

# Service Service Service

## Product Service Group CE Audio

# Service Information

Already published Service Informations :

### **CORRECTION TO SERVICE MANUAL**

\*Page 1-3 : The correct Tuner FM Aerial input for /37 version should be 300ohm click fit.

\*Page 9-5 : Due to some error, the Tape Adjustment & Check Table is enclosed.

### **\*Correction of Mechanical & Accessories parts list (Page 13-2):**

Change	0151	3139 118 16080	Cover Cassette Left
	0152	3139 118 16090	Cover Cassette Right
	0153	3139 114 72820	Lens Cassette Left
	0154	3139 114 72830	Lens Cassette Right
	1503	3139 110 35880	FFC Foil 15P/180/15P BD

### **\*Correction of circuit drawing and parts list for Front Control Board:**

Change	6842	9322 172 75676	LED VS LTL-1CHKFK
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### **\*Correction of circuit drawing and parts list for Front Display Board:**

Add	2508	3198 024 44730	47nF 50V
Change	3407	4822 051 20109	10R 5% 0,1W
	3408	4822 051 20109	10R 5% 0,1W
	3410	4822 051 20109	10R 5% 0,1W
	3411	4822 051 20109	10R 5% 0,1W
	3535	4822 051 20109	10R 5% 0,1W
	3536	4822 051 20109	10R 5% 0,1W
	3570	4822 051 20109	10R 5% 0,1W
	3571	4822 051 20109	10R 5% 0,1W
	5403	2422 543 01069	RES XTL 32,768kHz
	6420	9322 167 73676	LED VS LTL-4221NLC-KA

### **\*Correction of circuit drawing and parts list for AF9 Board:**

Add	2210	4822 126 13879	220nF +80/-20% 16V
	3821	4822 052 10109	△ 10R 5% 0,33W
	4148	4822 051 30008	0R Jumper 0603
	4151	4822 051 30008	0R Jumper 0603
	4152	4822 051 30008	0R Jumper 0603
Change	2208	4822 126 13879	220nF +80/-20% 16V
	2626	4822 124 40769	4,7uF 20% 100V
	3534	4822 051 30273	27k 5% 0,062W
Delete	4102, 4118		

### **\*Correction of circuit drawing and parts list for MMPWR 100W Module (L/R Amplifier & Supply Board):**

Change	2345	2020 561 90365	100nF +80/-20% 50V
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### **CHANGES DURING PRODUCTION**

#### **MECHANICAL & ACCESSORIES PARTS LIST (Page 13-2)**

\*From production week 0140 onwards the following has been changed due to UL Requirement to use V2 material for all major enclosure parts.

Change	0253	3139 114 74780	Panel Left (V2)
	0254	3139 114 74790	Panel Right (V2)
	0255	3139 114 74800	Cover Top (V2)
	0256	3139 114 74850	Panel Rear (V2)

#### **FRONT CONTROL BOARD**

\*From production week 0110 onwards pt.2 Board (identified by the last digit of the 12NC - 3139 113 34462) is introduced. For this reason new layout and circuit drawing are enclosed.

Reason : ESD solution.

#### **FRONT DISPLAY BOARD**

\*From production week 0110 onwards pt.2 Board (identified by the last digit of the 12NC - 3139 113 34472) is introduced. For this reason new layout and circuit drawing are enclosed.

Reason : Solution for tuner-locking issue.

Add	6415	4822 130 11397	BAS316
Change	3409	4822 117 12925	47k 1% 0,063W
Delete	3405		

Reason : ESD solution.

Add	2585	4822 126 13883	220pF 5% 50V
	2586	4822 126 13883	220pF 5% 50V
	2587	3198 017 41050	1uF 10V
	2588	4822 126 13879	220nF +80/-20% 16V
	2589	3198 017 41050	1μF 10V
	5408	4822 157 62552	Coil 2,2uH 5%
	5409	4822 157 62552	Coil 2,2uH 5%
Change	2563	5322 126 11583	10nF 10% 50V
Delete	9513, 9514		Bare wires

(P.T.O.)

