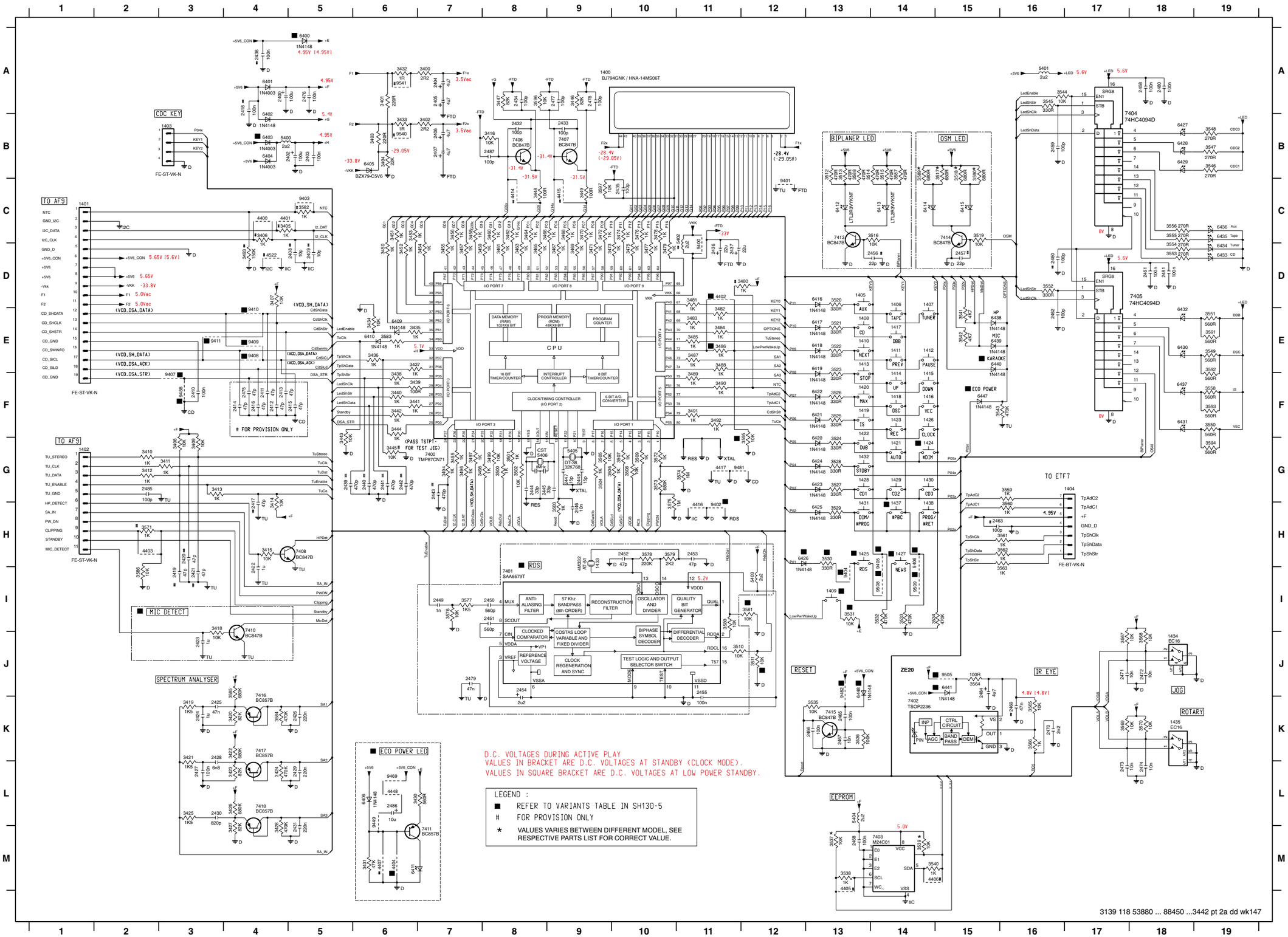
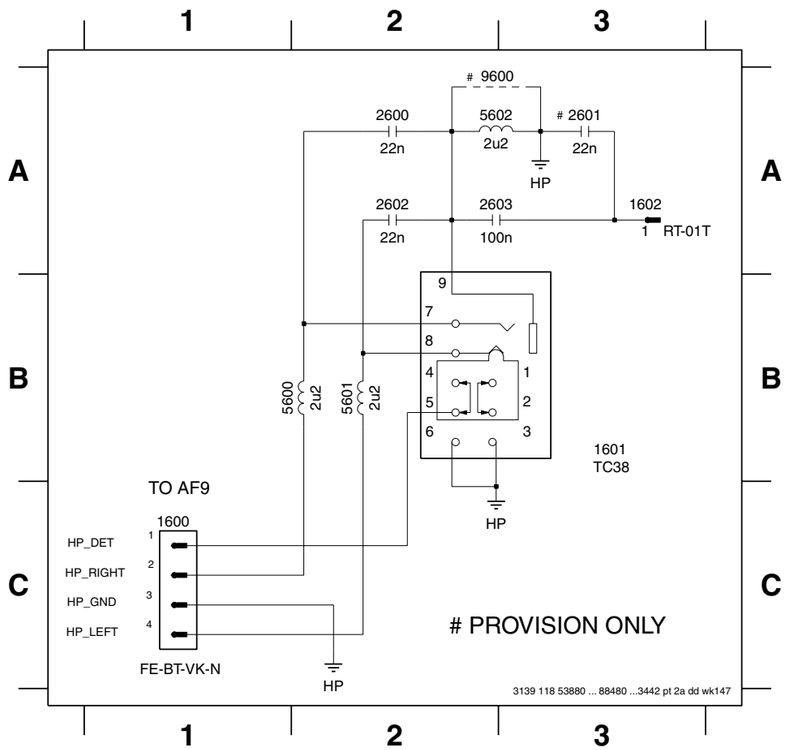
FRONT BOARD - CIRCUIT DIAGRAM



1400 A9 3445 G6 4522 D4
1401 C1 3446 A9 5400 B4
1402 G1 3447 A8 5401 A16
1403 B3 3448 C8 5402 C11
1404 G16 3449 C9 5403 I12
1405 D13 3450 D6 5404 L13
1406 D14 3451 C6 5405 G9
1407 D14 3452 D6 5406 G8
1408 E13 3453 C6 6400 A5
1409 I13 3454 D7 6401 A4
1410 E13 3455 D7 6402 B4
1411 E14 3456 C7 6403 B4
1412 E14 3457 D7 6404 B4
1413 E13 3458 C7 6405 B6
1414 F14 3459 D7 6406 L6
1415 F14 3460 C8 6409 E6
1416 F14 3461 D8 6410 E6
1417 E14 3462 C8 6411 M6
1418 F14 3463 D8 6412 C13
1419 F13 3464 C8 6413 C14
1420 F13 3465 D8 6414 C14
1421 G14 3466 C8 6415 C15
1422 F13 3467 D9 6416 D13
1423 F14 3468 C9 6417 E13
1424 G14 3469 D9 6418 E13
1425 H13 3470 C9 6419 E13
1426 F14 3471 D9 6420 G13
1427 H14 3472 C9 6421 F13
1428 G13 3473 D9 6422 F13
1429 G14 3474 C10 6423 G13
1430 G14 3475 D10 6424 G13
1431 H13 3476 C10 6425 H13
1432 G13 3477 D10 6426 H12
1433 H9 3478 C10 6427 B18
1434 J18 3479 D10 6428 B18
1435 K18 3480 D12 6429 B18
1437 H14 3481 D11 6430 E18
1438 H14 3482 E11 6431 F18
2400 A4 3483 E11 6432 E18
2402 B5 3484 E11 6433 D19
2403 B5 3485 E11 6434 D19
2404 A7 3486 E11 6435 C19
2405 A7 3487 E11 6436 C19
2406 B7 3488 E11 6437 F18
2407 B7 3489 F11 6438 E15
2408 D5 3490 F11 6439 E15
2409 D5 3491 F11 6440 E15
2410 F3 3492 F11 6441 J15
2411 F4 3493 D4 6447 F15
2412 F4 3494 G7 6448 J13
2413 F4 3495 G7 7402 K14
2414 F4 3496 G7 7403 M14
2415 F5 3497 G7 7404 B17
2416 F4 3498 G7 7405 D18
2417 H4 3499 G8 7406 B8
2418 A4 3500 G8 7407 B9
2419 I3 3501 G8 7408 H5
2420 H3 3502 G8 7410 J4
2421 I3 3503 H9 7411 M7
2422 I4 3504 G9 7413 C13
2423 J3 3505 G9 7414 C15
2424 K3 3506 G9 7415 K13
2425 K3 3507 G10 7416 J4
2426 K5 3508 G10 7417 K4
2427 L3 3509 G10 7418 L4
2428 K3 3510 J11 9400 D11
2429 L5 3511 J12 9401 C12
2430 L3 3512 B13 9402 H11
2431 M5 3513 B13 9403 C5
2432 B8 3514 B13 9404 I13
2433 B9 3515 B14 9405 H14
2434 A8 3516 C14 9406 H14
2435 C10 3517 B15 9407 E3
2436 D11 3518 B15 9408 E4
2437 D11 3519 C15 9409 E4
2438 A4 3520 D13 9410 D4
2439 G5 3521 E13 9411 E3
2440 G6 3522 E13 9449 L6
2441 G6 3523 E13 9462 J13
2442 G6 3524 G13 9469 L6
2443 G7 3525 F13 9481 G11
2444 G8 3526 F13 9488 F3
2445 G8 3527 G13 9505 J15
2446 H9 3528 G13 9508 I14
2447 G9 3529 H13 9509 I14
2448 G9 3530 H13 9540 B6
2449 I7 3531 I13 9541 A6
2450 I8 3532 I14
2451 I8 3533 I14
2452 H10 3534 I15
2453 H11 3535 K13
2454 J8 3536 K13
2455 J11 3537 M13
2456 D14 3538 M13
2457 D15 3539 M14
2458 A18 3540 M14
2459 B16 3541 E15
2460 D16 3542 E15
2461 D18 3543 F15
2462 E16 3544 A16
2463 H15 3545 A16
2465 K13 3546 B19
2466 K13 3547 B19
2467 K13 3548 B19
2468 M13 3549 E19
2469 K16 3550 F19
2470 K16 3551 E19
2471 J17 3552 D16
2472 J18 3553 D18
2473 L17 3554 D18
2474 L18 3555 C18
2475 F4 3556 C18
2476 A5 3558 F19
2477 A9 3559 G16
2478 A9 3560 H16
2479 J7 3561 H16
2480 A18 3562 H16
2481 D18 3563 I16
2484 J15 3564 J15
2485 G2 3565 K16
2486 L6 3566 K16
2487 B8 3567 J17
3400 A7 3568 J18
3401 A6 3569 K17
3402 B7 3570 K18
3403 B6 3571 H2
3404 B6 3572 G10
3405 C4 3573 G10
3406 C4 3574 G11
3407 D4 3575 H10
3408 G3 3576 I7
3409 G3 3577 I7
3410 G2 3578 H10
3411 G3 3579 H10
3412 G2 3580 I11
3413 G3 3581 I12
3414 H4 3582 C5
3415 H4 3583 E6
3416 B8 3584 K4
3418 I3 3585 J4
3419 K3 3586 I2
3420 K4 3587 B14
3421 K3 3588 B13
3422 K4 3589 B14
3423 L4 3590 B15
3424 L4 3591 E19
3425 L3 3592 E19
3426 L4 3593 F19
3427 M4 3594 G19
3428 M4 3595 G12
3430 L6 3596 A8
3431 M6 3597 C9
3432 A6 4400 C4
3433 B6 4401 C4
3434 E6 4402 D11
3435 E6 4403 H2
3436 E6 4404 M6
3437 E6 4405 M13
3438 F6 4406 M14
3439 F6 4407 M6
3440 F6 4414 C8
3441 F6 4415 C9
3442 F6 4416 H11
3443 G5 4417 G11
3444 F6 4448 L6

