TS_CPUOUT_SYNC
8	TOVALID	I	Transport stream 1 input valid.	TS_CPUOUT_VAL
9	TODATA0	I	Transport stream 1 input data bit 0.	TS_CPUOUT_DO
11	TODATA1	I	Transport stream 1 input data bit 1. Transport stream 2 input clock.	open
12	TODATA2	I	Transport stream 1 input data bit 2. Transport stream 2 input sync.	open
13	TODATA3	I	Transport stream 1 input data bit 3. Transport stream 2 input valid.	open
14	TODATA4	I	Transport stream 1 input data bit 4. Transport stream 2 input data.	open
16	TODATA5	I	Transport stream 1 input data bit 5.	open
17	TODATA6	I	Transport stream 1 input data bit 6.	open
18	TODATA7	I	Transport stream 1 input data bit 7.	open
123	TS_CKO	O	Transport stream output clock.	TS_CPUIN_CLK
125	TS_SYNCO	O	Transport stream output sync.	TS_CPUIN_SYNC
122	TS_VALIDO	O	Transport stream output valid.	TS_CPUIN_VAL
124	TS_DATAO	O	Transport stream output data.	TS_CPUIN_DO
General Purpose Input and Output (GPIO)				
1	GPIO0	I/O	General purpose I/O bit 0. (Resister-Ground)	R-G
2	GPIO1	I/O	General purpose I/O bit 1. (Resister-Ground)	R-G
3	GPIO2	I	General purpose I/O bit 2. (Head Phone Plug)	HP_PLUG
4	GPIO3	O	General purpose I/O bit 3. (Amp Standby)	AMP_STBY
19	GPIO4	I/O	General purpose I/O bit 4.	open
20	GPIO5	O	General purpose I/O bit 5. (Antena_5V_SW)	ANT_5V_SW
21	GPIO6	I/O	General purpose I/O bit 6.	open
91	GPIO7	I/O	General purpose I/O bit 7.	open
92	GPIO8	I/O	General purpose I/O bit 8.	open
93	GPIO9	O	General purpose I/O bit 9. (Common Interface VCC Enable)	CI_VCCEN
118	GPIO10	O	General purpose I/O bit 10. (Panel I2C Enable)	PNL_I2C_EN
119	GPIO11	O	General purpose I/O bit 11. (Panel Write Protect)	PNL_WP
120	GPIO12	I	General purpose I/O bit 12. (232C_Eable)	232C_EN
127	GPIO13	O	General purpose I/O bit 13. (ATV_Power_SW)	ATV_POW_SW
128	GPIO14	I	General purpose I/O bit 14. (Interrupt enable_SW)	IREM_SW
PCMCIA/CI				
83	D0	I/O	PCMCIA data bit 0.	C_D0
85	D1	I/O	PCMCIA data bit 1.	C_D1
87	D2	I/O	PCMCIA data bit 2.	C_D2
24	D3	I/O	PCMCIA data bit 3.	C_D3
26	D4	I/O	PCMCIA data bit 4.	C_D4
28	D5	I/O	PCMCIA data bit 5.	C_D5
30	D6	I/O	PCMCIA data bit 6.	C_D6
32	D7	I/O	PCMCIA data bit 7.	C_D7
81	D8	I/O	PCMCIA data bit 8.	TS_CIOUT_D0
84	D9	I/O	PCMCIA data bit 9.	TS_CIOUT_D1
86	D10	I/O	PCMCIA data bit 10.	TS_CIOUT_D2
25	D11	I/O	PCMCIA data bit 11.	TS_CIOUT_D3
27	D12	I/O	PCMCIA data bit 12.	TS_CIOUT_D4
29	D13	I/O	PCMCIA data bit 13.	TS_CIOUT_D5
31	D14	I/O	PCMCIA data bit 14.	TS_CIOUT_D6
34	D15	I/O	PCMCIA data bit 15.	TS_CIOUT_D7
80	A0	O	PCMCIA address bit 0.	CI_A0
78	A1	O	PCMCIA address bit 1.	CI_A1
75	A2	O	PCMCIA address bit 2.	CI_A2
73	A3	O	PCMCIA address bit 3.	CI_A3

Pin No.	Pin Name	I/O	Pin Function	Sheet Name
71	A4	O	PCMCIA address bit 4.	CI_A4
69	A5	O	PCMCIA address bit 5.	CI_A5
66	A6	O	PCMCIA address bit 6.	CI_A6
64	A7	O	PCMCIA address bit 7.	CI_A7
46	A8	O	PCMCIA address bit 8.	CI_A8
44	A9	O	PCMCIA address bit 9.	CI_A9
37	A10	O	PCMCIA address bit 10.	CI_A10
41	A11	O	PCMCIA address bit 11.	CI_A11
62	A12	O	PCMCIA address bit 12.	CI_A12
48	A13	O	PCMCIA address bit 13.	CI_A13
50	A14	O	PCMCIA address bit 14.	CI_A14
59	A15	O	PCMCIA address bit 15.	TS_CIIIN_CLK
57	A16	O	PCMCIA address bit 16.	TS_CIIIN_VAL
45	A17	O	PCMCIA address bit 17.	TS_CIIIN_SYNC
47	A18	O	PCMCIA address bit 18.	TS_CIIIN_D0
49	A19	O	PCMCIA address bit 19.	TS_CIIIN_D1
51	A20	O	PCMCIA address bit 20.	TS_CIIIN_D2
54	A21	O	PCMCIA address bit 21.	TS_CIIIN_D3
56	A22	O	PCMCIA address bit 22.	TS_CIIIN_D4
58	A23	O	PCMCIA address bit 23.	TS_CIIIN_D5
61	A24	O	PCMCIA address bit 24.	TS_CIIIN_D6
63	A25	O	PCMCIA address bit 25.	TS_CIIIN_D7
67	RESET	O	PCMCIA reset.	CI_RESET
35	CE1	O	PCMCIA card enable 1.	CI_EN1
36	CE2	O	PCMCIA card enable 2.	CI_EN2
23	CD1	I	PCMCIA card detection 1.	CI_CARDDDET1
88	CD2	I	PCMCIA card detection 2.	CI_CARDDDET2
38	VS1	I	PCMCIA voltage sense 1.	C_VS1
65	VS2	I	PCMCIA voltage sense 2.	TS_CIOUT_CLK
79	BVD1	I	PCMCIA battery voltage detection 1.	TS_CIOUT_SYNC
77	BVD2	I	PCMCIA battery voltage detection 2.	TS_CIOUT_VAL
72	INPACK	I	PCMCIA input port acknowledge.	CI_INP_ACK
70	WAIT	I	PCMCIA wait.	CI_WAIT
40	IORD	O	PCMCIA IO read strobe.	CI_RD
42	IOWR	O	PCMCIA IO write strobe.	CI_WR
74	REG	O	PCMCIA register selection.	CI_REG
39	OE	O	PCMCIA output enable.	CI_OE
53	WE	O	PCMCIA write enable.	CI_WE
55	READY	I	PCMCIA ready.	CI_IREQ
89	WP	I	PCMCIA write protect.	CI_IOSIS16
General Purpose Input and Output (GPIO)				
5	VCC33	—	I/O power 3.3V	D3.3V
33	VCC33	—	I/O power 3.3V	D3.3V
52	VCC33	—	I/O power 3.3V	D3.3V
68	VCC33	—	I/O power 3.3V	D3.3V
97	VCC33	—	I/O power 3.3V	D3.3V
121	VCC33	—	I/O power 3.3V	D3.3V
10	GND33	—	Ground	G
43	GND33	—	Ground	G
60	GND33	—	Ground	G
76	GND33	—	Ground	G
104	GND33	—	Ground	G
126	GND33	—	Ground	G
15	VCC18	—	Core power 1.8V	D1.8V
82	VCC18	—	Core power 1.8V	D1.8V
22	GND18	—	Ground	G
90	GND18	—	Ground	G
108	AVDD33_XTAL	—	Analog crystal power 3.3V	D3.3V
111	AVSS33_XTAL	—	Analog crystal ground	G
112	AVDD18_PLL	—	Analog PLL power 1.8V	D1.8V
113	AVSS18_PLL	—	Analog PLL ground	G

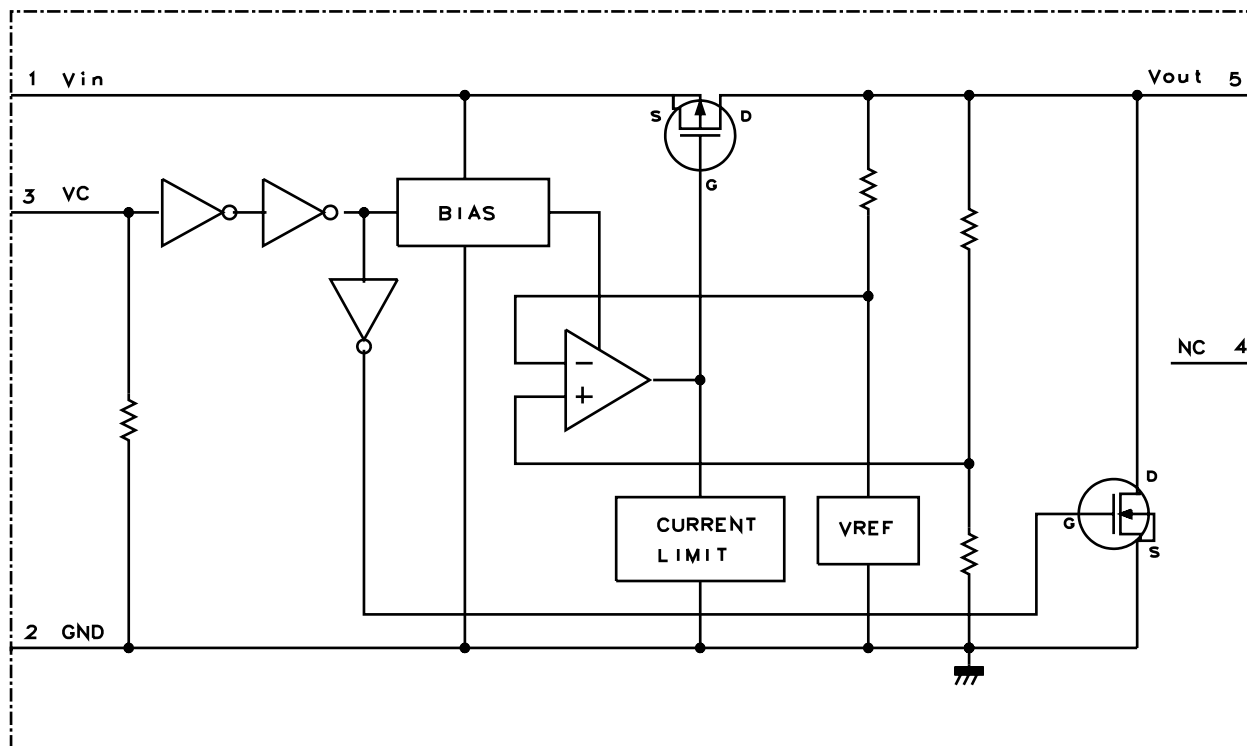
2.16. IC2701 (VHiYDA148QZ-1Y)

This IC is a block diagram and description LC-32/40/46LE700E (S89B4LC32L700) please see the service manual.

2.17. IC9612 (VHiTCR5SB33-1Y)**2.17.1 Block Diagram**

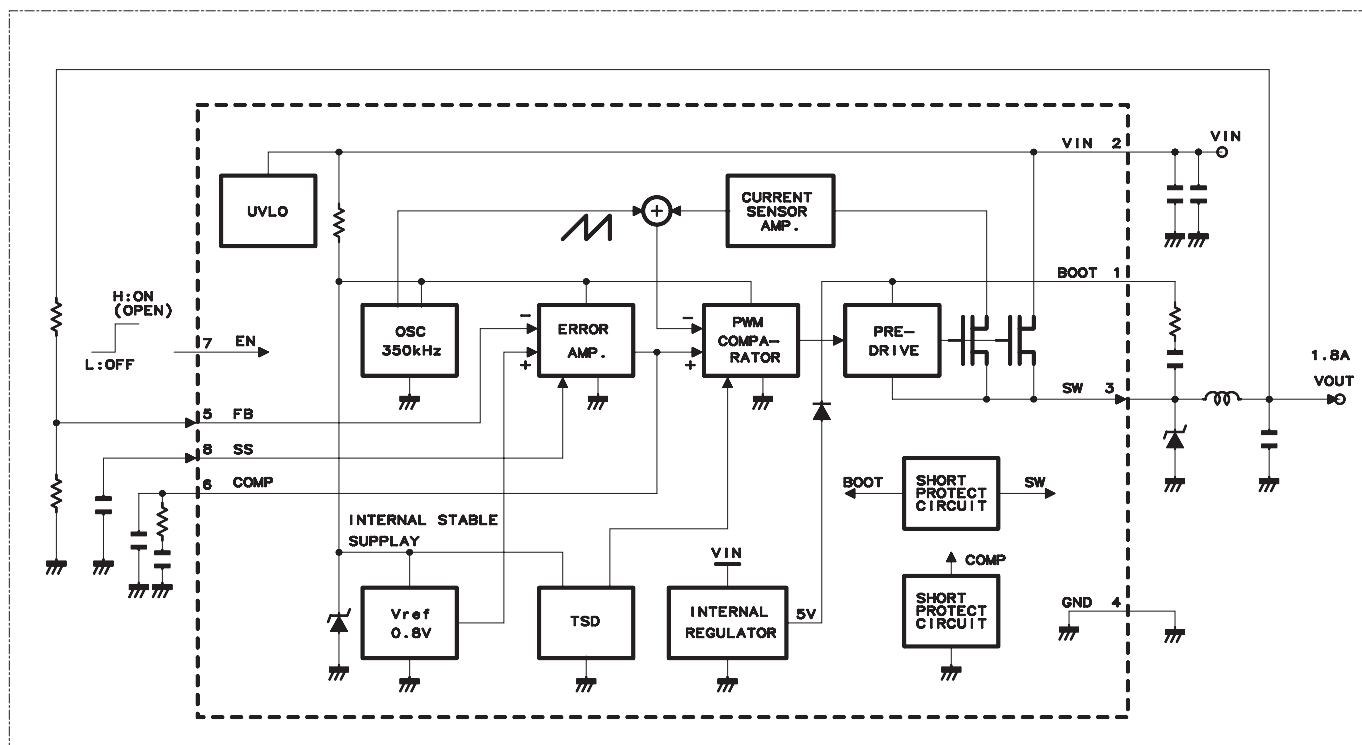
TCR5SB25/33

C-MOS Low_dropout REGULATOR

**2.17.2 Pin Connections and short description**

Pin No.	Pin Name	I/O	Pin Function
1	VIN	-	Voltage supply pin.
2	Ground	-	Ground pin
3	Control	I	Control signal pin
4	NC	-	No connection
5	Vout	O	Output pin

LV5893M
1CH-SW-REG



Pin No.	Pin Name	I/O	Pin Function
1	BOOT	I	Upper part MOS transistor boot strap capacity connection terminal. Connect the boot capacity of about 0.022μF between SW terminals. The boot capacity series resistance (about100Ω) is effective for stable operation.
2	VIN	I	Input power source terminal. Connect very big capacity (10μF 2 or more) between GND.
3	SW	I	Power switch terminal. Connect the output LC filter. Connect the above-mentioned capacity between BOOT terminals.
4	GND	—	Ground
5	FB	I	Feedback terminal. The output voltage is set by the division resistance of output voltage (Vout-FB-GND).
6	COMP	I	Phase compensation terminal. Connect external capacity and resistance for the phase compensation of the DC/DC converter close loop.
7	EN	I	Enable terminal It operates the converter by a high voltage or the opening. It stops with GND the converter operation.
8	SS	—	Soft start terminal. The soft start time is set by built-in 10μA source voltage and external soft start capacity.