\*From production week 0115 onwards the software of the main processor IC (7400) has been upgrade to version 14. The new service code is 9965 000 10407.

\*From production week 0126 onwards the following has been changed to lower ADC step from 255 to 253 so as to solve irregularly power-up recording problem.

Add 3524 4822 051 30109 10R 5% 0,062W  
Delete 4405

#### AF9 BOARD

\*From production week 0110 onwards pt.3 Board (identified by the last digit of the 12NC - 3139 113 34353) is introduced.

Reason : For process, EMC & ESD improvement.

Add 2950 4822 126 13881 470pF 5% 50V  
2951 4822 126 13881 470pF 5% 50V  
2952 4822 122 31765 100pF 2% 63V  
2953 4822 126 13881 470pF 5% 50V  
3820 4822 116 52176 10R 5% 0,5W  
Change 6206 4822 130 31878 1N4003G  
Delete 9614 Bare wire

\*From production week 0122 onwards the following has been changed for GSM solution.

Add 3525 4822 051 30471 470R 5% 0,062W  
3526 4822 051 30471 470R 5% 0,062W  
3645 4822 051 30221 220R 5% 0,062W  
3646 4822 051 30221 220R 5% 0,062W  
4153 4822 051 30008 0R Jumper 0603  
4641 4822 051 30008 0R Jumper 0603  
4642 4822 051 30008 0R Jumper 0603  
Delete 3641, 3642

\*From production week 0132 onwards the following has been changed to solve capacitor current leakage issue.

Change 2503 4822 124 22466 1uF 20% 50V  
2504 4822 124 22466 1uF 20% 50V  
2511 4822 124 22466 1uF 20% 50V  
2512 4822 124 22466 1uF 20% 50V

\*During production pt.4 Board (identified by the last digit of the 12NC - 3139 113 34354) is introduced. For this reason new layout and circuit drawing are enclosed.

#### MMPWR 100W MODULE - MAINS BOARD

\*During production pt.7 Board (identified by the last digit of the 12NC - 3139 113 34337) is introduced. For this reason new layout and circuit drawing are enclosed.

#### MMPWR 100W MODULE - L/R AMP. & SUPPLY BOARD

\*From production week 0121 onwards the following has been changed to increase Fan speed.

Change 3304 4822 052 10108  $\Delta$  1R 5% 0,33W  
3305 4822 116 83876 270R 5% 0,5W  
3306 4822 116 83876 270R 5% 0,5W

\*From production week 0121 onwards the following has been changed for NTC sensitivity adjustment.

Add 3292 4822 116 52263 2k7 5% 0,5W  
Change 6258 4822 130 34173 BZX79-B5V6

\*From production week 0121 onwards pt.4 Board (identified by the last digit of the 12NC - 3139 113 34344) is introduced. For this reason new layout and circuit drawing are enclosed.

Reason : For EMC solution.

Add 2370 2020 561 90365 100nF +80/-20% 50V  
2371 2020 561 90365 100nF +80/-20% 50V  
2372 4822 126 12878 1,5nF 10% 16V  
3395 4822 116 52175 100R 5% 0,5W