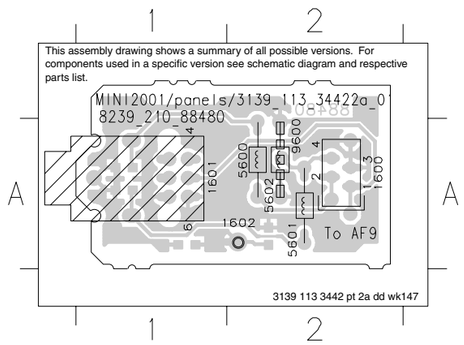
HEADPHONE PART - CIRCUIT DIAGRAM



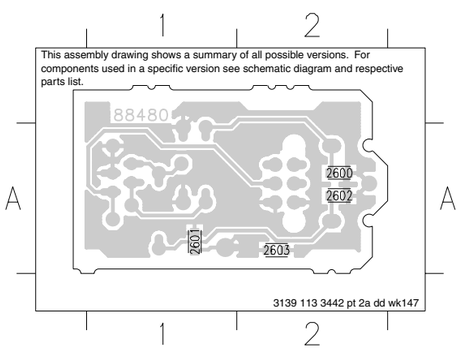
1600 C1
1601 B3
1602 A3
2600 A2
2601 A3
2602 A2
2603 A2
5600 B2
5601 B2
5602 A2
9600 A2

HEADPHONE BOARD - COMPONENT & CHIP LAYOUT

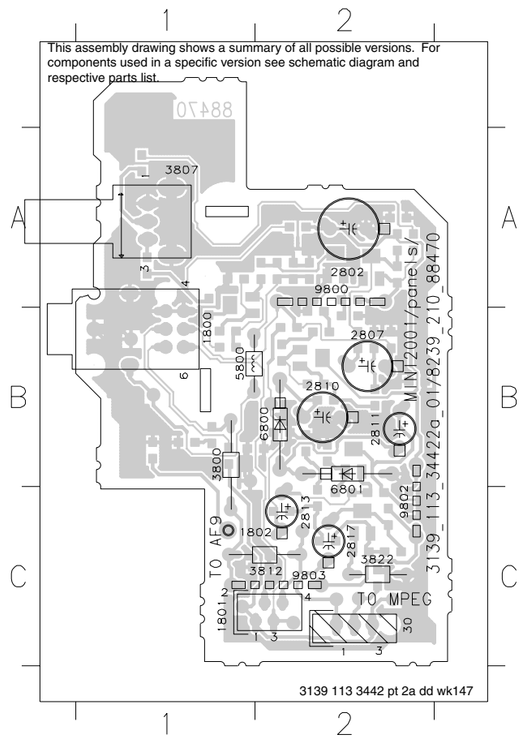
1600 A2 1602 A2 5601 A2 9600 A2
1601 A1 5600 A2 5602 A2



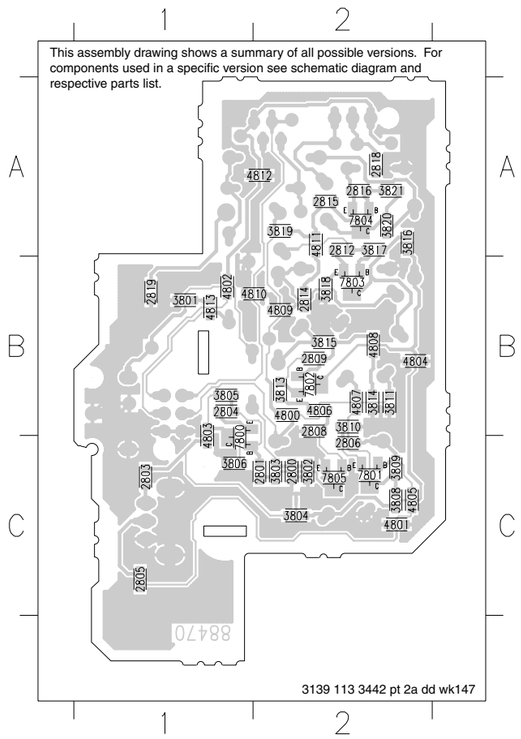
2600 A2 2601 A1 2602 A2 2603 A2



KARAOKE BOARD - COMPONENT & CHIP LAYOUT



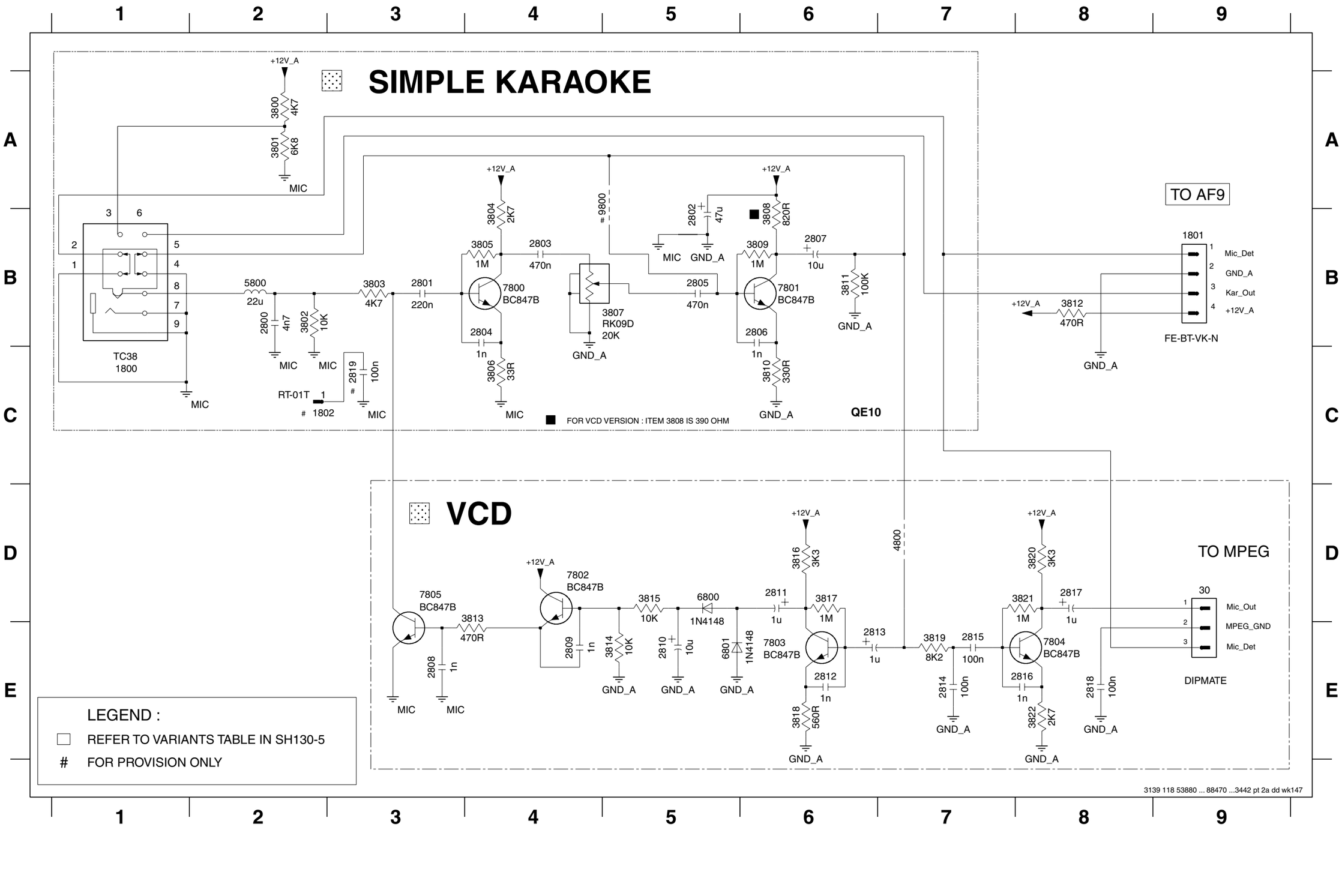
30 C2
1800 B1
1801 C1
2802 A2
2807 B2
2810 B2
2811 B2
2813 C2
2817 C2
3800 B1
3807 A1
3812 C2
3822 C2
5800 B1
6800 B2
6801 C2
9800 A2
9802 C2
9803 C2



