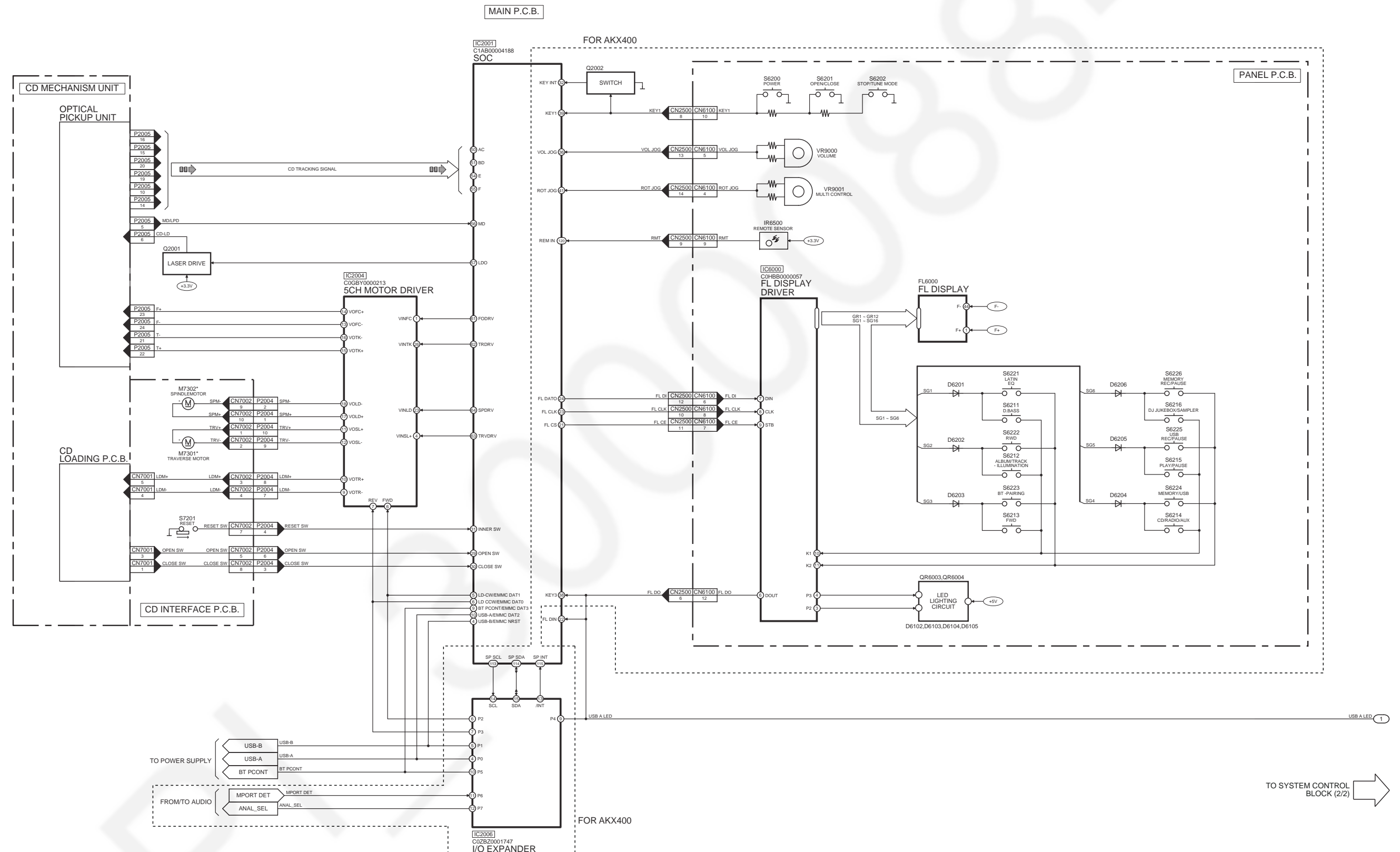


10.1. System Control

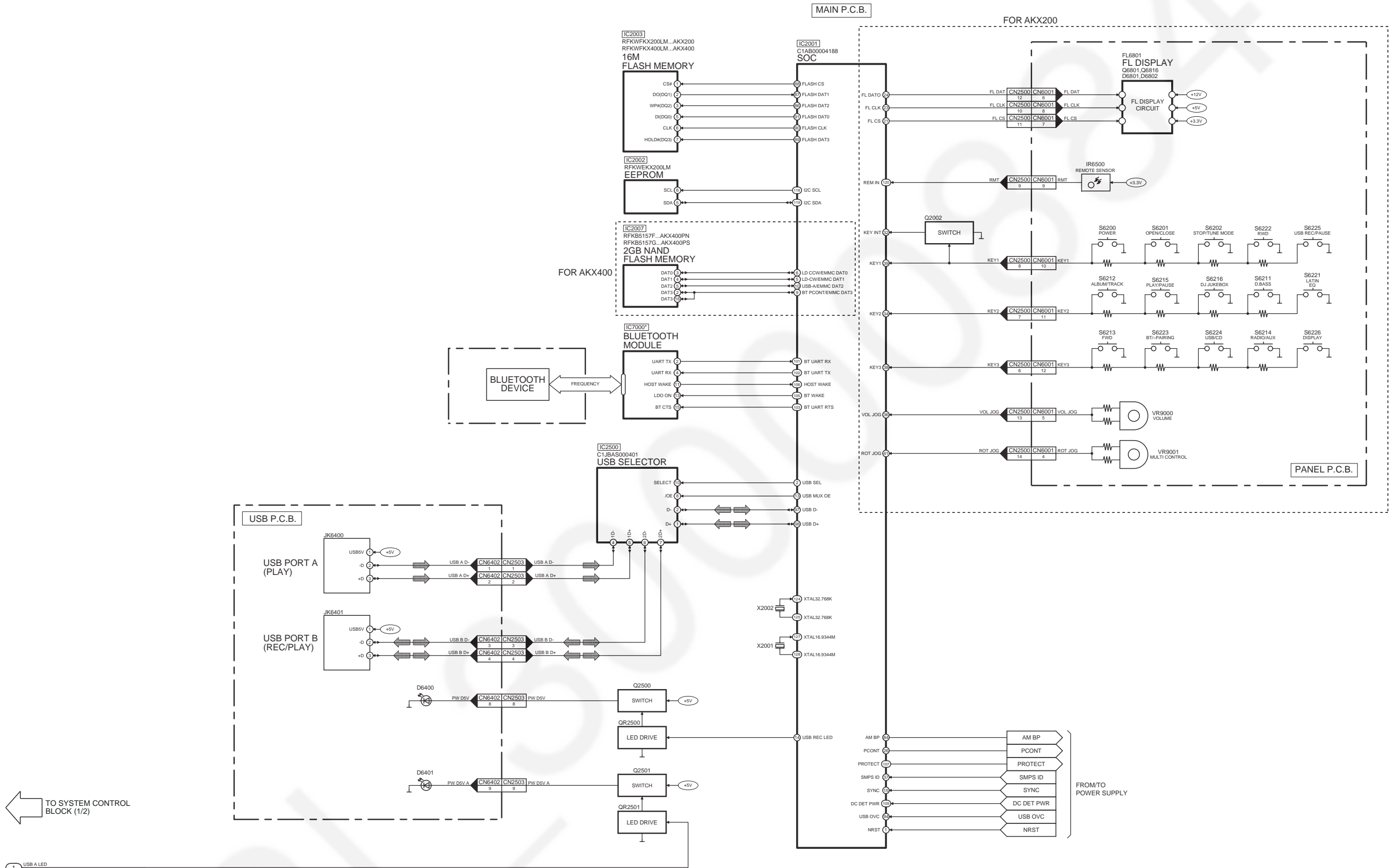
: CD INPUT SIGNAL LINE : USB SIGNAL LINE



NOTE: " * " REF IS FOR INDICATION ONLY

SA-AKX200PN/PS,SA-AKX400PN/PS SYSTEM CONTROL (1/2) BLOCK DIAGRAM

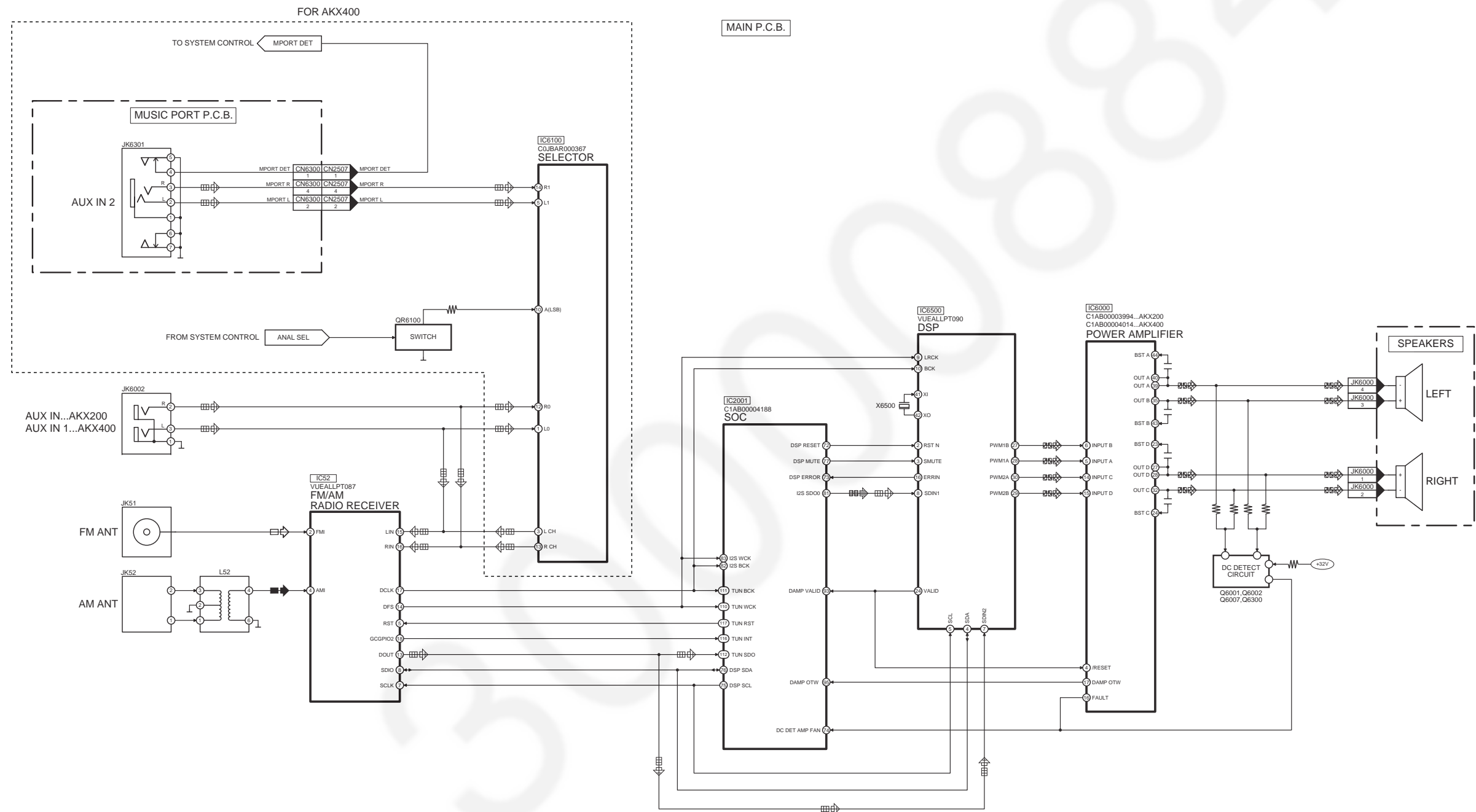
 : CD INPUT SIGNAL LINE
  : USB SIGNAL LINE