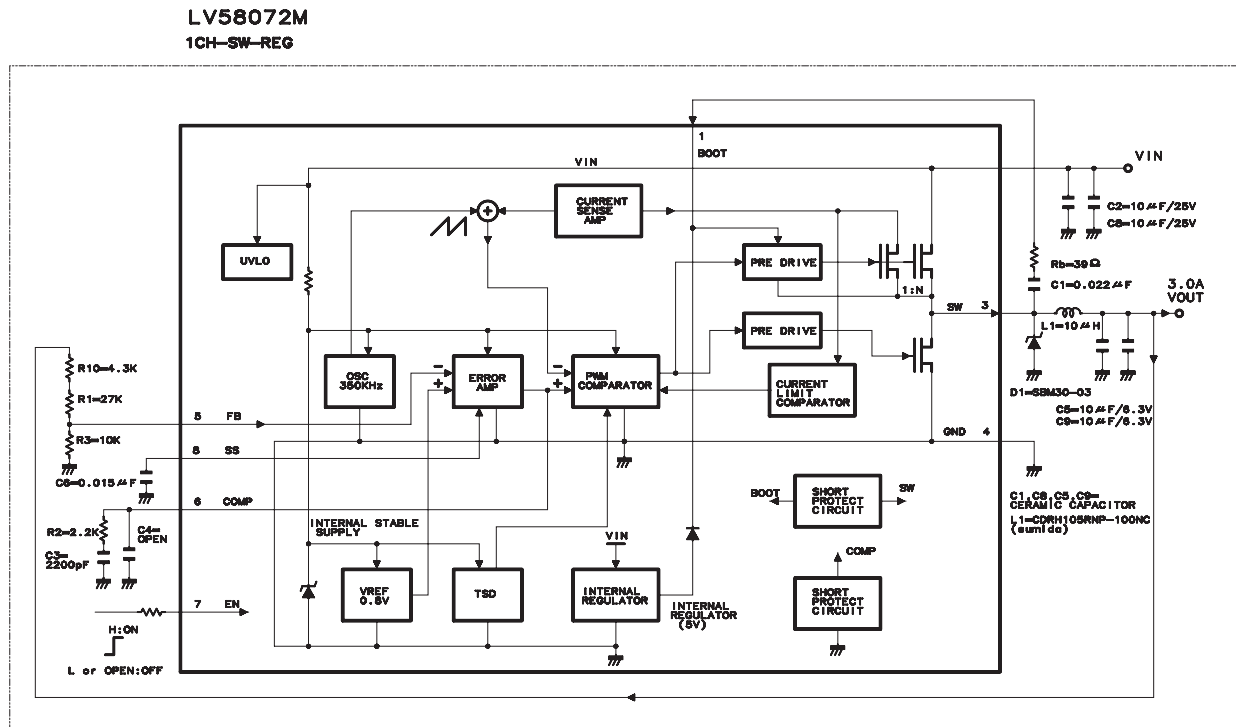
2.19. IC9611 (VHiTCR5SB25-1Y)

2.19.1 Pin Connections and short description

Pin No.	Pin Name	I/O	Pin Function						
1	VIN	I	Input power source terminal. A small, ceramic type can be used for the input capacitor (0.1μF).						
2	GND	—	Ground						
3	CONTROL	I	Control terminal. In control voltage ON, it is 1.5-6V, and turning off is 0.25V or less. <table><tr><th>Control voltage</th><th>Output voltage</th></tr><tr><td>HIGH</td><td>ON</td></tr><tr><td>LOW</td><td>OFF</td></tr></table>	Control voltage	Output voltage	HIGH	ON	LOW	OFF
Control voltage	Output voltage								
HIGH	ON								
LOW	OFF								
4	NC	—	No connection						
5	VOUT	O	Output voltage terminal. The output voltage of TCR5SB25 is 2.5V±0.05V. A small, ceramic type can be used for the output capacitor (1.0μF).						

2.20. IC9604 (VHiLV58072M-1Y)

2.20.1 Block Diagram



2.20.2 Pin Connections and short description

Pin No.	Pin Name	I/O	Pin Function
1	BOOT	I	Bootstrap Terminal Connect the boost capacity of about 0.022 μ F between SW terminals.
2	VIN	I	Input Voltage Terminal Connect very big capacity between GND.
3	SW	O	Power Switch Terminal Connect output LC filter. Moreover connect the above-mentioned capacity between BOOT terminals.
4	GND	—	Ground
5	FB	I	Feed Back Terminal The output voltage is set by the division resistance between the output voltages.
6	COMP	I	Phase Compensation Terminal The phase amends external capacity and the resistance of the DC/DC converter close loop are connected.
7	EN	I	Enable Terminal The converter works by the High voltage impression.
8	SS	—	Softstart Terminal The soft start time is set by built-in 10 μ A source voltage and external soft start capacity.

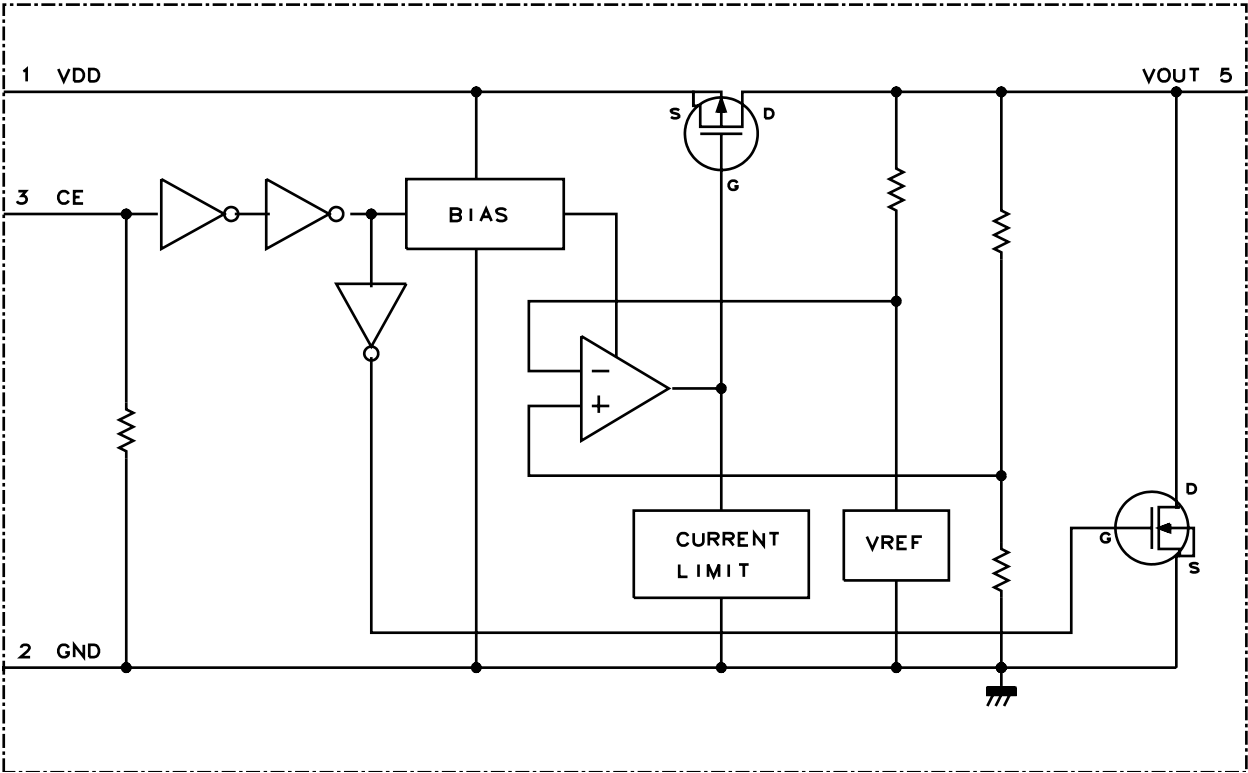
2.21. IC9606 (VHiLV5805M+-1Y)

This IC is a block diagram and description LC-19D1E (S58J9LC19D1ES) please see the service manual.

2.22. IC9603 (VHiMM3141YN-1Y)

2.22.1 Block Diagram

MM3141
C-MOS REGULATOR (150mA)

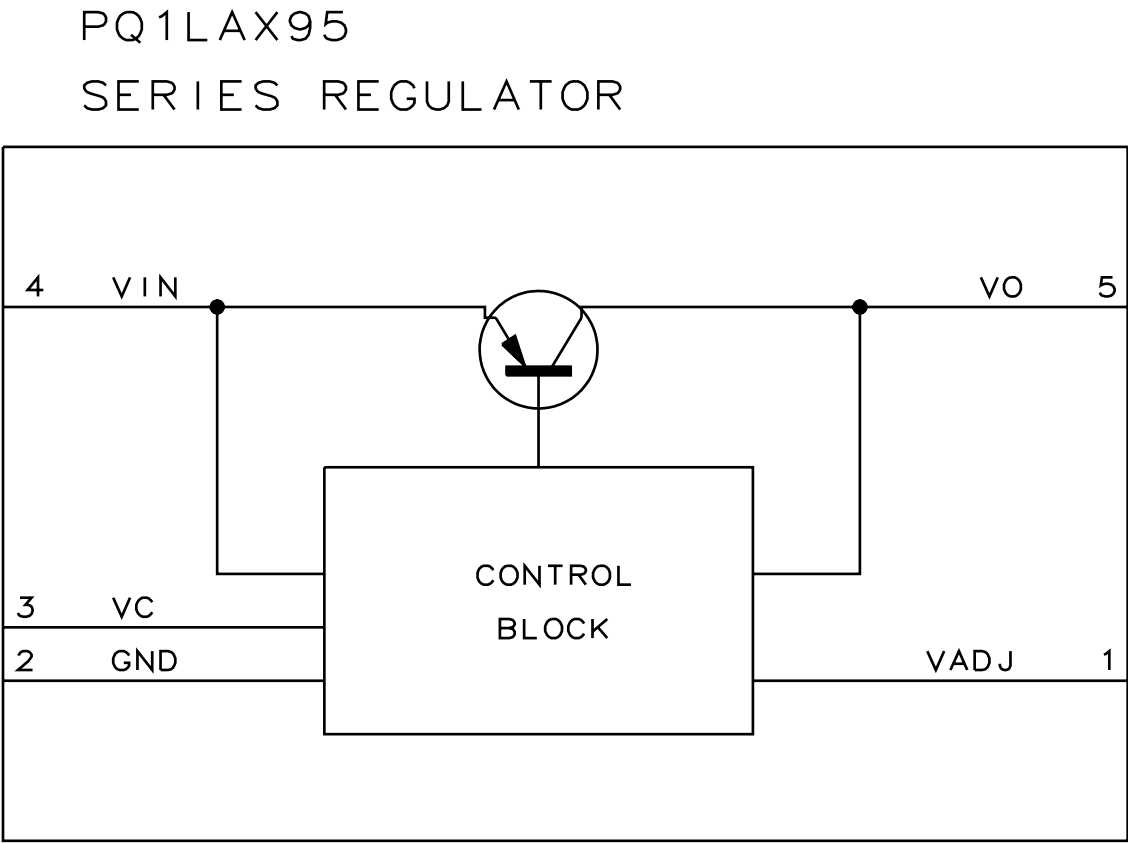


2.22.2 Pin Connections and short description

Pin No.	Pin Name	I/O	Pin Function						
1	VDD	-	Voltage supply pin.						
4	NC	-	No connection						
5	Vout	O	Output pin						
-	NC	-	No connection						
2	GND	-	Ground pin						
3	CE	I	ON/OFF control pin						
			<table><tr><td>CE</td><td>Vout</td></tr><tr><td>L</td><td>OFF</td></tr><tr><td>H</td><td>ON</td></tr></table>	CE	Vout	L	OFF	H	ON
			CE	Vout					
			L	OFF					
			H	ON					
Connect CE pin with VDD pin, when it is not used.									

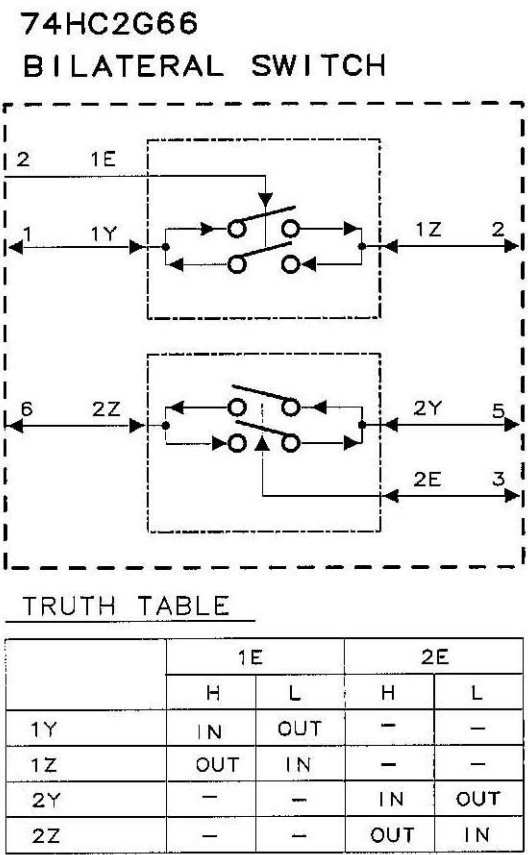
2.23. IC9610 (VHiPQ1LAX95-1Y)

2.23.1 Block Diagram



2.23.2 Pin Connections and short description

Pin No.	Pin Name	I/O	Pin Function
1	Vadj	I	Output Voltage Control
2	GND	-	Ground pin
3	Vc	I	ON/OFF Control
4	Vin	I	DC input
5	Vo	O	DC Output



2.24.2 Pin Connections and short description

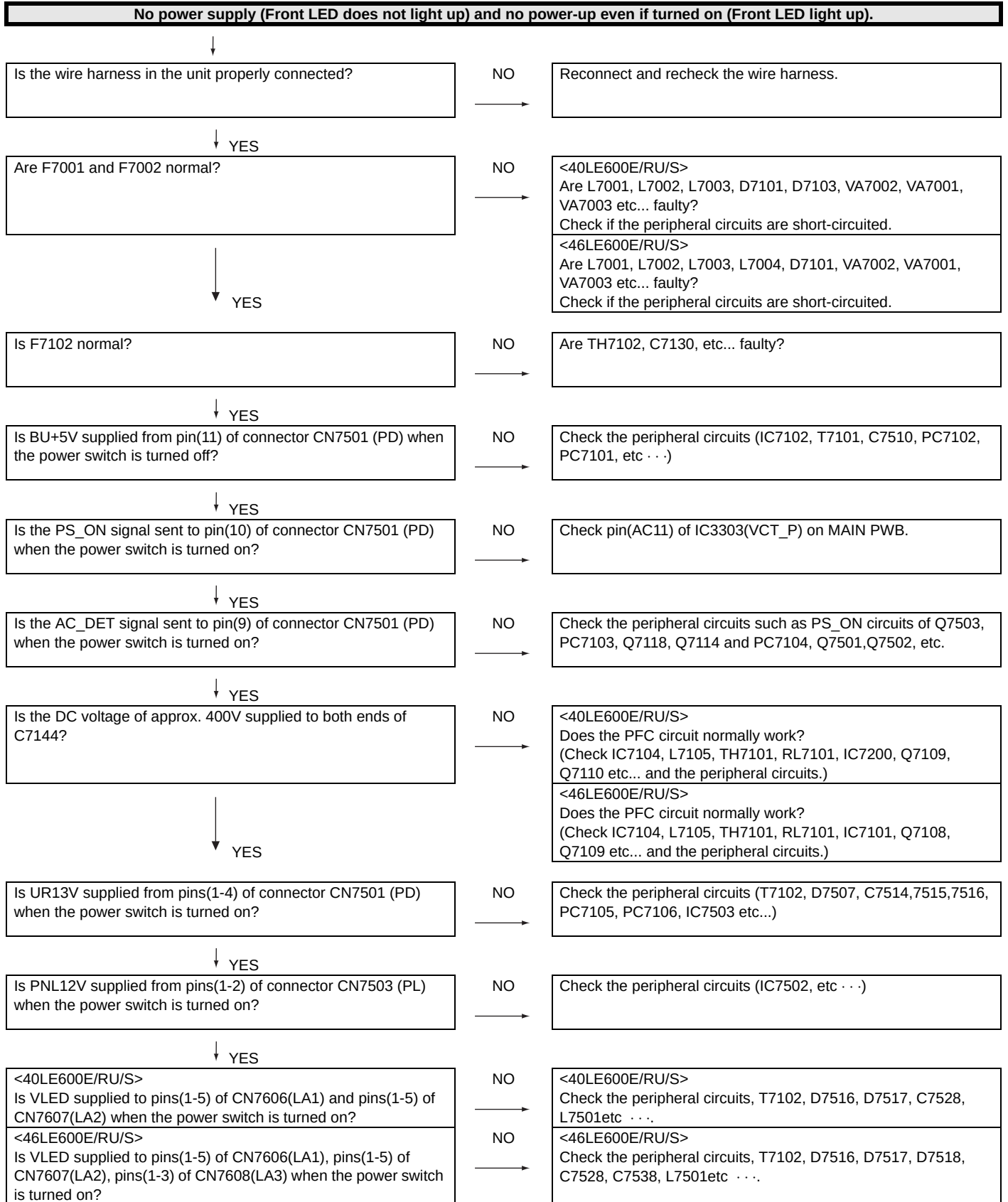
Pin No.	Pin Name	I/O	Pin Function
1	1Y	I/O	Independent input or output.
2	1Z	I/O	Independent input or output.
3	2E	I	Enable input (active HIGH).
4	GND	—	Ground
5	2Y	I/O	Independent input or output.
6	2Z	I/O	Independent input or output.
7	1E	I	Enable input (active HIGH).
8	VCC	—	Supply voltage.