2800 C2
2801 C2
2803 C1
2804 B1
2805 C1
2806 C2
2808 B2
2809 B2
2812 A2
2814 B2
2815 A2
2816 A2
2818 A2
2819 B1
3801 B1
3802 C2
3803 C2
3804 C2
3805 B1
3806 C1
3808 C2
3809 C2
3810 B2
3811 B2
3813 B2
3814 B2
3815 B2
3816 A2
3817 A2
3818 B2
3819 A2
3820 A2
3821 A2
4800 B2
4801 C2
4802 B1
4803 B1
4804 A2
4805 C2
4806 B2
4807 B2
4808 B2
4809 B2
4810 B2
4811 A2
4812 A2
4813 B1
7800 C1
7801 C2
7802 B2
7803 B2
7804 A2
7805 C2

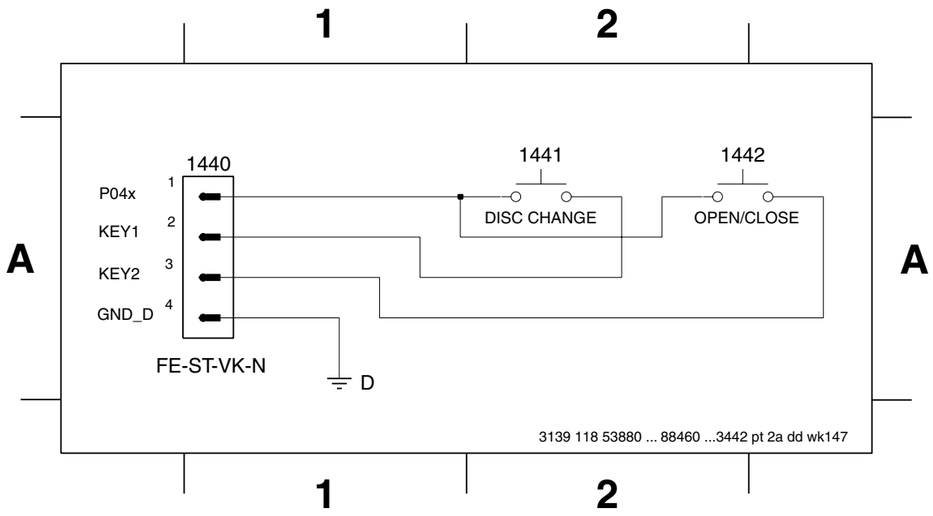
KARAOKE PART - CIRCUIT DIAGRAM

30 D9	1802 C2	2802 B5	2805 B5	2808 E3	2811 D6	2814 E7	2817 D8	3800 A2	3803 B3	3806 C4	3809 B6	3812 B8	3815 D5	3818 E6	3821 D8	5800 B2	7800 B4	7803 E6	9800 A5
1800 C1	2800 B2	2803 B4	2806 B6	2809 E4	2812 E6	2815 E7	2818 E8	3801 A2	3804 B4	3807 B4	3810 C6	3813 D4	3816 D6	3819 E7	3822 E8	6800 D5	7801 B6	7804 E8	
1801 B9	2801 B3	2804 B4	2807 B6	2810 E5	2813 E6	2816 E8	2819 C3	3802 B2	3805 B4	3808 B6	3811 B6	3814 E5	3817 D6	3820 D8	4800 D7	6801 E5	7802 D4	7805 D3	