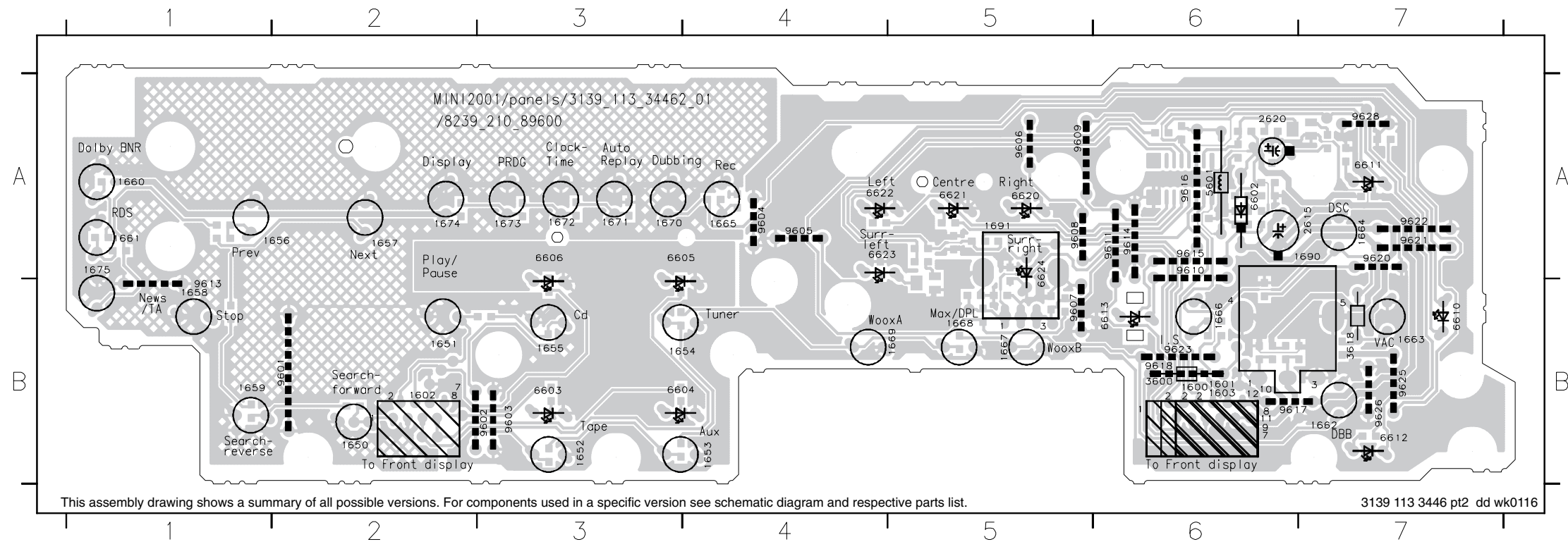
\*From production week 0137 onwards the following has been changed for EMC performance.

Change 2330 4822 122 33519 470pF 10% 50V  
2335 4822 122 33519 470pF 10% 50V  
Delete 2328, 2331