CHAPTER 5. TROUBLESHOOTING TABLE

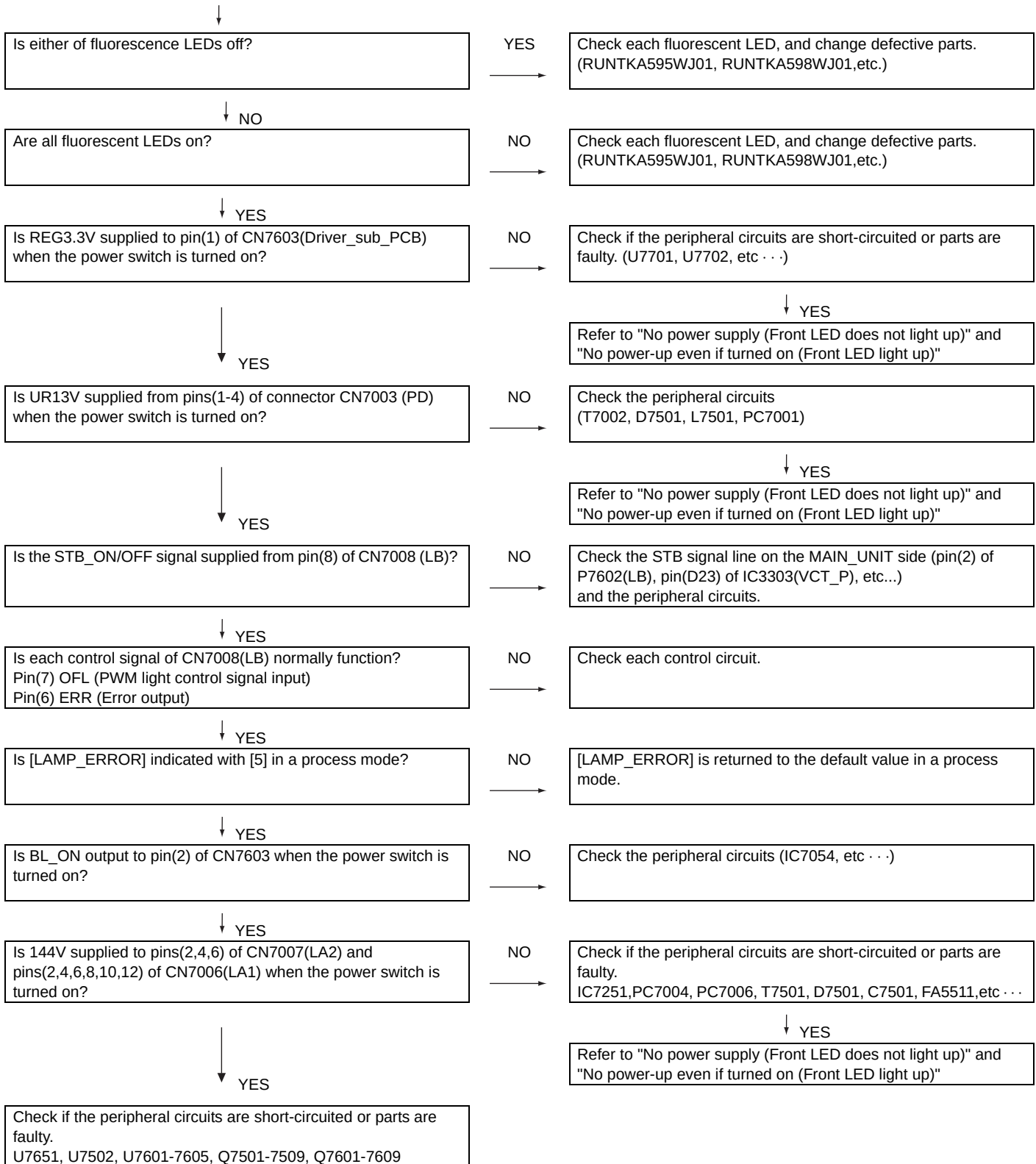
[1] TROUBLESHOOTING TABLE

<POWER BLOCK: LC-32LE600E/RU/S>

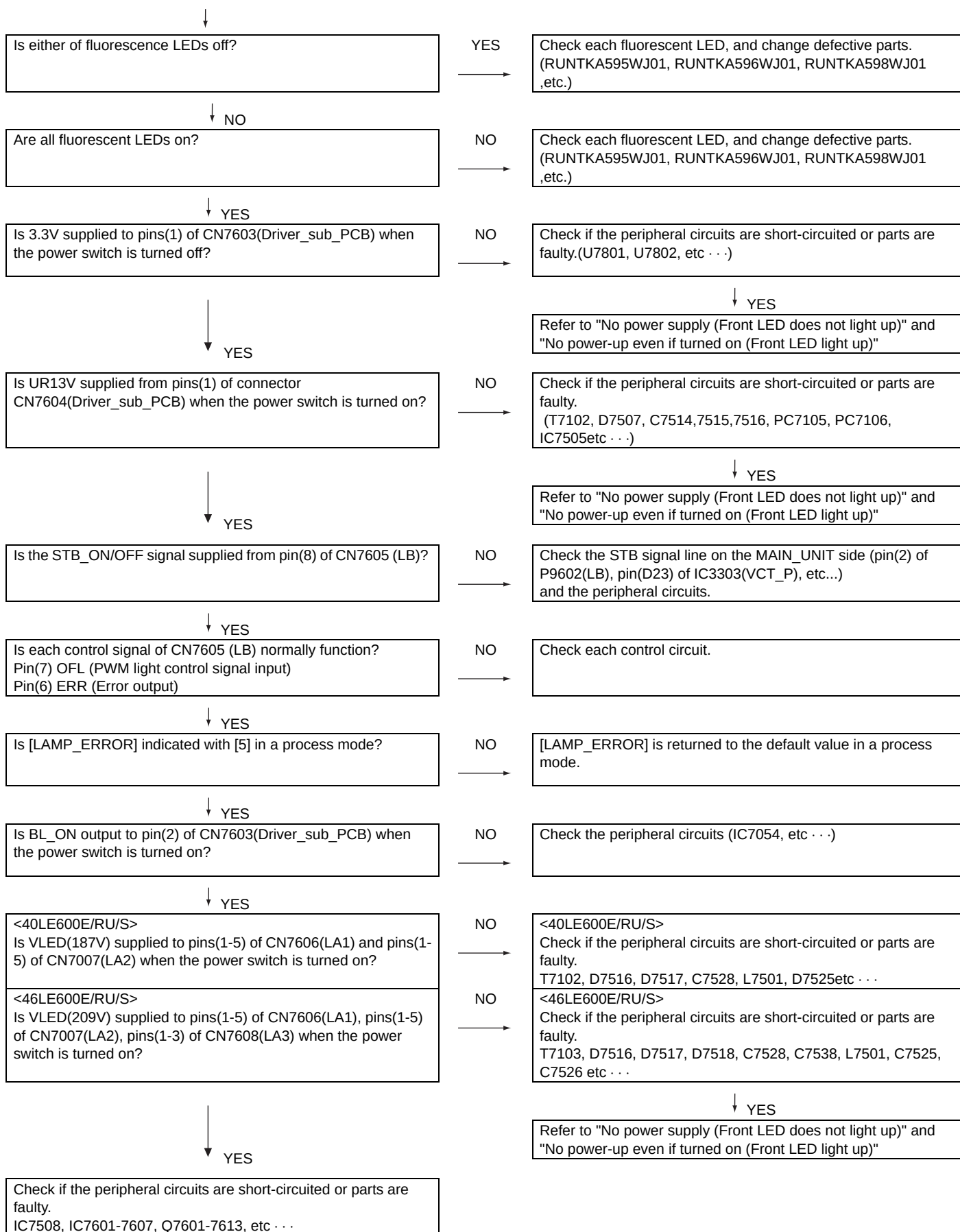
No power supply (Front LED does not light up) and no power-up even if turned on (Front LED light up).		
↓		
Is the wire harness in the unit properly connected?	NO →	Reconnect and recheck the wire harness.
↓ YES		
Are F7001 and F7002 normal?	NO →	Are L7004, L7001, L7002, BD7001 etc. faulty? Check if the peripheral circuits are short-circuited.
↓ YES		
Is BU+5V supplied from pin(11) of connector CN7003 (PD) when the power switch is turned off?	NO →	Check the peripheral circuits, IC7101, T101, C7401, C7403, PC7008, etc . . .
↓ YES		
Is the PS_ON signal sent to pin(10) of connector CN7003 (PD) when the power switch is turned on	NO →	Check pin(AC11) of IC3303(VCT_P) on MAIN PWB.
↓ YES		
Is the AC_DET signal sent to pin(9) of connector CN7003 (PD) when the power switch is turned on?	NO →	Check the peripheral circuits, PC7007, Q7004, PC7002, etc.
↓ YES		
Is the DC voltage of approx. 400V supplied to both ends of C7015?	NO →	Does the PFC circuit normally work? (Check IC7002, L7003, TH7001, IC7001, Q7005, Q7006 etc. and the peripheral circuits.)
↓ YES		
Is UR13V supplied from pins(1-4) of connector CN7003 (PD) when the power switch is turned on?	NO →	Check the peripheral circuits (T7002, D7051, L7051, PC7001)
↓ YES		
Is PNL12V supplied from pins(1-2) of connector CN7004 (PL) when the power switch is turned on?	NO →	Check the peripheral circuits (U7053, etc . . .)
↓ YES		
Is 144V supplied from pins(2,4,6) of CN7007(LA2) and pins(2,4,6,8,10,12) of CN7006 (LA1) when the power switch is turned on?	NO →	Check the peripheral circuits, T7501, D7501, C7501, FA5511, etc . . .



<Backlight BLOCK: LC-32LE600E/RU/S>

The backlight does not light

The backlight does not light



No sound (1-1) (during the reception of TV broadcasting)

No audio output during UHF/
VHF reception

Checklist:

- 1) Is the volume set to MIN or MUTE on the remote control? ●●● Set the desired volume.
- 2) Is ANT-CABLE disconnected or connected improperly? ●●● Connect it correctly as per the operation manual.
- 3) Attention: The terminal of IC3303 (VCT) cannot be actually checked by hiding oneself, and check it with another terminal of the same line, please.

(MAIN-UNIT) ↓

Is the audio signal
(AOUT_SP_L/R) output from
pins (H26) and (H25) of
IC3303 (VCT)?

NO

(TUNER SIDE) ↓

Is the audio signal (SIF)
input to pin (AB25) of
IC3303 (VCT)?

YES

Check whether there are a
power supply of IC3303
(VCT), the short circuit,
and other abnormalities.

(MAIN-UNIT) ↓ YES

Is the audio signal
(SPKOUT_L/R) output from
pins (17) and (18) of
IC1302 (A-SW) normally?

NO

Check S9V power supply
(10) (15) pin, D3.3V
power supply (3) (36)
pin, and AUSW-MUTE
signal (29) pin of IC1302
(A-SW) or the peripheral
circuits.

↓ YES

Is the audio signal (LCH±/
RCH±) output from pins
(31)/(27) and (11)/(14) of
IC2701 (A-AMP) normally?

NO

Check AMP12.5V power
supply (1) (10) pin, AMP-
STBY input signal (17)
pin, and audio-mute sig-
nal pin (19) of IC2701 (A-
AMP) or the peripheral
circuits.

↓ YES

Is the audio output signal
outputted to pins (1)-(4) of
SP-Connector (P2701) nor-
mally?

NO

Check SP- Connector
(P2701) and peripheral
circuits.

↓ YES

Is the SP-Wire harness
connected and operated
orthopedically normally?

NO

Correct an abnormal part
of SP- harness.

↓ YES

Check right and left SP-
BOX, and exchange defec-
tive SP-BOX
(R: RSP-ZA392WJZZ/
L: RSP-ZA391WJZZ)

A-BLOCK

↓ NO

Is the SIF signal output
from pin (4) of tuner
(TU1102)?

YES

Check whether there are
open-circuit or short-cir-
cuit between tuner
(TU1102) and IC3303.

↓ NO

Check whether IF5V
power supply is sup-
plied to pin (3) of tuner
(TU1102), and ANT5V
power supply is sup-
plied to pin (1) of tuner
(TU1102)?

NO

Check whether there are
open-circuit or short-cir-
cuit between tuner
(TU1102) and Q1105 (5V-
REG) or between tuner
and IC1101.

↓ YES

Check whether the I2C
signal (SDA/SCL) is
functioning by (9) (8)
pin of tuner (TU1102).

NO

Pursue an I2C line and
look for the part of an
open circuit or the short
circuit.

↓ YES

Check whether IF_AGC
is functioning between
pin (E24) of IC3303 and
pin (15) of tuner
(TU1102)

NO

Check whether there is an
open circuit or the short
circuit in an IF_AGC sig-
nal line.

↓ YES

Replace tuner
(TU1102).

No sound (1-2) (during the reception of DTV broadcasting)

No audio output during DTV reception

Checklist:

- 1) Is the volume set to MIN or MUTE on the remote control? ●●● Set the desired volume.
- 2) Is ANT-CABLE disconnected or connected improperly? ●●● Connect it correctly as per the operation manual.
- 3) Attention: The terminal of IC3303 (VCT) cannot be actually checked by hiding oneself, and check it with another terminal of the same line, please.

(MAIN-UNIT) ↓

Is the audio signal (AOUT_SP_L/R) output from pins (H26) and (H25) of IC3303 (VCT)?

NO

(TUNER SIDE)

Is the digital IF signal (D_IF±) input to pins (T25) (R25) of IC3303 (VCT)?

YES

Check whether there are a power supply of IC3303 (VCT), the short circuit, and other abnormalities.

(MAIN-UNIT) ↓ YES (OUTPUT SIDE)

Is the audio signal (SPKOUT_L/R) output from pins (17) and (18) of IC1302 (A-SW) normally?

NO

Check S9V power supply (10) (15) pin, D3.3V power supply (3) (36) pin, and AUSW-mute signal (29) pin of IC1302 (A-SW) or the peripheral circuits.

↓ YES

Is the audio signal (LCH±/RCH±) output from pins (31) (27) and (11) (14) of IC2701 (A-AMP) properly?

NO

Check AMP12.5V power supply (1) (10) pin, AMP-STBY input signal (17) pin, and audio-mute signal pin (19) of IC2701 (A-AMP) or the peripheral circuits.

↓ YES

Is the audio output signal outputted to pins (1)-(4) of SP-Connector (P2701) normally?

NO

Check SP-Connector (P2701) and peripheral circuits.

↓ YES

Is the SP-Wire harness (SP) connected and operated orthopedically normally?

NO

Correct an abnormal part of SP- harness.

↓ YES

Check right and left SP-BOX, and exchange defective SP-BOX (R: RSP-ZA392WJZZ/ L: RSP-ZA391WJZZ)

A-BLOCK

↓ NO

Is the digital IF signal (D_IF±) output from pins (17) (16) of tuner (TU1102)?

YES

Check whether there are open-circuit or short-circuit between tuner (TU1102) and IC3303.

↓ NO

Check whether the IF5V power supply is supplied to pin (3) of tuner (TU1102).

NO

Check whether there are open-circuit or short-circuit between Q1105 (5V-REG) and tuner (TU1102).

↓ YES

Check whether the I2C signal (SDA/SCL) is functioning by pin (9) (8) of tuner (TU1102).

NO

Pursue an I2C line and look for the part of an open circuit or the short circuit.

↓ YES

Check whether IF_AGC is functioning between pin (E24) of IC3303 and pin (15) of tuner (TU1102)

NO

Check whether there is an open circuit or the short circuit in an IF_AGC signal line.

↓ YES

Replace tuner (TU1102).

No sound from external input devices (2-1)-1

No sound from EXT1 (SCART1) connecting an external input device.

<EXT1>
Is the SC1_IN_L (SCART1-L-IN) audio signal input from pin (6) of SCART1 terminal (SC503) to pin (44) of IC1302 (A-SW)?
Is the SC1_IN_R (SCART1-R-IN) audio signal input from pin (2) of SCART1 terminal (SC503) to pin (43) of IC1302 (A-SW)?

NO

Check pins (6) (2) of SCART1 and connection of an external input device.

↓ YES

Is the audio signal (A_IN_L/R) properly output from pins (6) and (7) of IC1302 (A-SW)?

NO

Check S9V power supply (10) (15) pin, D3.3V power supply (3) (36) pin, and SDA0/SCL0 signal (28) (27) pin of IC1302 (A-SW) or the peripheral circuit.

↓ YES

Is the audio signal (A_OUT_SP_L/R) properly output from pins (H26) and (H25) of IC3303 (VCT)?

NO

Check D3.3V power supply pin (F18) of IC3303 (VCT) and the soldering confirmation or the peripheral circuit.

↓ YES

It is the same as the above-mentioned A-BLOCK.

No sound from external input devices (2-1)-2

No sound from EXT2 (SCART2) connecting an external input device.

<EXT2>
Is the SC2_IN_L (SCART2-L-IN) audio signal input from pin (6) of SCART2 terminal (SC502) to pin (46) of IC1302 (A-SW)?
Is the SC2_IN_R (SCART2-R-IN) audio signal input from pin (2) of SCART2 terminal (SC502) to pin (45) of IC1302 (A-SW)?

NO

Check pins (6) (2) of SCART2 and connection of an external input device.

↓ YES

Is the audio signal (A_IN_L/R) properly output from pins (6) and (7) of IC1302 (A-SW)?