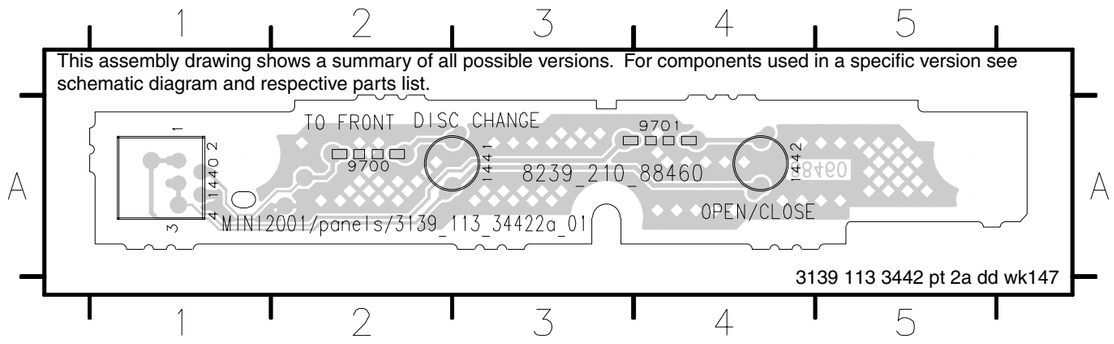
KEY-CDC PART - CIRCUIT DIAGRAM

1440 A1 1441 A2 1442 A2

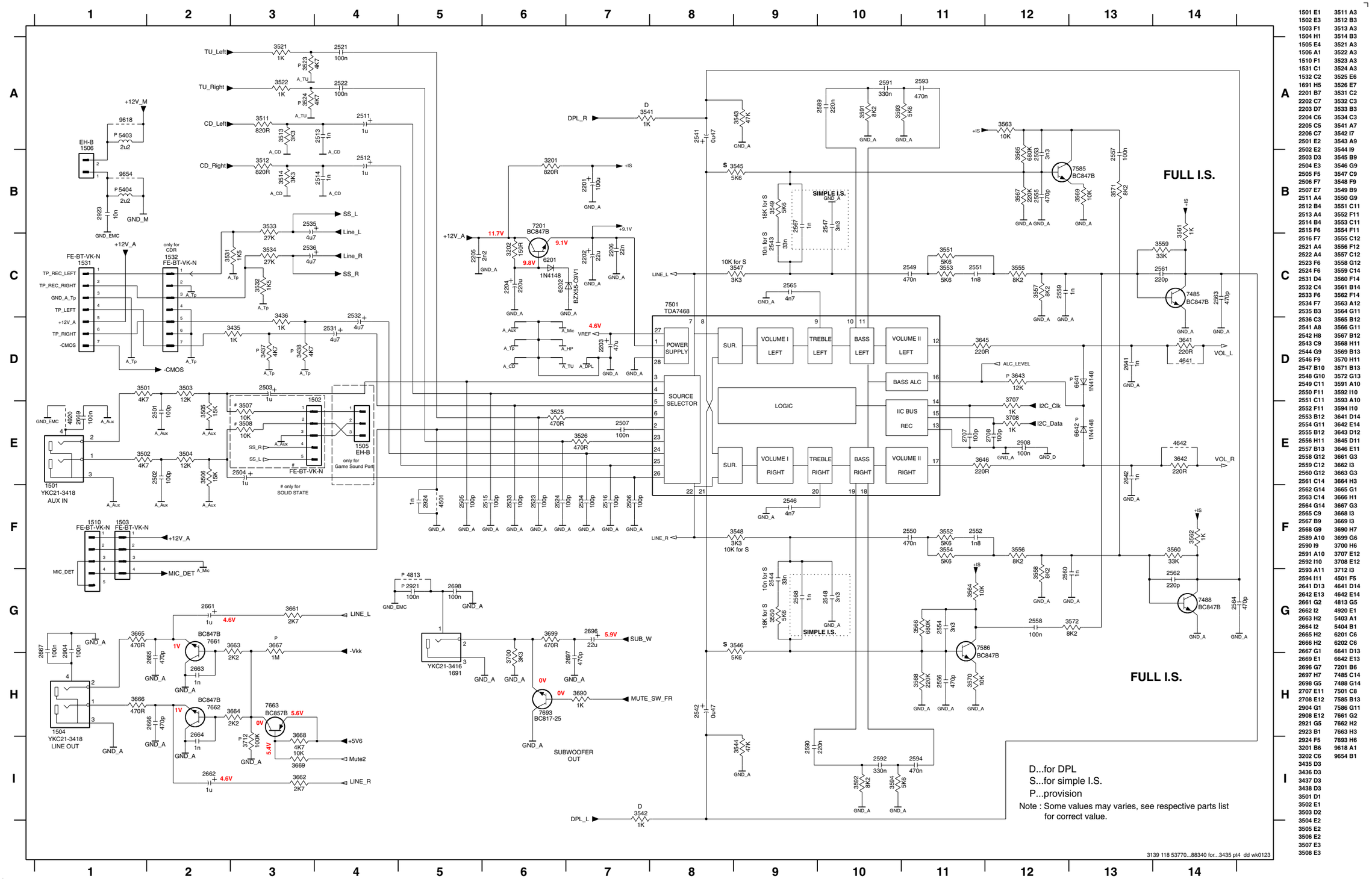


KEY-CDC BOARD - COMPONENT LAYOUT

1440 A1 1441 A3 1442 A4 9700 A2 9701 A4

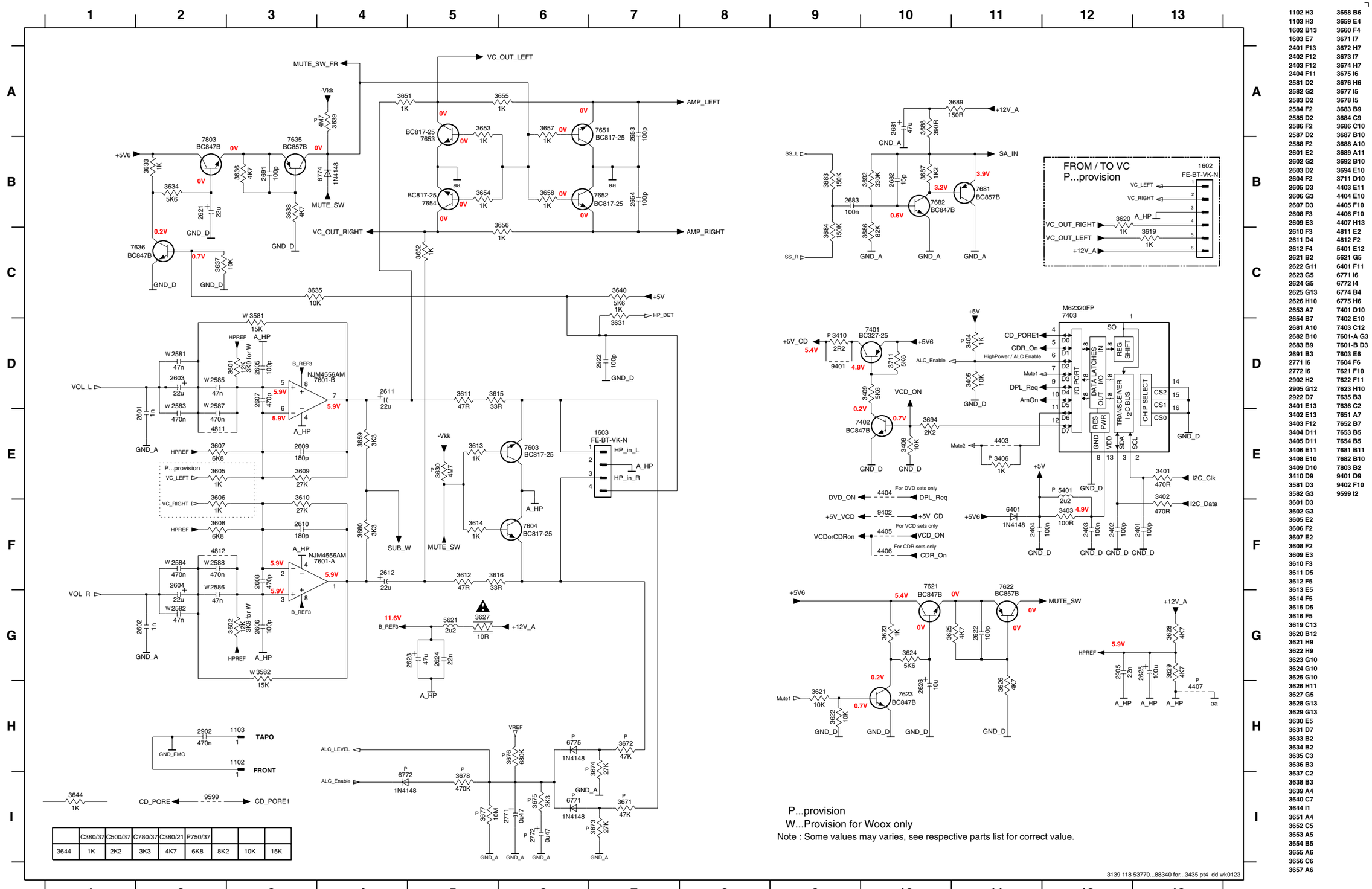


AF9 BOARD - CIRCUIT DIAGRAM (PART 1)



1501 E1	3511 A3	3565 B11	4642 E14
1502 E3	3512 B3	3566 G11	4813 G5
1503 F1	3513 A3	3567 B11	4920 E1
1504 H1	3514 B3	3568 H11	5403 A1
1505 E4	3521 A3	3569 B13	5404 B1
1506 A1	3522 A3	3570 H11	6201 C6
1510 F1	3523 A3	3571 B13	6202 C6
1531 C1	3524 A3	3572 G13	6641 D13
1532 C2	3525 E6	3590 I10	6642 E13
1691 H5	3526 E7	3591 C11	7201 B6
2201 B7	3531 C2	3592 I10	7485 C14
2202 C7	3532 C3	3593 A10	7488 G14
2203 D7	3533 B3	3594 I10	7501 C8
2204 C6	3534 C3	3641 D14	7585 B13
2205 C5	3541 A7	3642 E14	7586 G11
2206 C7	3542 I7	3643 D12	7661 G2
2501 E2	3543 A9	3644 E11	7662 H2
2502 E2	3544 I9	3645 G3	7663 H3
2503 D3	3545 B9	3646 E11	7693 H6
2504 E3	3546 G9	3660 G12	9618 A1
2505 F5	3547 C9	3661 G3	9654 B1
2506 F7	3548 F9	3662 I3	
2507 E7	3549 B9	3663 G3	
2511 A4	3550 G9	3664 H3	
2512 B4	3551 C11	3665 G14	
2513 A4	3552 F11	3666 H14	
2514 B4	3553 C11	3667 E11	
2515 F6	3554 F11	3668 E12	
2516 F7	3555 C12	3669 I3	
2521 A4	3556 F12	3690 H7	
2522 A4	3557 C12	3699 G6	
2523 F6	3558 G12	3700 H6	
2524 F6	3559 C14	3707 E12	
2531 D4	3560 F14	3708 E12	
2532 C4	3561 B14	3712 I3	
2533 F6	3562 F14	4501 F5	
2534 F7	3563 A12	4641 D14	
2535 B3	3564 G11	4642 E14	
2536 C3	3565 B12	4813 G5	
2541 A8	3566 G11	4920 E1	
2542 H8	3567 B12	5403 A1	
2543 C9	3568 H11	5404 B1	
2544 G9	3569 B13	6201 C6	
2546 F9	3570 H11	6202 C6	
2547 B10	3571 B13	6641 D13	
2548 G10	3572 G13	6642 E13	
2549 C11	3591 A10	7201 B6	
2550 F11	3592 I10	7485 C14	
2551 C11	3593 A10	7488 G14	
2552 F11	3594 I10	7501 C8	
2553 B12	3641 D14	7585 B13	
2554 G11	3642 E14	7586 G11	
2555 B12	3643 D12	7661 G2	
2556 H11	3645 D11	7662 H2	
2557 B13	3646 E11	7663 H3	
2558 G12	3661 G3	7693 H6	
2559 C12	3662 I3	9618 A1	
2560 G12	3663 G3	9654 B1	
2561 C14	3664 H3		
2562 G14	3665 G1		
2563 C14	3666 H1		
2564 G14	3667 G3		
2565 C9	3668 I3		
2567 B9	3669 I3		
2568 G9	3690 H7		
2589 A10	3699 G6		
2590 I9	3700 H6		
2591 A10	3707 E12		
2592 I10	3708 E12		
2593 A11	3712 I3		
2594 I11	4501 F5		
2641 D13	4641 D14		
2642 E13	4642 E14		
2661 G2	4813 G5		
2662 I2	4920 E1		
2663 H2	5403 A1		
2664 I2	5404 B1		
2665 H2	6201 C6		
2666 H2	6202 C6		
2667 G1	6641 D13		
2669 E1	6642 E13		
2696 G7	7201 B6		
2697 H7	7485 C14		
2698 G5	7488 G14		
2707 E11	7501 C8		
2708 E12	7585 B13		
2904 G1	7586 G11		
2908 E12	7661 G2		
2921 G5	7662 H2		
2923 B1	7663 H3		
2924 F5	7693 H6		
3201 B6	9618 A1		
3202 C6	9654 B1		
3435 D3			
3436 D3			
3437 D3			
3438 D3			
3501 D1			
3502 E1			
3503 D2			
3504 E2			
3505 E2			
3506 E2			
3507 E3			
3508 E3			

AF9 BOARD - CIRCUIT DIAGRAM (PART 2)



P...provision
W...Provision for Woox only
Note : Some values may varies, see respective parts list for correct value.

3139 118 53770...88340 for...3435 pt4 dd wk0123

	C380/37	C500/37	C780/37	C380/21	P750/37			
3644	1K	2K2	3K3	4K7	6K8	8K2	10K	15K

AF9 BOARD - CIRCUIT DIAGRAM (PART 3)

1100 F6 1201 C1 1202 E1 1203 C1 1204 E1 1205 C1 1206 C1 1401 A9 1402 D9 1403 A9 1404 D9 1405 A9 1520 E6 1521 A7 1522 A6 1523 D6 1524 A5 1525 B5 1541 D4 1542 D4 1801 A1 2207 D3 2208 F2 2209 E3 2210 F2 2211 F3 2520 E7 2801 B4 2802 C3 2803 B3 2804 B3 2805 B2 2806 B2 2807 B1 2808 B4 2809 B4 2810 A4 2901 F6 2950 E7 2951 E7 2952 E7 2953 E7 2954 E6 2955 E7 3205 D2 3412 A8 3801 B4 3802 A4 3803 B3 3804 A3 3805 B2 3806 A1 3807 B4 3808 A3 3809 B2 3820 E3 3821 E2 3822 F3 4802 C4 4901 B8 4903 B8 4904 F7 4905 C3 4906 A5 4907 C8 4908 C8 4909 A3 4910 A3 4911 A4 4912 B8 4913 B8 4914 B5 4915 C8 4921 B1 5801 B2 5802 A3 6204 F7 6205 D3 6206 F3 6207 C5 6208 C5 6209 F3 7202 E3 7404 F3 7802 A3 9405 C8 9483 F6 9484 D4 9486 E7 9614 E3 9634 E2 9904 F7

Note : Some values may varies, see respective parts list for correct value.
P...provision

P 4909 P 4910 P 4911 P 4906 P 4907 P 4908 P 4915 P 4912 4913 P 4914 P 4801 P 2520 P 3806 75R

+5V_CD 3804 220R 5802 2u2 3808 22K 3802 22K 2810 47p GND_D 2.9V

1801 YKC21-3416 COAX DIGITAL OUT 3809 47R 3805 220R 2806 150p 5801 6RG 2803 1u 2804 100n 2807 100n 2805 100n 4921 GND_EMC