# FRONT CONTROL BOARD

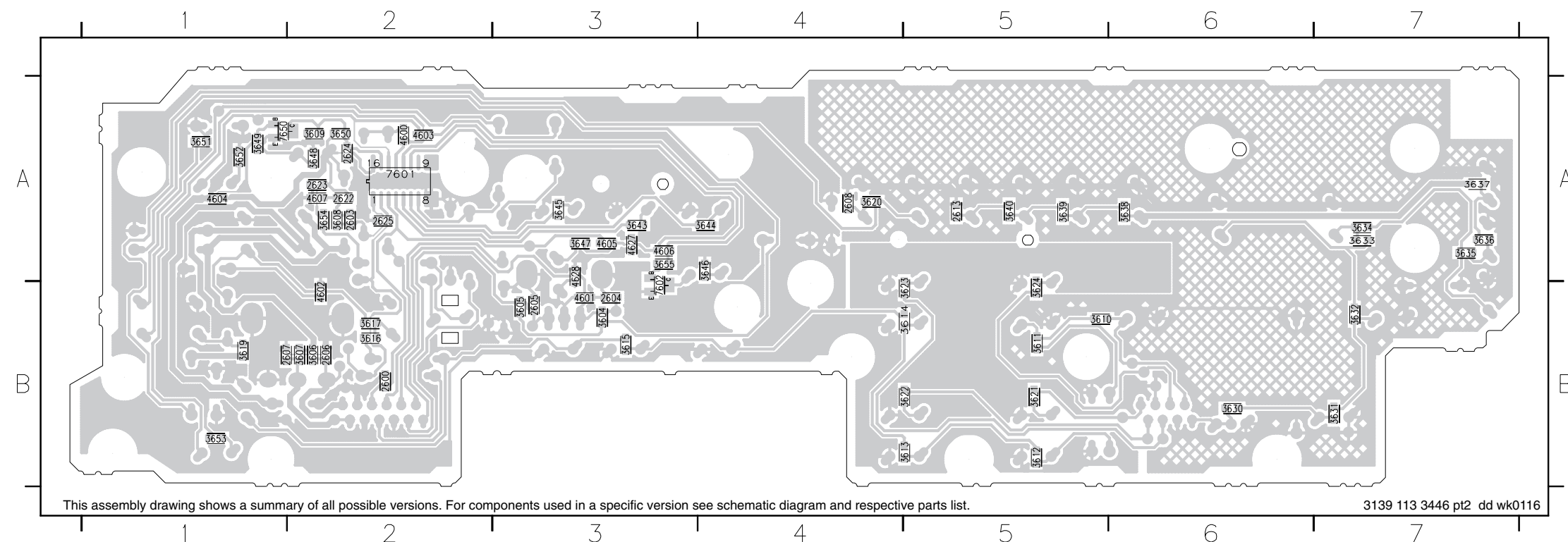
## FRONT CONTROL BOARD - COMPONENT LAYOUT

1600 B6 1650 B2 1654 B3 1658 B1 1662 B7 1666 B6 1670 A3 1674 A2 2615 A7 5601 A6 6605 A3 6612 B7 6622 A4 9602 B3 9606 A5 9610 A6 9615 A6 9620 A7 9625 B7  
 1601 B6 1651 B2 1655 B3 1659 B1 1663 B7 1667 B5 1671 A3 1675 A1 2620 A6 6602 A6 6606 A3 6613 B6 6623 A4 9603 B3 9607 B5 9611 A6 9616 A6 9621 A7 9626 B7  
 1602 B2 1652 B3 1656 A2 1660 A1 1664 A7 1668 B5 1672 A3 1690 A7 3600 B6 6603 B3 6610 B7 6620 A5 6624 A5 9604 A4 9608 A5 9613 B1 9617 B6 9622 A7 9628 A7  
 1603 B6 1653 B4 1657 A2 1661 A1 1665 A4 1669 B5 1673 A3 1691 A5 3618 B7 6604 B3 6611 A7 6621 A5 9601 B2 9605 A4 9609 A5 9614 A6 9618 B6 9623 B6