NOTE: “ * ” REF IS FOR INDICATION ONLY

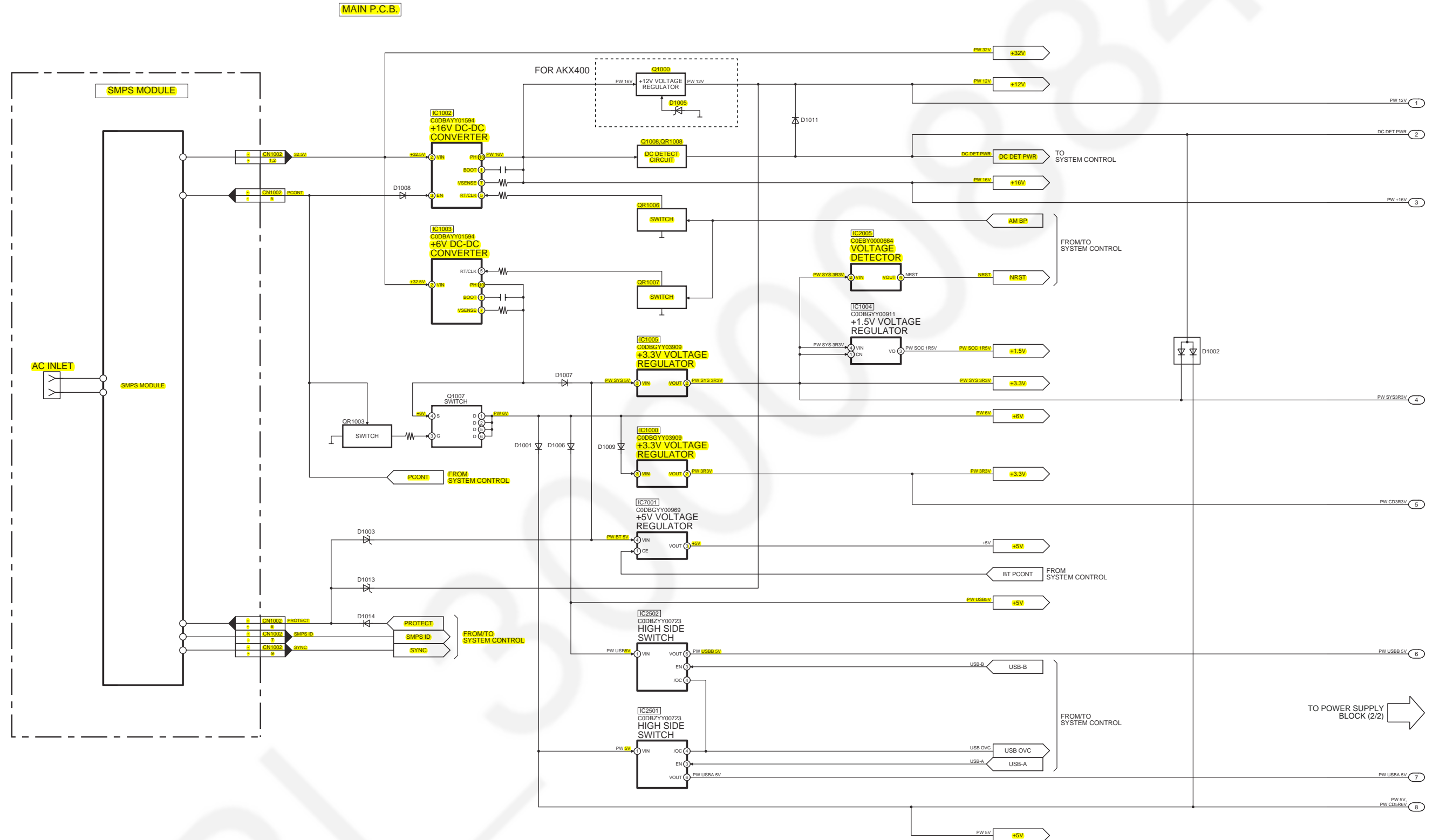
SA-AKX200PN/PS, SA-AKX400PN/PS SYSTEM CONTROL (2/2) BLOCK DIAGRAM

10.2. Audio

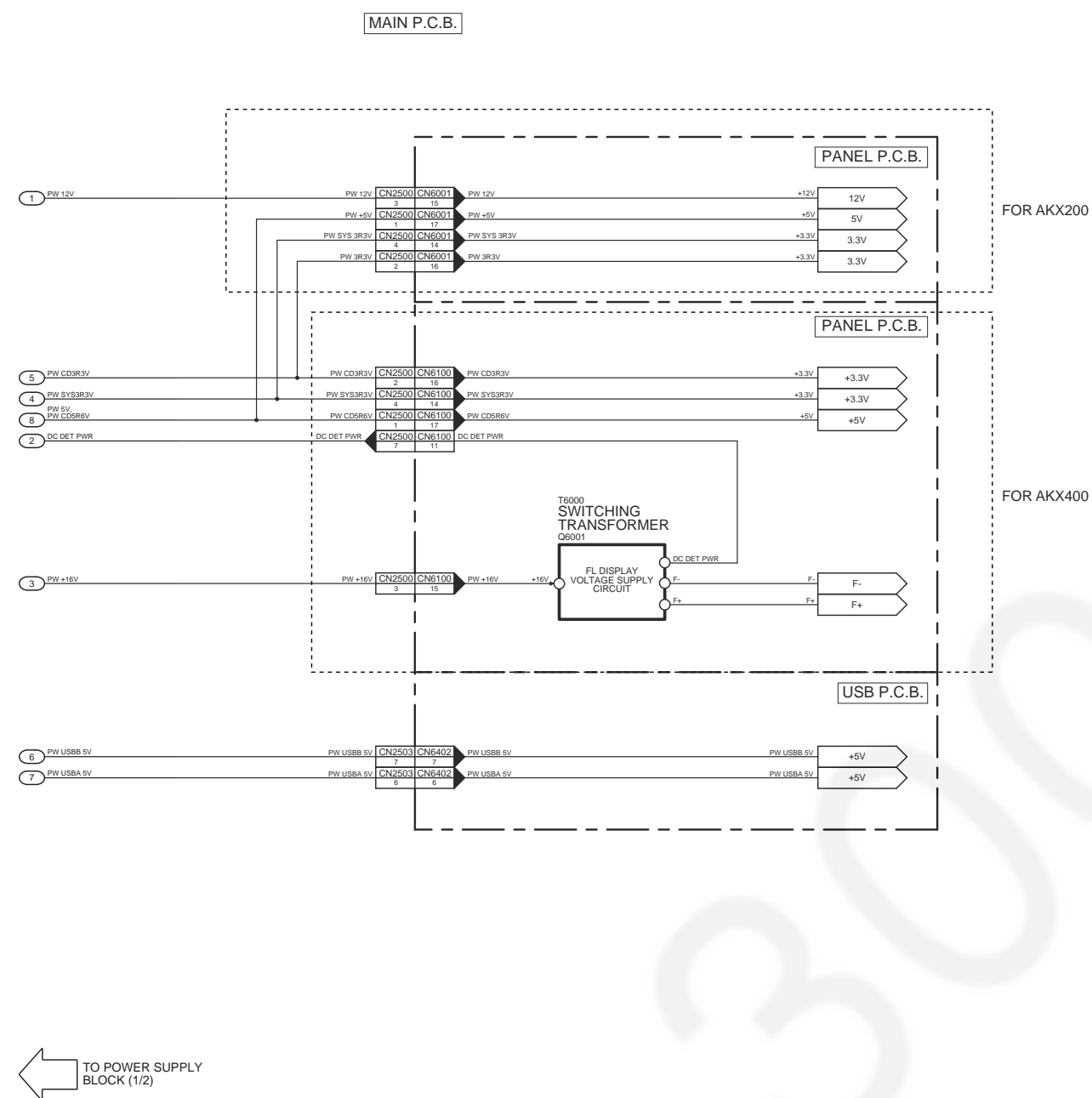


SA-AKX200PN/PS,SA-AKX400PN/PS AUDIO BLOCK DIAGRAM

10.3. Power Supply