7802 74LVU04D VCC GND 3801 470R 2801 100n 3807 2K2 2809 100n 2808 100n 3803 560R 2802 1n

EH-B 1524 GND_D CD_PORE For VCD version only 4914 GND_M

FE-BT-VK-N 1521 D_Text
FE-BT-VK-N 1522 FROM/TO 3CDC
FE-BT-VK-N 1525 +12V_M 6207 1N4003 6208 1N4003 GND_M +5V_CD CD_Right A_CD CD_Left
FE-BT-VK-N 1523

GND_D CD_PORE DSA_STB GND_D For VCD version only 4802 9484 For Non-VCD version only

3412 1K +5V 4.5V
FE-BT-VK-N 1403 1401 1405
NTC GND_D I2C_Data I2C_Clk GND_D +5V6_Con +12V_M +5V6 -Vkk F1 F2 4903 9405 GND_D 4908 DSA_STB D_Text

FE-BT-VK-N 1206 1203 1201 1205 FROM / TO Power Board
AMP_LEFT aa AMP_RIGHT NTC Low_Pw_Ctrl Pw_Dn Clipping AmOn F1 F2 AMP_CS_DC VCDorCDRon DVD_ON
For CDR version only +5V6 4905 +12V_M

-Vkk -CMOS 3205 5K6 -32V -10V 6205 BZX79-C10 2207 47u GND_D GND_D +5V6_Con
1n 2955 GND_D

1204 EH-B 1202 EH-B FROM / TO Power Board
+12V_A GND_A +12V_M GND_M +5V6 GND_D +5V_VCD

3821 10R 9.3V 9634 7202 MC78L05 IN GND OUT 9614 3820 10R
6206 1N4003 2209 47u GND_D GND_D 6209 BZX79-C6V8
2208 220n 2210 220n 7404 BC817-25 2211 100n 3822 270R GND_D GND_D GND_D GND_D

1541 FE-BT-VK-N 1542 FE-BT-VK-N FROM / TO DPL Board
AMP_CS_DC AmOn DPL_Clk DPL_Data D_DPL DPL_Vol_Clk DPL_Req +12V_A SS_L A_DPL SS_R DPL_R A_DPL DPL_L

FROM/TO TUNER
TU_STEREO TU_CLK TU_DATA TU_ENAB +12V_A TU_Right GND_A TU_Left
FE-BT-VK-N 1520
+12V_A 9486 47n 2954 P 2520 10n A_TU 470p 2950 470p 2951 100p 2952 470p 2953

1100 2901 100n GND_D GND_EMC 9483 aa GND_A
MIC_DET 4904 9904 6204 BZX79-B3V3 GND_D

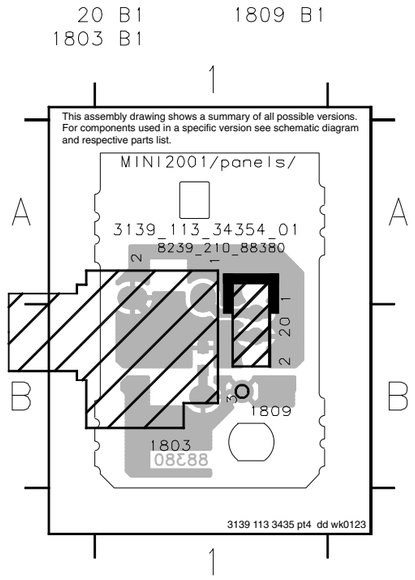
1404 FE-BT-VK-N 1402 FE-BT-VK-N FROM/TO FRONT
TU_STEREO TU_CLK TU_DATA TU_ENAB Tu_Gnd HP_DET SA_IN POWER_DOWN CLIP LOW_PWR_CTRL MIC_DET DPL_VOL_CLK DPL_CLK DPL_DATA GND_D
3.5V 8.5V 4.9V D_DPL

FROM/TO FRONT
GND_D UP_CLK DQSY SRDT GND_D SHIELD COAX2 COAX1 GND_D PORE / DSA_STB GND_D SILD CD_SH_DATA SICL CD_SH_CLK CD_SH_STR SW_INFO +12V_M GND_M +5V_CD CD_RIGHT GND_A CD_LEFT

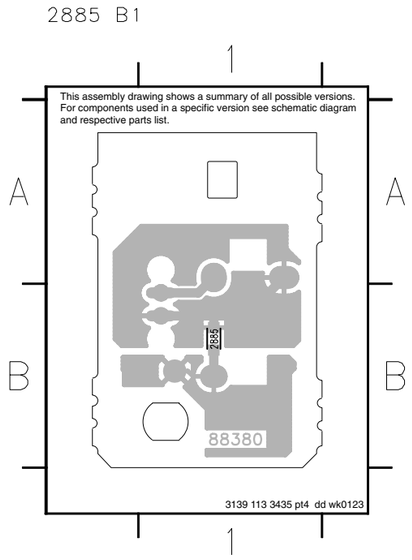
NTC GND_D I2C_DATA I2C_CLK GND_D +5V6_CON +11V_D +5V6 -VKK F1 F2 CD_SH_DATA CD_SH_CLK CD_SH_STR GND_D SW_INFO SICL SILD DSA_STB/GND_D UP_CLK DQSY SRDT GND_D

3139 118 53770...88340 for...3435 pt4 dd wk0123

VIDEO OUT CINCH BOARD - COMPONENT LAYOUT

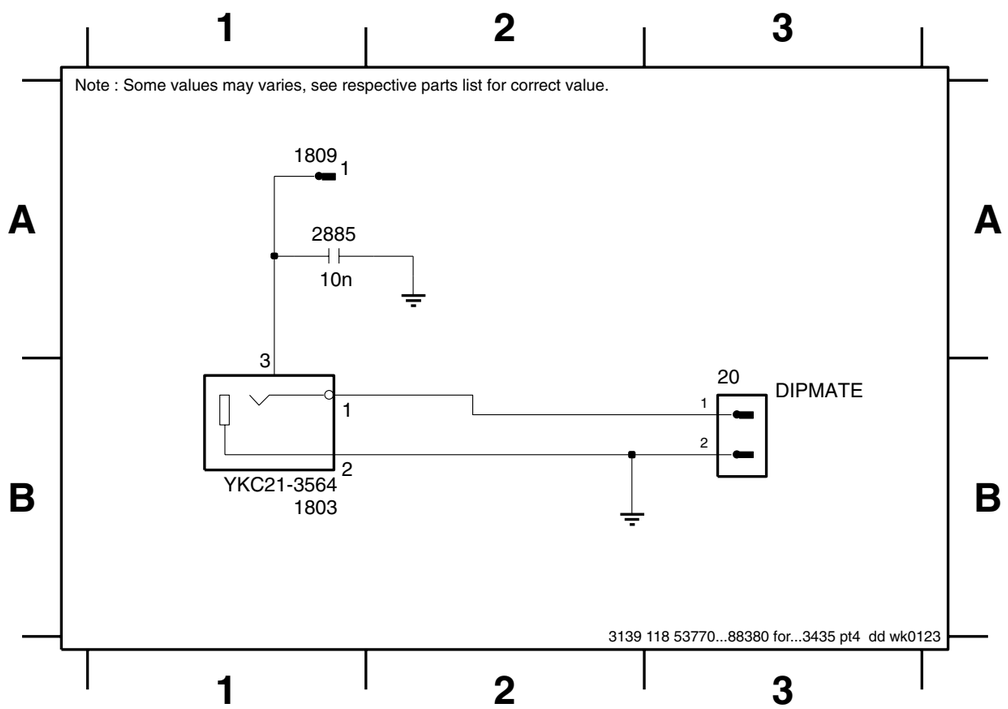


VIDEO OUT CINCH BOARD - CHIP LAYOUT



VIDEO OUT CINCH PART - CIRCUIT DIAGRAM

20 B3 1803 B1 1809 A1 2885 A1



TAPE ADJUSTMENT & CHECK TABLE

	TEST CASSETTE	RECORDER MODE	MEASURE ON	READ ON	ADJUST with	ADJUST to
ADJUST MOTOR SPEED						
NORMAL SPEED	SBC420 3150Hz	PLAY B	◇1 or ◇2 LEFT RIGHT	frequency counter	3620	3150Hz +/- 0.5%
		PLAY A			check	3150Hz -0.8/+1.8%
CHECK WOW & FLUTTER						
DECK A & B	SBC420 3150Hz	PLAY	◇1 or ◇2 LEFT RIGHT	W&F-meter	check	<0.4 % DIN
ADJUST AZIMUTH						
DECK A & B	SBC420 10kHz	PLAY FWD	◇1 or ◇2 LEFT RIGHT	mV-meter	left hand screw	max. output level & left=right
		PLAY REV #			right hand screw	
CHECK PLAYBACK FREQUENCY RESPONSE						
DECK A & B	SBC420	PLAY	◇1 or ◇2 LEFT RIGHT	mV-meter	check	limits see fig.1
ADJUST BIAS CURRENT						
DECK B	SBC419A^	RECORD	◇5 or ◇6 LEFT RIGHT	mV-meter	3773	995mV
	SBC420				check	750mV +/- 1.5dB
CHECK OVERALL FREQUENCY RESPONSE AND DISTORTION						
Inject 3mV signals 100Hz, 250Hz, 1kHz, 10kHz, 12.5kHz via ◇3 or ◇4	SBC419A^ or SBC420	RECORD B				
	RECORDED CASSETTE	PLAY B	◇1 or ◇2 LEFT RIGHT	mV-meter	check	limits see fig. 2 *
Inject 1kHz 8.85mV via ◇3 or ◇4	SBC419A^ or SBC420	RECORD B				
	RECORDED CASSETTE	PLAY B	◇1 or ◇2 LEFT RIGHT	THD-meter	check	<3% *

