

Service Manual

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ORDER NO. KMS0401890C1

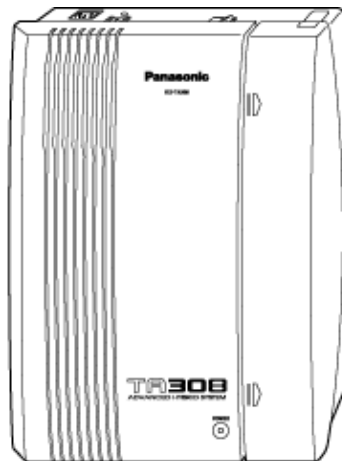
F19

Service Manual

Advanced Hybrid System

1 KX-TA308

(for U.S.A.)



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WARNING

This service information is designed for experienced repair technicians only and is not designed for non-technical individuals. It does not contain warnings or cautions to advise non-technical individuals of potential dangers in the use of the product. Products powered by electricity should be serviced or repaired only by experienced professional technicians. Improper use or repair of the product or products dealt with in this service information by anyone else could result in injury or death.

When you note the serial number, write down all of the 11 digits. The serial number may be used to identify the product.

Panasonic

IMPORTANT INFORMATION ABOUT LEAD FREE, (PbF), SOLDERING

If lead free solder was used in the manufacture of this product the printed circuit boards will be marked PbF.

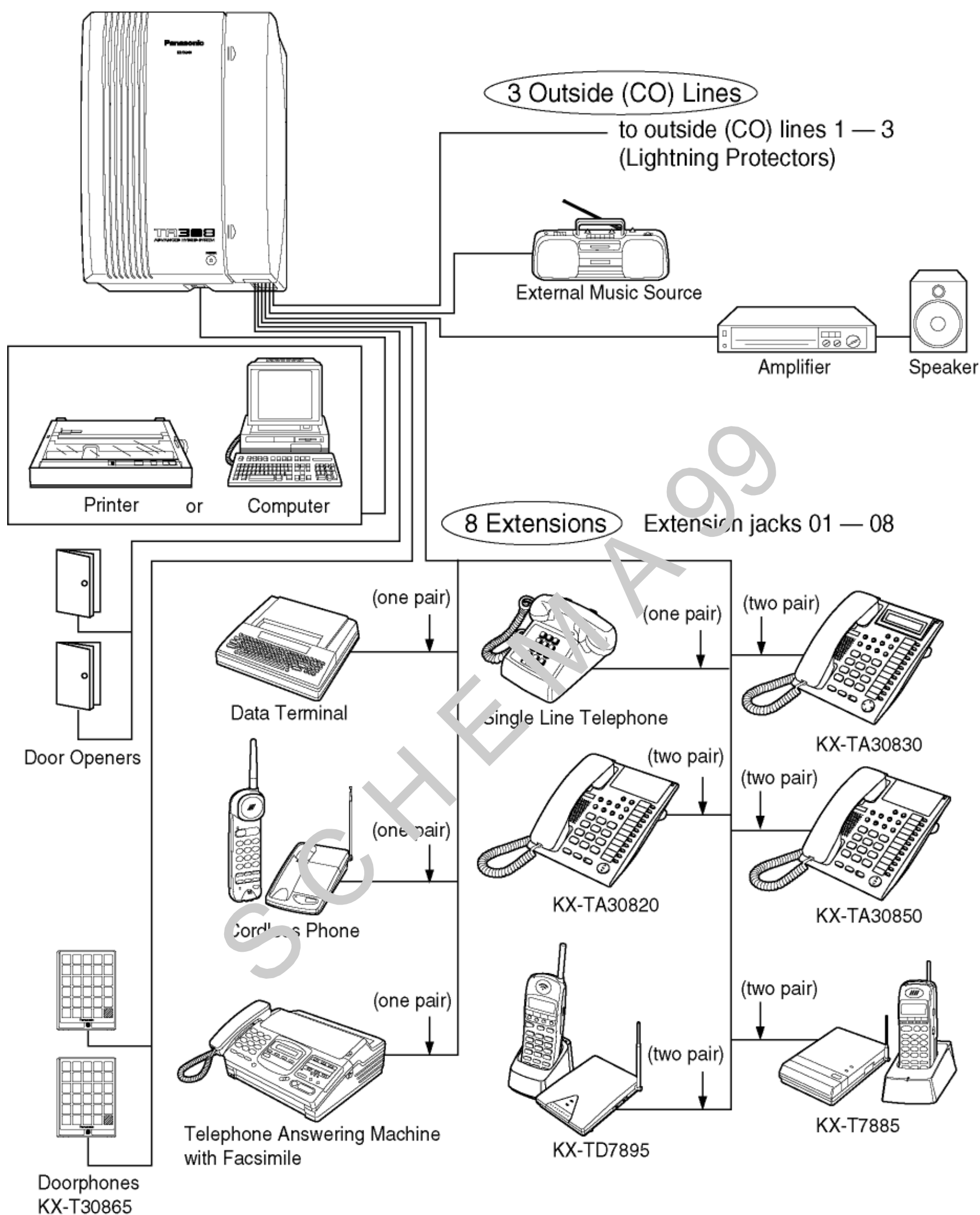
Standard leaded, (Pb), solder can be used as usual on boards without the PbF mark.

When this mark does appear please read and follow the special instructions described in this manual on the use of PbF and how it might be permissible to use Pb solder during service and repair work.

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7 SYSTEM CONNECTION DIAGRAM

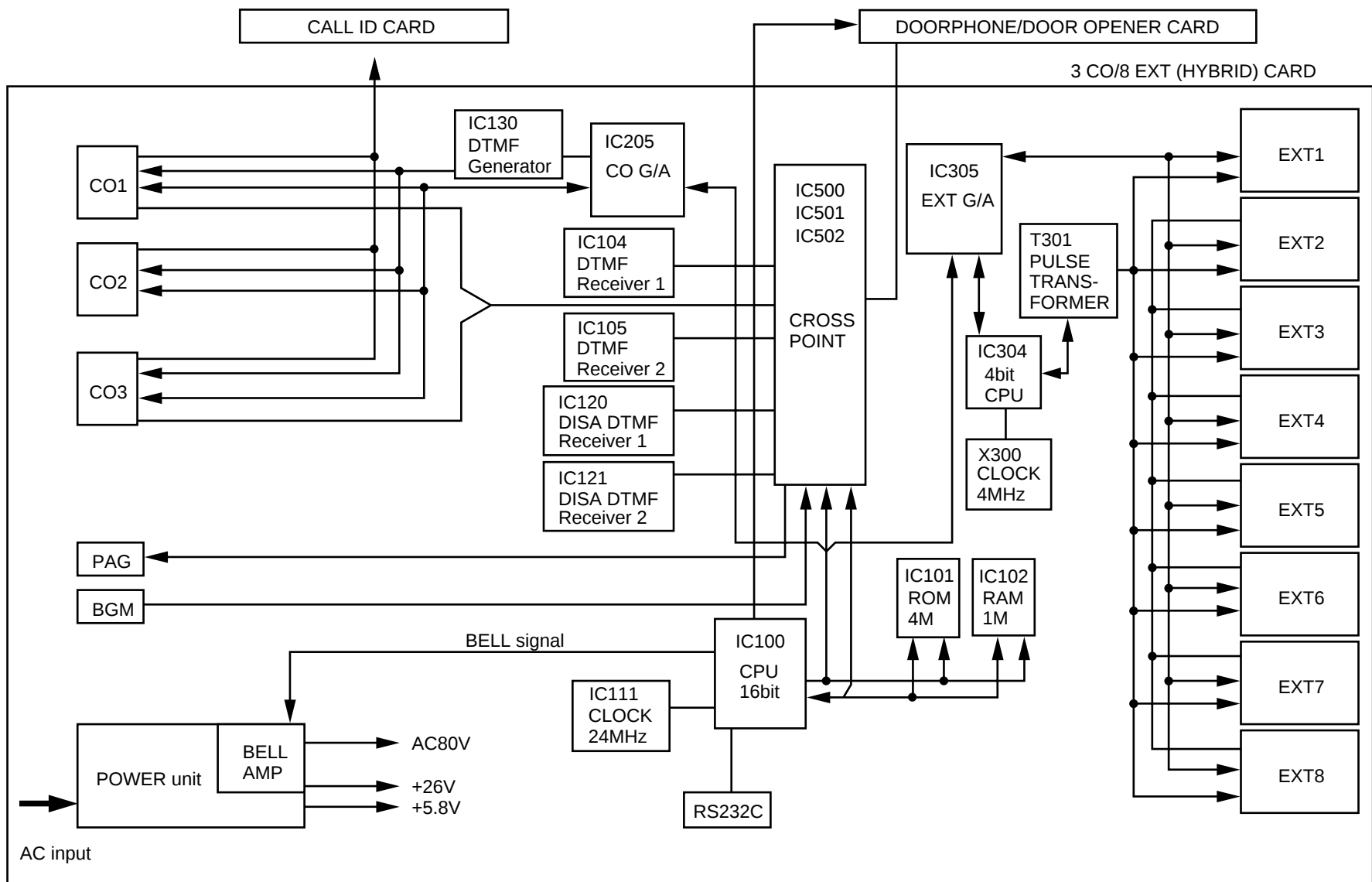
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Note:

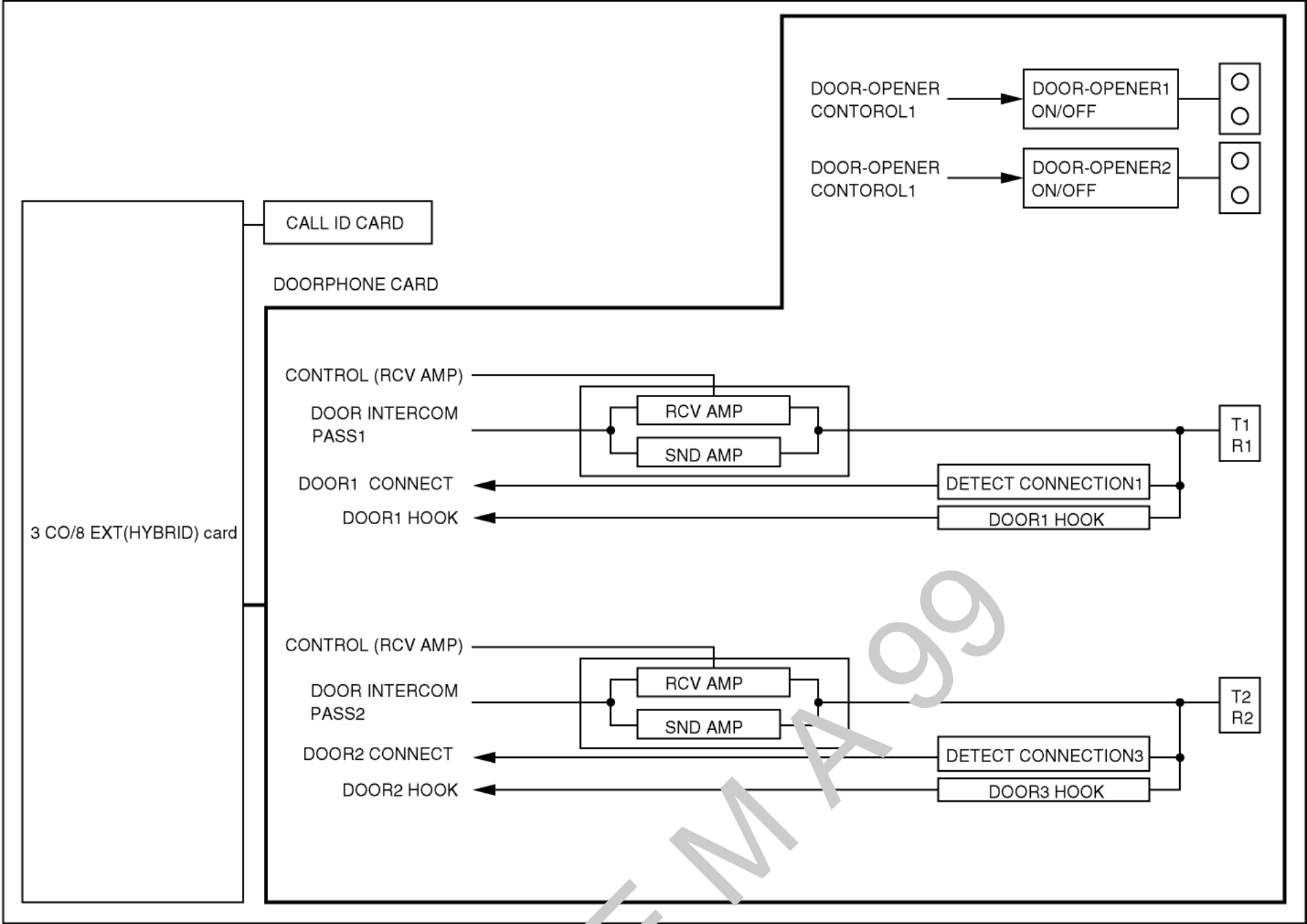
- It is recommended that the extension of jack 01 is a display proprietary telephone.
- Parallel connection telephones is possible. Refer to Installation Manual.