NO

Check S9V power supply (10) (15) pin, D3.3V power supply (3) (36) pin, and SDA0/SCL0 signal (28) (27) pin of IC1302 (A-SW) or the peripheral circuit.

↓ YES

Is the audio signal (A_OUT_SP_L/R) properly output from pins (H26) and (H24) of IC3303 (VCT)?

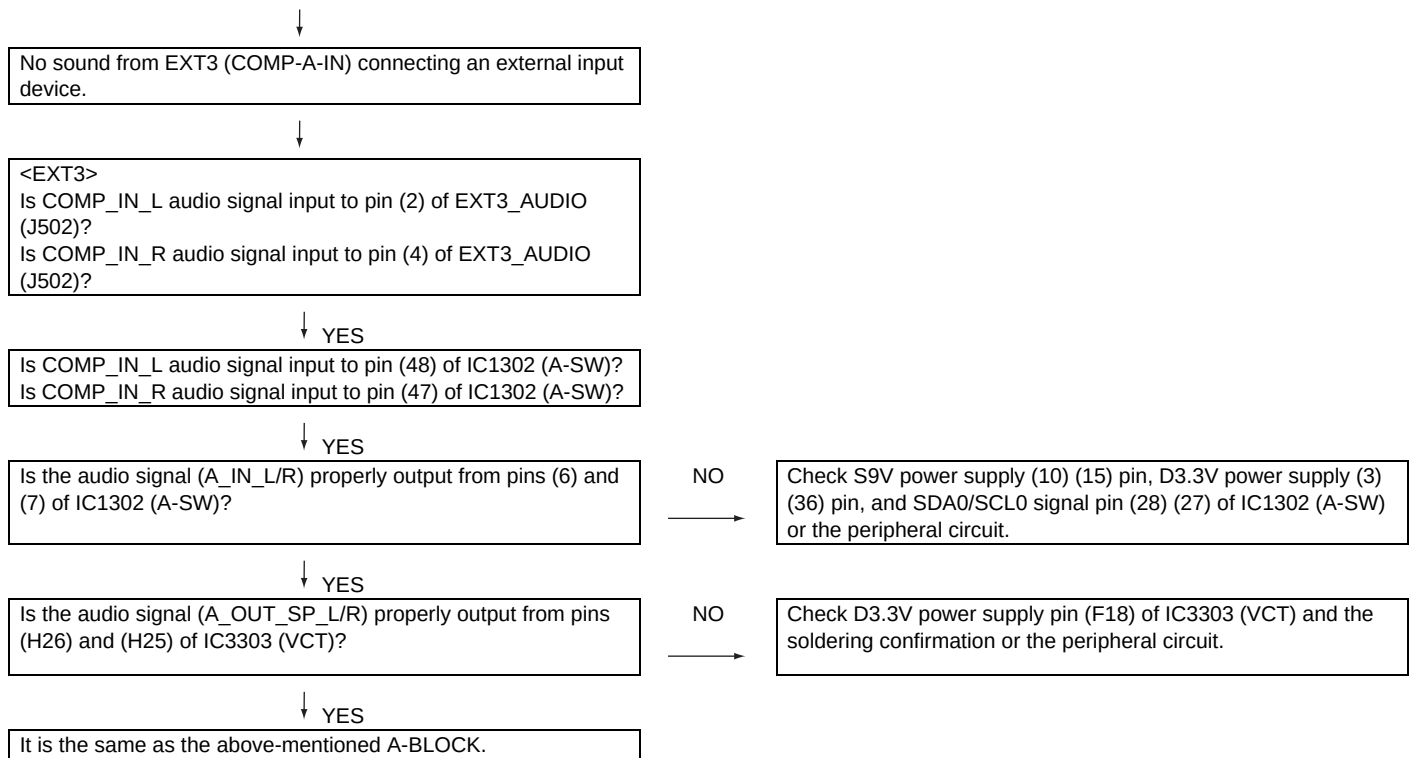
NO

Check D3.3V power supply pin (F18) of IC3303 (VCT) and the soldering confirmation or the peripheral circuit.

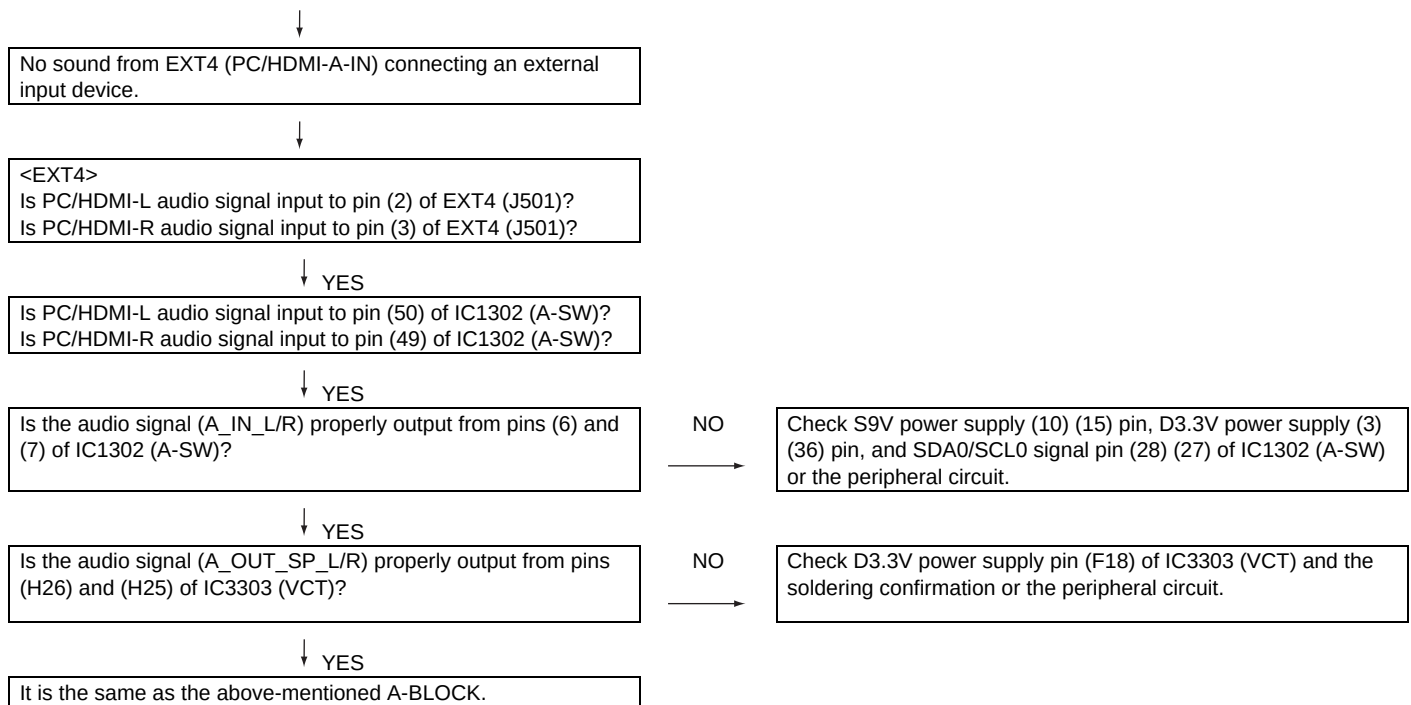
↓ YES

It is the same as the above-mentioned A-BLOCK.

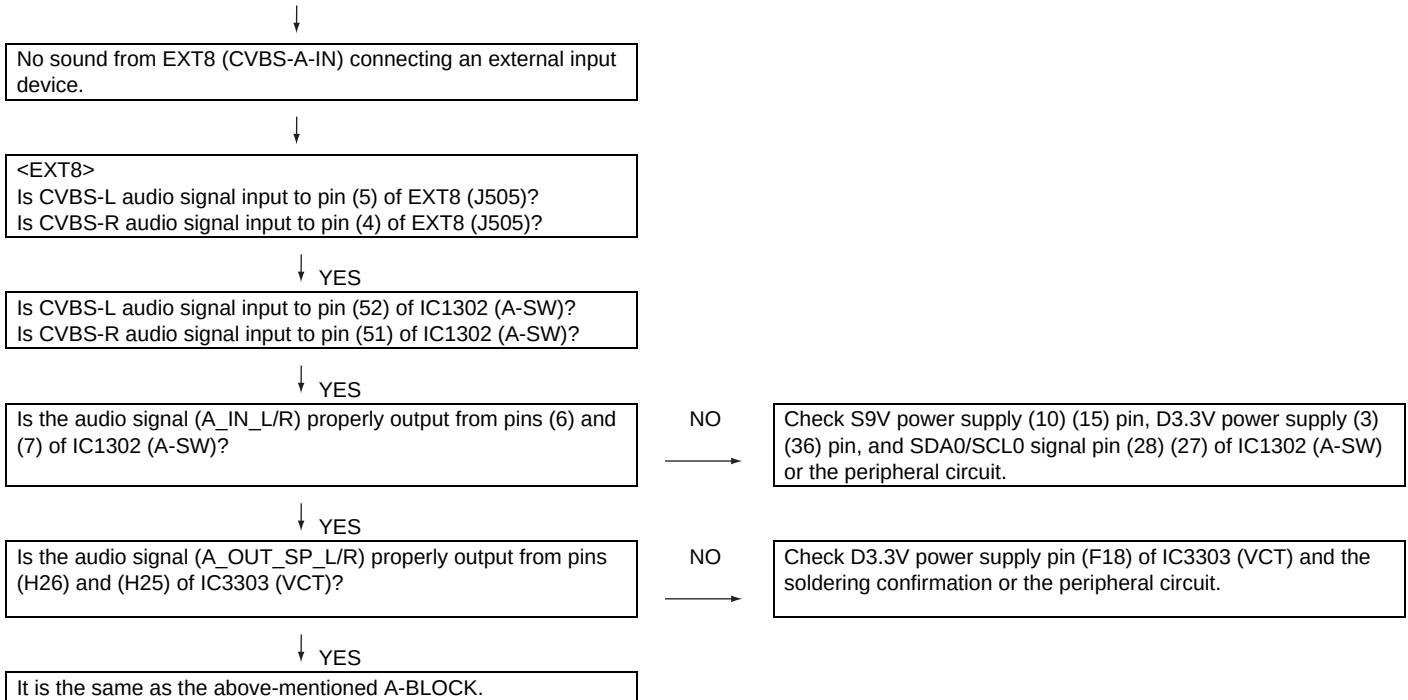
No sound from external input devices (2-2)-1



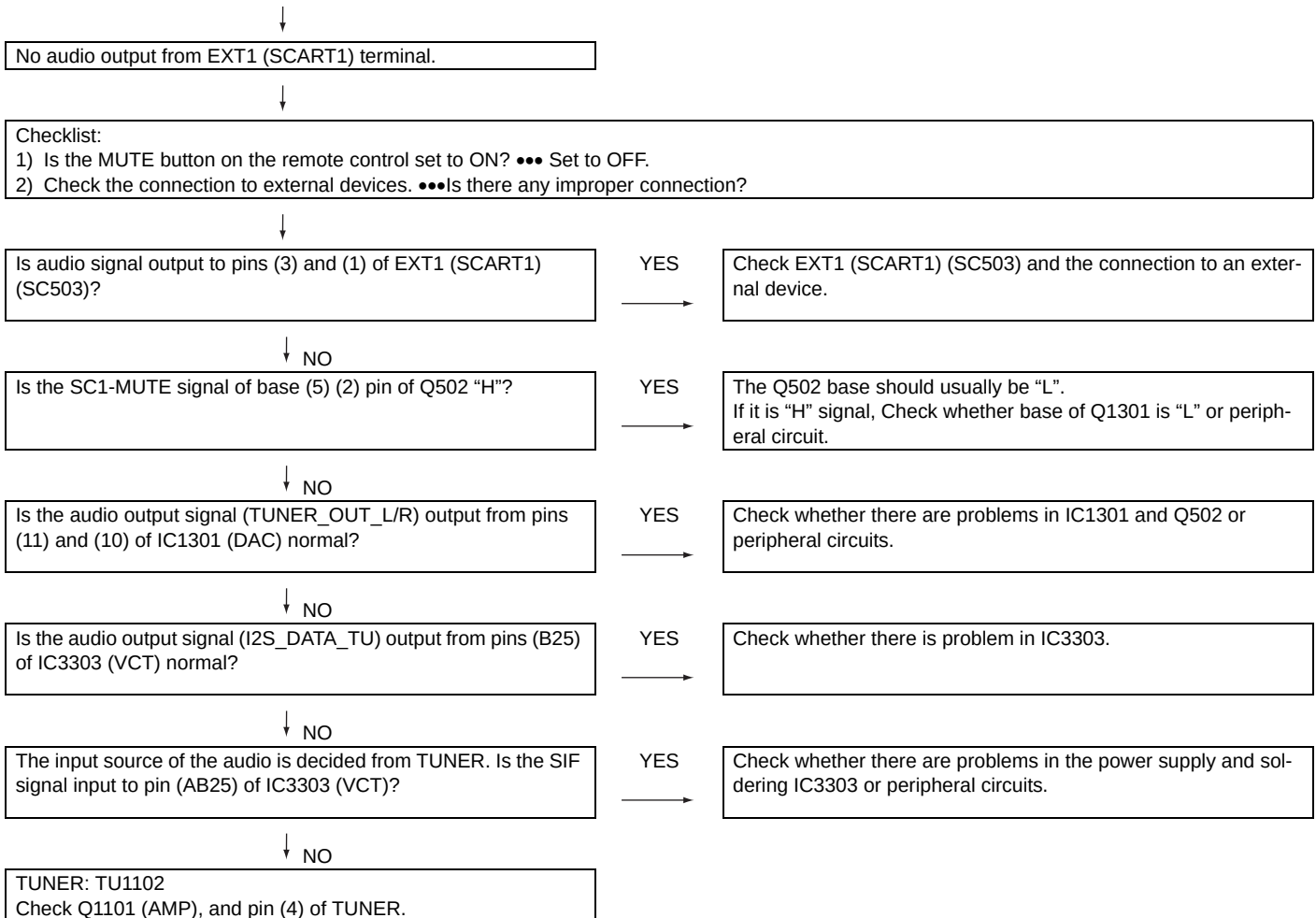
No sound from external input devices (2-2) -2



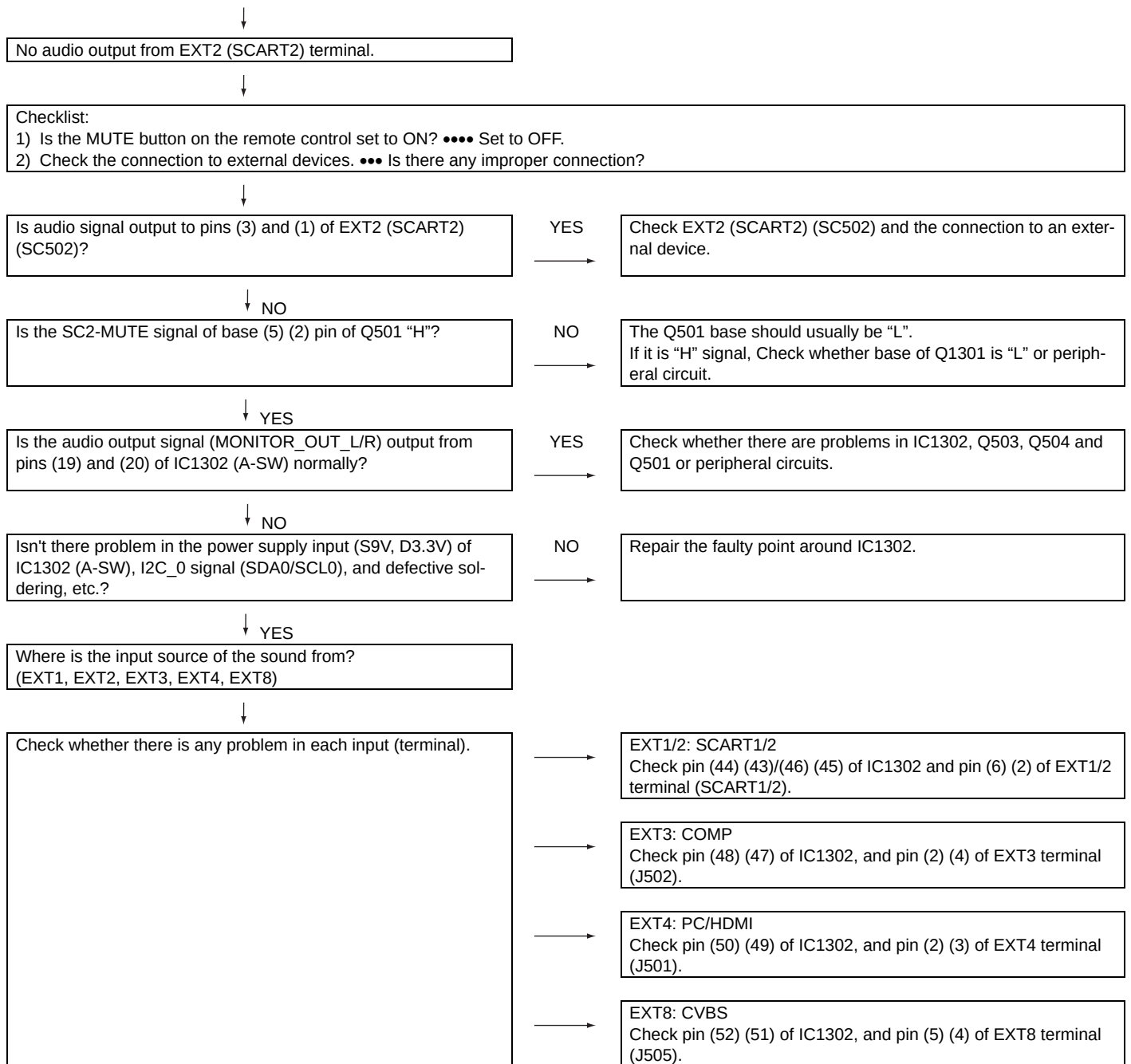
No sound from external input devices (2-2)-3