SBC419A^ : 4822 397 30069
SBC420 : 4822 397 30071

\# For Auto-reverse version only
* If high frequencies are not within limits, decrease bias and re-measure. If distortion is too high, increase bias and re-meaure
^ Not applicable for Ferro version

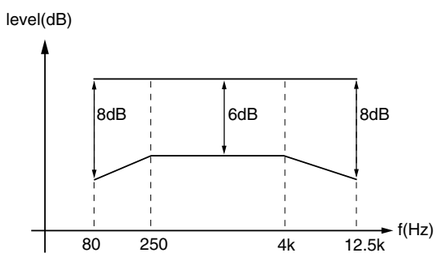


figure. 1

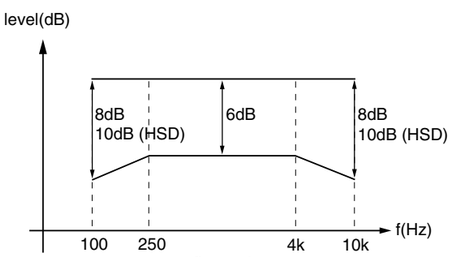
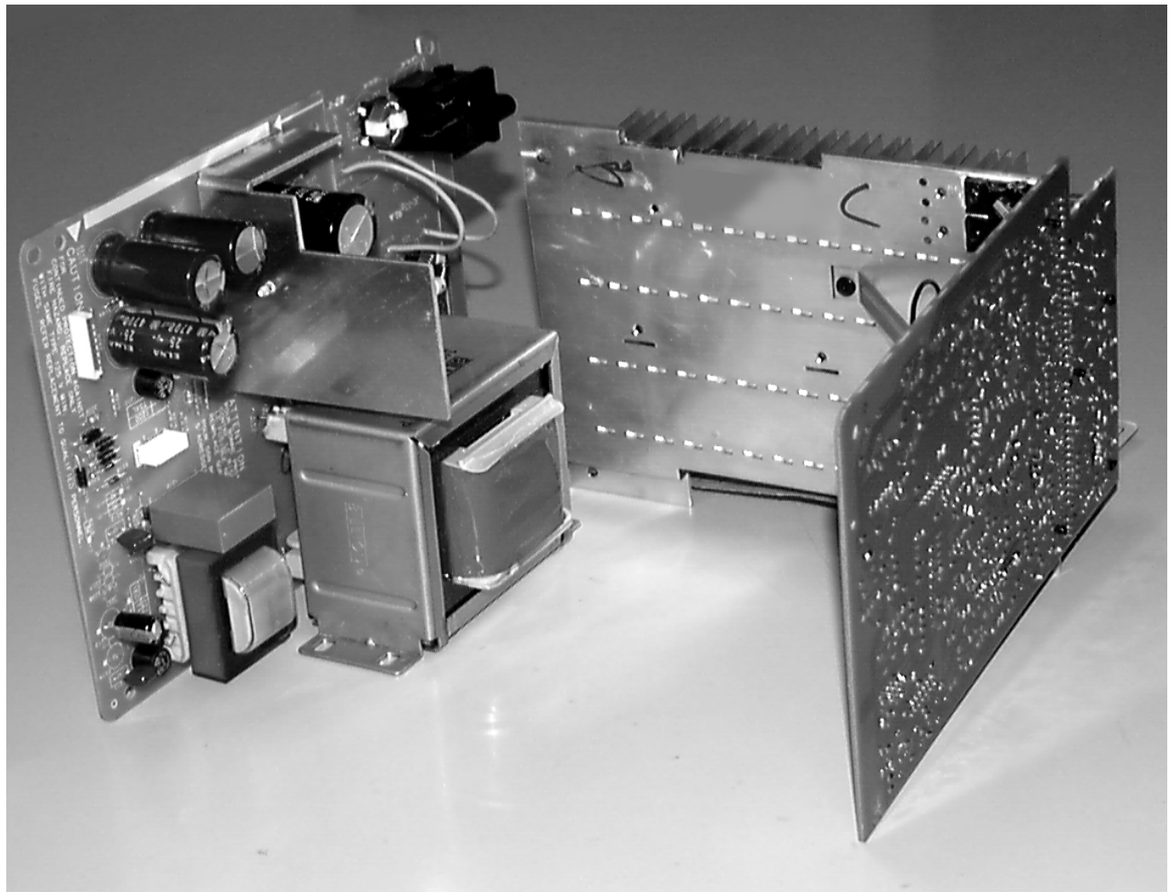


figure. 2



POWER 2001 Module

(30 - 70W Version)

stage .9

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Circuit details:

Amplifier:

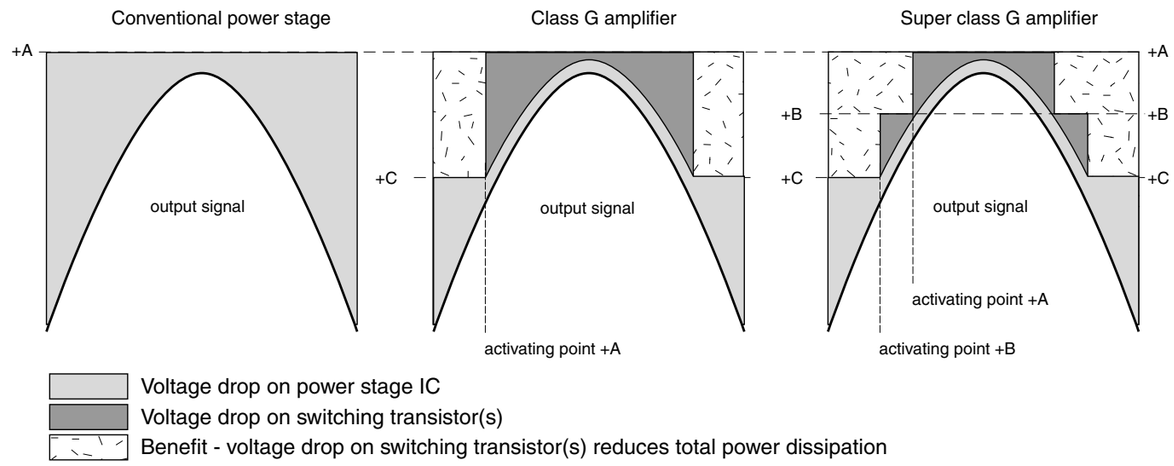
Attention: In the POWER 2001 module the power amplifier IC AN7591 is used as a bridge-amplifier.
Any connection from output to ground will destroy the outpout stages!

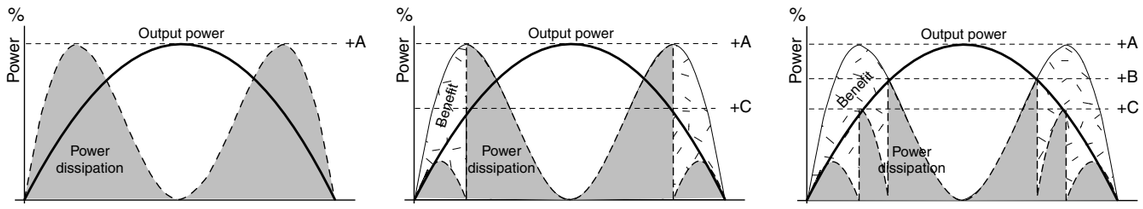
- Via the AMP_ON control line, connected to pins 6 (Stby), the power amplifiers are switched on/off by the µP.
  High level (approx. 4,5V): power amplifiers switched on
  Low level (approx. 0V): power amplifiers switched off

- Super class G - operation

  The power amplifiers operate as so-called super class G - amplifiers:
  The supply pins 12 (Vcc) are not just connected to one fixed DC-supply as in conventional amplifiers.
  Dependent on the output power there are three different DC-voltages supplied to the power amplifiers:
  ⇒ +C1 (+20V) for low output power
  ⇒ +B1 (+29V) for medium output power
  ⇒ +A1 (+41V for high output power

Principle / benefit of Super Class G





Circuit details continued:

- **Low power standby feature**

An additional small standby transformer, reduces power consumption in standby-mode.
In case power is switched on, the control line ECO is low → relay 1210 is activated → contacts 1 and 2 are closed → transformer 5001is connected to mains.
When the set is switched off (standby) the control line ECO is high → relay 1210 is not activated → mainstransformer is disconnected. Via standby transformer and rectifiers 6210-6214 the supply voltage LOW_PWR_SUP is substituted. This voltage is always available and so the microprocessor is kept running.