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9.2 DOORPHONE/DOOR OPENER CARD

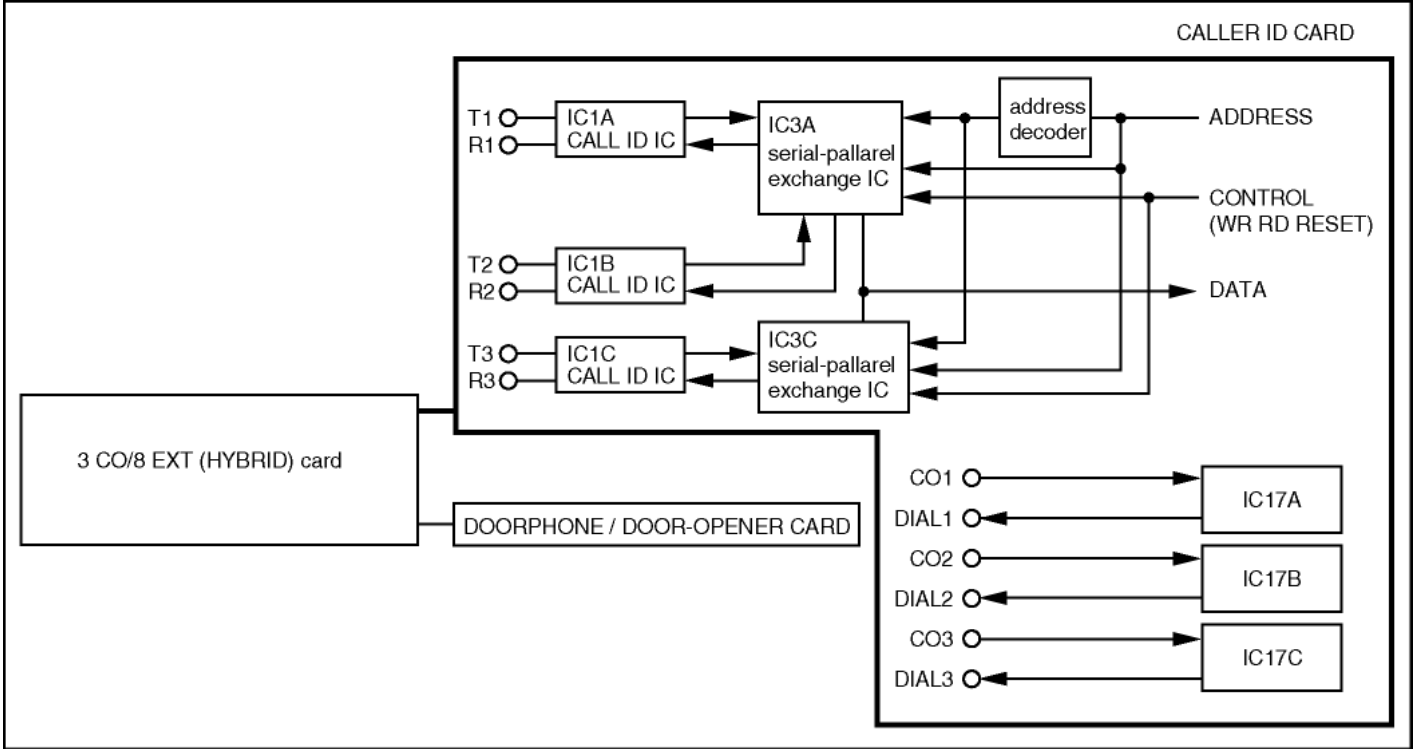
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9.3 CALLER ID/VMM CARD

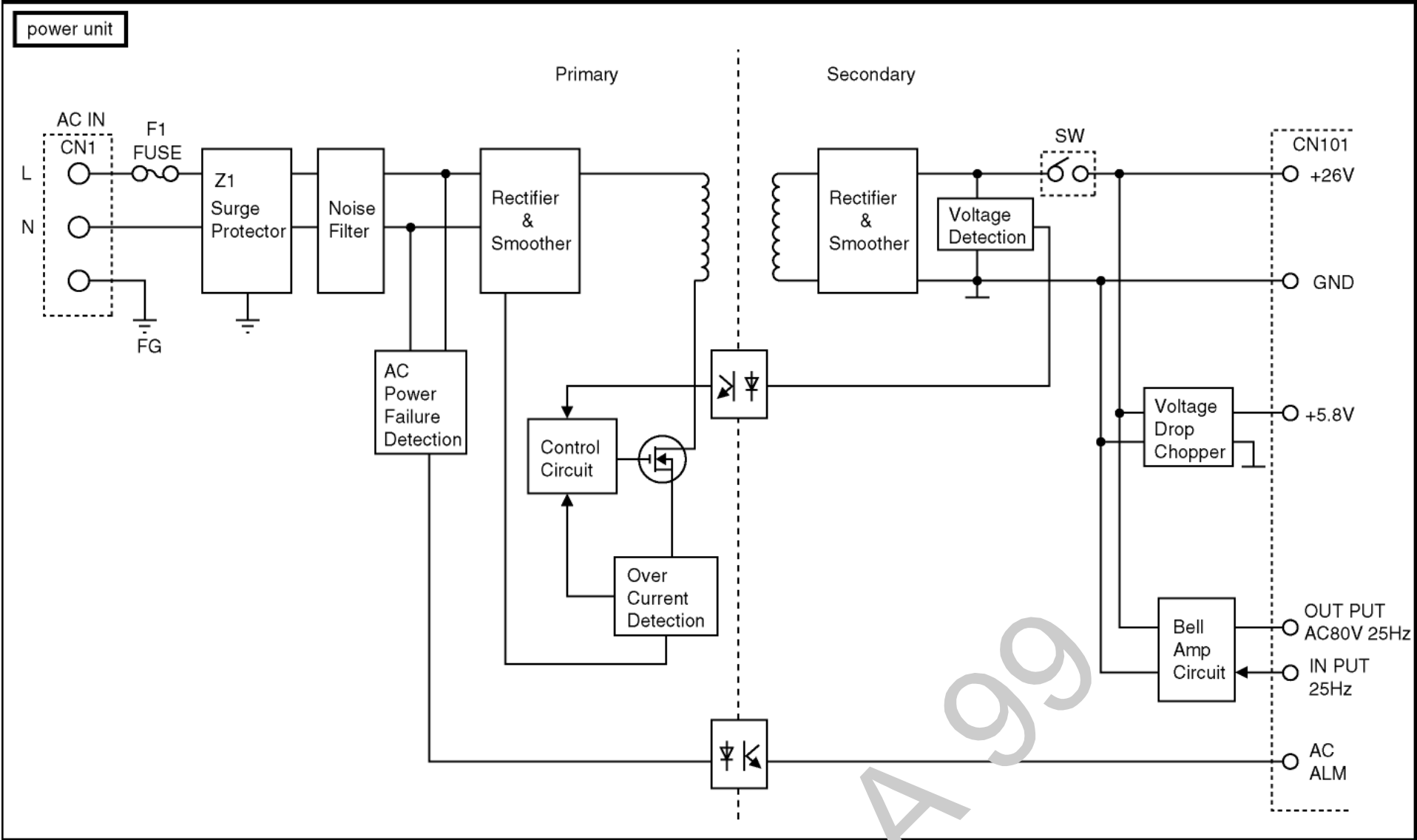
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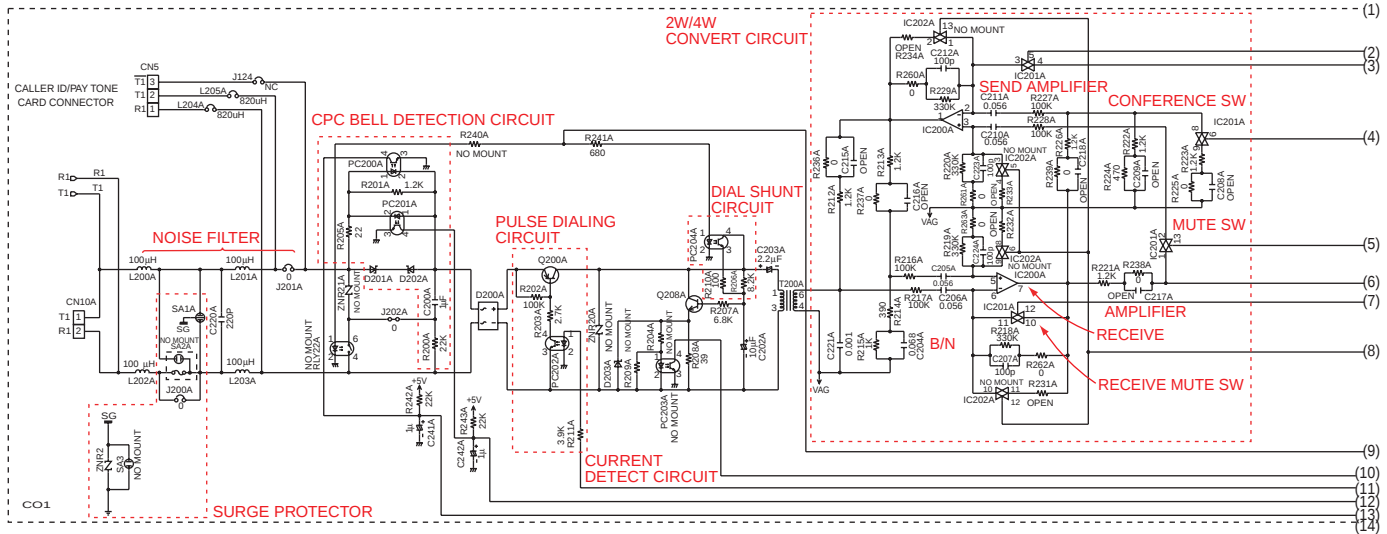
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9.4 POWER UNIT

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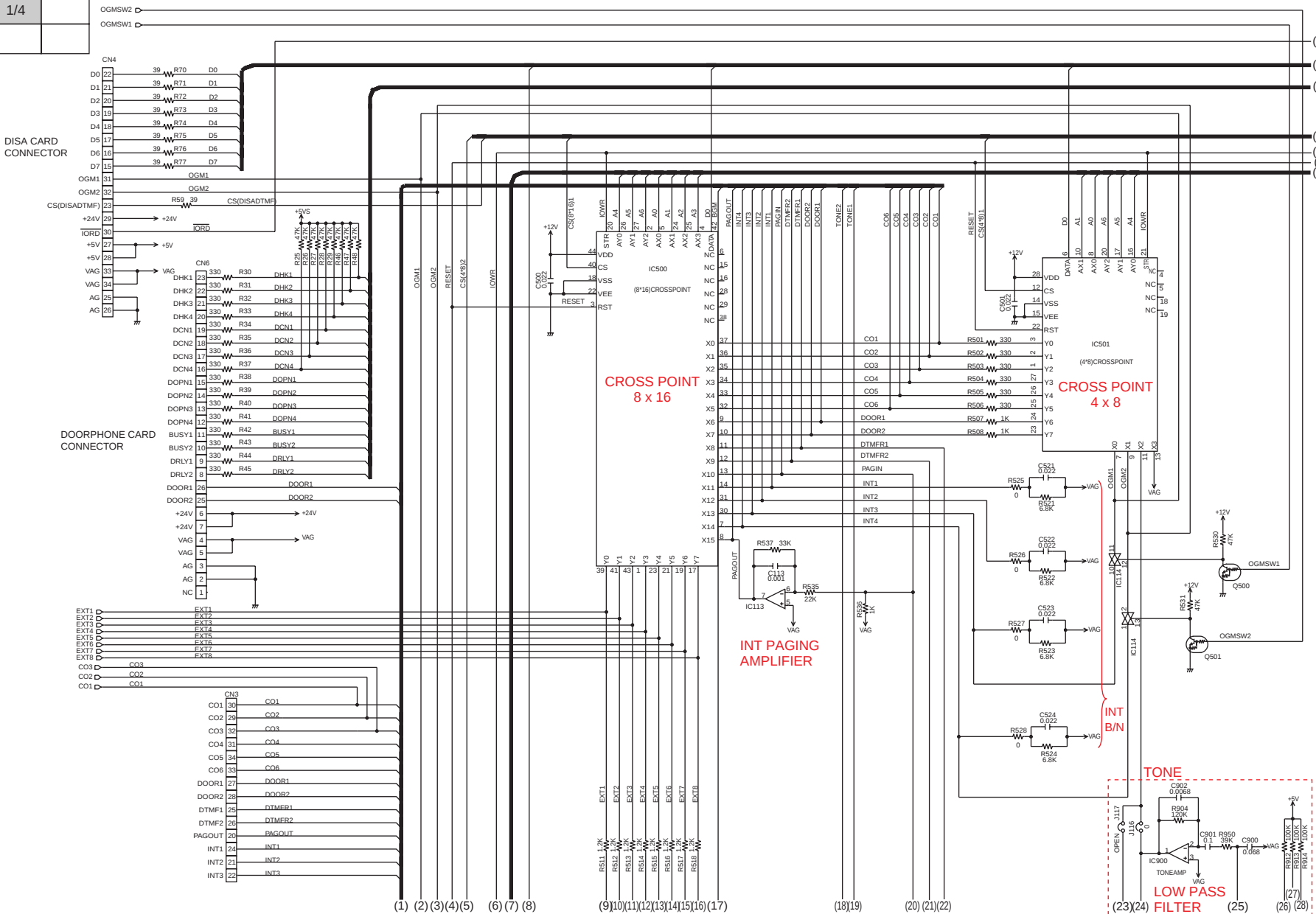
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DISA CARD CONNECTOR