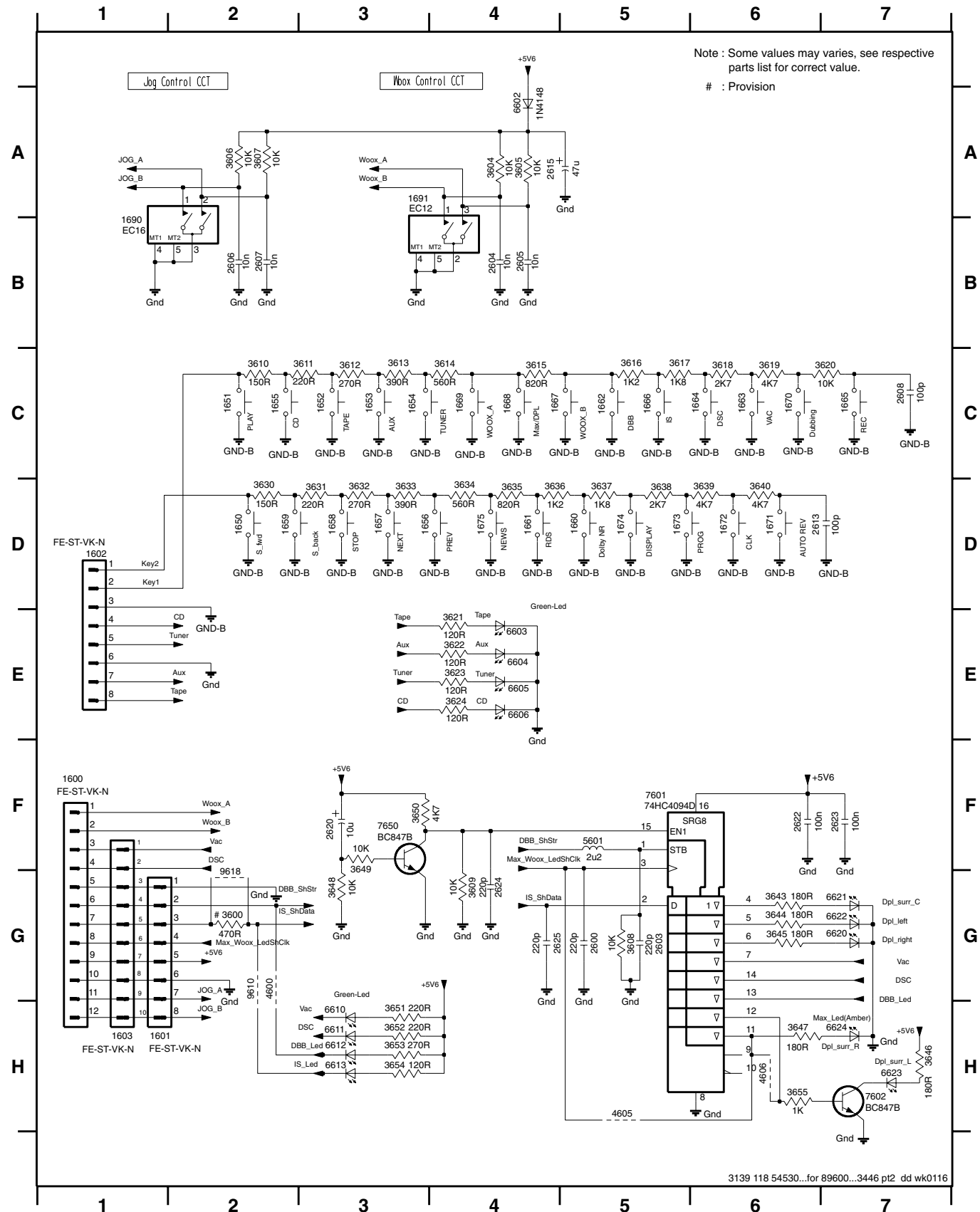
## FRONT CONTROL BOARD - CHIP LAYOUT

2600 B2 2606 B2 2622 A2 3604 B3 3608 A2 3612 B5 3616 B2 3621 B5 3630 B6 3634 A7 3638 A6 3644 A4 3648 A2 3652 A1 4600 A2 4604 A1 4627 A3 7650 A1  
 2603 A2 2607 B1 2623 A2 3605 B3 3609 A2 3613 B5 3617 B2 3622 B5 3631 B7 3635 A7 3639 A5 3645 A3 3649 A1 3653 B1 4601 B3 4605 A3 4628 A3  
 2604 B3 2608 A4 2624 A2 3606 B2 3610 B5 3614 B5 3619 B1 3623 B5 3632 B7 3636 A7 3640 A5 3646 A4 3650 A2 3654 A2 4602 B2 4606 A3 7601 A2  
 2605 B3 2613 A5 2625 A2 3607 B2 3611 B5 3615 B3 3620 A4 3624 B5 3633 A7 3637 A7 3643 A3 3647 A3 3651 A1 3655 A3 4603 A2 4607 A2 7602 B3