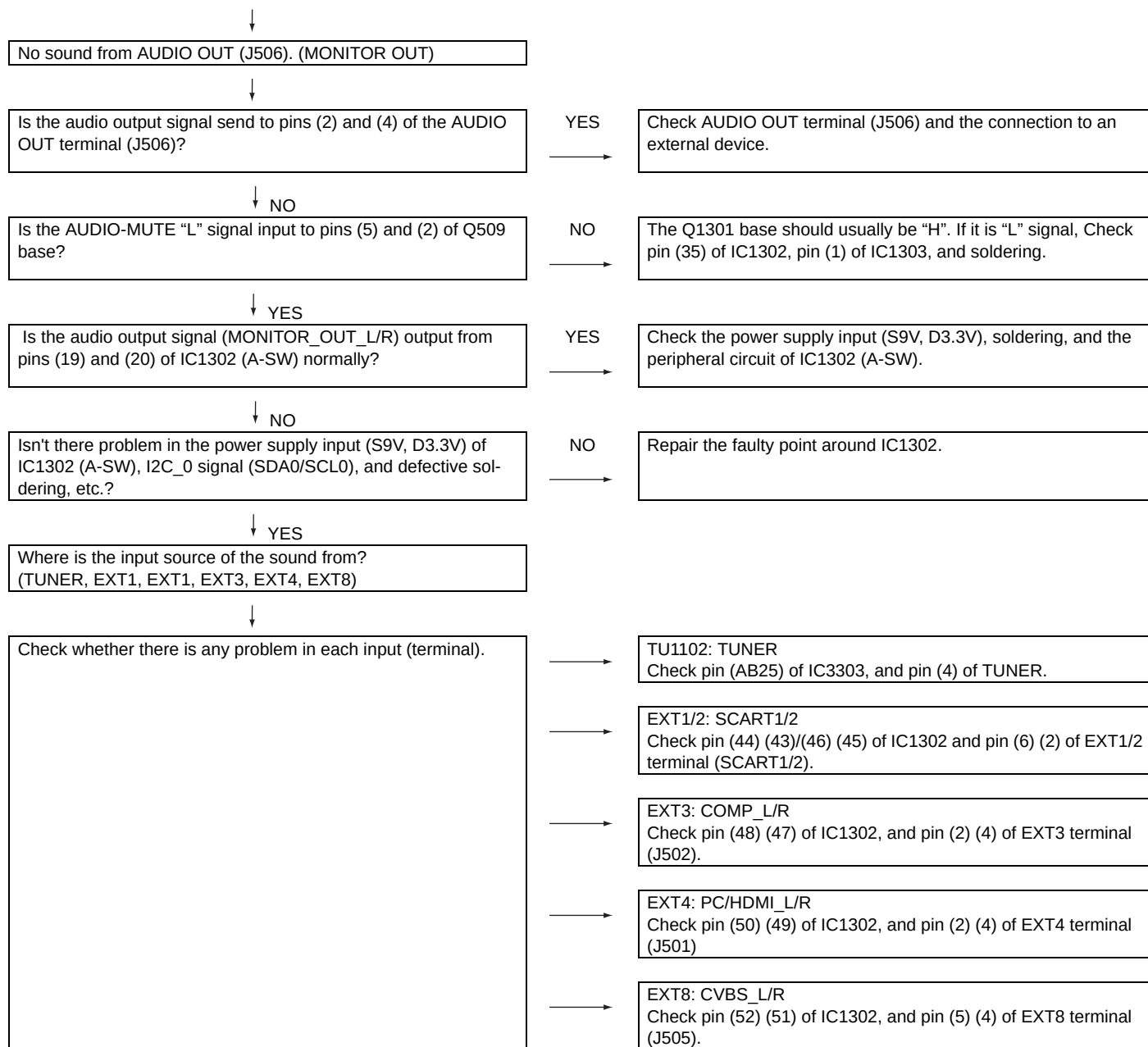
No sound of external device (3-1)-1



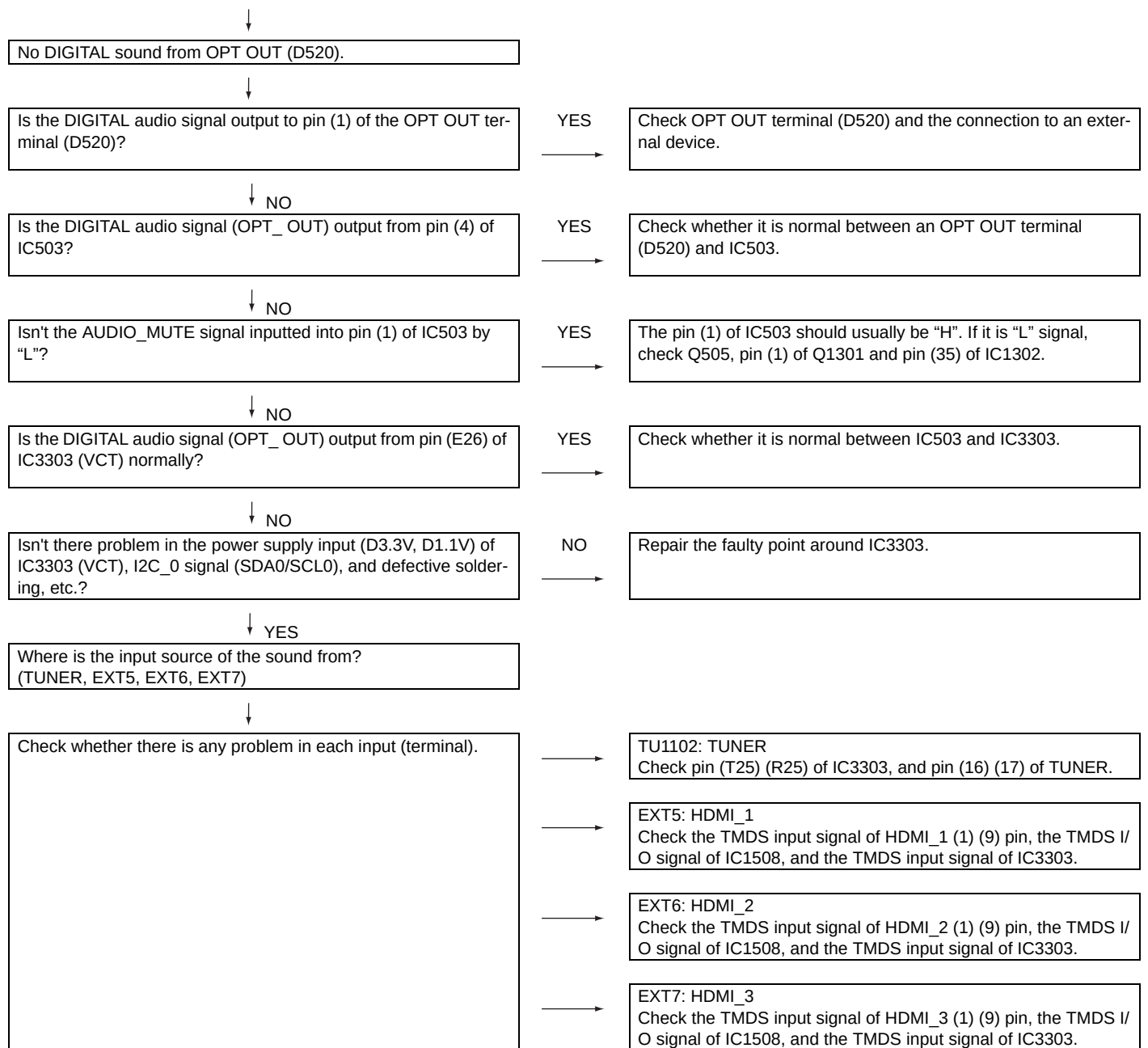
No sound of external device (3-1)-2



No sound of external device (3-2)



No sound of external device (3-3)



<When tuner (U/V, DTV) is received>**No picture on the display (1)-1**

No picture appears on LCD during the tuner (U/V) reception.

Checklist:

- 1) Is "INPUT SOURCE" button  on the remote control set up correctly? ••• set it as "TV" with the INPUT SOURCE button  on the remote control.
- 2) Is MENU-Picture-Backlight/Contrast/Brightness set to "MIN"? ••• Set it to an appropriate level.
- 3) Is ANT-CABLE disconnected or connected improperly? ••• Connect it correctly as per the operation manual.
- 4) Attention: The terminal of IC3303 (VCT) cannot be actually checked by hiding oneself, and check it with another terminal of the same line, please.

↓ YES

Is the level of pins (9) and (8) of tuner (TU1102) at "H"?

NO

These are communications lines for control (I2C). Follow the path and check whether they are forced to L (PULL_DOWN). (IC3303 (F25) (F24) pin)

↓ YES

Is the video signal (VIDEO) output from pin (6) of tuner (TU1102)?

NO

Check the tuner (TU1102) and peripheral circuits.

↓ YES

Is the video signal (TUNER_CVBS) input to pin (AD25) of IC3303 (VCT)?

NO

Isn't there any part with short-circuits at IC3303 (VCT)? or Check peripheral circuits.

↓ YES

Is the LVDS video signal (LVDS0_D [0:4] ±) output from pin [A6:A11], [B6:B11] of IC3303 (VCT)?

NO

Check IC3303 (VCT), and peripheral circuits.

↓ YES

Is the LVDS video signal (LVDS0_D [0:4] ±) input to pins (40)-(28) of LW Connector (P2601), and is CLK signal (TCLK±) input to pins (32)/(33)?

NO

Check whether there is short circuit between [A6:A11], [B6:B11] pin of IC3303 (VCT) and (40)-(28) pin of LW Connector (P2601), and peripheral circuits.

↓ YES

Is the I2C signal (VCOM_SDA/SCL) send to pin(12)/(13) of LP Connector (P2602)?

NO

Check the I2C signal of IC2602 and peripheral circuit.

↓ YES

Is the PNL12V output to pin (1)/(2) of PL Connector (CN7004(32 inch)/CN7503(40/46 inch)) of POWER UNIT?

NO

Check PL connector of POWER UNIT and U7053(32inch)/IC7502(40/46inch).

↓ YES

Exchange LCD-CONT-UNIT and do it operate normally?

↓ NO

Check the contact of the LCD-CONT-UNIT connection harness (LW/LP/PL).
Exchange LCD-PANEL if it is useless even if it exchanges it.

<When tuner (U/V, DTV) is received>**No picture on the display (1)-2**

No picture appears on LCD during the tuner (DTV) reception.



Checklist:

- 1) Is "INPUT SOURCE" button on the remote control set up correctly? ●●● set it as "TV" with the INPUT SOURCE button on the remote control.
- 2) Is MENU-Picture-Backlight/Contrast/Brightness set to "MIN"? ●●● Set it to an appropriate level.
- 3) Is ANT-CABLE disconnected or connected improperly? ●●● Connect it correctly as per the operation manual.
- 4) Attention: The terminal of IC3303 (VCT) cannot be actually checked by hiding oneself, and check it with another terminal of the same line, please.



YES

Is the level of pins (9) and (8) of tuner (TU1102) at "H"?

NO

These are communications lines for control (I2C). Follow the path and check whether they are forced to L(PULL_DOWN). (IC3303 (F25) (F24) pin)



YES

Is the digital video signal (DIFP/N) output from pin (16) (17) of tuner (TU1102)?

NO

Check the tuner (TU1102) and peripheral circuits.



YES

Is the digital video signal (DIFP/N) input to pin (T25) (R25) of IC3303 (VCT)?

NO

Isn't there any part with short-circuits at IC3303 (VCT)? or Check peripheral circuits.



YES

Is the LVDS video signal (LVDS0_D [0:4] $\pm$) output from pin [A6:A11], [B6:B11] of IC3303 (VCT)?

NO

Check IC3303 (VCT), and peripheral circuits.



YES

Is the LVDS video signal (LVDS0_D [0:4] $\pm$) input to pins (40)-(28) of LW Connector (P2601), and is CLK signal (TCLK $\pm$) input to pins (32)/(33)?

NO

Check whether there is short circuit between [A6:A11], [B6:B11] pin of IC3303 (VCT) and (40)-(28) pin of LW Connector (P2601), and peripheral circuits.



YES

Is the I2C signal (VCOM_SDA/SCL) send to pin(12)/(13) of LP Connector (P2602)?

NO

Check the I2C signal of IC2602 and peripheral circuit.



YES

Is the PNL12V output to pin (1)/(2) of PL Connector (CN7004(32 inch)/CN7503(40/46 inch)) of POWER UNIT?

NO

Check PL connector of POWER UNIT and U7053(32inch)/IC7502(40/46inch).



YES

Exchange LCD-CONT-UNIT and do it operate normally?



NO

Check the contact of the LCD-CONT-UNIT connection harness (LW/LP/PL).
Exchange LCD-PANEL if it is useless even if it exchanges it.

<When EXT1 is used for external input>

No picture on the display (2)-1

↓

No Composite video output when the EXT1 external input is used.

↓

Checklist:

- 1) Is "INPUT SOURCE" button  on the remote control set up correctly? ●●● set it as "EXT1" with the INPUT SOURCE button on the remote control.
 - 2) Is MENU-Picture-Backlight/Contrast/Brightness set to "MIN"? ●●● Set it to an appropriate level.
 - 3) Check the connection to the external device ●●●Connect it correctly as per the operation manual for the device.
 - 4) Attention: The terminal of IC3303 (VCT) cannot be actually checked by hiding oneself, and check it with another terminal of the same line, please.
- ↓

Is the CVBS video signal (SC1_CVBS/Y) sent to pin (20) of SCART1 (SC503)?

NO

→ Check external connection, input setting, SCART1 (SC503) and peripheral circuits.

↓ YES

Is the CVBS video signal (SC1_CVBS/Y) sent to input terminal pin (AE24) of IC3303 (VCT)?

NO

→ IC3303 (VCT), I2C_0signal (SDA0/SCL0), and peripheral circuits.

↓ YES

Is the LVDS video signal (LVDS0_D [0:4]±) input to pins (40)-(28) of LW Connector (P2601), and is CLK signal (TCLK±) input to pins (32)/(33)?

NO

→ Check whether there is short circuit between [A6:A11], [B6:B11] pin of IC3303 (VCT) and (40)-(28) pin of LW Connector (P2601), and peripheral circuits.

↓ YES

Is the I2C signal (VCOM_SDA/SCL) send to pin(12)/(13) of LP Connector (P2602)?

NO

→ Check the I2C signal of IC2602 and peripheral circuit.

↓ YES

Is the PNL12V output to pin (1)/(2) of PL Connector (CN7004(32 inch)/CN7503(40/46 inch)) of POWER UNIT?

NO

→ Check PL connector of POWER UNIT and U7053(32inch)/IC7502(40/46inch).

↓ YES

Exchange LCD-CONT-UNIT and do it operate normally?

↓ NO

Check the contact of the LCD-CONT-UNIT connection harness (LW/LP/PL).
Exchange LCD-PANEL if it is useless even if it exchanges it.

<When EXT1 is used for external input>

No picture on the display (2)-2

No RGB output when the EXT1 external input is used.

Checklist:

- 1) Is "INPUT SOURCE" button  on the remote control set up correctly? ●●● set it as "EXT1" with the INPUT SOURCE button on the remote control.
- 2) Is MENU-Picture-Backlight/Contrast/Brightness set to "MIN"? ●●● Set it to an appropriate level.
- 3) Check the connection to the external device ●●●Connect it correctly as per the operation manual for the device.
- 4) Attention: The terminal of IC3303 (VCT) cannot be actually checked by hiding oneself, and check it with another terminal of the same line, please.

Is the RGB signal sent to pins (15), (11) and (7) of SCART1 (SC503)? (RED1, GREEN1, BLUE1)

NO

Check external connection, input setting, SCART1 (SC503) and peripheral circuits.

Is the RGB signal (RED1, GREEN1, BLUE1) sent to input terminal pins (AF24), (AD24) and (AD23) of IC3303 (VCT)?