DOORPHONE CARD CONNECTOR

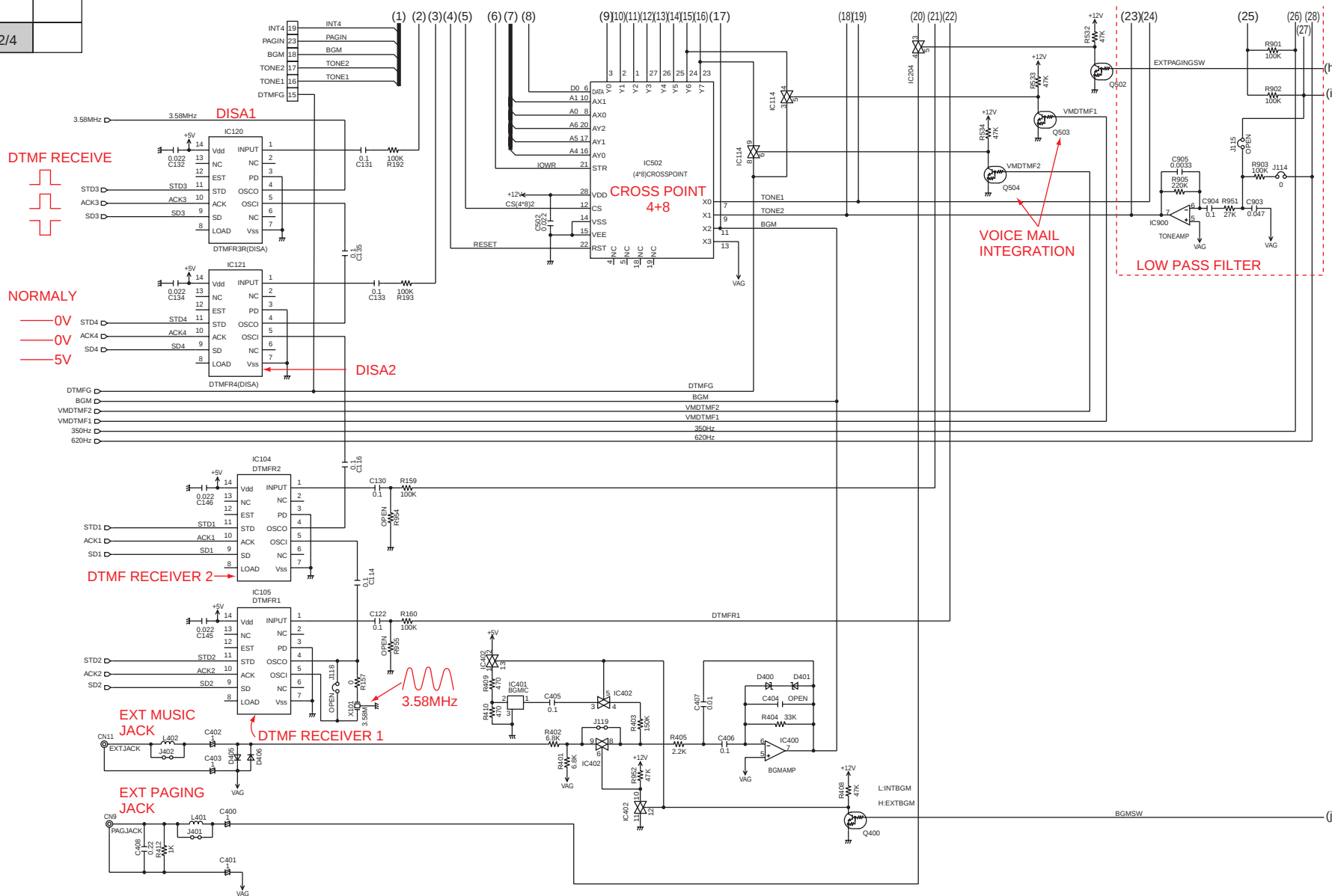


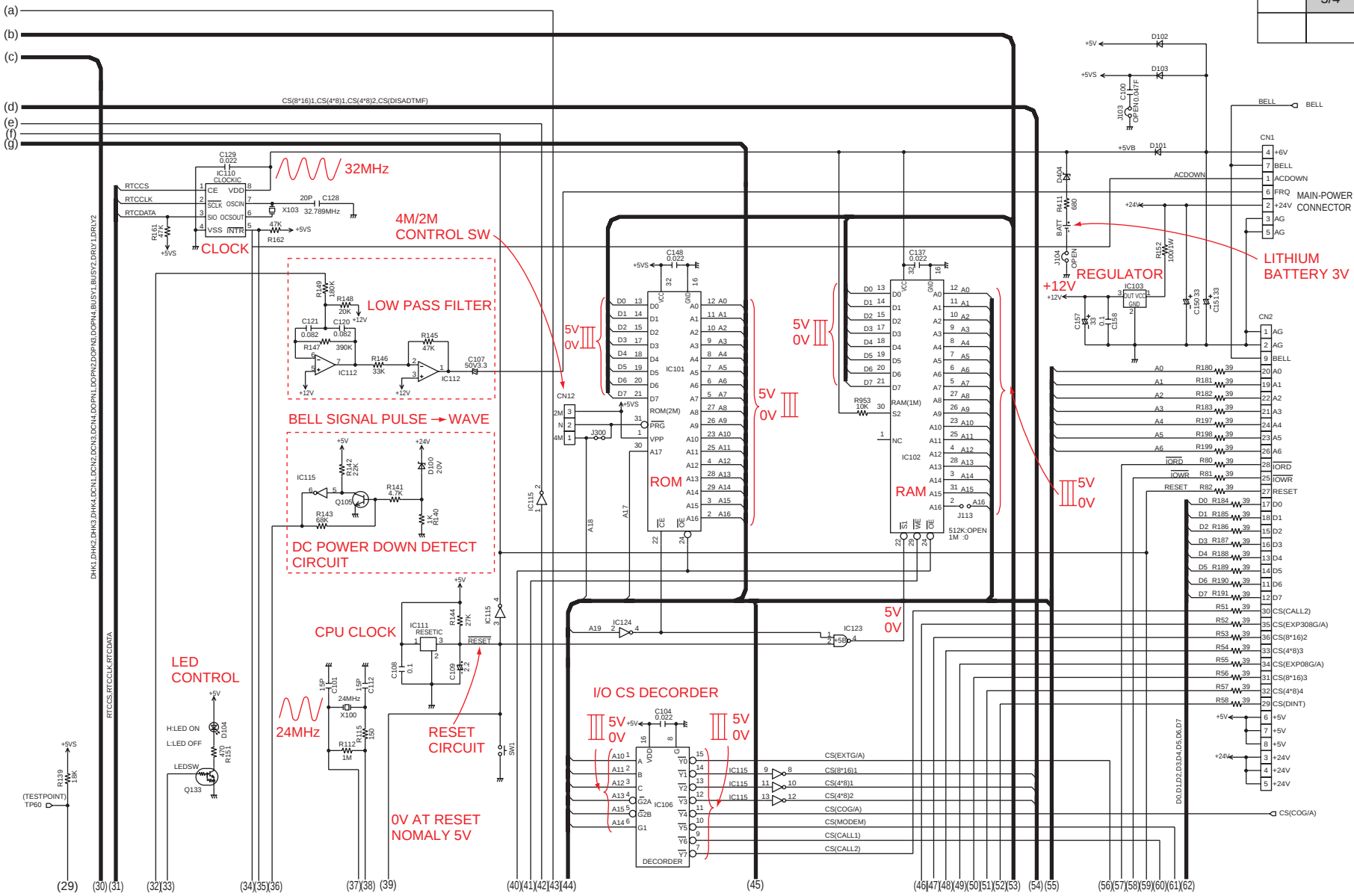
DTMF RECEIVE



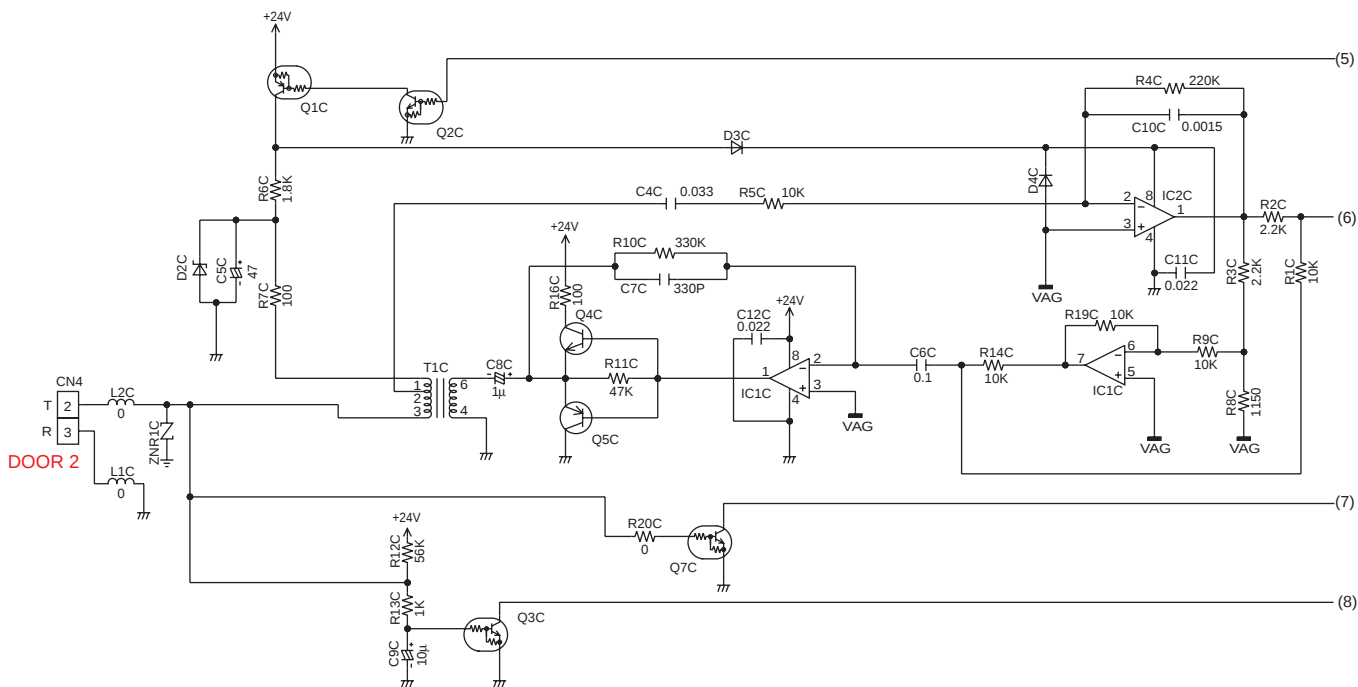
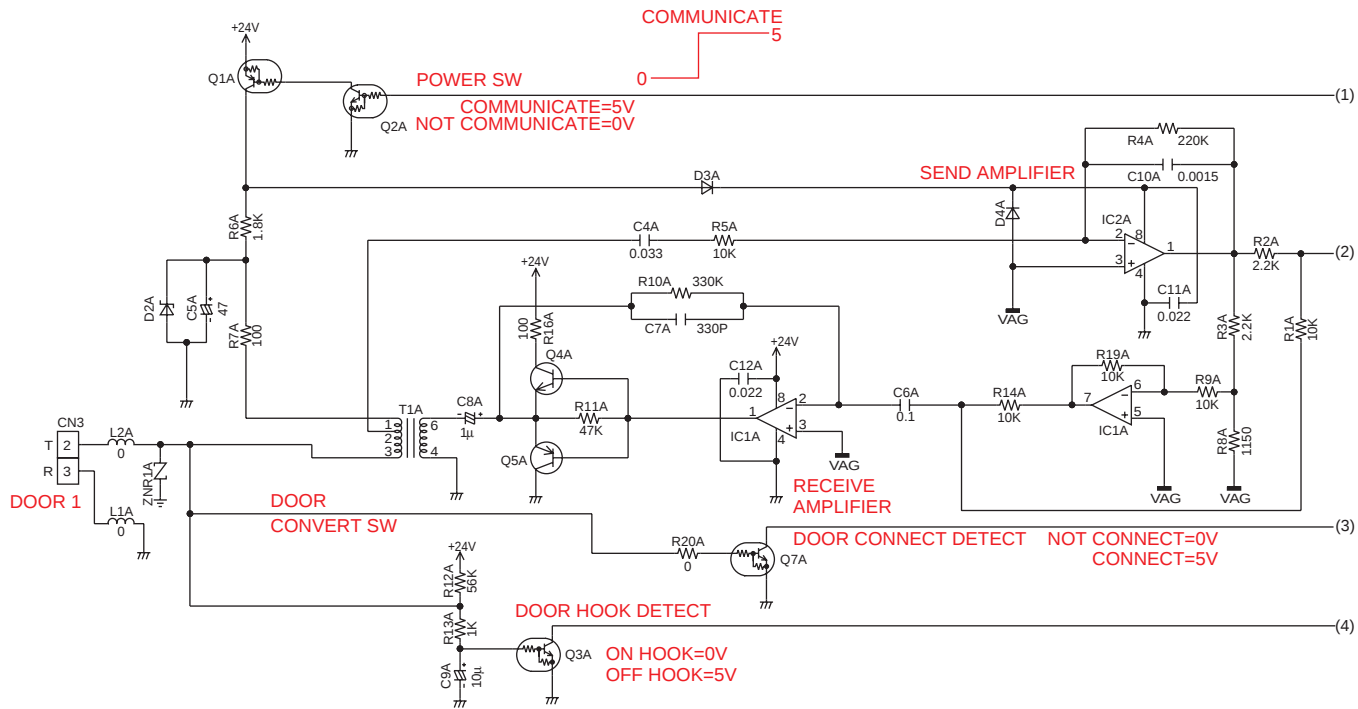
NORMALLY