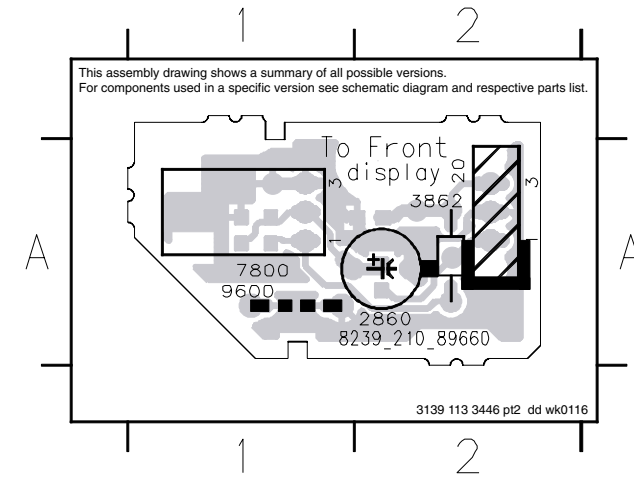
# FRONT CONTROL BOARD - CIRCUIT DIAGRAM

- |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |
|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 1600 F1 | 1653 C3 | 1660 D5 | 1667 C4 | 1674 D5 | 2605 B4 | 2622 F6 | 3606 A2 | 3613 C3 | 3620 C7 | 3632 D3 | 3639 D6 | 3648 G3 | 3655 H6 | 6604 E4 | 6620 G7 | 7650 F3 |
| 1601 H2 | 1654 C3 | 1661 D4 | 1668 C4 | 1675 D4 | 2606 B2 | 2623 F7 | 3607 A2 | 3614 C4 | 3621 E4 | 3633 D3 | 3640 D6 | 3649 F3 | 4600 G2 | 6605 E4 | 6621 G7 | 9610 G2 |
| 1602 D1 | 1655 C2 | 1662 C5 | 1669 C4 | 1690 B1 | 2607 B2 | 2624 G4 | 3608 G5 | 3615 C4 | 3622 E4 | 3634 D4 | 3643 G6 | 3650 F3 | 4605 H5 | 6606 E4 | 6622 G7 | 9618 G2 |
| 1603 H1 | 1656 D3 | 1663 C6 | 1670 C6 | 1691 A3 | 2608 C7 | 2625 G4 | 3609 G4 | 3616 C5 | 3623 E4 | 3635 D4 | 3644 G6 | 3651 H3 | 4606 H6 | 6610 H3 | 6623 H7 |         |
| 1650 D2 | 1657 D3 | 1664 C6 | 1671 D6 | 2600 G5 | 2613 D6 | 3600 G2 | 3610 C2 | 3617 C5 | 3624 E4 | 3636 D4 | 3645 G6 | 3652 H3 | 5601 F5 | 6611 H3 | 6624 H7 |         |
| 1651 C2 | 1658 D3 | 1665 C7 | 1672 D6 | 2603 G5 | 2615 A4 | 3604 A4 | 3611 C3 | 3618 C6 | 3630 D2 | 3637 D5 | 3646 H7 | 3653 H3 | 6602 A4 | 6612 H3 | 7601 F5 |         |
| 1652 C3 | 1659 D2 | 1666 C5 | 1673 D5 | 2604 B4 | 2620 F3 | 3605 A4 | 3612 C3 | 3619 C6 | 3631 D3 | 3638 D5 | 3647 H6 | 3654 H3 | 6603 E4 | 6613 H3 | 7602 H7 |         |



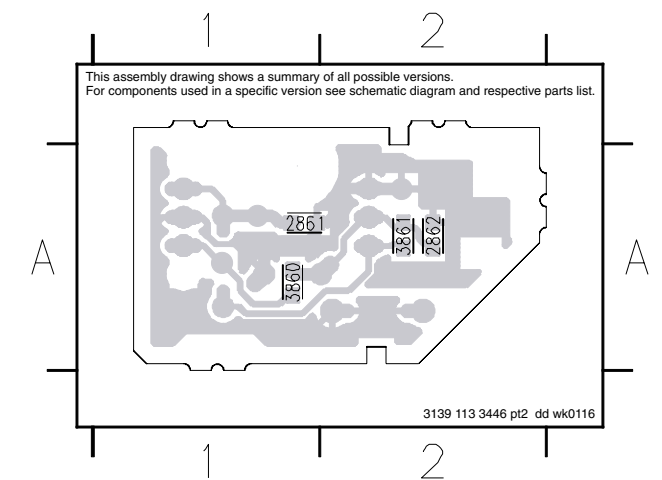
# IR-EYE BOARD - COMPONENT LAYOUT

- |         |         |         |
|---------|---------|---------|
| 20 A2   | 3862 A2 | 9600 A1 |
| 2860 A2 | 7800 A1 |         |