NO

Check between pins (15) (11) (7) of SCART1 (SC503) and pins (AF24) (AD24) (AD23) of IC3303 (VCT) and peripheral circuits.

↓ YES

Is the LVDS video signal (LVDS0_D [0:4] ±) input to pins (40)-(28) of LW Connector (P2601), and is CLK signal (TCLK±) input to pins (32)/(33)?

NO

Check whether there is short circuit between [A6:A11], [B6:B11] pin of IC3303 (VCT) and (40)-(28) pin of LW Connector (P2601), and peripheral circuits.

↓ YES

Is the I2C signal (VCOM_SDA/SCL) send to pin(12)/(13) of LP Connector (P2602)?

NO

Check the I2C signal of IC2602 and peripheral circuit.

↓ YES

Is the PNL12V output to pin (1)/(2) of PL Connector (CN7004(32 inch)/CN7503(40/46 inch)) of POWER UNIT?

NO

Check PL connector of POWER UNIT and U7053(32inch)/IC7502(40/46inch).

↓ YES

Exchange LCD-CONT-UNIT and do it operate normally?

↓ NO

Check the contact of the LCD-CONT-UNIT connection harness (LW/LP/PL).
Exchange LCD-PANEL if it is useless even if it exchanges it.

<When EXT1 is used for external input>

No picture on the display (2)-3

No Y/C output when the EXT1 external input is used.

Checklist:

- 1) Is "INPUT SOURCE" button  on the remote control set up correctly? ●●● set it as "EXT1" with the INPUT SOURCE button on the remote control.
- 2) Is MENU-Picture-Backlight/Contrast/Brightness set to "MIN"? ●●● Set it to an appropriate level.
- 3) Check the connection to the external device ●●●Connect it correctly as per the operation manual for the device.
- 4) Attention: The terminal of IC3303 (VCT) cannot be actually checked by hiding oneself, and check it with another terminal of the same line, please.

Is the Y/C signal sent to pins (20) and (15) of SCART1 (SC503)? (Y/C1)

NO

Check external connection, input setting, SCART1 (SC503) and peripheral circuits.

↓ YES

Is the Y/C signal (Y/C1) sent to input terminal pins (AE24) and (AF24) of IC3303 (VCT)?

NO

Check between pins (20) (15) of SCART1 (SC503) and pins (AE24) (AF24) of IC3303 (VCT), and peripheral circuits.

↓ YES

Is the LVDS video signal (LVDS0_D [0:4] ±) input to pins (40)-(28) of LW Connector (P2601), and is CLK signal (TCLK±) input to pins (32)/(33)?

NO

Check whether there is short circuit between [A6:A11], [B6:B11] pin of IC3303 (VCT) and (40)-(28) pin of LW Connector (P2601), and peripheral circuits.

↓ YES

Is the I2C signal (VCOM_SDA/SCL) send to pin(12)/(13) of LP Connector (P2602)?

NO

Check the I2C signal of IC2602 and peripheral circuit.

↓ YES

Is the PNL12V output to pin (1)/(2) of PL Connector (CN7004(32 inch)/CN7503(40/46 inch)) of POWER UNIT?

NO

Check PL connector of POWER UNIT and U7053(32inch)/IC7502(40/46inch).

↓ YES

Exchange LCD-CONT-UNIT and do it operate normally?

↓ NO

Check the contact of the LCD-CONT-UNIT connection harness (LW/LP/PL).
Exchange LCD-PANEL if it is useless even if it exchanges it.

<When EXT2 is used for external input>

No picture on the display (3)-1

No composite video output when the EXT2 external input is used.

Checklist:

- 1) Is "INPUT SOURCE" button  on the remote control set up correctly? ●●● set it as "EXT2" with the INPUT SOURCE button on the remote control.
- 2) Is MENU-Picture-Backlight/Contrast/Brightness set to "MIN"? ●●● Set it to an appropriate level.
- 3) Check the connection to the external device ●●● Connect it correctly as per the operation manual for the device.
- 4) Attention: The terminal of IC3303 (VCT) cannot be actually checked by hiding oneself, and check it with another terminal of the same line, please.

Is the CVBS video signal sent to pin (20) of SCART2 (SC502)?

NO

Check external connection, input setting, SCART2 (SC502) and peripheral circuits.

↓ YES

Is the CVBS video signal (SC2_CVBS/Y) sent to input terminal pin (AD26) of IC3303 (VCT)?

NO

Check IC3303 (VCT), I2C_0 signal (SDA0/SCL0), and peripheral circuits.

↓ YES

Is the LVDS video signal (LVDS0_D [0:4] ±) input to pins (40)-(28) of LW Connector (P2601), and is CLK signal (TCLK±) input to pins (32)/(33)?

NO

Check whether there is short circuit between [A6:A11], [B6:B11] pin of IC3303 (VCT) and (40)-(28) pin of LW Connector (P2601), and peripheral circuits.

↓ YES

Is the I2C signal (VCOM_SDA/SCL) sent to pin(12)/(13) of LP Connector (P2602)?

NO

Check the I2C signal of IC2602 and peripheral circuit.

↓ YES

Is the PNL12V output to pin (1)/(2) of PL Connector (CN7004(32 inch)/CN7503(40/46 inch)) of POWER UNIT?

NO

Check PL connector of POWER UNIT and U7053(32inch)/IC7502(40/46inch).

↓ YES

Exchange LCD-CONT-UNIT and do it operate normally?

↓ NO

Check the contact of the LCD-CONT-UNIT connection harness (LW/LP/PL).
Exchange LCD-PANEL if it is useless even if it exchanges it.

<When EXT2 is used for external input>

No picture on the display (3)-2

No Y/C output when the EXT2 external input is used.

Checklist:

- 1) Is "INPUT SOURCE" button  on the remote control set up correctly? ●●● set it as "EXT2" with the INPUT SOURCE button on the remote control.
- 2) Is MENU-Picture-Backlight/Contrast/Brightness set to "MIN"? ●●● Set it to an appropriate level.
- 3) Check the connection to the external device ●●● Connect it correctly as per the operation manual for the device.
- 4) Attention: The terminal of IC3303 (VCT) cannot be actually checked by hiding oneself, and check it with another terminal of the same line, please.

Is the Y/C signal sent to pins (20) and (15) of SCART2 (SC502)? (SC2_Y/C2)

NO

Check external connection, input setting, SCART2 (SC502) and peripheral circuits.

↓ YES

Is the Y/C signal (SC2_Y/C2) sent to input terminal pins (AD26) and (AF25) of IC3303 (VCT)?

NO

Check between pins (20) (15) of SCART2 (SC502) and pins (AD26) (AF25) of IC3303 (VCT) and peripheral circuits.

↓ YES

Is the LVDS video signal (LVDS0_D [0:4] ±) input to pins (40)-(28) of LW Connector (P2601), and is CLK signal (TCLK±) input to pins (32)/(33)?

NO

Check whether there is short circuit between [A6:A11], [B6:B11] pin of IC3303 (VCT) and (40)-(28) pin of LW Connector (P2601), and peripheral circuits.

↓ YES

Is the I2C signal (VCOM_SDA/SCL) send to pin(12)/(13) of LP Connector (P2602)?

NO

Check the I2C signal of IC2602 and peripheral circuit.

↓ YES

Is the PNL12V output to pin (1)/(2) of PL Connector (CN7004(32 inch)/CN7503(40/46 inch)) of POWER UNIT?

NO

Check PL connector of POWER UNIT and U7053(32inch)/IC7502(40/46inch).

↓ YES

Exchange LCD-CONT-UNIT and do it operate normally?

↓ NO

Check the contact of the LCD-CONT-UNIT connection harness (LW/LP/PL).
Exchange LCD-PANEL if it is useless even if it exchanges it.

<When EXT3/4/8 is used for external input>

No picture on the display (4)-1

No Component video output when the EXT3 external input is used.

Checklist:

- 1) Is "INPUT SOURCE" button  on the remote control set up correctly? ●●● set it as "EXT3"/"EXT4"/"EXT8" with the INPUT SOURCE button on the remote control.
- 2) Is MENU-Picture-Backlight/Contrast/Brightness set to "MIN"? ●●● Set it to an appropriate level.
- 3) Check the connection to the external device ●●● Connect it correctly as per the operation manual for the device.
- 4) Attention: The terminal of IC3303 (VCT) cannot be actually checked by hiding oneself, and check it with another terminal of the same line, please.

Is the component video signal sent to pin (3) (5) (7) of EXT3 terminal (J503)? (Y, Pb, Pr)

NO

Check external connection, input setting, EXT3 terminal (J503) and peripheral circuits.

↓ YES

Is the component video signal (COMP_Y/Pb/Pr) sent to input terminal pin (AE21) (AD22) (AF22) of IC3303 (VCT)?

NO

Check between pins (3) (5) (7) of EXT3 terminal (J503) and pins (AE21) (AD22) (AF22) of IC3303 (VCT) and peripheral circuits.

↓ YES

Is the LVDS video signal (LVDS0_D [0:4] ±) input to pins (40)-(28) of LW Connector (P2601), and is CLK signal (TCLK±) input to pins (32)/(33)?

NO

Check whether there is short circuit between [A6:A11], [B6:B11] pin of IC3303 (VCT) and (40)-(28) pin of LW Connector (P2601), and peripheral circuits.

↓ YES

Is the I2C signal (VCOM_SDA/SCL) send to pin(12)/(13) of LP Connector (P2602)?

NO

Check the I2C signal of IC2602 and peripheral circuit.

↓ YES

Is the PNL12V output to pin (1)/(2) of PL Connector (CN7004(32 inch)/CN7503(40/46 inch)) of POWER UNIT?

NO

Check PL connector of POWER UNIT and U7053(32inch)/IC7502(40/46inch).

↓ YES

Exchange LCD-CONT-UNIT and do it operate normally?

↓ NO

Check the contact of the LCD-CONT-UNIT connection harness (LW/LP/PL).
Exchange LCD-PANEL if it is useless even if it exchanges it.

<When EXT3/4/8 is used for external input>

No picture on the display (4)-2

No PC output when the EXT4 external input is used.

Checklist:

- 1) Is "INPUT SOURCE" button  on the remote control set up correctly? ●●● set it as "EXT3"/"EXT4"/"EXT8" with the INPUT SOURCE button on the remote control.
- 2) Is MENU-Picture-Backlight/Contrast/Brightness set to "MIN"? ●●● Set it to an appropriate level.
- 3) Check the connection to the external device ●●● Connect it correctly as per the operation manual for the device.
- 4) Attention: The terminal of IC3303 (VCT) cannot be actually checked by hiding oneself, and check it with another terminal of the same line, please.

Is the RGB signal sent to pins (1), (2) and (3) of EXT4 terminal (PC_IN) (SC501)? (PC_R/G/B)

NO

Check external connection, input setting, EXT4 terminal (PC_IN) (SC501) and peripheral circuits.

↓ YES

Is the RGB signal (PC_R/G/B) sent to input terminal pins (AE20) (AE19) and (AD19) of IC3303 (VCT)?

NO

Check between pins (1) (2) (3) of EXT4 terminal (PC_IN) (SC501) and pins (AE20) (AE19) (AD19) of IC3303 (VCT).

↓ YES

Is the LVDS video signal (LVDS0_D [0:4] ±) input to pins (40)-(28) of LW Connector (P2601), and is CLK signal (TCLK±) input to pins (32)/(33)?

NO

Check whether there is short circuit between [A6:A11], [B6:B11] pin of IC3303 (VCT) and (40)-(28) pin of LW Connector (P2601), and peripheral circuits.

↓ YES

Is the I2C signal (VCOM_SDA/SCL) send to pin(12)/(13) of LP Connector (P2602)?

NO

Check the I2C signal of IC2602 and peripheral circuit.

↓ YES

Is the PNL12V output to pin (1)/(2) of PL Connector (CN7004(32 inch)/CN7503(40/46 inch)) of POWER UNIT?

NO

Check PL connector of POWER UNIT and U7053(32inch)/IC7502(40/46inch).

↓ YES

Exchange LCD-CONT-UNIT and do it operate normally?

↓ NO

Check the contact of the LCD-CONT-UNIT connection harness (LW/LP/PL).
Exchange LCD-PANEL if it is useless even if it exchanges it.

<When EXT3/4/8 is used for external input>

No picture on the display (4)-3

No Composite video output when the EXT8 external input is used.

Checklist:

- 1) Is "INPUT SOURCE" button  on the remote control set up correctly? ●●● set it as "EXT3"/"EXT4"/"EXT8" with the INPUT SOURCE button on the remote control.
- 2) Is MENU-Picture-Backlight/Contrast/Brightness set to "MIN"? ●●● Set it to an appropriate level.
- 3) Check the connection to the external device ●●● Connect it correctly as per the operation manual for the device.
- 4) Attention: The terminal of IC3303 (VCT) cannot be actually checked by hiding oneself, and check it with another terminal of the same line, please.

Is the Composite video signal sent to pin (6) of EXT8 terminal (J505)? (CVBS_IN)

NO

Check external connection, input setting, EXT8 terminal (J505) and peripheral circuits.

↓ YES

Is the Composite video signal (CVBS_IN) sent to input terminal pin (AC24) of IC3303 (VCT)?

NO

Check between pin (6) of EXT8 terminal (J505) and pin (AC24) of IC3303 (VCT) and peripheral circuits.

↓ YES

Is the LVDS video signal (LVDS0_D [0:4] ±) input to pins (40)-(28) of LW Connector (P2601), and is CLK signal (TCLK±) input to pins (32)/(33)?

NO

Check whether there is short circuit between [A6:A11], [B6:B11] pin of IC3303 (VCT) and (40)-(28) pin of LW Connector (P2601), and peripheral circuits.

↓ YES

Is the I2C signal (VCOM_SDA/SCL) send to pin(12)/(13) of LP Connector (P2602)?

NO

Check the I2C signal of IC2602 and peripheral circuit.

↓ YES

Is the PNL12V output to pin (1)/(2) of PL Connector (CN7004(32 inch)/CN7503(40/46 inch)) of POWER UNIT?

NO

Check PL connector of POWER UNIT and U7053(32inch)/IC7502(40/46inch).

↓ YES

Exchange LCD-CONT-UNIT and do it operate normally?

↓ NO

Check the contact of the LCD-CONT-UNIT connection harness (LW/LP/PL).
Exchange LCD-PANEL if it is useless even if it exchanges it.

<When EXT5/6/7(HDMI) is used for external input> No picture on the display (5)-1

No HDMI0 digital video output when the EXT5 external input is used.

Checklist:

- 1) Is "INPUT SOURCE" button  on the remote control set up correctly? ●●● set it as "EXT5"/"EXT6"/"EXT7" with the INPUT SOURCE button on the remote control.
- 2) Is MENU-Picture-Backlight/Contrast/Brightness set to "MIN"? ●●● Set it to an appropriate level.
- 3) Check the connection to the external device ●●● Connect it correctly as per the operation manual for the device.
- 4) Attention: The terminal of IC3303 (VCT) cannot be actually checked by hiding oneself, and check it with another terminal of the same line, please.

Is the HDMI Digital video signal sent to pin (1)-(9) of EXT5 terminal (SC1501)? (HDMI0_D [0:2] _P/N)

NO

Check external connection, input setting, EXT5 terminal (SC1501) and peripheral circuits.

↓ YES

Is the HDMI Digital video signal sent to pin (21)-(26) of IC1508 (HDMI-receiver)? (HDMI0_D [0:2] _P/N)

NO

Check short circuit of EXT5 terminal (SC1501), and peripheral circuits.

↓ YES

Is HDMI_SW_Digital Video signal sent to pin (AF16) (AE16)-(AF18) (AE18) of input terminal of IC3303 (VCT)? (HDMI_SW_D [0:2] P/N)

NO

Check short circuit of IC1508 (HDMI_receiver), power source and peripheral circuits.

↓ YES

Is the LVDS video signal (LVDS0_D [0:4] ±) input to pins (40)-(28) of LW Connector (P2601), and is CLK signal (TCLK±) input to pins (32)/(33)?

NO

Check whether there is short circuit between [A6:A11], [B6:B11] pin of IC3303 (VCT) and (40)-(28) pin of LW Connector (P2601), and peripheral circuits.

↓ YES

Is the I2C signal (VCOM_SDA/SCL) send to pin(12)/(13) of LP Connector (P2602)?

NO

Check the I2C signal of IC2602 and peripheral circuit.

↓ YES

Is the PNL12V output to pin (1)/(2) of PL Connector (CN7004(32 inch)/CN7503(40/46 inch)) of POWER UNIT?

NO

Check PL connector of POWER UNIT and U7053(32inch)/IC7502(40/46inch).

↓ YES

Exchange LCD-CONT-UNIT and do it operate normally?

↓ NO

Check the contact of the LCD-CONT-UNIT connection harness (LW/LP/PL).
Exchange LCD-PANEL if it is useless even if it exchanges it.

<When EXT5/6/7(HDMI) is used for external input> No picture on the display (5)-2

↓

No HDMI1 digital video output when the EXT6 external input is used.