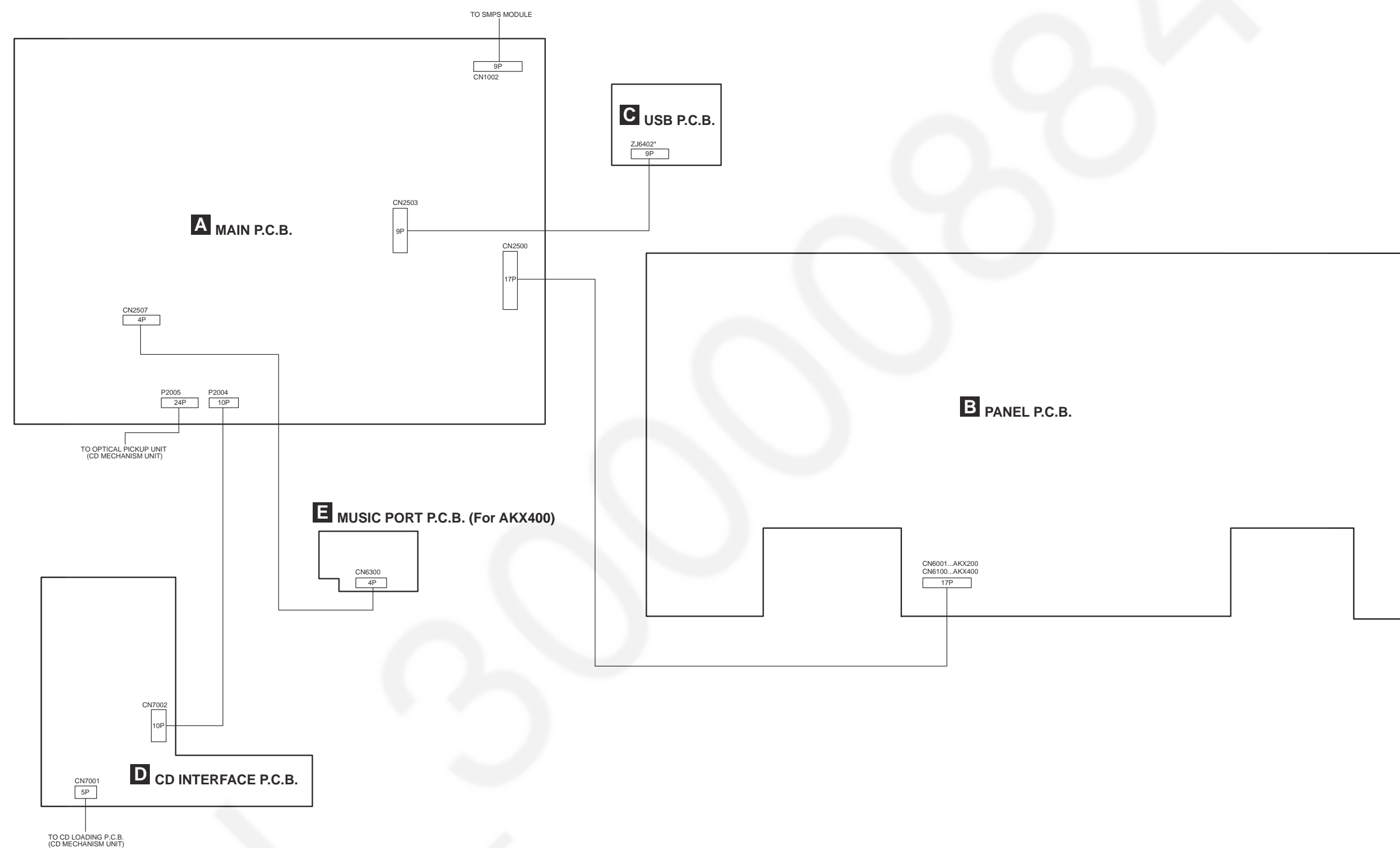


SA-AKX200PN/PS,SA-AKX400PN/PS POWER SUPPLY (1/2) BLOCK DIAGRAM



SA-AKX200PN/PS,SA-AKX400PN/PS POWER SUPPLY (2/2) BLOCK DIAGRAM

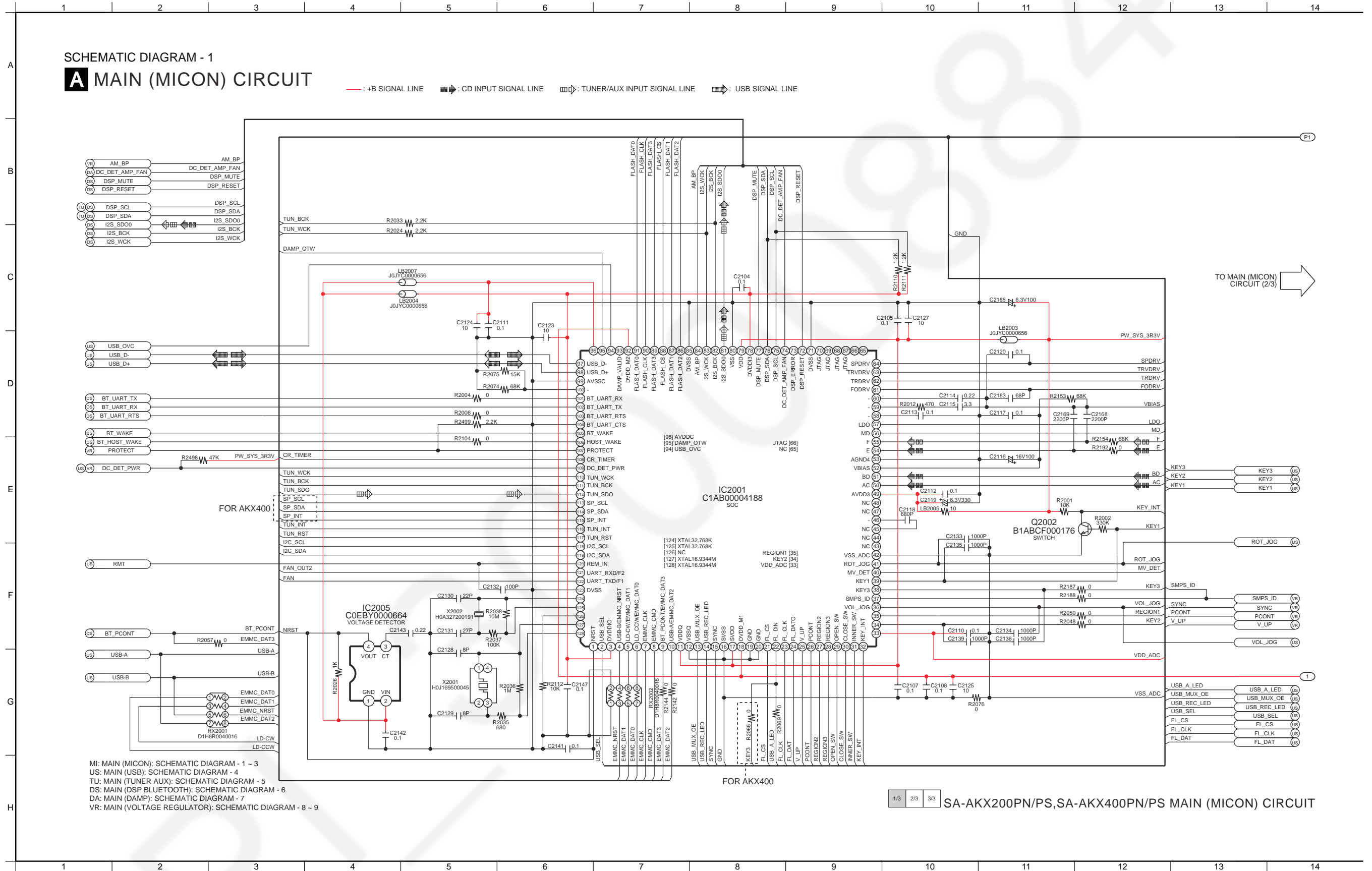
11 Wiring Connection Diagram



NOTE: " * " REF IS FOR INDICATION ONLY.