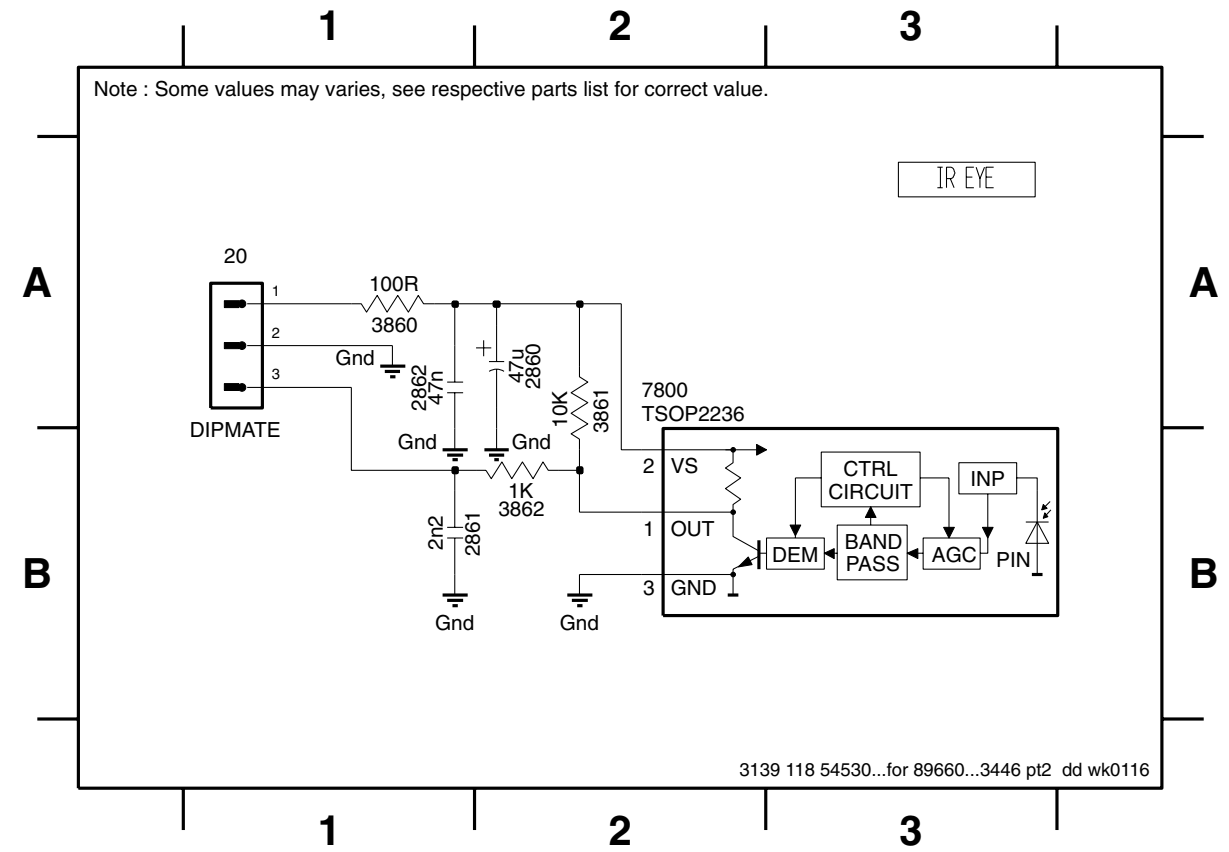
# IR-EYE BOARD - CHIP LAYOUT

- |         |         |         |         |
|---------|---------|---------|---------|
| 2861 A1 | 2862 A2 | 3860 A1 | 3861 A2 |
|---------|---------|---------|---------|