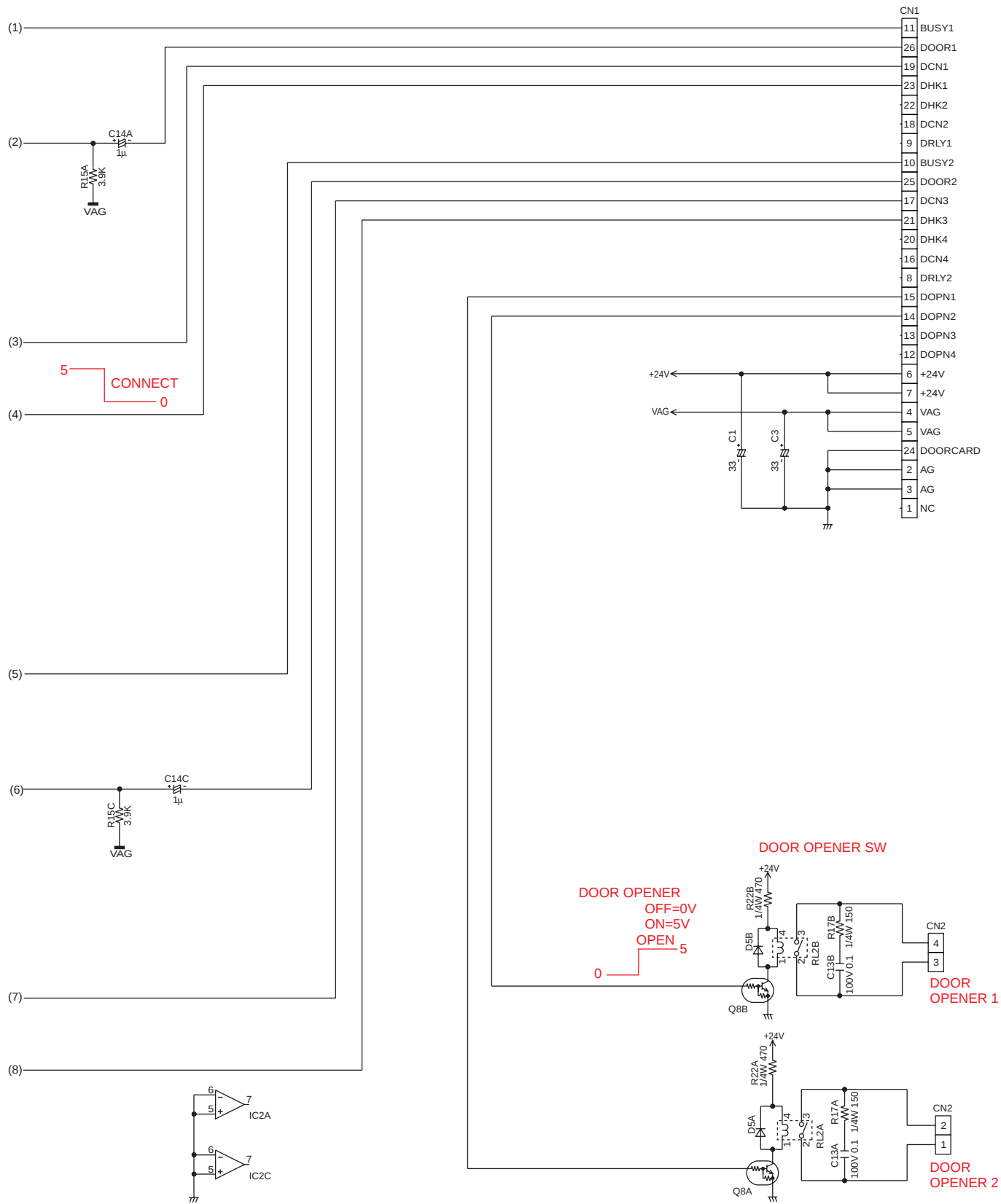
— 0V
— 0V
— 5V



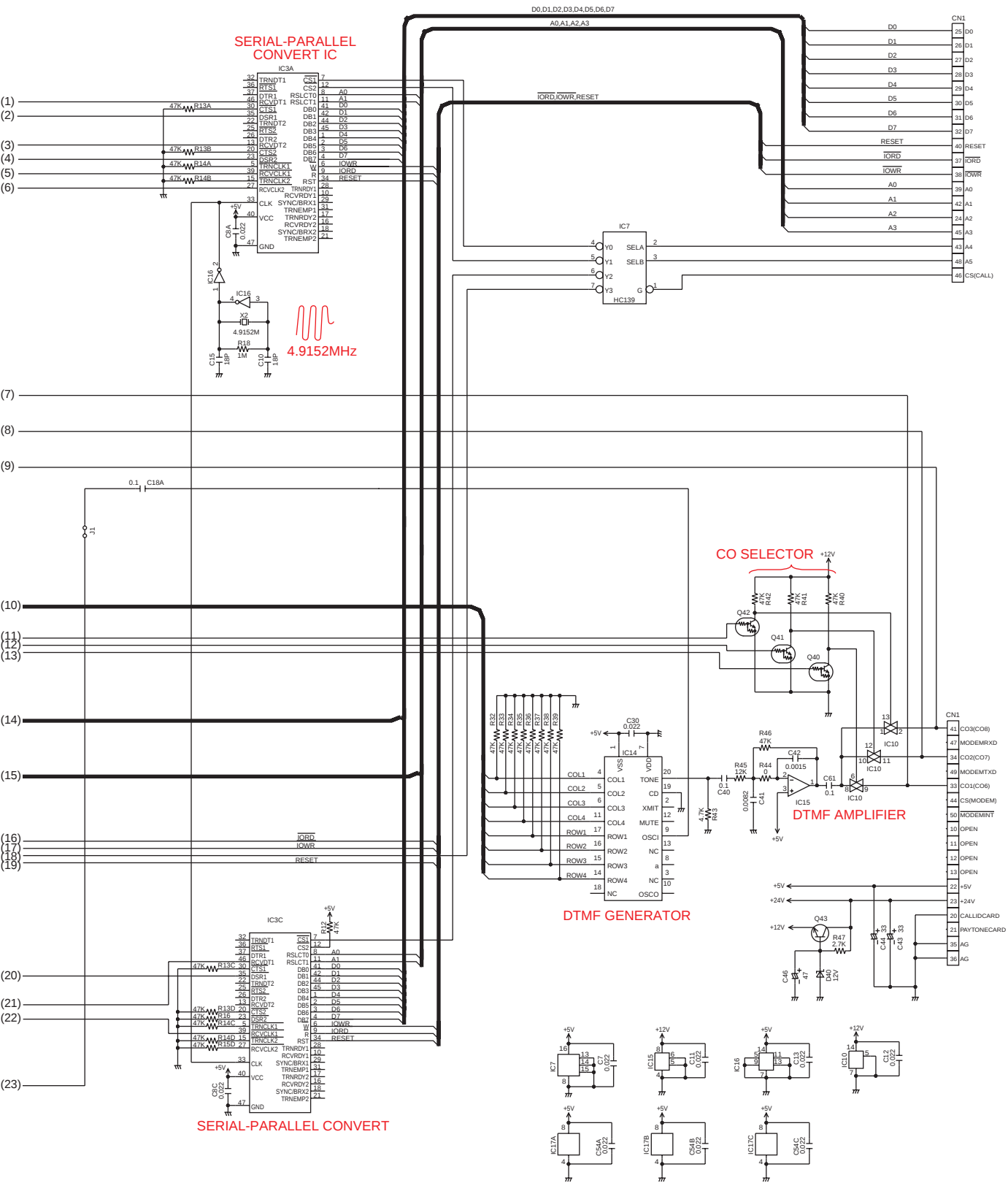


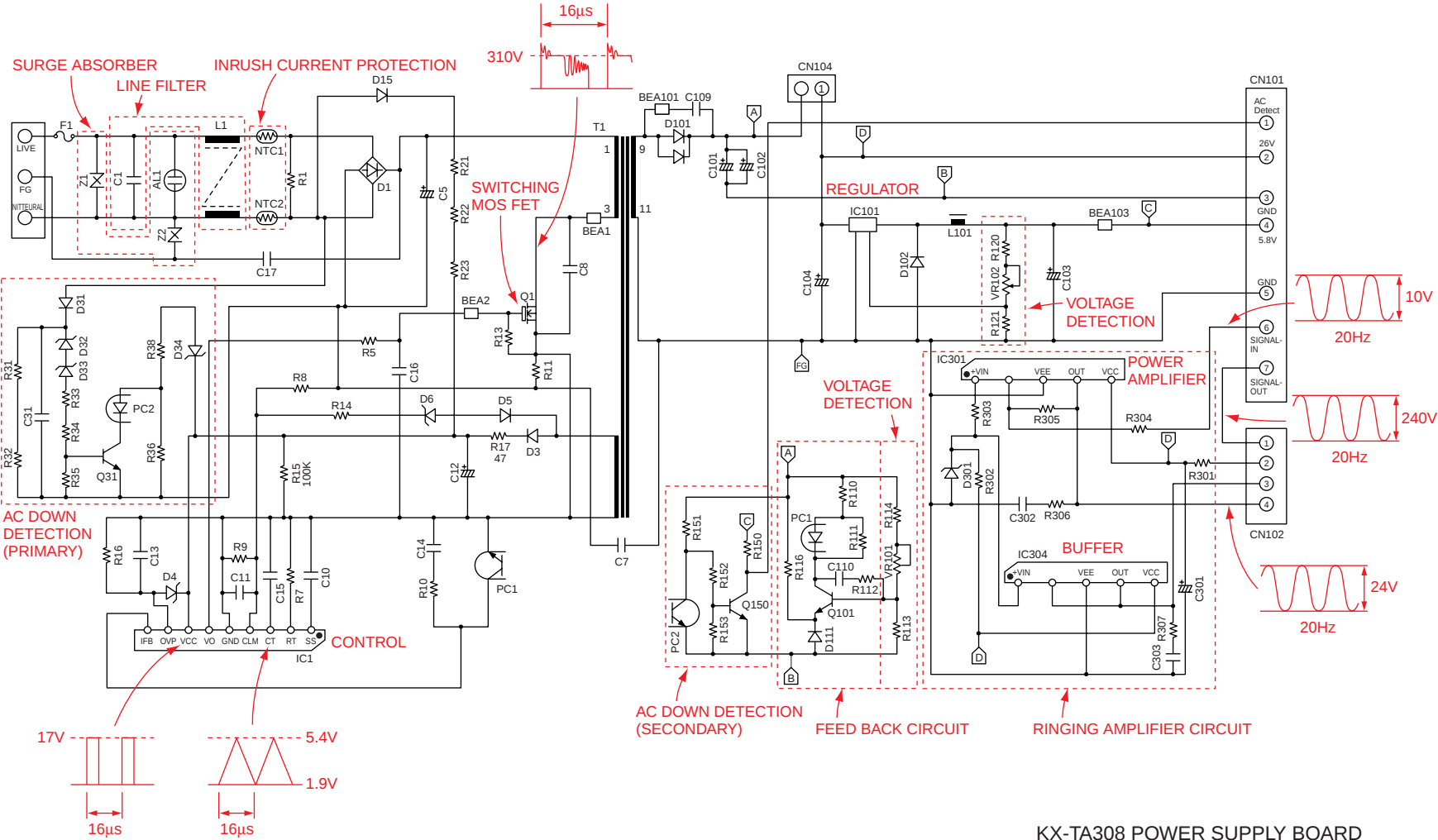








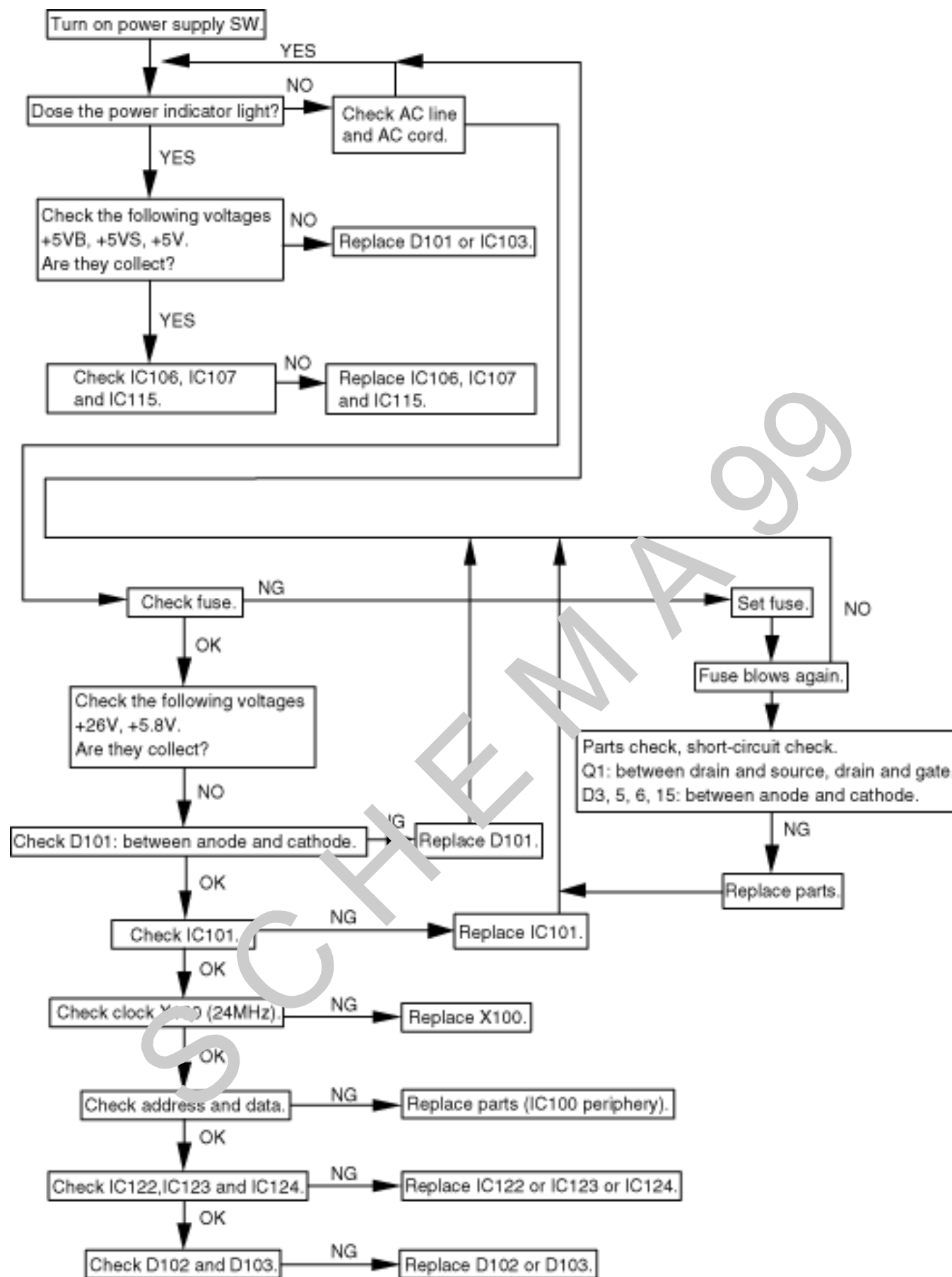




KX-TA308 POWER SUPPLY BOARD

14.1 NO OPERATION (CHECK POWER SUPPLY BOARD, MAIN BOARD)

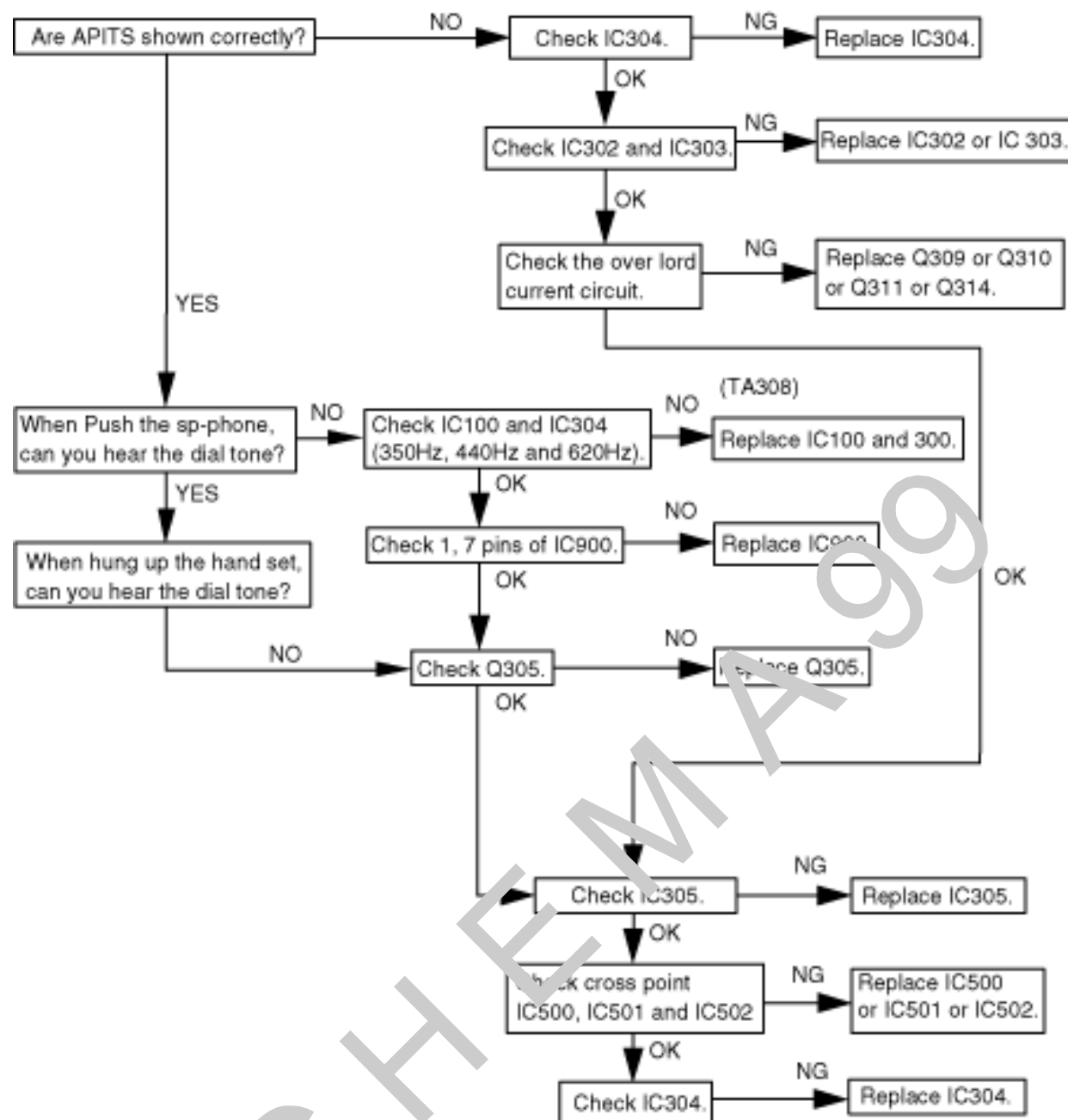