SA-AKX200PN/PS, SA-AKX400PN/PS WIRING CONNECTION DIAGRAM

12.2. Main (Micon) Circuit (1/3)

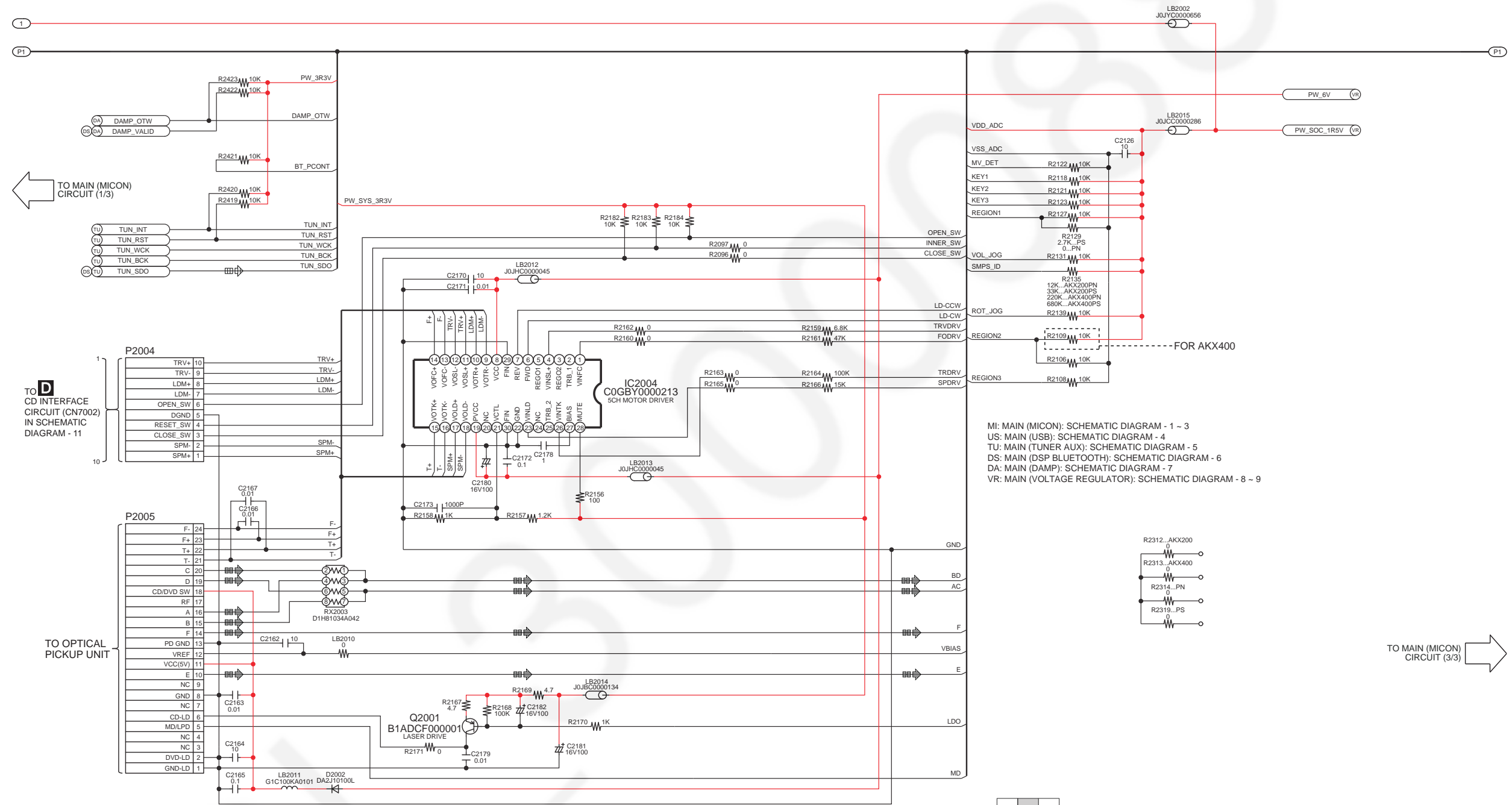


12.3. Main (Micon) Circuit (2/3)

SCHEMATIC DIAGRAM - 2

A MAIN (MICON) CIRCUIT

— : +B SIGNAL LINE : CD INPUT SIGNAL LINE : TUNER/AUX INPUT SIGNAL LINE : USB SIGNAL LINE

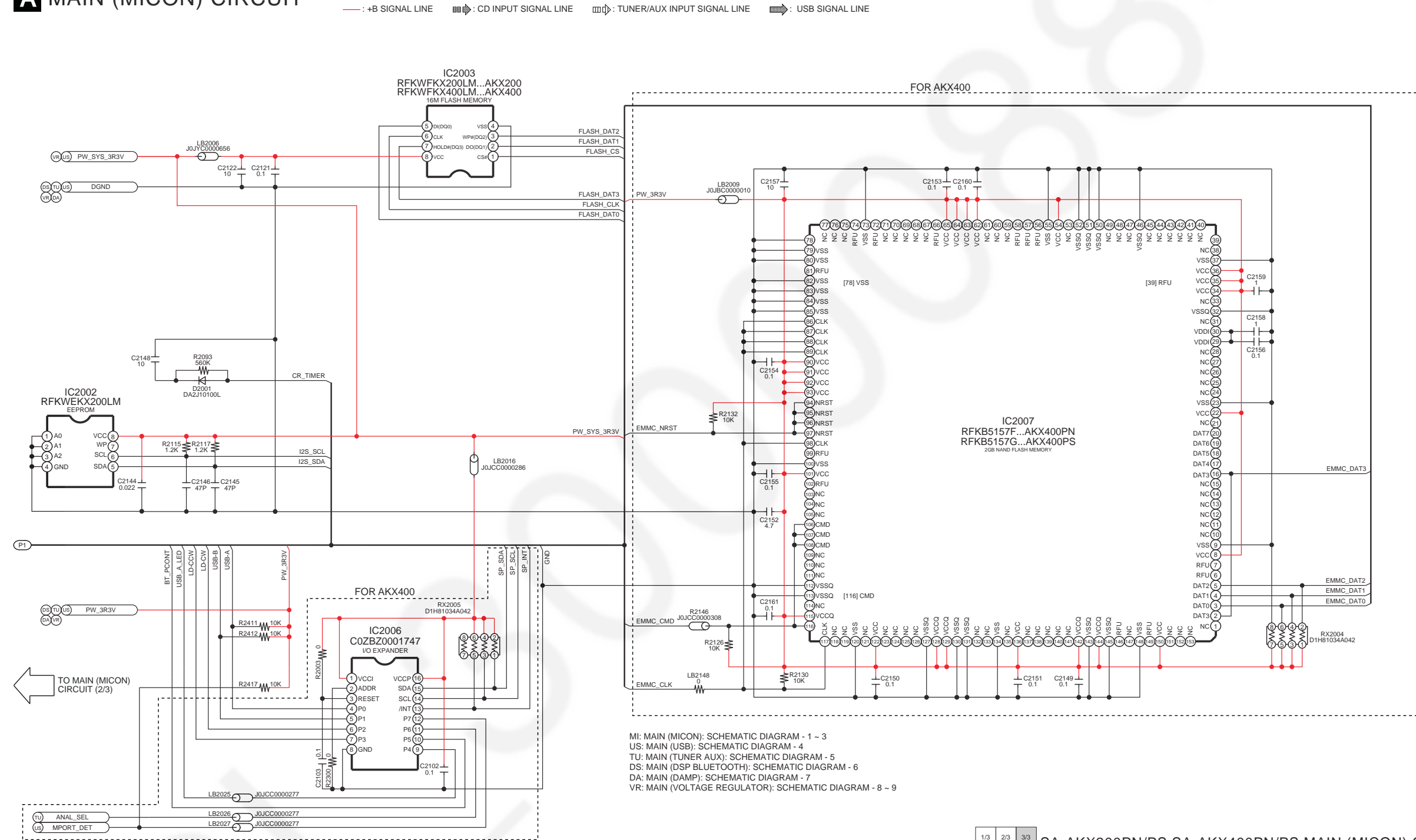


SA-AKX200PN/PS,SA-AKX400PN/PS MAIN (MICON) CIRCUIT

12.4. Main (Micon) Circuit (3/3)

SCHEMATIC DIAGRAM - 3

A MAIN (MICON) CIRCUIT



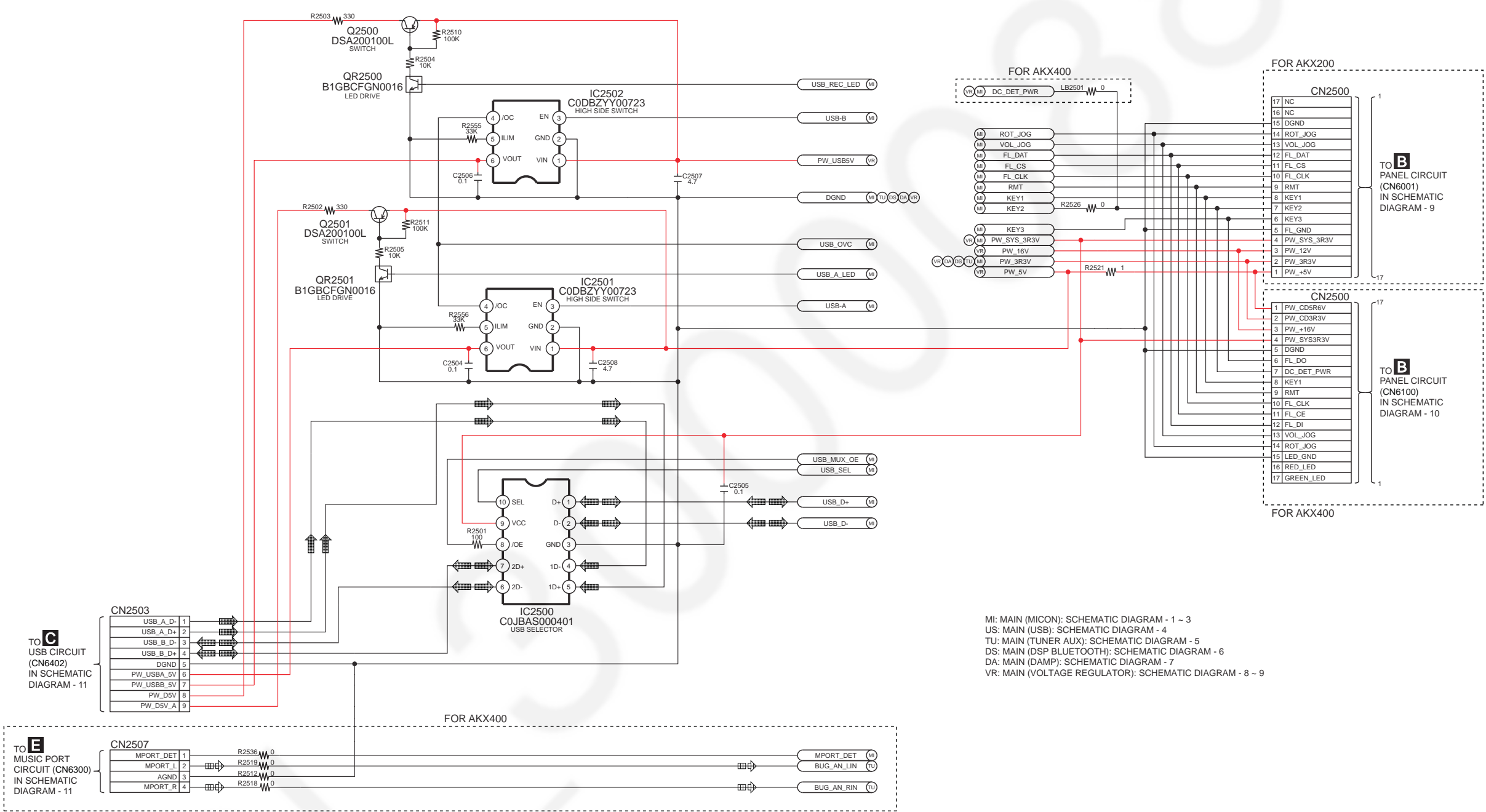
MI: MAIN (MICON): SCHEMATIC DIAGRAM - 1 ~ 3
US: MAIN (USB): SCHEMATIC DIAGRAM - 4
TU: MAIN (TUNER AUX): SCHEMATIC DIAGRAM - 5
DS: MAIN (DSP BLUETOOTH): SCHEMATIC DIAGRAM - 6
DA: MAIN (DAMP): SCHEMATIC DIAGRAM - 7
VR: MAIN (VOLTAGE REGULATOR): SCHEMATIC DIAGRAM - 8 ~ 9