- **DC voltages +A1, +B1, +C1**

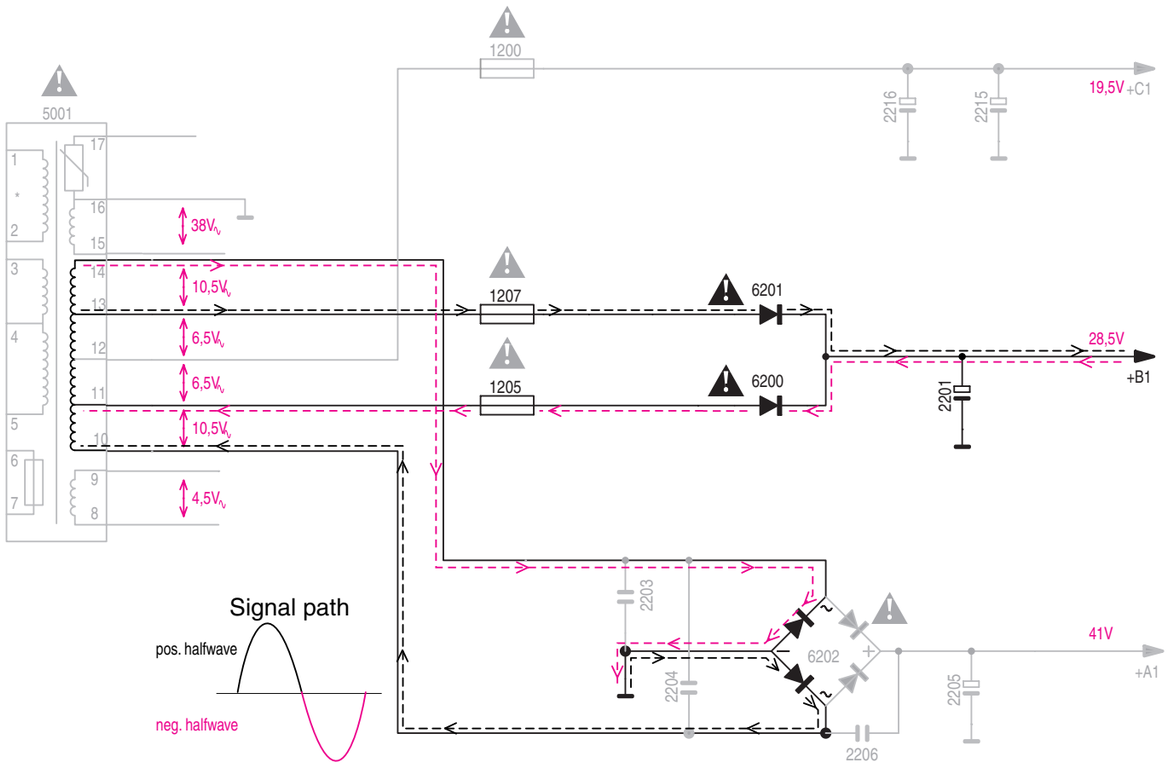
These voltages supply the Super Class G amplifier, described on previous page.
The whole power supply is optimized for the special characteristic of this type of amplifier. For that reason several “tricky” details have been applied to ensure optimal efficiency and symmetrical load to the mains transformer.

Generation of +A1

Common full wave rectifying with bridge rectifier 6202, using 100% secondary winding of mains transformer (pin 10-14).

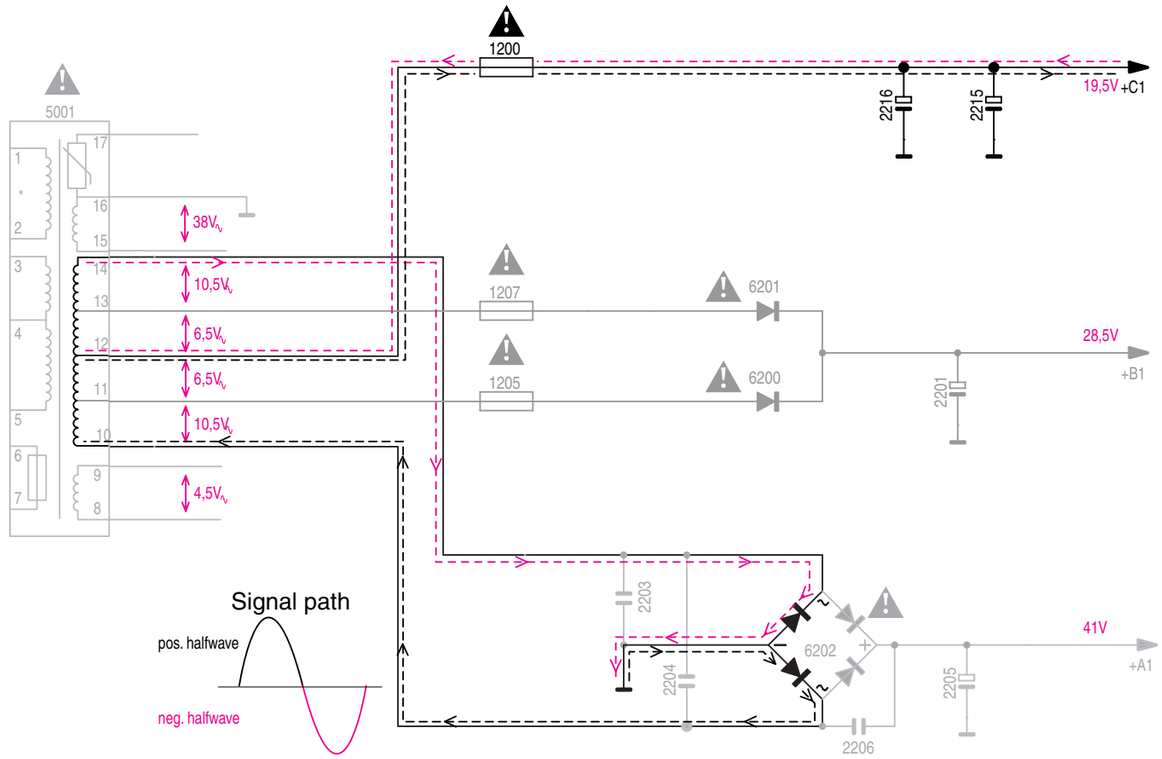
Generation of +B1

The supply for +B1 consists of one full wave rectifier:
– 2 diodes of bridge rectifier 6202, with 6200(6220 in parallel) 6201(6221 in parallel) for generation of +B1using approx. 70% secondary winding of mains transformer (pin 10-13 respectively pin 11-14).
As example for generation of +B1 see picture 1.

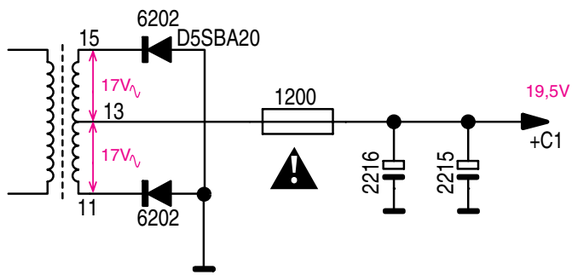


picture 1

Generation of +C1
Full wave rectifying with 2 diodes of bridge rectifier 6202, using 50% secondary winding of mains transformer (pin 13-15/13-11).
See picture 2 below.



simplified:



picture 2

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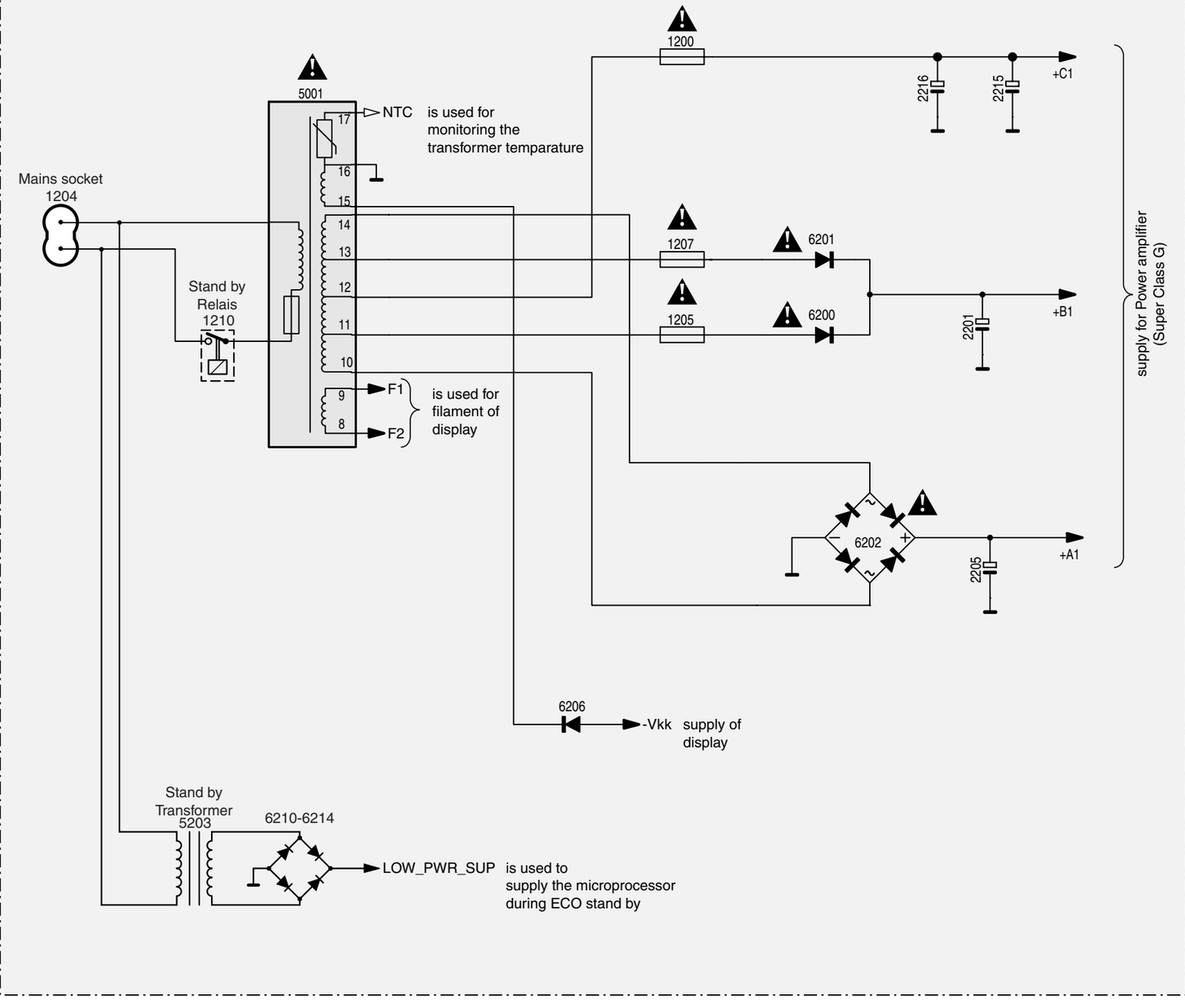
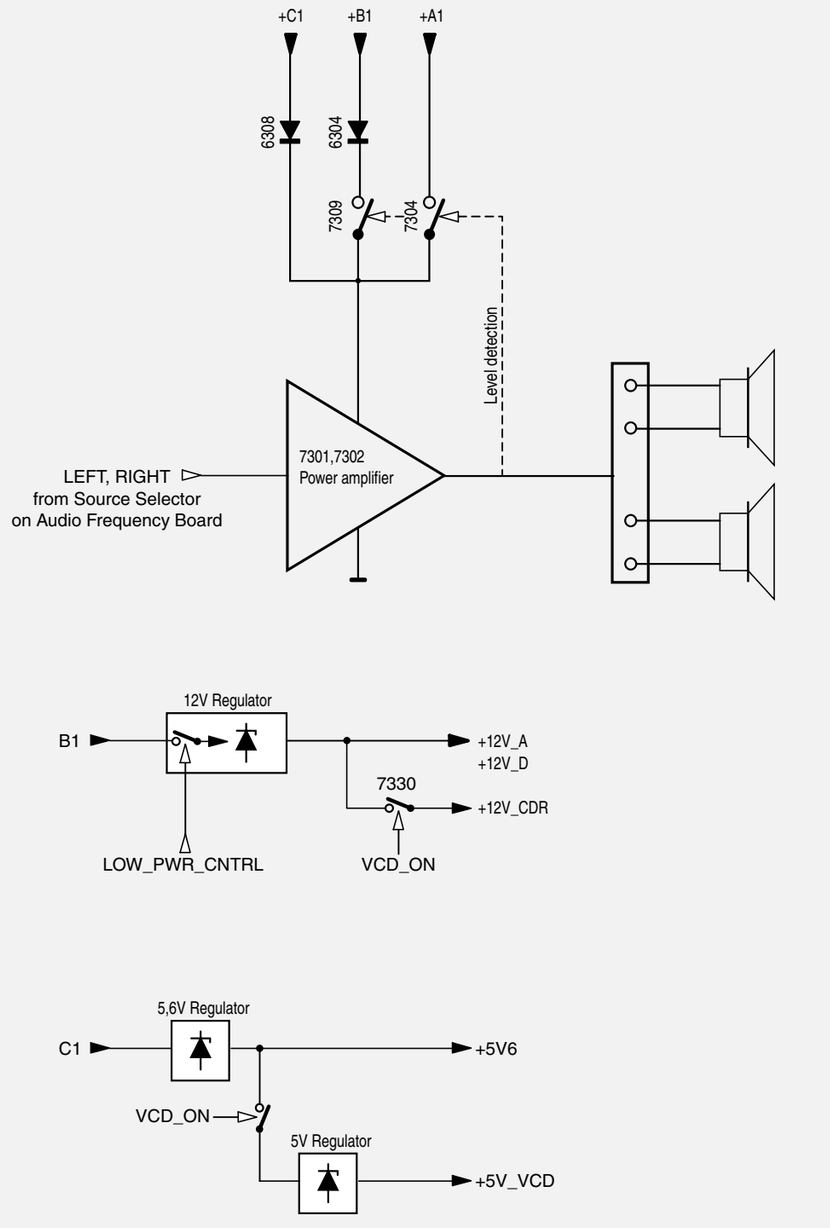
Block Diagram