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14.2 NO DIAL TONE (CHECK MAIN BOARD)

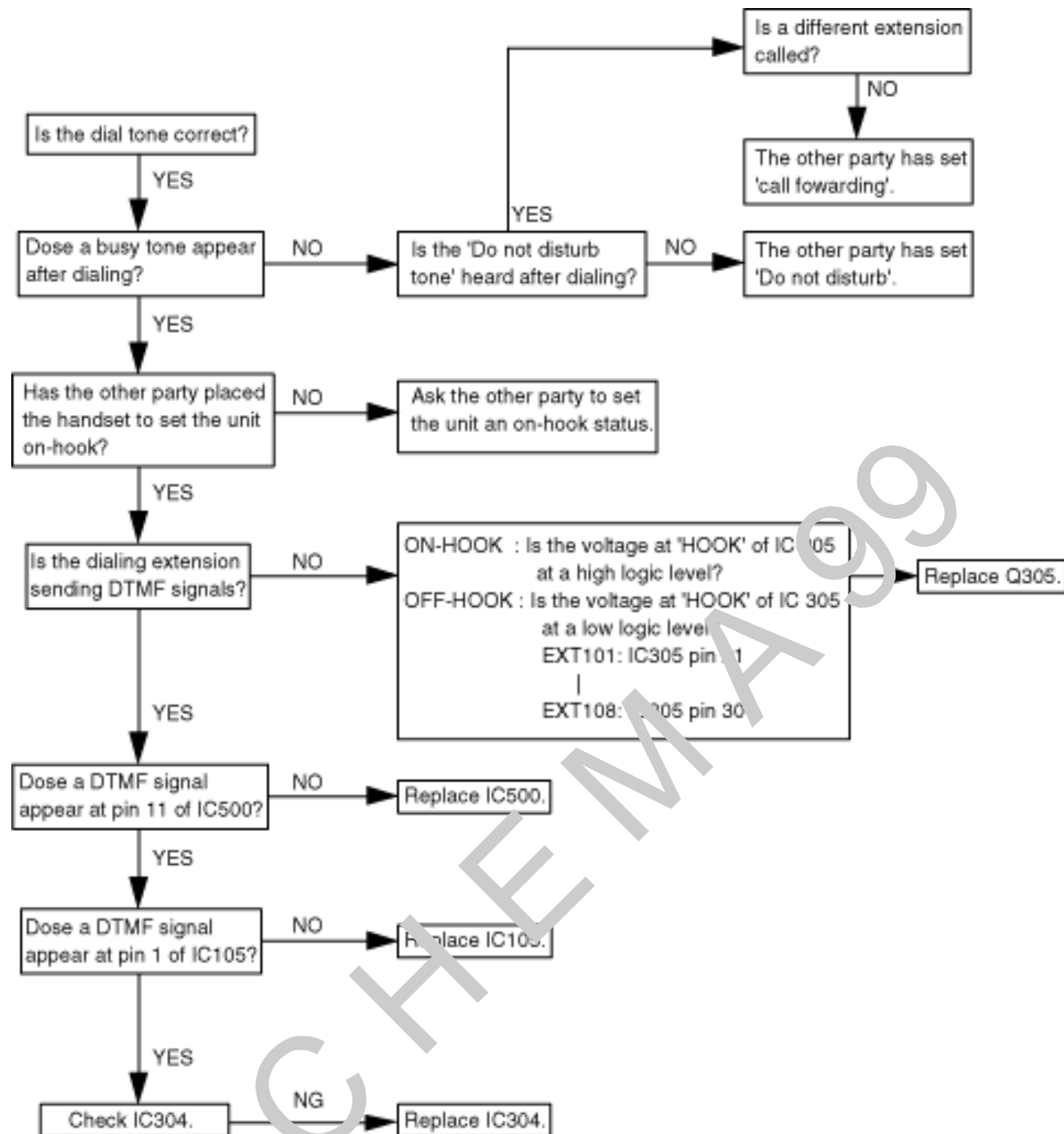
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14.3 CAN NOT DIAL (CHECK MAIN BOARD)

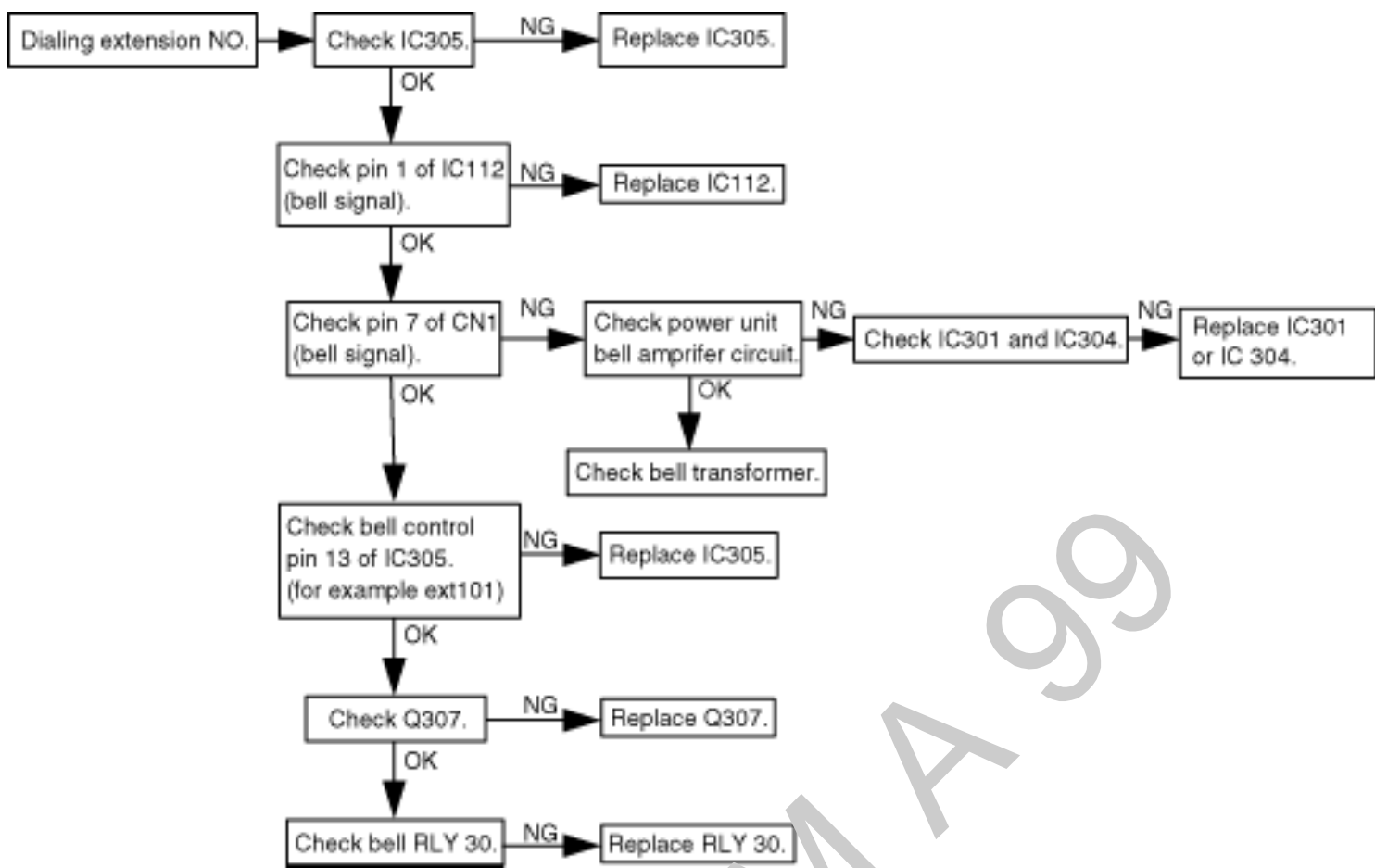
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14.4 CAN NOT CALL EXTENSION (CHECK MAIN BOARD)