1/3 2/3 3/3 SA-AKX200PN/PS,SA-AKX400PN/PS MAIN (MICON) CIRCUIT

12.5. Main (USB) Circuit

SCHEMATIC DIAGRAM - 4
A MAIN (USB) CIRCUIT

— : +B SIGNAL LINE  : AUX INPUT SIGNAL LINE  : USB SIGNAL LINE



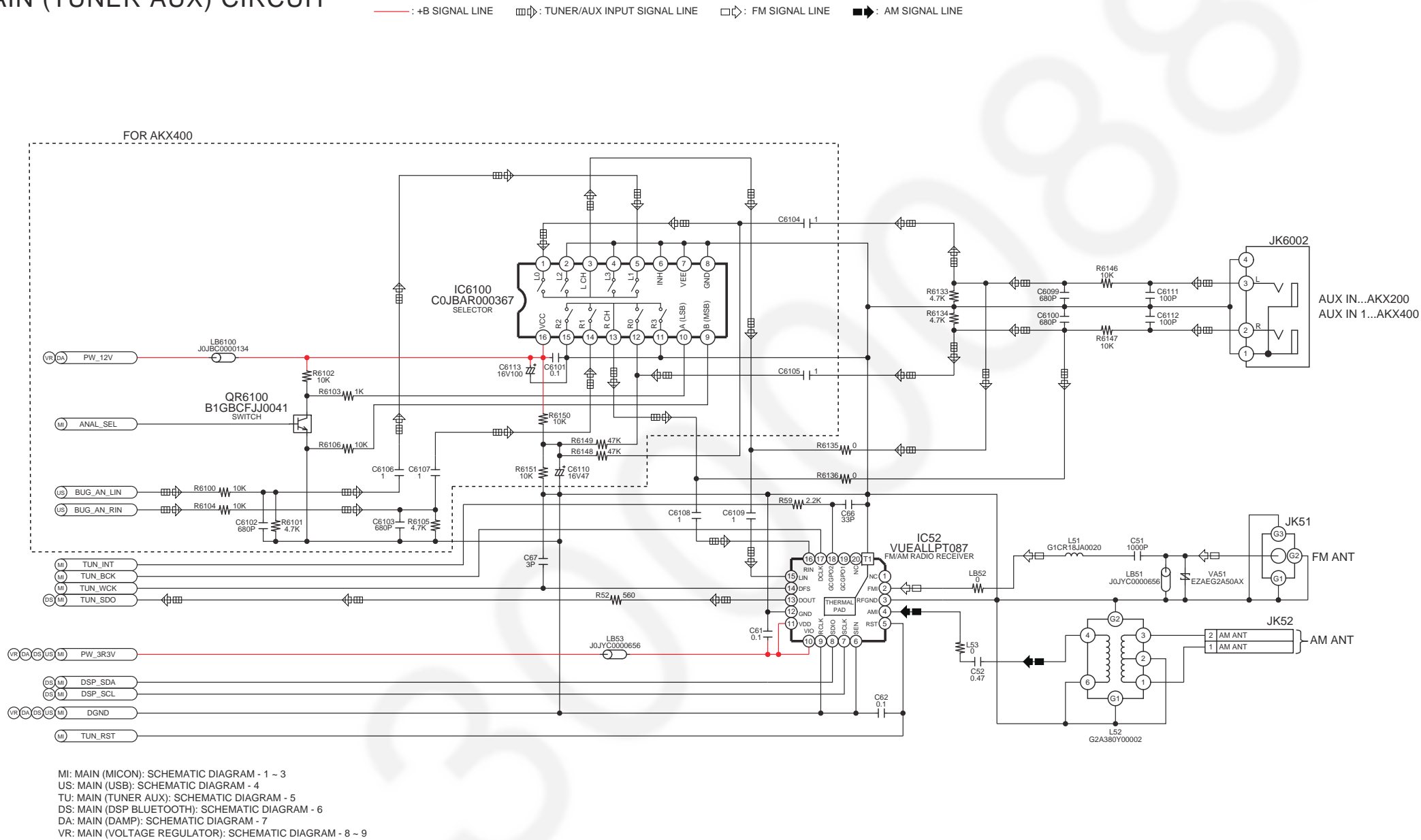
MI: MAIN (MICON): SCHEMATIC DIAGRAM - 1 ~ 3
US: MAIN (USB): SCHEMATIC DIAGRAM - 4
TU: MAIN (TUNER AUX): SCHEMATIC DIAGRAM - 5
DS: MAIN (DSP BLUETOOTH): SCHEMATIC DIAGRAM - 6
DA: MAIN (DAMP): SCHEMATIC DIAGRAM - 7
VR: MAIN (VOLTAGE REGULATOR): SCHEMATIC DIAGRAM - 8 ~ 9