↓

Checklist:

- 1) Is "INPUT SOURCE" button  on the remote control set up correctly? ●●● set it as "EXT5"/"EXT6"/"EXT7" with the INPUT SOURCE button on the remote control.
- 2) Is MENU-Picture-Backlight/Contrast/Brightness set to "MIN"? ●●● Set it to an appropriate level.
- 3) Check the connection to the external device ●●● Connect it correctly as per the operation manual for the device.
- 4) Attention: The terminal of IC3303 (VCT) cannot be actually checked by hiding oneself, and check it with another terminal of the same line, please.

↓

Is the HDMI Digital video signal sent to pin (1)-(9) of EXT6 terminal (SC1502)? (HDMI1_D [0:2] _P/N)

NO

→

Check external connection, input setting, EXT6 terminal (SC1502) and peripheral circuits.

↓ YES

Is the HDMI Digital video signal sent to pin (13)-(18) of IC1508 (HDMI-receiver)? (HDMI1_D [0:2] _P/N)

NO

→

Check short circuit of EXT6 terminal (SC1502), and peripheral circuits.

↓ YES

Is HDMI_SW_Digital Video signal sent to pin (AF16) (AE16)-(AF18) (AE18) of input terminal of IC3303 (VCT)? (HDMI_SW_D [0:2] P/N)

NO

→

Check short circuit of IC1508 (HDMI_receiver), power source and peripheral circuits.

↓ YES

Is the LVDS video signal (LVDS0_D [0:4] ±) input to pins (40)-(28) of LW Connector (P2601), and is CLK signal (TCLK±) input to pins (32)/(33)?

NO

→

Check whether there is short circuit between [A6:A11], [B6:B11] pin of IC3303 (VCT) and (40)-(28) pin of LW Connector (P2601), and peripheral circuits.

↓ YES

Is the I2C signal (VCOM_SDA/SCL) send to pin(12)/(13) of LP Connector (P2602)?

NO

→

Check the I2C signal of IC2602 and peripheral circuit.

↓ YES

Is the PNL12V output to pin (1)/(2) of PL Connector (CN7004(32 inch)/CN7503(40/46 inch)) of POWER UNIT?

NO

→

Check PL connector of POWER UNIT and U7053(32inch)/IC7502(40/46inch).

↓ YES

Exchange LCD-CONT-UNIT and do it operate normally?

↓ NO

Check the contact of the LCD-CONT-UNIT connection harness (LW/LP/PL).
Exchange LCD-PANEL if it is useless even if it exchanges it.

<When EXT5/6/7 (HDMI) is used for external input> No picture on the display (5)-3

No HDMI2 digital video output when the EXT7 external input is used.

Checklist:

- 1) Is "INPUT SOURCE" button  on the remote control set up correctly? ●●● set it as "EXT5"/"EXT6"/"EXT7" with the INPUT SOURCE button on the remote control.
- 2) Is MENU-Picture-Backlight/Contrast/Brightness set to "MIN"? ●●● Set it to an appropriate level.
- 3) Check the connection to the external device ●●● Connect it correctly as per the operation manual for the device.
- 4) Attention: The terminal of IC3303 (VCT) cannot be actually checked by hiding oneself, and check it with another terminal of the same line, please.

Is the HDMI Digital video signal sent to pin (1)-(9) of EXT7 terminal (SC1503)? (HDMI2_D [0:2] _P/N)

NO

Check external connection, input setting, EXT7 terminal (SC1503) and peripheral circuits.

↓ YES

Is the HDMI Digital video signal sent to pin (3)-(8) of IC1508 (HDMI-receiver)? (HDMI2_D [0:2] _P/N)

NO

Check short circuit of EXT7 terminal (SC1503), and peripheral circuits.

↓ YES

Is HDMI_SW_Digital Video signal sent to pin (AF16) (AE16)-(AF18) (AE18) of input terminal of IC3303 (VCT)? (HDMI_SW_D [0:2] P/N)

NO

Check short circuit of IC1508 (HDMI_receiver), power source and peripheral circuits.

↓ YES

Is the LVDS video signal (LVDS0_D [0:4] ±) input to pins (40)-(28) of LW Connector (P2601), and is CLK signal (TCLK±) input to pins (32)/(33)?

NO

Check whether there is short circuit between [A6:A11], [B6:B11] pin of IC3303 (VCT) and (40)-(28) pin of LW Connector (P2601), and peripheral circuits.

↓ YES

Is the I2C signal (VCOM_SDA/SCL) send to pin(12)/(13) of LP Connector (P2602)?

NO

Check the I2C signal of IC2602 and peripheral circuit.

↓ YES

Is the PNL12V output to pin (1)/(2) of PL Connector (CN7004(32 inch)/CN7503(40/46 inch)) of POWER UNIT?

NO

Check PL connector of POWER UNIT and U7053(32inch)/IC7502(40/46inch).

↓ YES

Exchange LCD-CONT-UNIT and do it operate normally?

↓ NO

Check the contact of the LCD-CONT-UNIT connection harness (LW/LP/PL).
Exchange LCD-PANEL if it is useless even if it exchanges it.

<When an external monitor is connected>	No picture on the external monitor (6)-1
--	---

↓

No picture appears on external monitor during the tuner (U/V) reception. (Tuner input, EXT1 output)

↓

Checklist:

- 1) Are input terminal on back of TV and "INPUT SOURCE" button  on the remote control set up correctly? ●● See the operation manual and set "INPUT SOURCE" appropriately, set to EXT***.
- 2) Is SCART-CABLE disconnected or connected improperly? ●● Connect it correctly as per the operation manual.

↓

Is the video signal outputted to pin (19) of SCART1 (SC503)?

YES

→ Check SCART1, external connection or input setting.

↓ NO

Is the video signal (SC1-VOUT) outputted from pin (2) of IC504 (75Ω_driver)?

YES

→ Check SCART1 (SC503) and peripheral circuits.

↓ NO

Is video signal (CVBS_TU_OUT) input to pin (4) of IC507?

YES

→ Check IC507 and peripheral circuits.

↓ NO

Is video signal (TUNER_CVBS) outputted from emitter of Q1102?

YES

→ Check IC3303 and peripheral circuits.

↓ NO

Is video signal (VIDEO) outputted from pin (6) of TUNER (TU1102)?

↓ NO

Check IF5V power supply pins (3), 12C-line pins (9) and (8) of tuner (TU1102) and peripheral circuits.

<When an external monitor is connected> No picture on the external monitor (6)-2

No picture appears on external monitor during the EXT8 input (COMPOSITE).
(EXT8 COMP input, EXT2 output)

Checklist:

- 1) Are input terminal on back of TV and "INPUT SOURCE" button  on the remote control set up correctly? ●● See the operation manual and set "INPUT SOURCE" appropriately, set to EXT***.
- 2) Is SCART-CABLE disconnected or connected improperly? ●● Connect it correctly as per the operation manual.

Is the video signal outputted to pin (19) of SCART2 (SC502)?

YES

Check SCART2, external connection or input setting.

↓ NO

Is the video signal (SC2-VOUT) outputted from pin (4) of IC508 (75Ω_driver)?

YES

Check IC508 and peripheral circuits.

↓ NO

Is the Composite Video signal (CVBS_MON_OUT) outputted from the pin (B13) of IC3303 (VCT)?

YES

Check between IC508 and IC3303 and the peripheral circuitry.

↓ NO

Is the Composite signal (CVBS_IN) inputted to pins (6) of EXT8 terminal normally?

YES

Check a short circuit etc. between the EXT8 input terminal (pin (6)) and IC3303 (VCT).

↓ NO

Check whether the terminal of EXT8 is faulty, or there is not any error in external connection.

<When an external monitor is connected>	No picture on the external monitor (6)-3
--	---

↓

No picture appears on external monitor during the EXT5/6/7 inputs (HDMI). (EXT5 HDMI input, EXT2 output)

↓

Checklist:

- 1) Are input terminal on back of TV and "INPUT SOURCE" button on the remote control set up correctly? ●● See the operation manual and set "INPUT SOURCE" appropriately, set to EXT***.
- 2) Is SCART-CABLE disconnected or connected improperly? ●● Connect it correctly as per the operation manual.

↓

Is the video signal outputted to pin (19) of SCART2 (SC502)?

YES

Check SCART2, external connection or input setting.

↓ NO

Is the video signal (SC2-VOOUT) outputted from pin (4) of IC508 (75Ω_driver)?

YES

Check IC508 and peripheral circuits.

↓ NO

Is the Composite Video signal (CVBS_MON_OUT) outputted from the pin (B13) of IC3303 (VCT)?

YES

Check between IC508 and IC3303 and the peripheral circuitry.

↓ NO

Is the HDMI output signal (HDMI_SW_D [0:2] P/N) input to the pin [AF16-AE18] of IC3303 (VCT) normally?

YES

Check a short circuit, HDMI_H/V signal, HDMI_PLG signal, and other abnormality, etc. with IC3303.

↓ NO

Is the HDMI input signal (HDMI0/1/2_D [0:2] P/N) input to IC1508 (HDMI-receiver) normally?

YES

Check a short circuit, HDMI_I2C signal, and other abnormality, etc. with IC1508.

↓ NO

Are the pin (43) (44)/(39) (40)/(33) (34) of I2C signal (HDMI [0:2] _SDA/SCL) accessed normally?

NO

Exchange HDMI-Receiver (IC1508) Or check short circuit.

↓ YES

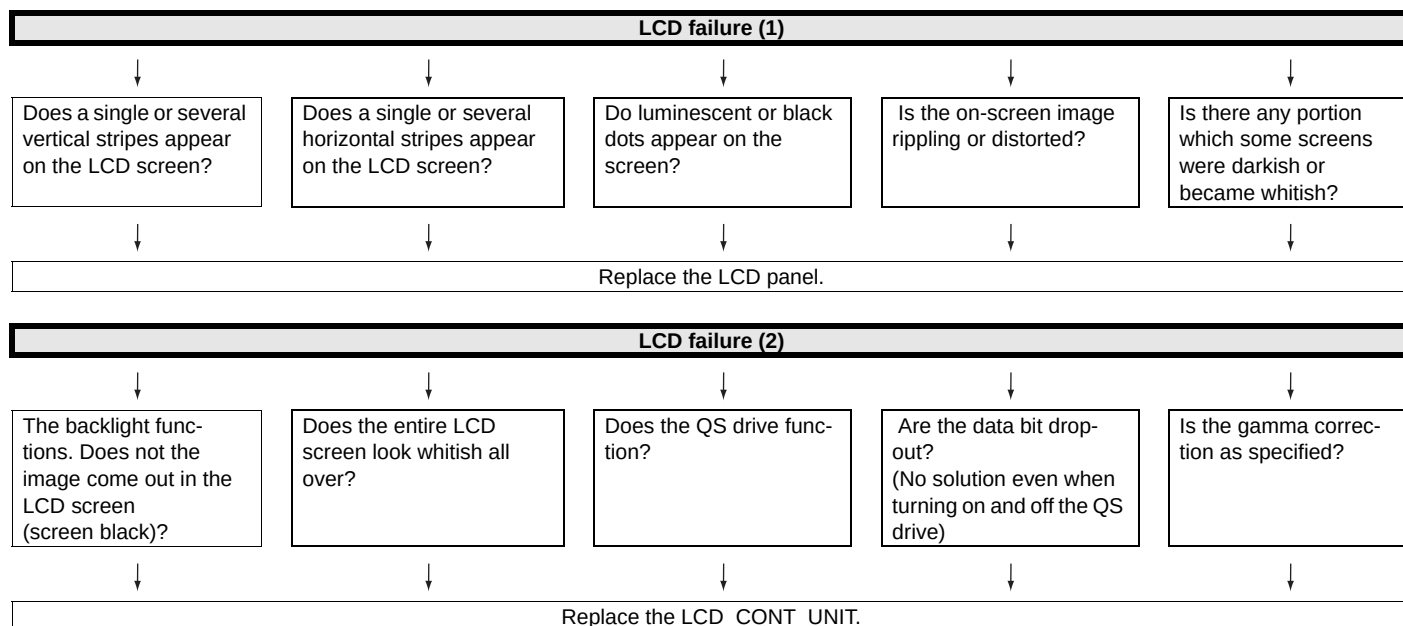
Is the TMDS signal (1-12) pin inputted to HDMI1/2/3 (EXT5/6/7) terminal normally?

YES

Check a short circuit etc. between HDMI1/2/3 and IC1508 (HDMI-receiver).

↓ NO

Check whether the terminal of HDMI1/2/3 (EXT5/6/7) is faulty, or there is not any error in external connection.



MODELS LC32LE600E LC40LE600E LC46LE600E

SYMPTOM Squealing or no sound.

CAUSE Software issues in main sound processing IC.

ACTION Update software to the latest version following the instructions in the service manual,
Following this update please perform a factory reset.

Note that the latest version of software is available from the Sharp Tech Web.

Sharp Electronics (UK) Limited

Reference – LCEU96
Revision - 2

White – Carry out as required
Yellow – Carry out as required and whenever the unit comes in for service
Red – Carry out on all units

<u>MODELS</u>	LC32LE600E	LC40LE600E	LC46LE600E
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SYMPTOM Stuck in stand by following software update or PWB replacement the Red LED flashing, if there has been more than 5 attempts to bring the TV on with the incorrect settings then the TV will be none responsive and show only the Red power LED.

CAUSE Incorrect MODEL NAME / INCH SIZE identification within the service menu setup software resulting in "Lamp error" protection mode "STANDBY CAUSE" (1B).

ACTION Follow the instructions given below to gain access to the engineer "service menu" and check/reset "INCH SIZE" and "MODEL NAME" where applicable.

- Switch the TV off using the rocker switch located on the lower left side of the TV (just around the back).
- Whilst hold down the "Input" button and "Volume –" buttons on the set, switch the TV on again using the rocker switch left side.
- After 30 seconds the set should function showing a [K] in the upper left part of the screen.
- Press together the Volume – and Program – buttons on the set.
- You should now be in the engineer service menu (see Figure 1).
- Using the Channel up and Down buttons on the remote to select the "INCH SIZE" then "MODEL NAME" and correct using the Right arrow or Volume + - button to the details as indicated on the cabinet back (see Figures 2 and 3).
- Reset "STANBY CAUSE" as required, change "ERROR RESET" to "YES" and press "OK".

Do not make any other adjustments within any other part of the service menus as this can result in unrecoverable errors.

When completed switch off and remove the mains supply.

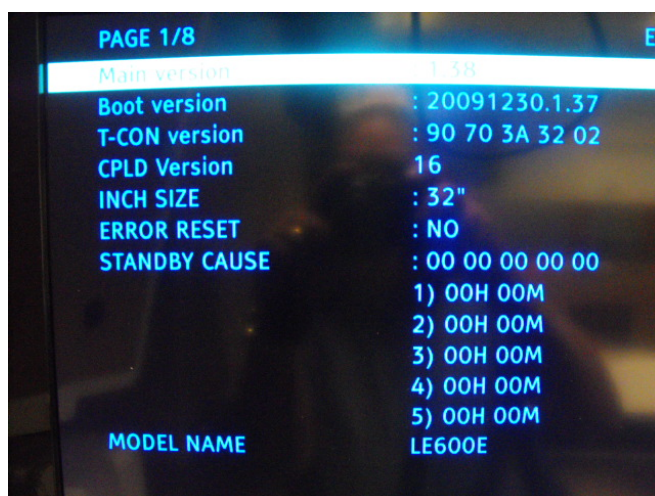


Figure 1: Service menu showing screen size and Model name.

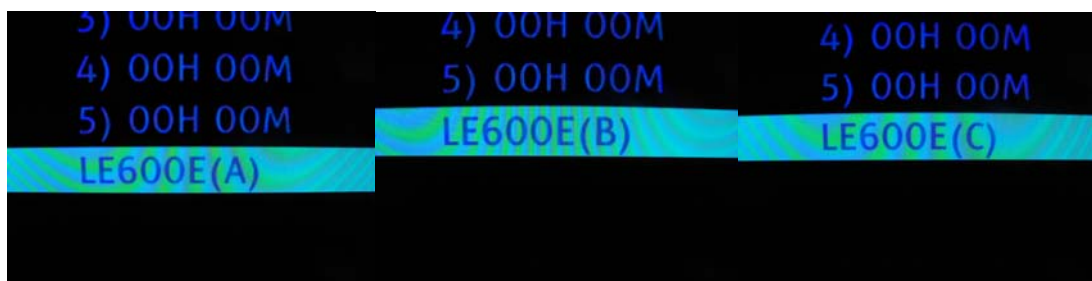


Figure 2: Service menu indications of Model versions selection E, E(A), E(B) or E(C).



Figure 3: The Model number may be followed by a box containing the Variant letter, the above label shows the [A] variant which must be set in the service mode detailed above along with the 46" in the "INCH SIZE"..

MODELS **LC32LE600E** **LC40LE600E** **LC46LE600E**

SYMPTOM Stuck in shut-down following software update or PWB replacement.

CAUSE Incorrect model/size identification within the service menu setup software.