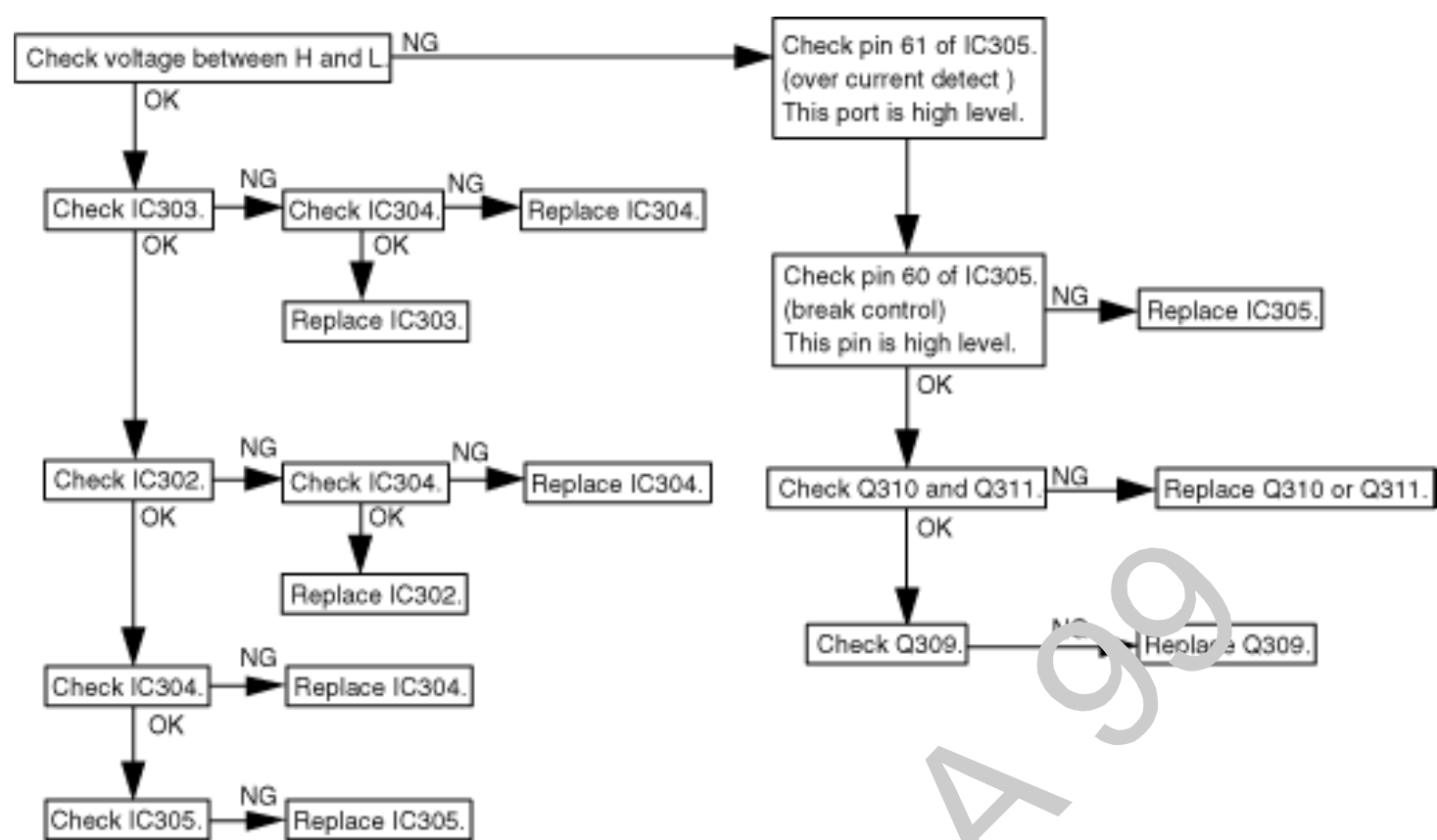
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14.5 CAN NOT USE PROPRIETARY TELEPHONE (CHECK MAIN BOARD)

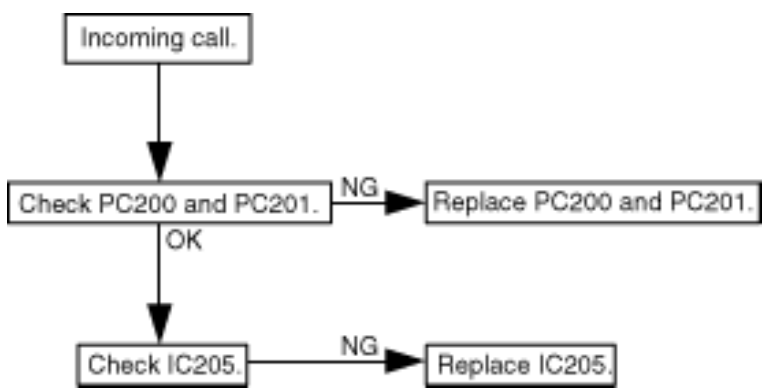
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14.6 CAN NOT RECEIVE INCOMING CALL (CHECK MAIN BOARD)

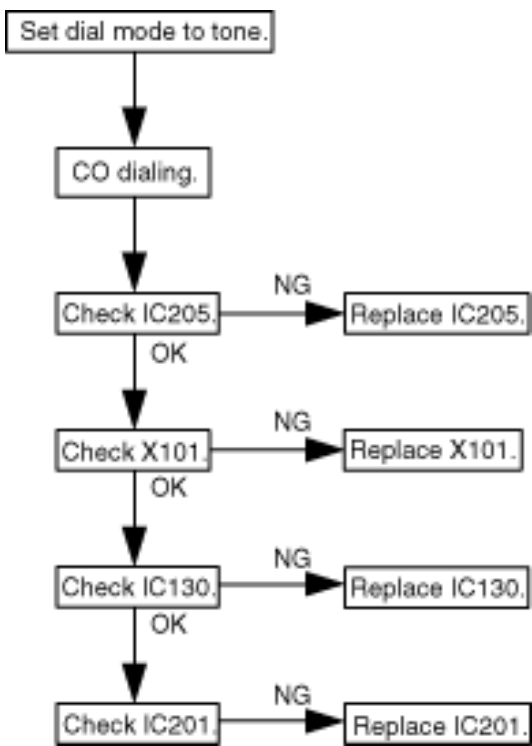
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14.7 CAN NOT SEND DTMF DIALING (CHECK MAIN BOARD)

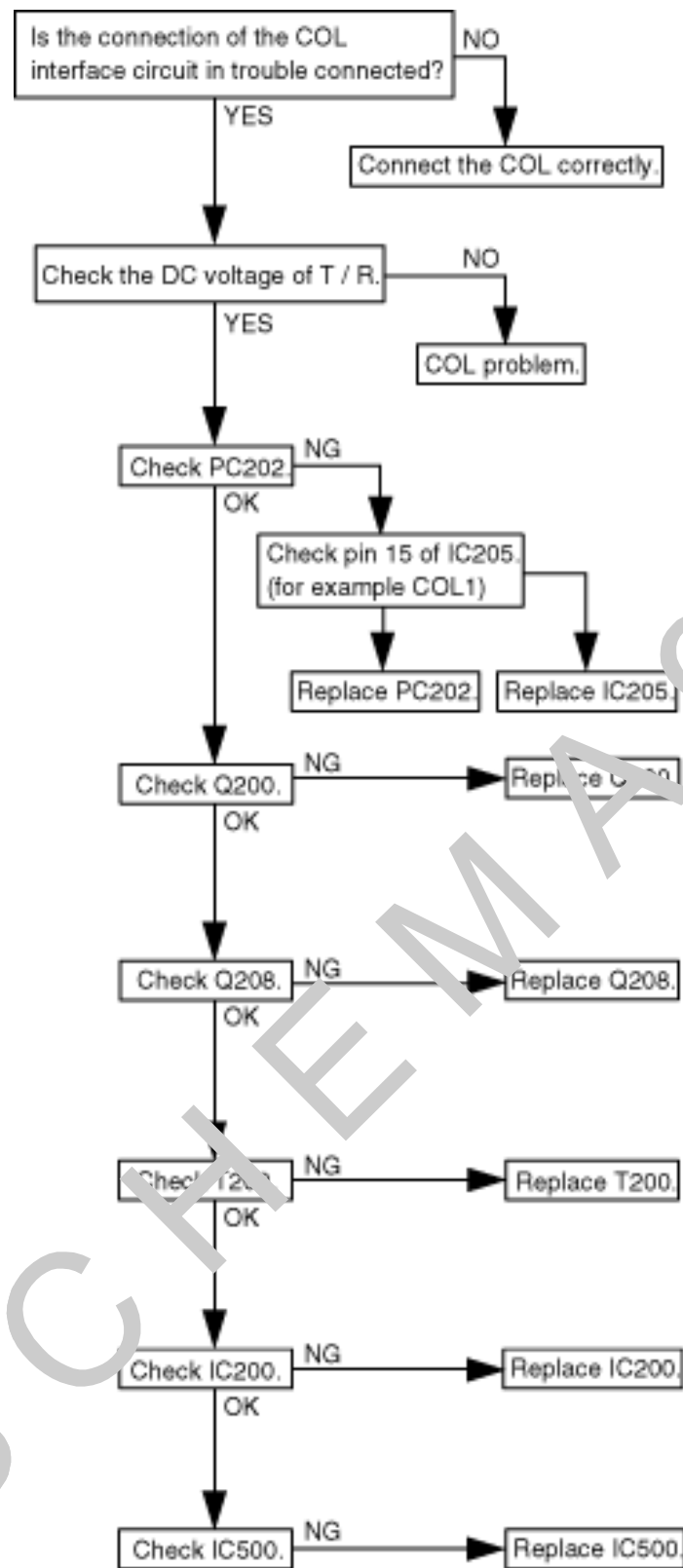
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14.8 CAN NOT RECEIVE COL DIAL TONE (CHECK MAIN BOARD)

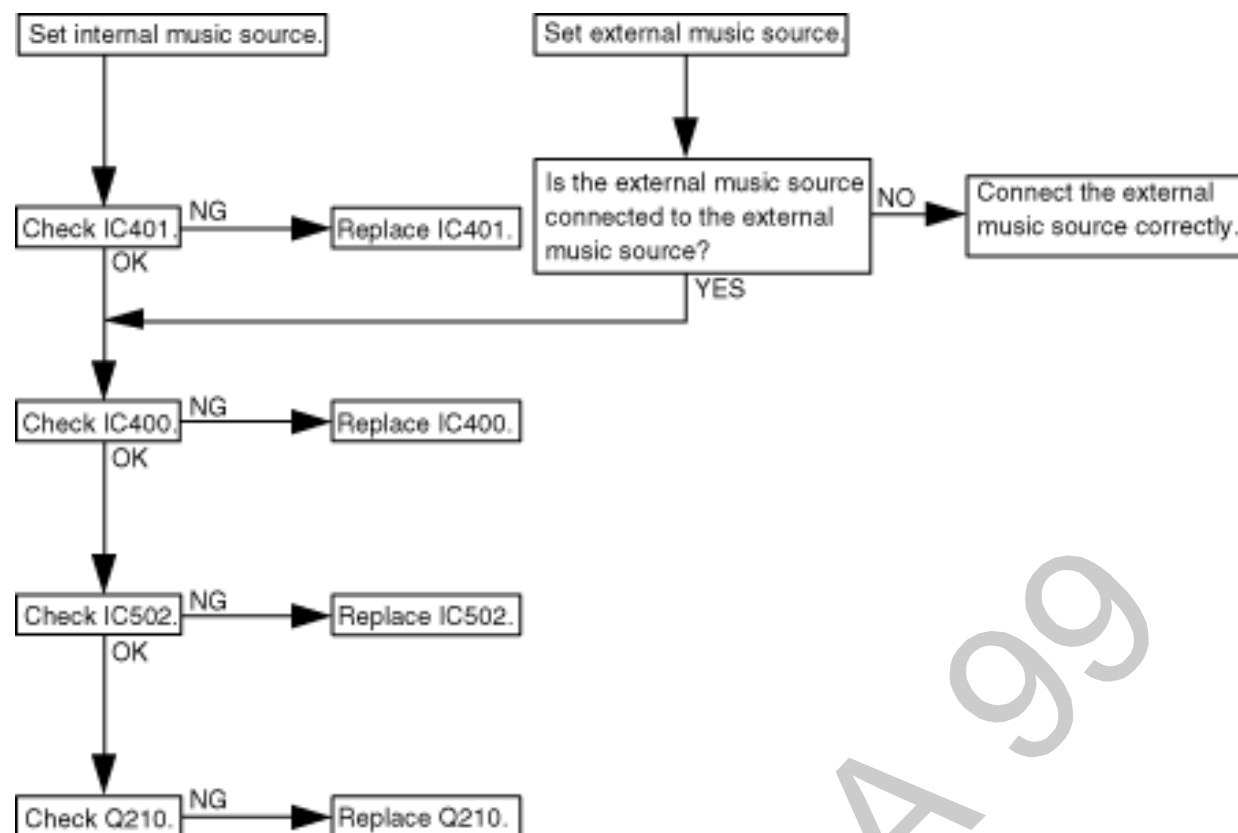
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14.9 CAN NOT SEND A HOLD ON MUSIC (CHECK MAIN BOARD)

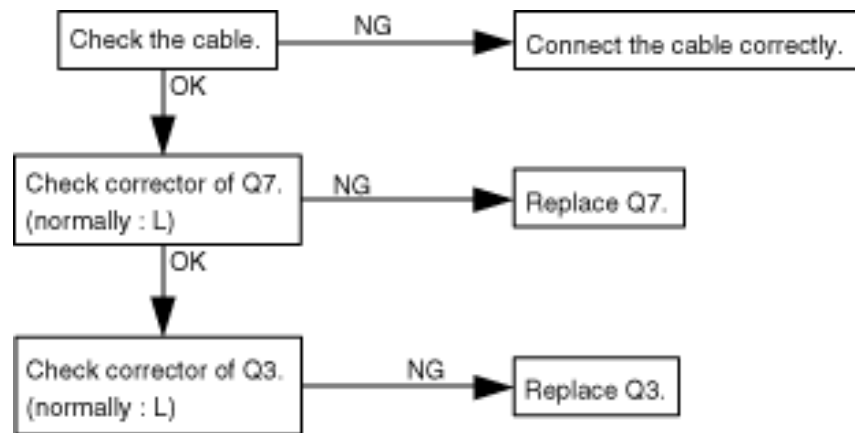
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15.1 CAN NOT CALL FROM DOORPHONE