SA-AKX200PN/PS,SA-AKX400PN/PS MAIN (USB) CIRCUIT

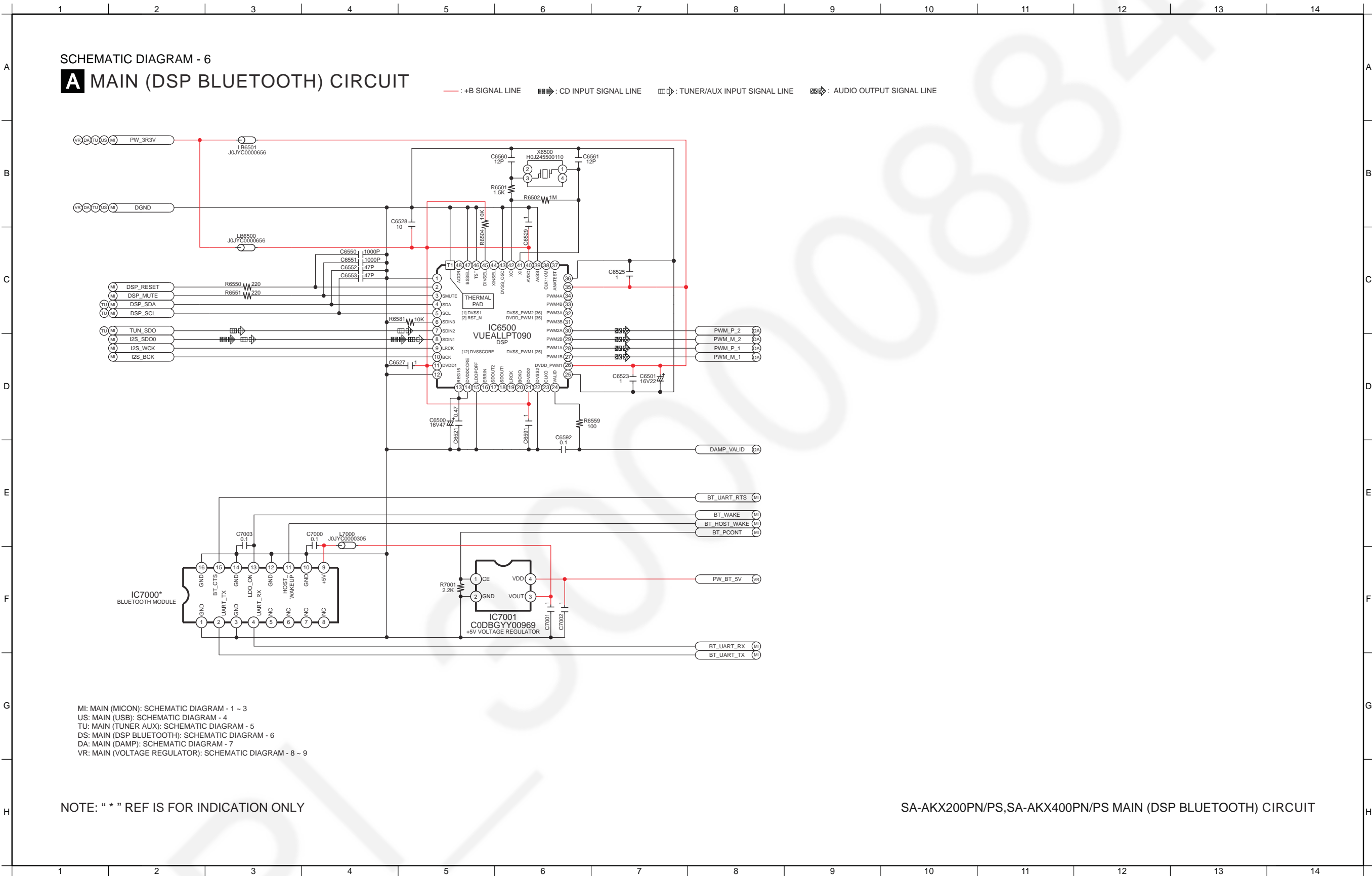
12.6. Main (Tuner AUX) Circuit

SCHEMATIC DIAGRAM - 5

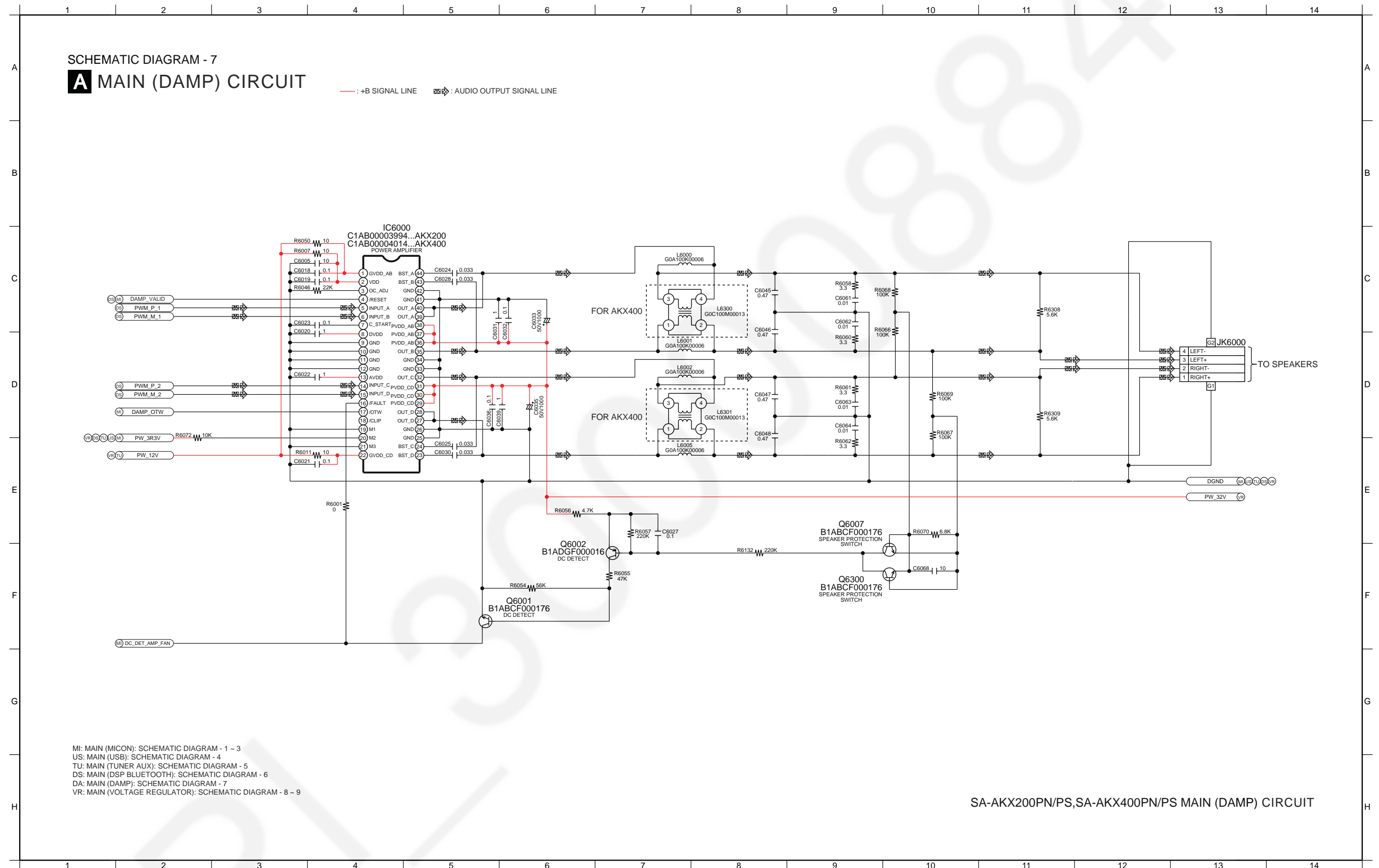
A MAIN (TUNER AUX) CIRCUIT



12.7. Main (DSP Bluetooth) Circuit



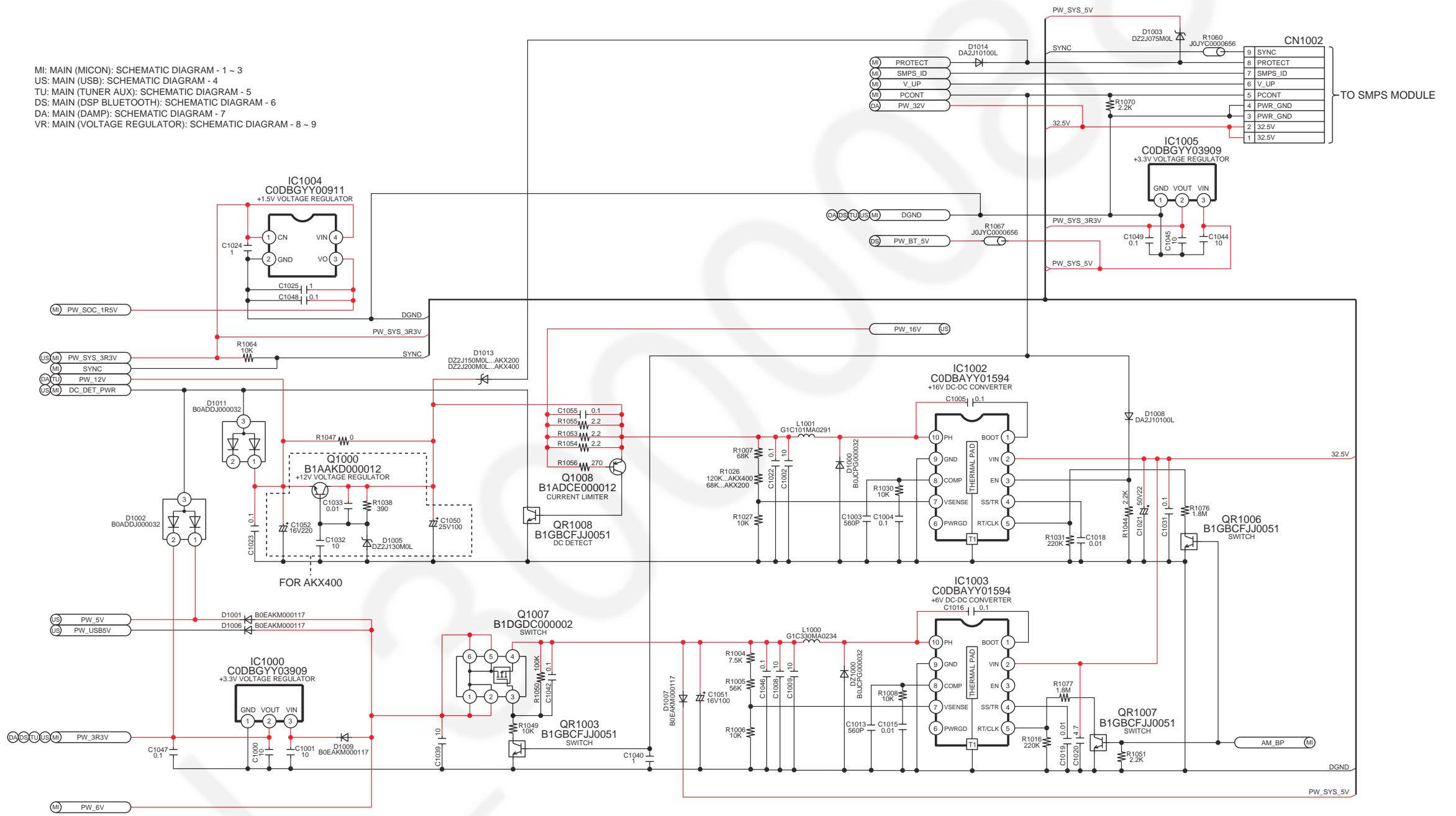
12.8. Main (Damp) Circuit



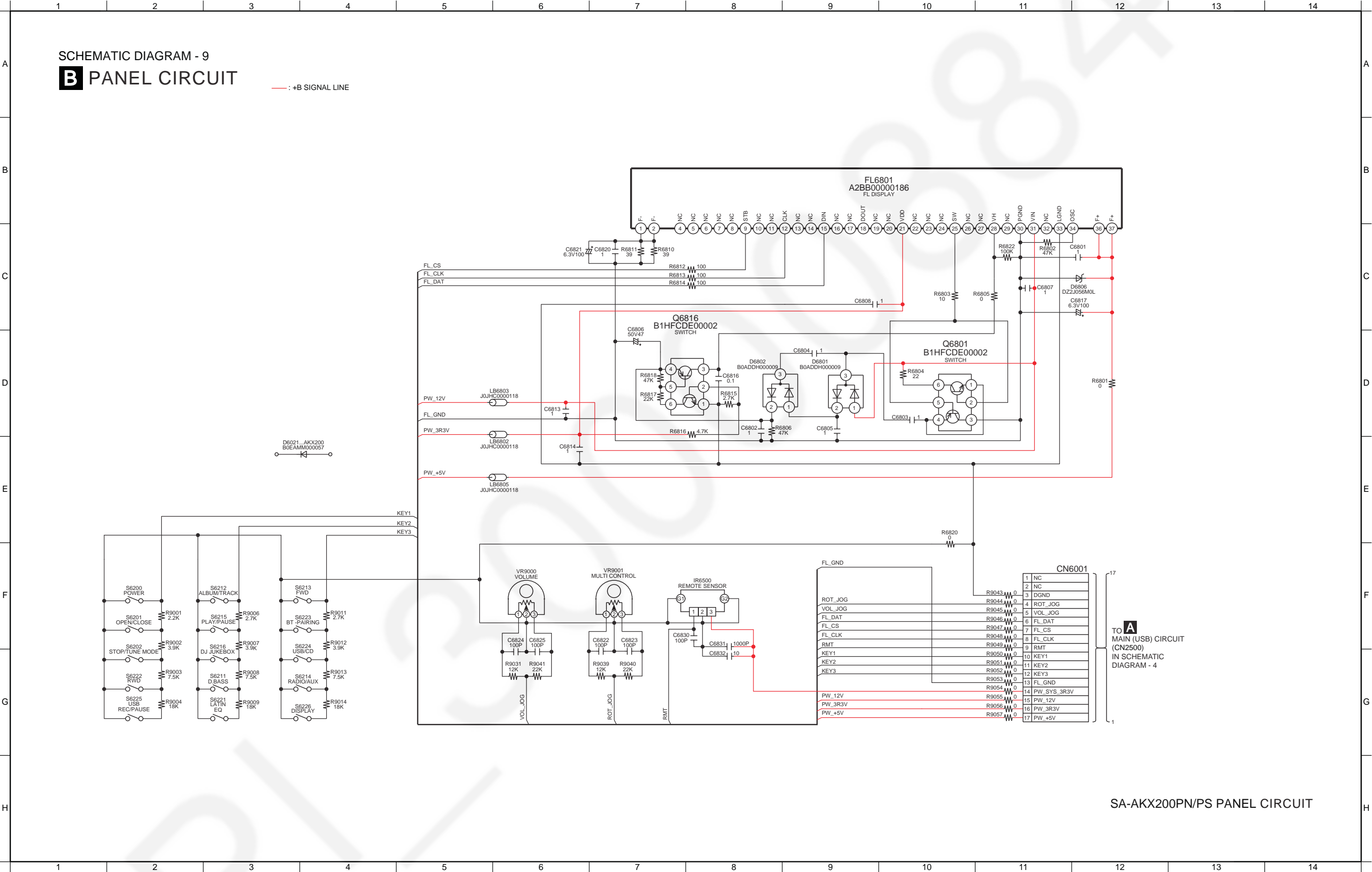
12.9. Main (Voltage Regulator) Circuit

SCHEMATIC DIAGRAM - 8
A MAIN (VOLTAGE REGULATOR) CIRCUIT

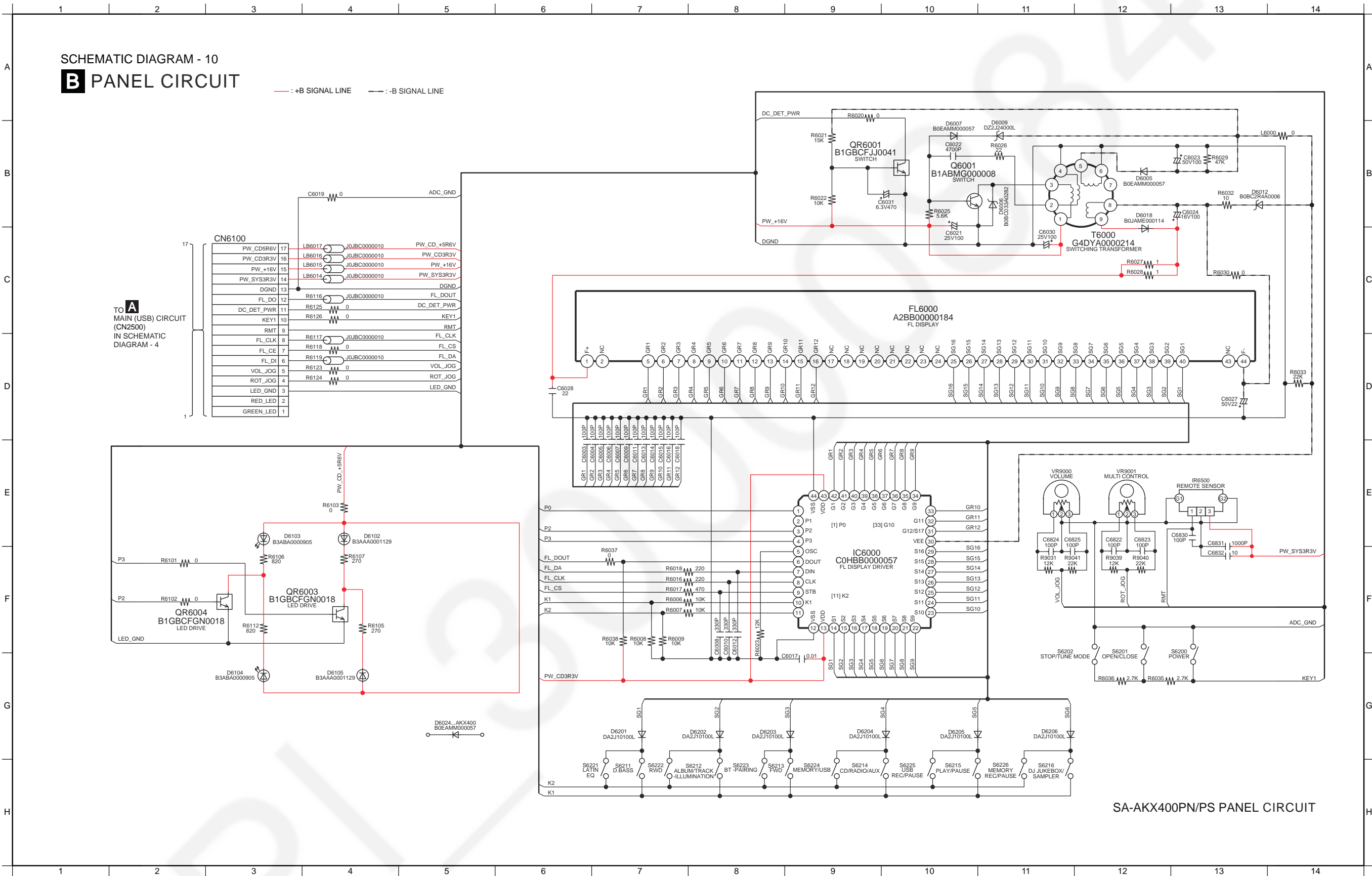
MI: MAIN (MICON): SCHEMATIC DIAGRAM - 1 ~ 3
US: MAIN (USB): SCHEMATIC DIAGRAM - 4
TU: MAIN (TUNER AUX): SCHEMATIC DIAGRAM - 5
DS: MAIN (DSP BLUETOOTH): SCHEMATIC DIAGRAM - 6
DA: MAIN (DAMP): SCHEMATIC DIAGRAM - 7
VR: MAIN (VOLTAGE REGULATOR): SCHEMATIC DIAGRAM - 8 ~ 9



12.10. Panel Circuit (For SA-AKX200PN/PS)



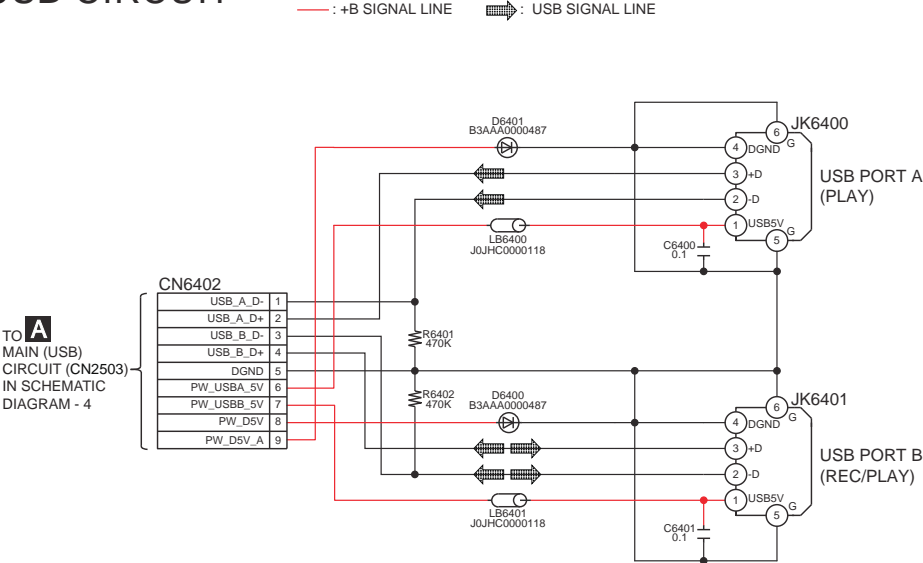
12.11. Panel Circuit (For SA-AKX400PN/PS)