ACTION Follow the instructions given below to gain access to the engineer "service menu" and check/reset screen size and model version.

- Whilst hold down the Input source and Volume – buttons on the set, insert the mains cable or turn on the mains supply.
- After 30 seconds release these buttons.
- The set should now start to function.
- Press together the Volume – and Program – buttons on the set.
- You should now be in the engineer service menu (see Figure 1).
- Using the curser buttons on the remote highlight and reset if needed the model size and Model name-version (A,B,C.) as indicated on the cabinet back (see Figures 2 and 3).
Do not make any other adjustments within any other part of the service menus as this can result in unrecoverable errors.
- When completed switch off and remove the mains supply.

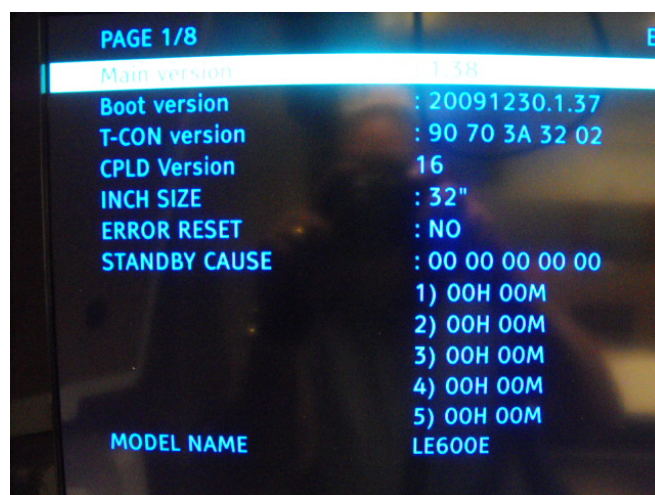


Figure 1: Service menu showing screen size and Model name.

Sharp Electronics (UK) Limited

Reference – JW20100326

Revision - 1

White – Carry out as required

Yellow – Carry out as required and whenever the unit comes in for service

Red – Carry out on all units



Figure 2: Service menu indications of Model versions E, E(A), E(B) or E(C).



Figure 3: The Model number may be followed by a box containing Variant letter as indicated above (A).

<u>MODELS</u>	LC32LE600E	LC40LE600E	LC40LE600EA	LC46LE600E
	LC46LE600EA			

REASON Incorrect part number for IC501 quoted on various pages of the service manual.

ACTION If you need to replace IC501 please use the correct part number and add the updated information on the following pages to the service manual.

<u>REF NO</u>	<u>DESCRIPTION</u>	<u>PART NUMBER</u>	<u>PRICE CODE</u>
IC501	1K E2PROM	RH-iXXC206WJZZS	AH

LC-32/40/46LE600E/RU/S

CHAPTER 4. ADJUSTMENT PROCEDURE

[1] ADJUSTMENT PROCEDURE

1. Adjustment method after PWB and/or IC replacement due to repair

The unit is set to the optimum at the time of shipment from the factory. If any value should become improper or any adjustment is necessary due to the part replacement, make an adjustment according to the following procedure.

- Procure the following units in order to replace the main unit, EEPROM (IC501).

MAIN UNIT: DUNTKF111PM11

NOTE: [Caution when replacing ICs in the main unit (IC501)]

The above ICs are EEPROMs storing the EDID data of PC data.

Before replacing the relevant part, procure the following parts in which the data have been rewritten.

IC501 ~~93C46~~ EDID (PC) ANALOG-RGB
RH-IXC206WJZZS

2. Entering and exiting the adjustment process mode

- Press the "MAIN POWER" key on the set of running TV set to force power off.
(Or, unplug the AC power cord of running TV set to force power off.)
- While holding down the " " and "INPUT" keys on the set at once, press the "MAIN POWER" key on the set to turn on the power.
The letter "K" appears on the screen.
- Next, hold down the " " and "P ()" keys on the set at once.
Multiple lines of orange characters appearing on the screen indicate that the set is now in the adjustment process mode.
If you fail to enter the adjustment process mode (the display is the same as normal start up), retry the procedure.
- To exit the adjustment process mode after the adjustment is done, press the MAIN POWER key and turn off a power supply, or unplug the AC power cord to force power off.
(When the power is turned off with the remote controller, once unplug the AC power cord and wait for 10 seconds before plug it in again.)

CAUTION: Use due care in handling the information described here lest the users should know how to enter the adjustment process mode. If the settings are tampered with in this mode, unresolvable system damage may result.

3. Remote controller key operation in adjustment process mode.

- key operation

Remote controller key	Main unit key	Remote controller key Main unit key Function
P ()	P ()	Moving an item (line) by one (UP/DOWN)
(H/)	(H/)	Changing a selected item setting (+1/-1)
Cursor ()	—	Turning a page (PREVIOUS/NEXT)
Cursor ()	—	Changing a selected line setting (+10/-10)
Input button	Input button	Input source switching (toggle switching) (TV→EXT1→EXT2→EXT3→EXT4→HDMI1→HDMI2→HDMI3→EXT5)
OK	—	Executing a function

Input mode is switched automatically when relevant adjustment is started so far as the necessary input signal is available.

Figure 1: Chapter 4 Adjustment Procedure - Page 1

LC-32/40/46LE600E/RU/S

CHAPTER 6. MAJOR IC INFORMATIONS

[1] MAJOR IC INFORMATIONS

1. DESCRIPTION OF MAJOR ICs

Ref No.	Name	Part Code	Description
[MAIN UNIT]			
IC1301	VHAK4341ED-1Y	DAC	AK4341 is 24 bits DAC of 2Vrms output. A newly developed advanced multiple bit system is adopted in the Δ T modulator. In this model, this IC is used to use the audio signal from a digital tuner as an audio output signal of SCART1.
IC1302	VHMT6202N1-1Q	Audio multiplexer	The MediaTek MT6202 introduces the advantages of an input multiplexer, the headphone driver and the PGA outputs. The analog input pins can either independently support GPIO function or provide extra GPIO pins to use. The analog input pins can either independently support GPIO function or provide extra GPIO pins to use.
IC1303	VHS8064NM-1Y	Voltage detector with built-in delay circuit	This IC is a highly precision voltage detector (4.4V) with built-in delay circuit. In this model, it used as voltage detector of MUTE signal.
IC1104	VHPQ1LA506-1Y	ANALOG-REG	PQ1LA506 is series regulator with an on/off function and the over current protection function. In this model, it generate 5V.
IC501	VHC8R24C21F-1Y (RH-KXC206WJQZS)	1K EEPROM RH-KXC206WJZZS	This IC is a 1Kbit-2-wire (I2C bus type) serial EEPROM that can be programmed electrically. The EEPROM chip stores the ECD data of PC input. This data is controlled through I2C signals.
IC506	VHM32216P-1Y	RS232C-DRIVER	The MAX3221E is a single driver, single receiver RS-232 solution operating from a single Vcc supply. The RS-232 pins provide IEC G-1000-4-2 ESD Protection. The device meets the requirements of TIA/EIA-232-F and provides the electrical interface between an asynchronous communication controller and the serial-port connector. The charge pump and four small external capacitors allow operation from a single 3V to 5.5V supply.
IC1506	VHG891973-1Q	HDMI_Port_Processor	The Sil91673 HDMI port processor is the second generation of HDMI devices that support revision 1.3 of the HDMI specification. The main feature is as follows. 1) 4-input, 1-output HDMI port processor. 2) Integrated TMDs receiver and transmitter cores capable of receiving and transmitting at 2.25Gbps. 3) Supports video resolutions up to 1080p, 60Hz, 12bit or 720p/1080i, 120Hz, 12bit. 4) Receiver fully comply with CEA-605, HDCP 1.1 and HDMI 1.3 specifications.
IC3302	VHED6538G-1Y	USB high side SW	SD6538G is single channel high side powers switch with low ON resistance Nch power MOSFET. Rich safety functions such as over current detection, Thermal shutdown (TSD), under voltage lock out (UVLO) and soft start function which are required for the power supply part protection are integrated into 1chip.
IC3303	RH-KXC758WJQZQ	VCT & Main CPU	This IC is Video Processor & MAIN CPU. In this IC, the decode processing and the video signal processing are done. Moreover, OSD is generated here and added to a picture signal.
IC3304	VHS8062NM-1Y	Voltage detector with built-in delay circuit	This IC is a highly precision voltage detector (2.8V) with built-in delay circuit. In this model, it uses as RESET signal of IC3303.
IC3305	VHS8062DM-1Y	Voltage detector with built-in delay circuit	This IC is a highly precision voltage detector (2.0V) with built-in delay circuit. In this model, it used as a D-PWM signal generator.
IC3501/2	RH-KXC506WJQZQ	512Mb-DDR2-SDRAM	This IC is 512Mb DDR2 SDRAM. This IC operates as a memory of IC3303 (Video Processor). ***
IC8403	RH-KXC788WJN2Y	2Mb-Serial-FLASH	This IC is 2Mbit CMOS 3.3 Volt Flash Memory with 50-MHz SPI (Serial Peripheral Interface) Bus and Small Sector for Boot and Parameter Storage.
IC8401	RH-KXC721WJQZQ	512Mb-NAND-FLASH	This IC is 512Mb NAND flash memory. This IC stores the software data that processes the system of TV such as the graphic processing, the LCD controls, and backlights etc.
IC8455	VHBR34564F-1Y	I2C bus type-64K EEPROM	The BR24 564F is a 64Kbit-2-wire (I2C bus type) serial EEPROM that can be programmed electrically. This IC stores the menu data and the adjustment value data of adjustment process mode etc. The data is given out by commands from the main microprocessor.
IC4402	VHACZ1320C-1Y	SMART LOAD SW	The ACZ1320 is a P-channel high-side load switch with controlled slew rate. ACZ1320-04 have a slew rate of 1ms.

R - 1

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Figure 2: Chapter 6 Major IC Information - Page 1.

Sharp Electronics (UK) Limited

Reference – EEL998

Revision - 1

White – Carry out as required

Yellow – Carry out as required and whenever the unit comes in for service

Red – Carry out on all units

LC-3240/46LE600E/RU/IS

NO.	PARTS CODE	PRICE RANK	NEW MARK	MAN O/F/REP	DESCRIPTION
[3] DUNTKF111PM11 (MAIN Unit)					
P84406	RRLN-A192WZZY	AA		J	Ferrite Core
P88601	Not Available	-		-	Ferrite Core *PWB replacement item
P88610	RRLN-C207TAZZY	AB		J	Ferrite Core
P88611	RRLN-C207TAZZY	AB		J	Ferrite Core
P88614	Not Available	-		-	Ferrite Core *PWB replacement item
P88615	RRLN-C207TAZZY	AB		J	Ferrite Core
P88616	RRLN-C207TAZZY	AB		J	Ferrite Core
P88617	RRLN-C207TAZZY	AB		J	Ferrite Core
P88618	RRLN-C207TAZZY	AB		J	Ferrite Core
RL501	RF1LN0003TAZZY	AD		J	Coil
RL502	RF1LN0003TAZZY	AD		J	Filter
RL503	RF1LN0003TAZZY	AD		J	Filter
RL504	RF1LN0003TAZZY	AC		J	Filter
RL507	RF1LN0003TAZZY	AC		J	Filter
RL508	RF1LN0003TAZZY	AC		J	Filter
RL509	RF1LN0003TAZZY	AC		J	Coil
RL510	RF1LN0003TAZZY	AC		J	Filter
RL511	RF1LN0003TAZZY	AC		J	Coil
RL512	RF1LN0003TAZZY	AC		J	Filter
RL513	RF1LN0003TAZZY	AC		J	Filter
RL514	RF1LN0003TAZZY	AD		J	Filter
RL515	RF1LN0003TAZZY	AD		J	Filter
RL516	RF1LN0003TAZZY	AD		J	Coil
RL517	RF1LN0003TAZZY	AC		J	Filter
RL301	RF1LNA110WZZY	AC		J	Filter
RL302	RF1LNA110WZZY	AC		J	Filter
RL303	RF1LNA110WZZY	AC		J	Filter
RL304	RF1LNA110WZZY	AC		J	Filter
RL305	RF1LNA110WZZY	AC		J	Filter
RL306	RF1LNA110WZZY	AC		J	Filter
IC501	RH-IXC205WJZZS	...		J	I
IC502	RH-IXC205WJZZS	...		J	I
IC503	VR1TSET08U1EY	AC		J	I C T08T08U1EY
IC504	VH1MM150XN-1Y	AD		J	I C M150XNRE
IC506	VH1MS221E1D-1Y	AK		J	I C M221E1DRE
IC507	VH1MM1507XN-1Y	AD		J	I C M1507XNRE
IC508	VH1MM17582U-1Y	AD		J	I C M17582URE
IC1104	VH1PQ1L45G5-1Y	AC		J	I C PQL45G5MSPQ
IC1301	VH1KX4301E1D-1Y	AT		P	I C AK431E1D
IC1302	VH1MTS292N--1Q	AK		P	I C MTS292N
IC1303	VH1SAP95ANM-1Y	AC		J	I C S80445C95C-0M720
IC1306	VH1S1191B73-1Q	AN		P	I C S01B7ACN1
IC2602	VH1HC2088DP-1Y	AD		J	I C 74HC2088DP 125
IC2701	VH1YDA1485Z-1Y	AL		J	I C YDA1485Z
IC2302	VH1R06385Z-1Y	AD		J	I C R06385Z-TR
IC3303	RH-13C250WJQ20	BE		P	I C MTS250WJQ20
IC3304	Not Available	-		-	I C *PWB replacement item
IC3305	Not Available	-		-	I C *PWB replacement item
IC3501	RH-13C250WJQ20	AV		J	I C KAT1118CG-HCF7
IC3503	RH-13C250WJQ20	AV		J	I C KAT1118CG-HCF7
IC4401	VH1MTS295AL-1Q	AM		P	I C MTS295AL
IC4402	VH1A021320C-1Y	AE		J	I C S021320C134
IC5401	RH-13C250WJQ20	AR		J	I C H21U30R1216-TP08
IC5403	Not Available	-		-	I C *PWB replacement item
IC5455	Not Available	-		-	I C *PWB replacement item
IC5601	VH1HC2088DP-1Y	AD		J	I C 74HC2088DP 125
IC5603	VH1MM141YN-1Y	AC		J	I C M141YNRE
IC5604	Not Available	-		-	I C *PWB replacement item
IC5605	VH1LV5523M--1Y	AE		J	I C LV5523M-TE-L-E
IC5606	VH1LV5523M--1Y	AE		J	I C LV5523M-TE-L-E
IC5608	VH1LV5523M--1Y	AE		J	I C LV5523M-TE-L-E
IC5610	VH1PQ1L45G5-1Y	AD		J	I C PQL45G5MSPQ
IC5611	VH1TCR55B25-1Y	AD		J	I C TCR55B25-TEMLP1
IC5612	VH1TCR55B25-1Y	AC		J	I C TCR55B25-TEMLP1
IC5613	VH1HC2088DP-1Y	AD		J	I C 74HC2088DP 125
IC5614	Not Available	-		-	I C *PWB replacement item
3501	DJAK10008GZZZ	AD		J	Jack
3502	DJAK1A061WZZZ	AE		J	Jack
3503	DJAK5A111WZZZ	AG		J	Jack
3504	DJAK10008GZZZ	AD		J	Jack
3505	DJAK5A029WZZZ	AG		J	Jack
3506	DJAK1A061WZZZ	AE		J	Jack
3301	DSOCZA123WQK	AD		J	Socket
L501	VPCNN120J180W	AD		J	Peaking Coil 15uH
L502	VPCNN120J180W	AB		J	Peaking Coil 15uH
L503	VPCNN2R2J817W	AD		J	Peaking Coil 2.2uH
L504	VPCNN2R2J817W	AB		J	Peaking Coil 2.2uH
L1102	VPSRN2R2J844W	AD		J	Peaking Coil 2.2uH
L1103	VPSRN100J180W	AB		J	Peaking Coil 15uH
L1104	VPSRN2R2J844W	AD		J	Peaking Coil 2.2uH
L1301	VPSRN2R2J844W	AB		J	Peaking Coil 2.2uH
L1302	VPSRN2R2J844W	AD		J	Peaking Coil 2.2uH
L3613	BC1LFA110WZZY	AE		J	Coil
L3614	BC1LFA110WZZY	AE		J	Coil
L3615	BC1LFA110WZZY	AE		J	Coil
L3616	BC1LFA110WZZY	AE		J	Coil

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Figure 3: Parts List - Page 8.

Sharp Electronics (UK) Limited

Reference – EEL998

Revision - 1

White – Carry out as required

Yellow – Carry out as required and whenever the unit comes in for service

Red – Carry out on all units

MODELS LC32LE600E LC40LE600E LC46LE600E LC52LE600E

REASON Changes in LCD panel assembly and Main PWB during production.

ACTION When servicing please check the rear rating plate to ensure the correct circuit and parts list is being used as there are currently 3 versions including A and B variants.



Figure 1: Original Version Model Number only. Figure 2: Indication of “A” Version chassis.