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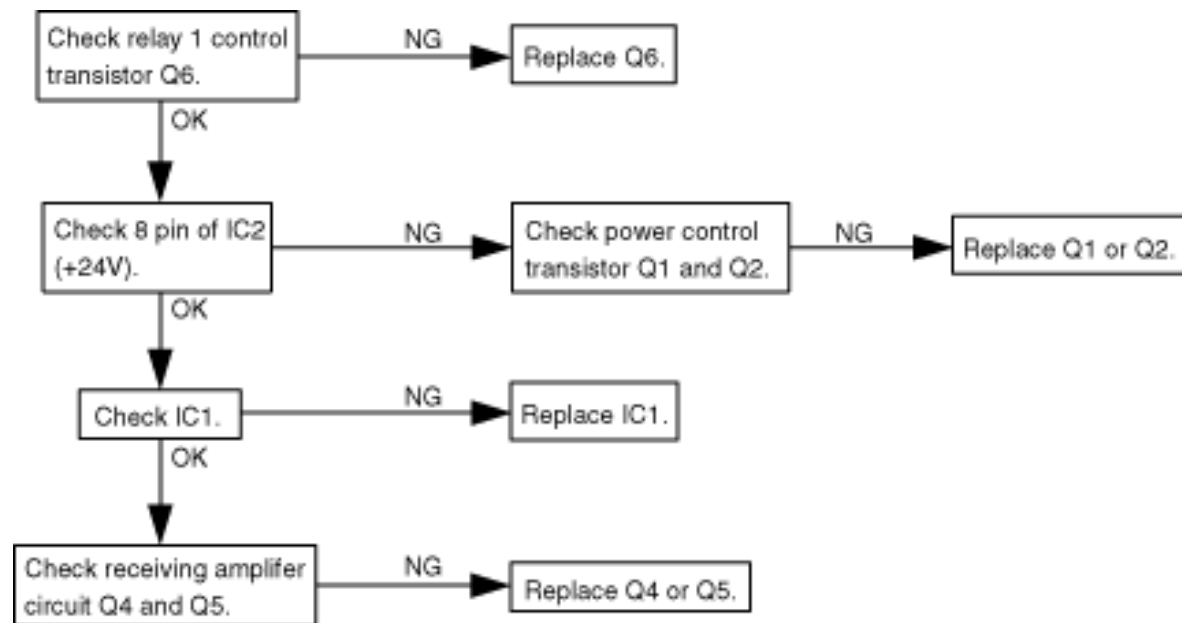


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SCHEMA 99

15.2 CAN NOT TALK

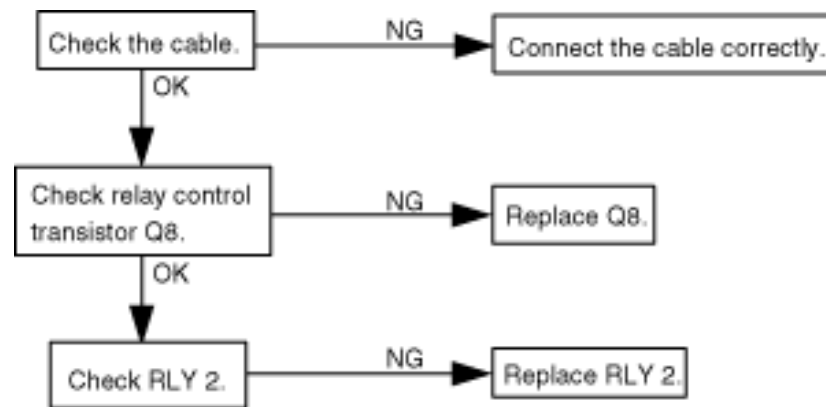
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15.3 CAN NOT USE DOOROPENER

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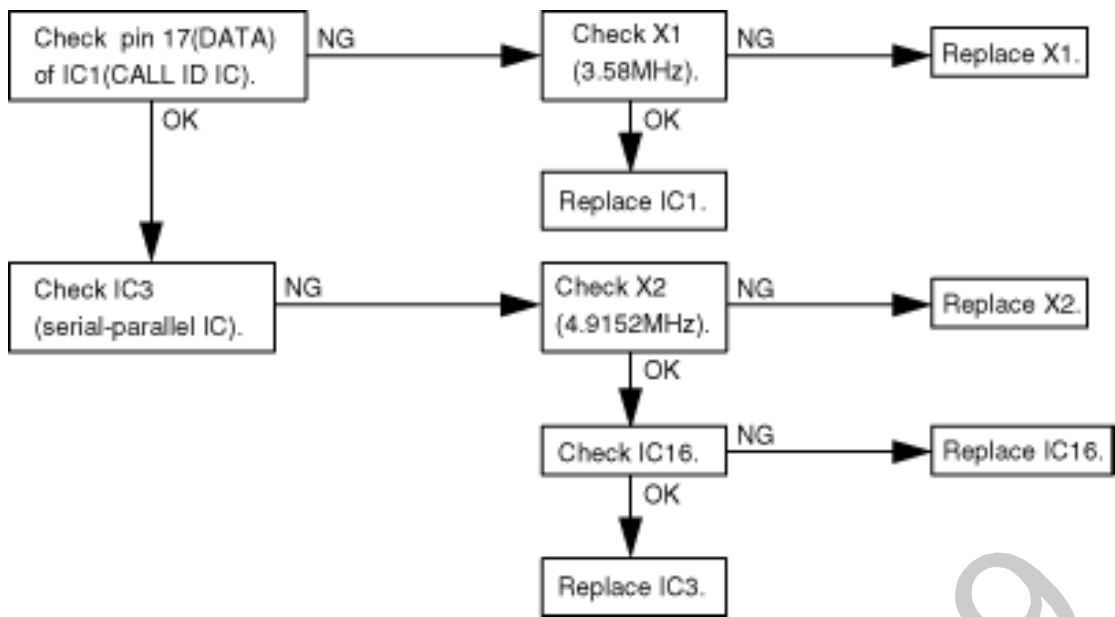


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SCHEMA 99

16.1 CAN NOT RECEIVE CALL ID DATA (FSK)

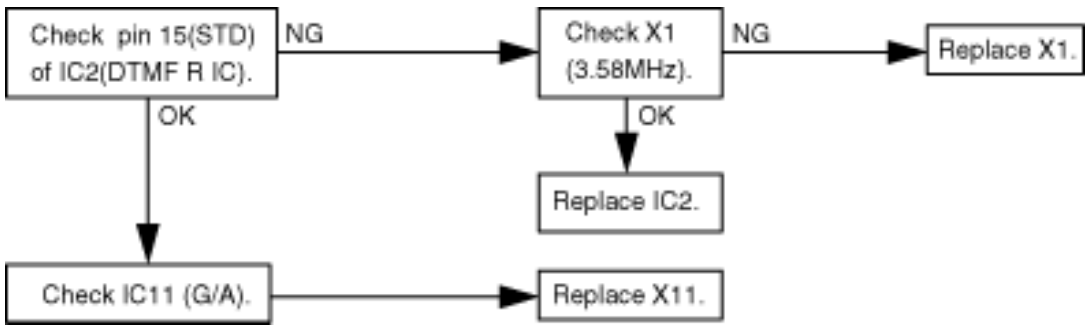
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16.2 CAN NOT RECEIVE CALL ID DATA (DTMF)

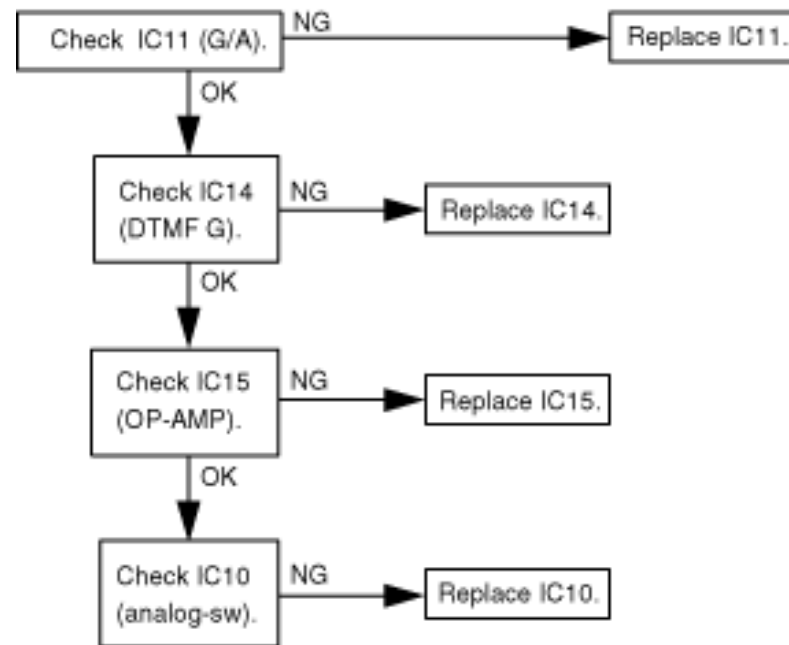
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16.3 CAN NOT SEND DTMF

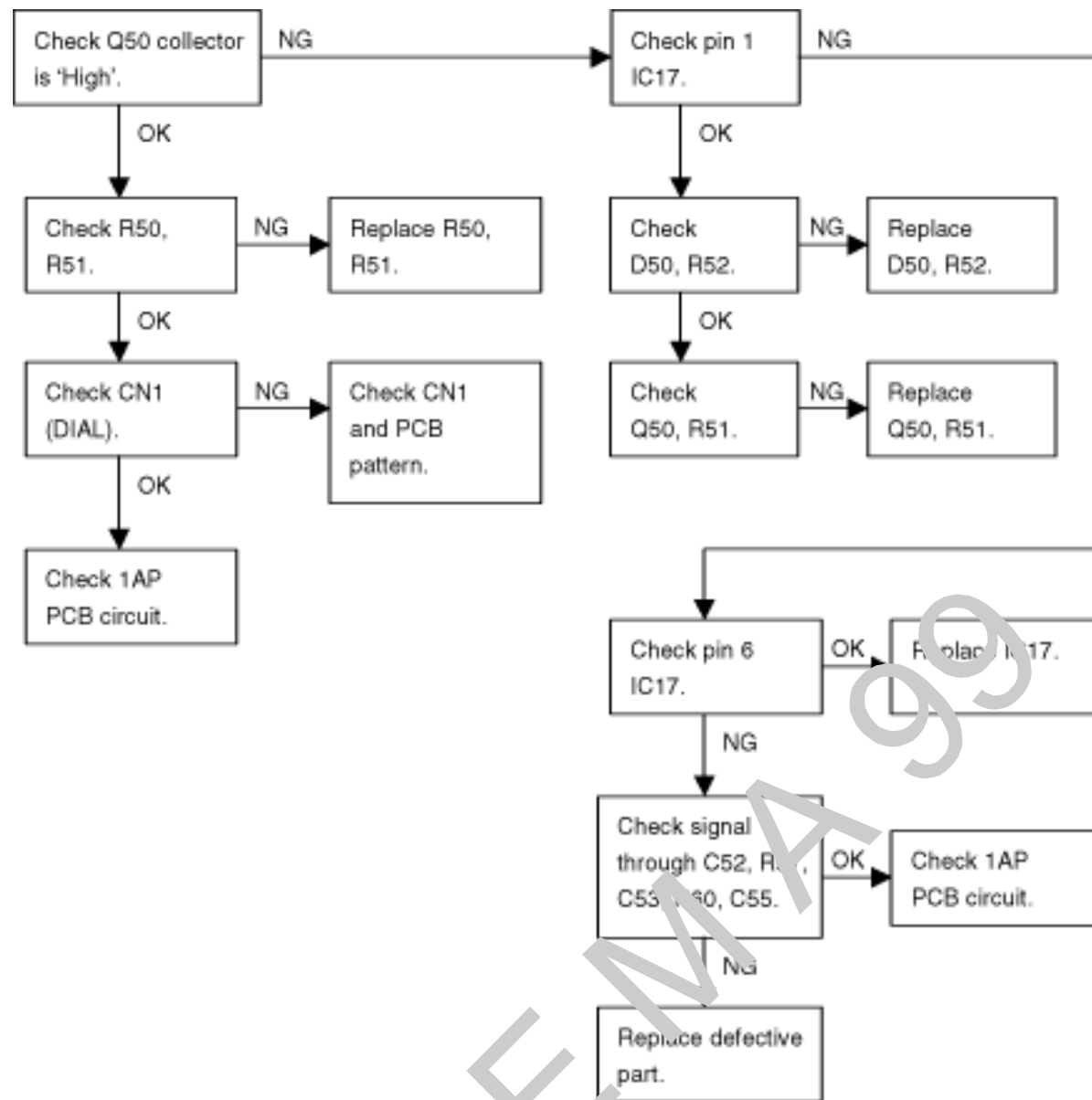
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16.4 CAN NOT DETECT VMM SIGNAL