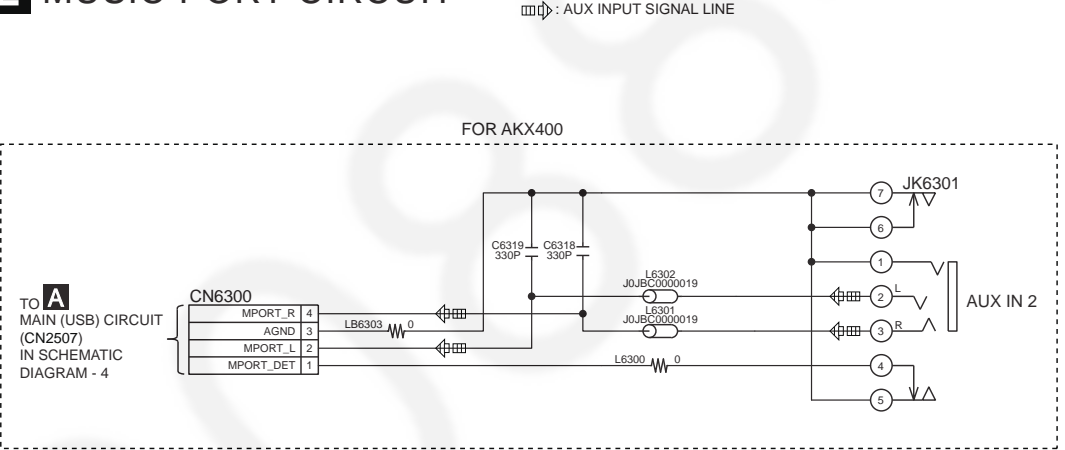
12.12. USB, CD Interface and Music Port Circuit

SCHEMATIC DIAGRAM - 11

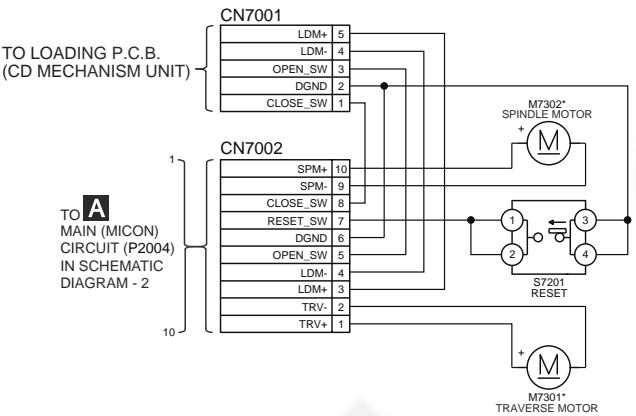
C USB CIRCUIT



E MUSIC PORT CIRCUIT



D CD INTERFACE CIRCUIT



NOTE: “*” REF IS FOR INDICATION ONLY

SA-AKX200PN/PS,SA-AKX400PN/PS USB / CD INTERFACE / MUSIC PORT CIRCUIT

14 Voltage and Waveform Measurement

14.1. Voltage Measurement

Note:

- Indication Voltage Values are in standard values for the unit measured by the DC electronic circuit tester (high-impedance) with the chassis taken as standard.
- Therefore, there may exist some errors in voltage values, depending on the internal impedance of the DC circuit tester.
- Circuit voltage and waveform described herein shall be regarded as reference information when probing defect point because it may differ from actual measuring value due to difference of Measuring instrument and its measuring condition and product itself.