MAINS BOARD



P2001 BOARD



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P2001 30-70W MAINS

1204 not on all versions 5201 1220 1222 not on all versions 5202
1221 1223
97TS 97TS
1202 T1,6A T1,25A T4A
1206 SDKGA /21 ONLY Voltage Selector
NOT /21 9210 1208 T1,6A /21 ONLY
5001 Mains Transformer
NTC
T.F.
F2 F1
3200 10M /37 ONLY
9211 SDT
Stand by Relay 1210
LOW_PWR_SUP 6208 1N4148 ECO
13.5V 2,5V
1200 T5A 19372
1205 T4A
1207 T4A
C1 19.5V
2216 6m8 2200 4m7 optional
2215 6m8 2217 4m7 optional
CDR ONLY
6200 1N5392
6220 1N5392
6201 1N5392
6221 1N5392
2202 100n
28.5V
2201 3m3
GBU8D
2203 100n
6202
2204 100n
2206 100n
41V
2205 or 2250 4m7 only for /37 3m3 not for /37
3212 33K
1201 EH-B TO C/S BOARD
GND GND C1 B1
19.5V 28.5V
1203 EH-B TO POWER BOARD
19.5V 28.5V 41V 41V
C1 B1 GND GND A1 A1
6203 1N4148
3201 4K7
7.8V
2207 47n
BZX79-F8V2 6204
6209 1N4148
3205 4K7
7200 or 7203 BD238
-45V -33V -33.5V
3211 4R7
3202 3K9
2208 0u47
6206 1N4003
3204 680R
6207 BZX79-C33
2209 100u
2210 100u
-Vkk regulator
1209 FE-BT-VK-N TO POWER BOARD
-Vkk F1 F2 Power Down NTC ECO Low Power Supply
LOW_PWR_SUP
13.5V 13.5V
ONLY /21 9212
NOT /21 9213
1212 T100mA /21 ONLY
5203 Stand by Transformer
1211 T160mA NOT /21
2211 47n 6210 1N4003* 6211 1N4003*
3206 10K 6213 1N4003* 6214 1N4003* 2212 47n 2213 220u
9214 NOT /21
7201 BC327-25 6212 BYV10-40
28V 14V 0V 14V
3207 4K7 28V 13.4V
3208 4K7 8.4V 8.5V 28V 12.9V
6215 BYV10-40
6216 BZX79-C8V2
7202 BC547B 14V 7.5V
3209 100K 2214 220u
6217 BYV10-40
6218 1N4148
6222 BZX79-C2V7
C1
V... at 120V AC
V... at 240V AC
ONLY /21 version
Low Power supply regulator for /21 version only
EVM .....V DC-voltages measured with low output power
*1N4003** → *for /21 BYV10-40 is used*

Power2001 Mainsboard, 2001-03-21

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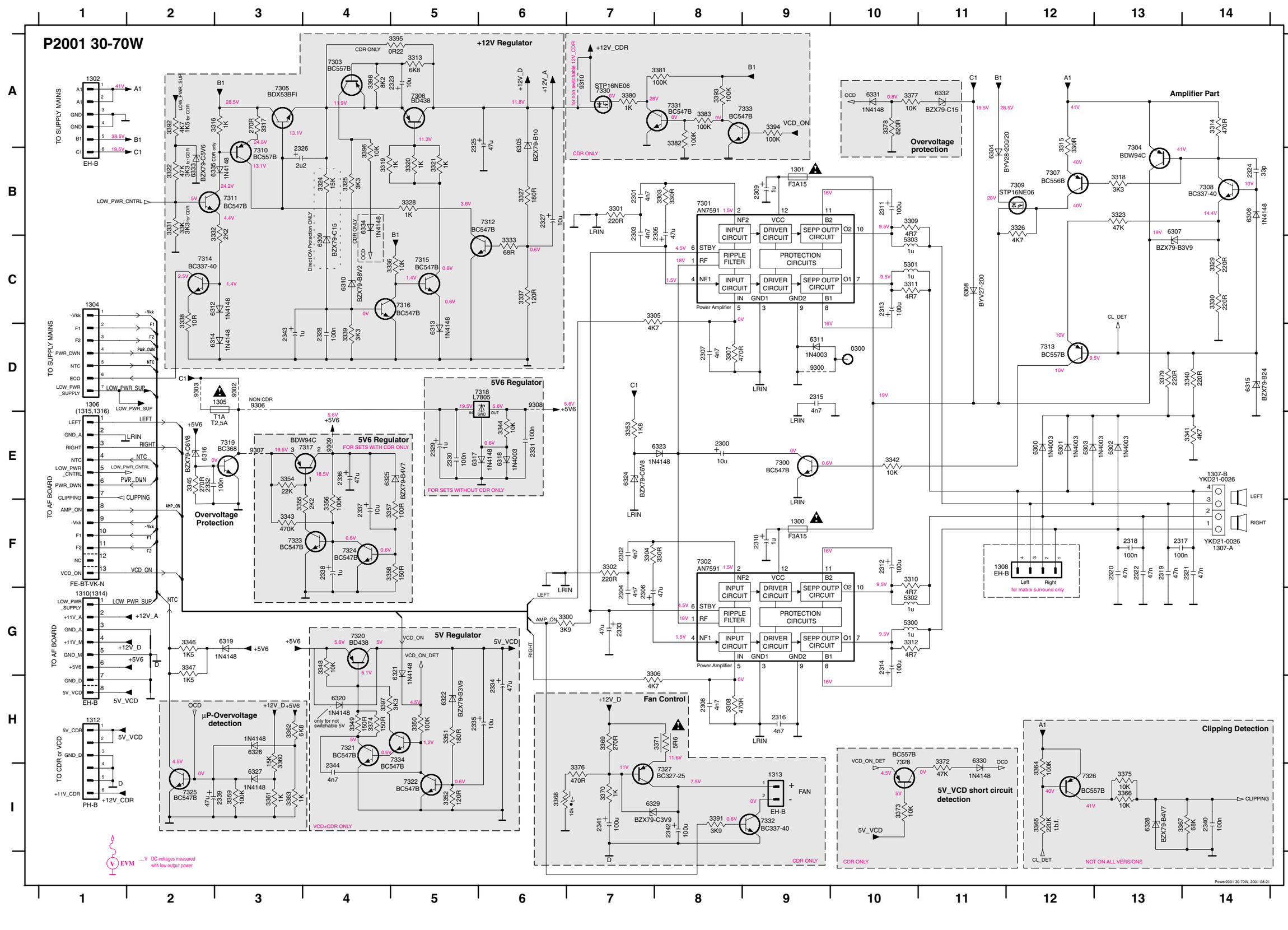

SET BLOCK DIAGRAM