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17.1 CPU (IC100) PORT MAP

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PIN NO	PORT	PIN NAME	I/O	FUNCTION	ACTIVE
15	P00	DHK1	I	DOORPHONE HOOK1	H:ACTIVE
16	P01	DHK2	I	DOORPHONE HOOK2	H:ACTIVE
17	P02	DHK3	I	DOORPHONE HOOK3	H:ACTIVE
18	P03	DHK4	I	DOORPHONE HOOK4	H:ACTIVE
19	P04	DCN1	I	DOORPHONE CONNECT DETECT1	H:ACTIVE
20	P05	DCN2	I	DOORPHONE CONNECT DETECT2	H:ACTIVE
21	P06	DCN3	I	DOORPHONE CONNECT DETECT3	H:ACTIVE
22	P07	DCN4	I	DOORPHONE CONNECT DETECT4	H:ACTIVE
24	P10	P10/NM1	I	-	L
25	P11	PPDWN/INTP0	I	DC POWER CUT OFF DETECT	H:DC POWER DETECT
26	P12	P12/INTP1	I	-	L
27	P13	RTC/INTP2	I	TIME INTERRUPT	L:ACTIVE
28	P14	P14/INTP3	I	AC POWER CUT OFF DETECT	L:ACTIVE
29	P15	P15/INTP4	I	-	L
30	P16	P16/INTP5	I	-	L
31	P20	EXTPAG	O	EXTPAGING	L:ACTIVE
32	P21	BGMSW	O	BGMSW	H:EXT L:INT
33	P22	LED SW	O	LED SW	H:ACTIVE
34	P23	TEST	O	TEST PORT	L:ACTIVE
35	P24	440Hz	O	tone	H:ACTIVE
36	P25	25Hz	O	BELL	H:ACTIVE
37	P30	RS232CTXD	O	SERIAL DATA SEND	L
38	P31	RS232CRXD	I	SERIAL DATA RECEIVE	L
39	P32	R32/TXC/SCK0	O	-	L
40	P33	P33/CTS0	O	-	L
41	P34	MODEMTXD	O	-	L
42	P35	MODEMRXD	I	-	L
43	P36	P36/SCK1/CTS1	O	-	H:ACTIVE
45	P40	DOPN1	O	DOOR OPENER 1	H:ACTIVE
46	P41	DOPN2	O	DOOR OPENER 2	H:ACTIVE
47	P42	DOPN3	O	DOOR OPENER 3	H:ACTIVE
48	P43	DOPN4	O	DOOR OPENER 4	H:ACTIVE
49	P44	BUSY1	O	DOOR PHONE CALL 1, 2	H:ACTIVE
50	P45	BUSY2	O	DOOR PHONE CALL 3, 4	H:ACTIVE
51	P46	DRLY1	O	DOOR PHONE SW 1, 2	L:DOOR1 H:DOOR2
52	P47	DRLY2	O	DOOR PHONE SW 3, 4	L:DOOR3 H:DOOR4
54	P50	RTCCE	O	TIME CESIGNAL	H:ACTIVE
55	P51	RTCCLK	O	SHIFT CLOCK	H:ACTIVE
56	P52	RTCDATA	I/O	TIME SERIAL DATA	H:ACTIVE
59	P60	DEFAULT	I	DEFAULT SW	L:ACTIVE
60	P61	-	I	-	L
61	P62	-	I	-	L
62	P63	-	I	-	L
66	P70	-	O	-	L
67	P71	-	O	-	L
68	P72	-	O	-	L
69	P73	-	O	-	L
70	P74	-	O	-	L
71	P75	-	O	-	L
72	P76	-	O	-	L
73	P77	-	O	-	L
75	P80	RS232CDTR	O	DTR SIGNAL SEND	H:ACTIVE
76	P81	RS232CDSR	I	DTR SIGNAL RECEIVE	L:ACTIVE

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17.2 BIT CPU (IC304) I/O PORT MAP

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PIN NO	PORT	PIN NAME	I/O	FUNCTION	ACTIVE
32	P00	SD3	I	DISA1 DTMF SIGNAL	L:ACTIVE
31	P01	SD4	I	DISA2 DTMF SIGNAL	L:ACTIVE
30	P02	SD1	I	DTMFR1 SIGNAL	L:ACTIVE
29	P03	SD2	I	DTMF2 SIGNAL	L:ACTIVE
37	P10	CINT	I	CPR INTERRUPT	L:ACTIVE
36	P11	CREQ	I	CPR COMMUNICATE REQUEST	L:ACTIVE
35	P12	PRX1	I	RECEIVE DATA FROM PITS (01-08)	L:ACTIVE
33	P13	PRX2	I	RECEIVE DATA FROM PITS (09-16)	H:ACTIVE
43	P20	620Hz	O	620Hz SIGNAL	L:ACTIVE
42	P21	350Hz	O	350Hz SIGNAL	H:ACTIVE
41	P22	PTX1	O	SEND DATA FROM PITS (01-08)	H:ACTIVE
40	P23	CACK	O	CPR ACK SIGNAL	L:ACTIVE
26	P30	ACK1	O	ACK FROM DTMFR1	H:ACTIVE
25	P31	ACK2	O	ACK FROM DTMFR2	H:ACTIVE
24	P32	ACK3	O	ACK FROM DISA1	H:ACTIVE
23	P33	ACK4	O	ACK FROM DISA2	H:ACTIVE
16	P40	-	O	-	H:ACTIVE
15	P41	PA	O	ANALOGUE SW A	H:ACTIVE
14	P42	PB	O	ANALOGUE SW B	H:ACTIVE
13	P43	PC	O	ANALOGUE SW C	H:ACTIVE
11	P50	STD3	I	DTMF SIGNAL DETECT DISA1	H:ACTIVE
10	P51	STD4	I	DTMF SIGNAL DETECT DISA2	H:ACTIVE
9	P52	STD1	I	DTMF SIGNAL DETECT DTMFR1	H:ACTIVE
8	P53	STD2	I	DTMF SIGNAL DETECT DTMFR2	H:ACTIVE
7	P60	CRXD0	O	CPR RECEIVE DATA	H:ACTIVE
6	P61	CRXD1	O	CPR RECEIVE DATA	H:ACTIVE
5	P62	CRXD2	O	CPR RECEIVE DATA	H:ACTIVE
4	P63	CRXD3	O	CPR RECEIVE DATA	H:ACTIVE
3	P70	CTXD0	I	CPR SEND DATA	H:ACTIVE
2	P71	CTXD1	I	CPR SEND DATA	H:ACTIVE
1	P72	CTXD2	I	CPR SEND DATA	H:ACTIVE
44	P73	CTXD3	I	CPR SEND DATA	H:ACTIVE
28	P80	PCLR	O	DATA CLEAR	L:ACTIVE
27	P81	PTX2	O	SEND DATA FROM PITS (09-16)	H:ACTIVE

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17.3 CO G/A (IC205) PORT MAP

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PIN NO	PORT	PIN NAME	I/O	FUNCTION	ACTIVE
4	P00	COL1	O	DTMFGENERATOR	H:ACTIVE
5	P01	COL2	O	DTMFGENERATOR	H:ACTIVE
6	P02	COL3	O	DTMFGENERATOR	H:ACTIVE
7	P03	COL4	O	DTMFGENERATOR	H:ACTIVE
8	P04	ROW1	O	DTMFGENERATOR	H:ACTIVE
9	P05	ROW2	O	DTMFGENERATOR	H:ACTIVE
10	P06	ROW3	O	DTMFGENERATOR	H:ACTIVE
11	P07	ROW4	O	DTMFGENERATOR	H:ACTIVE
13	P10	CONF1	O	CONFERENCE	L:ACTIVE
14	P11	MUTE1	O	SENDMUTE	H:ACTIVE
15	P12	DL1	O	PULSEDIAL	H:ACTIVE
16	P13	DS1	O	DIALSHUNT	H:ACTIVE
17	P14	SHUNT1	O	RECEIVEMUTE	H:ACTIVE
18	P15	HD1	O	HOLD	L:ACTIVE
19	P16	BELLA1	I	BELLDETECTA	L:ACTIVE
20	P17	BELLB1	I	BELLDETECTB	L:ACTIVE
21	P20	CONF2	O	CONFERENCE	L:ACTIVE
24	P21	MUTE2	O	SENDMUTE	H:ACTIVE
25	P22	DL2	O	PULSEDIAL	H:ACTIVE
26	P23	DS2	O	DIALSHUNT	H:ACTIVE
27	P24	SHUNT2	O	RECEIVEMUTE	H:ACTIVE
28	P25	HD2	O	HOLD	L:ACTIVE
29	P26	BELLA2	I	BELLDETECTA	L:ACTIVE
30	P27	BELLB2	I	BELLDETECTB	L:ACTIVE
36	P30	CONF3	O	CONFERENCE	L:ACTIVE
37	P31	MUTE3	O	SENDMUTE	H:ACTIVE
38	P32	DL3	O	PULSEDIAL	H:ACTIVE
39	P33	DS3	O	DIALSHUNT	H:ACTIVE
40	P34	SHUNT3	O	RECEIVEMUTE	H:ACTIVE
41	P35	HD3	O	HOLD	L:ACTIVE
44	P36	BELLA3	I	BELLDETECTA	L:ACTIVE
45	P37	BELLB3	I	BELLDETECTB	L:ACTIVE
46	P40	DTMF1	O	DTMF DIAL CO1	L:ACTIVE
47	P41	DTMF2	O	DTMF DIAL CO1	L:ACTIVE
48	P42	DTMF3	O	DTMF DIAL CO1	L:ACTIVE
49	P43	PAD1	O	3 dB PAD	L:ACTIVE
50	P44	PAD2	O	3 dB PAD	L:ACTIVE
51	P45	PAD3	O	3 dB PAD	L:ACTIVE
53	P46	VMDTMF1	O	EXT107 VOICE MAIL INTEGRATION	L:ACTIVE
54	P47	VMDTMF2	O	EXT108 VOICE MAIL INTEGRATION	L:ACTIVE
55	P50	PAY1	I	PAY TONE DETECT1	L:DETECT
56	P51	PAY2	I	PAY TONE DETECT2	L:DETECT
57	P52	PAY3	I	PAY TONE DETECT3	L:DETECT
58	P53	DIAL1	I	DIAL TONE DETECT1	L:DETECT
59	P54	DIAL2	I	DIAL TONE DETECT2	L:DETECT
60	P55	DIAL3	I	DIAL TONE DETECT3	L:DETECT
61	P56	CALLCARD	I	CALL ID CARD (CO1-CO3) DETECT	L:DETECT
64	P57	PAY CARD	I	PAY CARD (CO1-CO3) DETECT	L:DETECT
31	P60	CDT1	I	CURRENT DETECT1	L:DETECT
32	P61	CDT2	I	CURRENT DETECT2	L:DETECT
34	P62	CDT3	I	CURRENT DETECT3	L:DETECT
35	P63	DOORCARD	I	DOOR CARD DETECT	L:DETECT

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17.4 EXT G/A (IC305) PORT MAP

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PIN NO	PORT	PIN NAME	I/O	FUNCTION	ACTIVE
4	P00	CTXD0	O	CPR SEND DATA	H:ACTIVE
5	P01	CTXD1	O	CPR SEND DATA	H:ACTIVE
6	P02	CTXD2	O	CPR SEND DATA	H:ACTIVE
7	P03	CTXD3	O	CPR SEND DATA	H:ACTIVE
8	P04	CINT	O	INTERRUPT TO 4 BIT CPU	L:ACTIVE
9	P05	-	O	-	H
10	P06	PDRLY1	O	POWER FAILURE TRANSFER	L:ACTIVE
11	P07	RESET4BIT	O	RESET TO 4 BIT CPU	L:ACTIVE
13	P10	BELL1	O	EXT BELL CONTROL 1	H:ACTIVE
14	P11	BELL2	O	EXT BELL CONTROL 2	H:ACTIVE
15	P12	BELL3	O	EXT BELL CONTROL 3	H:ACTIVE
16	P13	BELL4	O	EXT BELL CONTROL 4	H:ACTIVE
17	P14	BELL5	O	EXT BELL CONTROL 5	H:ACTIVE
18	P15	BELL6	O	EXT BELL CONTROL 6	H:ACTIVE
19	P16	BELL7	O	EXT BELL CONTROL 7	H:ACTIVE
20	P17	BELL8	O	EXT BELL CONTROL 8	H:ACTIVE
21	P20	HOOK1	I	EXT HOOK DETECT 1	L:ACTIVE
24	P21	HOOK2	I	EXT HOOK DETECT 2	L:ACTIVE
25	P22	HOOK3	I	EXT HOOK DETECT 3	L:ACTIVE
26	P23	HOOK4	I	EXT HOOK DETECT 4	L:ACTIVE
27	P24	HOOK5	I	EXT HOOK DETECT 5	L:ACTIVE
28	P25	HOOK6	I	EXT HOOK DETECT 6	L:ACTIVE
29	P26	HOOK7	I	EXT HOOK DETECT 7	L:ACTIVE
30	P27	HOOK8	I	EXT HOOK DETECT 8	L:ACTIVE
36	P30	CNG1	I	CNG1 DETECT	H:ACTIVE
37	P31	VOX1	I	VOX1 DETECT	H:ACTIVE
38	P32	EOM1	I	MESSAGE 1	L:ACTIVE
39	P33	STD3	I	DISA 1 DTMF RECEIVE	H:ACTIVE
40	P34	RESET1	O	RESET1	L:ACTIVE
41	P35	P/R1	O	REC/PLAY1	L:REC H:PLAY
44	P36	CE1	O	OGM CE1	L:ACTIVE
45	P37	OGMSW1	O	OGM1 SW	L:ACTIVE
46	P40	CNG2	I	CNG2 DETECT	H:ACTIVE
47	P41	VOX2	I	VOX2 DETECT	H:ACTIVE
48	P42	EOM2	I	MESSAGE 2	L:ACTIVE
49	P43	STD4	I	DISA 2 DTMF RECEIVE	H:ACTIVE
50	P44	RESET2	O	RESET2	L:ACTIVE
51	P45	P/R2	O	REC/PLAY2	L:REC H:PLAY
53	P46	CE2	O	OGM CE2	L:ACTIVE
54	P47	OGMSW2	O	OGM2 SW	L:ACTIVE
55	P50	CRXD0	O	CPR RECEIVE DATA	H:ACTIVE
56	P51	CRXD1	O	CPR RECEIVE DATA	H:ACTIVE
57	P52	CRXD2	O	CPR RECEIVE DATA	H:ACTIVE
58	P53	CRXD3	O	CPR RECEIVE DATA	H:ACTIVE
59	P54	CREQ	O	CPR REQUEST	L:ACTIVE
60	P55	BR1	O	BREAK1	L:ACTIVE
61	P56	OL1	I	OVER CURRENT1	L
64	P57	CACK	I	CPR ACK	L:ACTIVE
31	P60	TA616CARD	I	TA62477 DETECT	L:ACTIVE
32	P61	DISACARD	I	OGM DETECT	L:ACTIVE
34	P62	TA08CARD	I	TA62470 DETECT	L:ACTIVE
35	P63	-	I	-	H

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