14.1.1. Main P.C.B. (1/3)

REF NO.	IC1000																			
MODE	1	2	3																	
CD PLAY	0	3.3	5.9																	
STANDBY	0	3.3	5.9																	

REF NO.	IC1002																			
MODE	1	2	3	4	5	6	7	8	9	10										
CD PLAY	21.8	32.7	2.9	2.3	0.5	2.6	0.8	0.9	0	15.6										
STANDBY	21.8	32.7	2.9	2.3	0.5	2.6	0.8	0.9	0	15.6										

REF NO.	IC1003																			
MODE	1	2	3	4	5	6	7	8	9	10										
CD PLAY	12	13.4	2.9	2.4	0.5	2.6	0.8	0.8	0	5.9										
STANDBY	12	13.4	2.9	2.4	0.5	2.6	0.8	0.8	0	5.9										

REF NO.	IC1004																			
MODE	1	2	3	4																
CD PLAY	3.2	0	1.6	3.2																
STANDBY	3.2	0	1.6	3.2																

REF NO.	IC1005																			
MODE	1	2	3																	
CD PLAY	0	3.2	4.2																	
STANDBY	0	3.2	4.2																	

REF NO.	IC2001																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
CD PLAY	3.2	3.2	3.2	3.2	3.1	3.2	0	0	0	1.1	3.2	0	0	0	0	0	3.2	1.6	0	0
STANDBY	3.2	3.2	3.2	3.2	0	0	0	0	3.1	0	3.2	0	0	0	0	0	3.2	1.6	0	0

REF NO.	IC2001																			
MODE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
CD PLAY	2.6	3.2	0.1	3.2	2.9	2.9	0	0	3.3	0	3.3	0.1	1.6	1.6	0.5	0.9	0.8	1.6	1.6	1
STANDBY	2.6	3.2	0	3.2	2.9	2.9	0	0	3.3	0	3.3	0	1.6	1.6	0	1.6	0.8	1.6	1.6	1

REF NO.	IC2001																			
MODE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
CD PLAY	0	0	1.6	1.6	2	2	3.2	3.2	3.2	3.2	1.6	1.6	0	1.6	1.6	0	1.9	1.6	1.7	1.7
STANDBY	1	0	1.6	1.6	1.6	2	3.2	1.5	3.2	1.6	1.6	1.6	0	1.6	1.6	0	3.3	0	1.6	1.6

REF NO.	IC2001																			
MODE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
CD PLAY	1.6	1.6	1.6	1.6	1.6	0	1.6	1.6	1.6	1.6	0	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	0
STANDBY	1.6	1.6	1.6	1.6	1.6	0	1.6	1.5	1.5	1.3	0	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	0

REF NO.	IC2001																			
MODE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
CD PLAY	0.7	1.6	1.6	0	0	2.9	1.1	2.7	2.9	0.2	0.2	1.6	3.3	3.3	0	3.2	0	0	0	0
STANDBY	0	1.6	1.6	0	0	3.2	1.6	3.2	3.2	0	0	1.6	3.3	3.3	0	3.2	0	0	0	1.2

SA-AKX200/400PN/PS MAIN P.C.B.

14.1.2. Main P.C.B. (2/3)

REF NO. MODE	IC2001																			
	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120
CD PLAY	3.2	3.2	0	0	3.2	0	0	3.2	3.2	1.6	1.6	1.6	0	0	0	3.3	3.2	3.2	3.2	3.2
STANDBY	2	2	2	0	3.1	2	0.2	3.2	1.2	1.2	1.1	1.2	3.2	3.2	3.2	1.2	1.4	3.2	3.2	3.2
REF NO. MODE	IC2001																			
	121	122	123	124	125	126	127	128												
CD PLAY	1.8	3.3	0	1.5	1.4	0	1.4	1.4												
STANDBY	1.8	1	0	1.4	1.5	1.5	1.4	1.4												
REF NO. MODE	IC2004																			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
CD PLAY	1.6	5.9	2.6	1.6	2.6	0	0	5.9	0	0	3.1	2.9	2.9	3.1	3	3.1	3.6	2.5	5.9	2.4
STANDBY	1.6	5.9	2.6	1.6	2.6	0	0	5.9	0	0	3	3	3	3	3	3	3	3	5.9	2.4
REF NO. MODE	IC2004																			
	21	22	23	24	25	26	27	28	29	30										
CD PLAY	1.5	0	1.8	5.9	5.9	1.6	1.6	3.3	0	0										
STANDBY	1.5	0	1.6	5.9	5.9	1.6	1.6	3.3	0	0										
REF NO. MODE	IC2005																			
	1	2	3	4																
POWER ON	0	3.3	0	3.3																
REF NO. MODE	IC2006																			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16				
CD PLAY	3.2	0	3.2	0	3.2	0	0	0	0	0	0	0	3.2	3.2	3.2	3.2				
STANDBY	3.2	0	3.2	0	3.2	0	0	0	0	0	0	0	3.2	3.2	3.2	3.2				
REF NO. MODE	IC2500																			
	1	2	3	4	5	6	7	8	9	10										
USB B ON	3	0	0	0.2	3	0	3	0	3.3	3.3										
REF NO. MODE	IC2501																			
	1	2	3	4	6															
USB A ON	5	0	5	5	5															
REF NO. MODE	IC2502																			
	1	2	3	4	6															
USB B ON	5	0	5	5	5															
REF NO. MODE	IC6000 (For SA-AKX400)																			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
CD PLAY	12.6	12.6	1.2	3.3	1.7	1.7	3.2	3.3	0	0	0	0	7.8	1.7	1.7	3.3	3.3	3.3	0	2.8
STANDBY	12.6	12.6	1.2	3.3	1.7	1.7	3.2	3.3	0	0	0	0	7.8	1.7	1.7	3.3	3.3	3.3	0	2.8
REF NO. MODE	IC6000 (For SA-AKX400)																			
	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
CD PLAY	0	12.6	30.1	30.1	0	0	18.7	18.7	38.4	38.4	38.4	18.7	0	0	18.6	38.4	38.4	38.4	18.6	18.6
STANDBY	0	12.6	30.1	30.1	0	0	18.7	18.7	38.4	38.4	38.4	18.7	0	0	18.6	38.4	38.4	38.4	18.6	18.6
REF NO. MODE	IC6000 (For SA-AKX400)																			
	41	42	43	44																
CD PLAY	0	0	30.1	30.1																
STANDBY	0	0	30.1	30.1																

SA-AKX200/400PN/PS MAIN P.C.B.

14.1.3. Main P.C.B. (3/3)

REF NO.	IC6000 (For SA-AKX200)																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
CD PLAY	12.5	12.5	1.2	3.3	1.7	1.7	2.7	2.7	3.3	0	0	0	7.8	1.7	1.7	3.3	3.3	3.3	0	2.8
STANDBY	12.6	12.5	1.2	3.3	1.7	1.7	2.7	3.3	0	0	0	0	7.8	1.7	1.7	3.3	3.3	3.3	0	2.8
REF NO.	IC6000 (For SA-AKX200)																			
MODE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
CD PLAY	0	12.6	27.9	27.7	0	0	16.3	16.3	32.6	32.6	1.4	16.3	0	0	16.3	32.6	32.6	32.6	16.3	16.3
STANDBY	0	12.6	27.9	27.9	0	0	16.3	16.3	32.6	32.6	2.3	16.3	0	0	16.3	32.6	32.6	32.6	16.3	16.3
REF NO.	IC6000 (For SA-AKX200)																			
MODE	41	42	43	44																
CD PLAY	0	0	27.8	27.8																
STANDBY	0	0	27.9	27.9																
REF NO.	IC6100																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16				
CD PLAY	6.5	0	6.5	0	0.1	0	0	0	0	0	0	6.5	6.5	0.1	0	13				
STANDBY	6.5	0	6.5	0	0.1	0	0	0	0	0	0	6.5	6.5	0.1	0	13				
REF NO.	Q1000				Q2001				Q6001				Q6002				Q6007			
MODE	E	C	B		E	C	B		E	C	B		E	C	B		E	C	B	
CD PLAY	12.8	16.1	13.4		2.9	1.9	2.2		0	3.2	0		32.6	0	12		16.3	11.7	0	
STANDBY	12.8	16.1	13.4		2.9	1.9	2.2		0	3.2	0		32.6	0	12		16.3	11.7	0	
REF NO.	Q6300				QR6100															
MODE	E	C	B		E	C	B													
CD PLAY	16.3	11.7	0		0	0	3.2													
STANDBY	16.3	11.7	0		0	0	3.2													
REF NO.	Q1007						Q1008				QR1003				QR1008					
MODE	1	2	3	4	5	6	E	C	B		E	C	B		E	C	B			
POWER ON	6	6	0	6	6	6	12	0	12		0	0	3.3		0	3.3	0			
REF NO.	Q2500				QR2500															
MODE	E	C	B		E	C	B													
USB B (ON)	5	5	0		0	0	5													
REF NO.	Q2501				QR2501															
MODE	E	C	B		E	C	B													
USB A (ON)	5	5	0		0	0	5													
REF NO.	QR1006				QR1007															
MODE	E	C	B		E	C	B													
AM BP (ON)	0	0	3.3		0	0	3.3													

SA-AKX200/400PN/PS MAIN P.C.B.

14.1.4. Panel P.C.B.

REF NO.	IC6000																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
CD PLAY	0	0	0	0	1.9	3.3	1.3	0.1	2.9	0	0	0	3.3	-15.9	-15.9	-19.6	-23.3	-21.4	-23.3	-21.4
STANDBY	0	0	0	0	1.9	3.3	1.3	0.1	2.9	0	0	0	3.3	-15.9	-15.9	-19.6	-23.3	-21.4	-23.3	-21.4

REF NO.	IC6000																			
MODE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
CD PLAY	-23.3	-23.3	-21.4	-23.3	-15.9	-19.6	-15.9	-21.4	-23.3	-23.7	-22	-21.6	-21.4	-21.4	-21.4	-21.4	-21.4	-21.4	-21.4	-21.4
STANDBY	-23.3	-23.3	-21.4	-23.3	-15.9	-19.6	-15.9	-21.4	-23.3	-23.7	-22	-21.6	-21.4	-21.4	-21.4	-21.4	-21.4	-21.4	-21.4	-21.4

REF NO.	IC6000																			
MODE	41	42	43	44																
CD PLAY	-21.5	-21.8	3.3	0																
STANDBY	-21.5	-21.8	3.3	0																

REF NO.	Q6001				QR6003				QR6004											
MODE	E	C	B		E	C	B		E	C	B									
CD PLAY	0	15.5	-0.2		0	0.2	3.2		0	4.3	0									
STANDBY	0	15.5	-0.2		0	0.2	3.2		0	4.3	0									

REF NO.	QR6001																			
MODE	E	C	B																	
POWER ON	0	3.3	0																	

SA-AKX200/400PN/PS PANEL P.C.B.