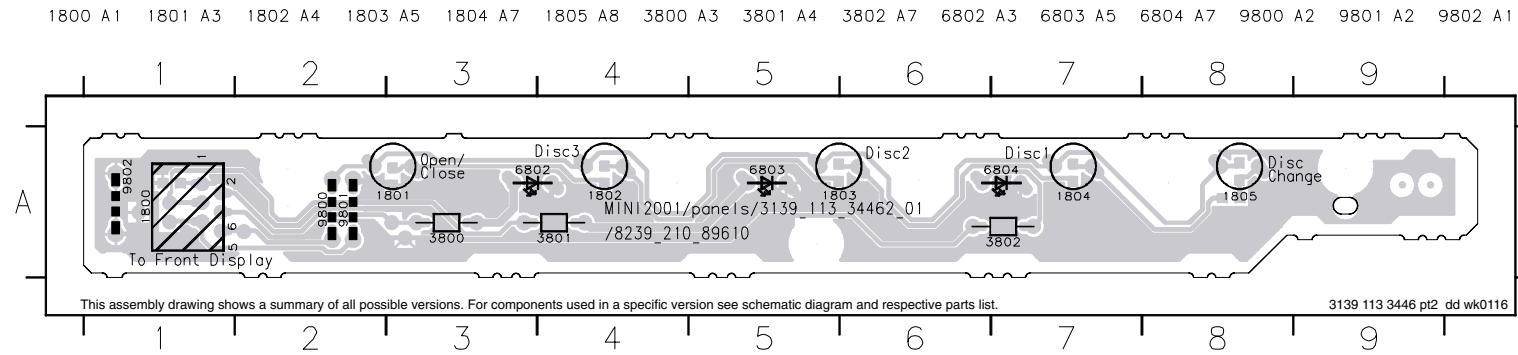


# IR-EYE BOARD - CIRCUIT DIAGRAM

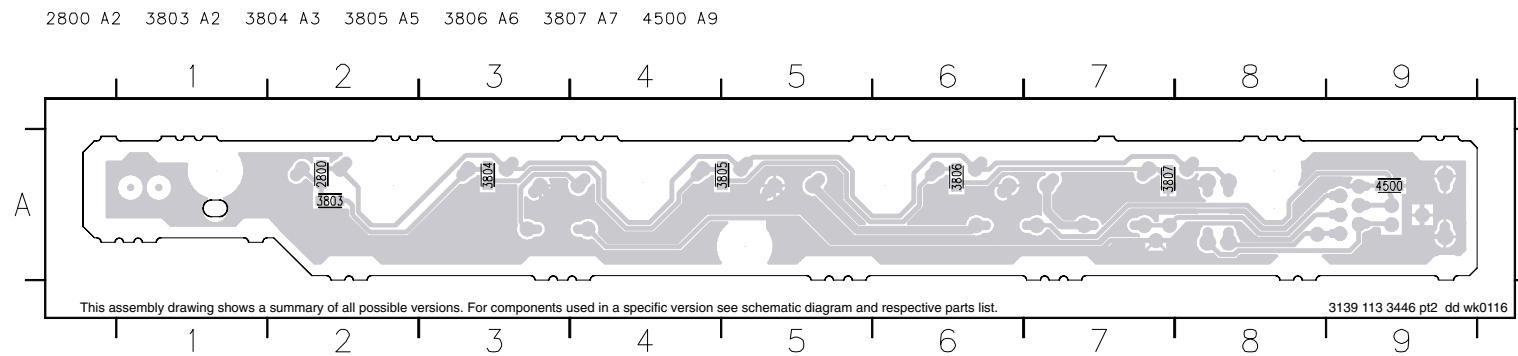
- |       |         |         |         |         |         |         |         |
|-------|---------|---------|---------|---------|---------|---------|---------|
| 20 A1 | 2860 A2 | 2861 B1 | 2862 A1 | 3860 A1 | 3861 A2 | 3862 B2 | 7800 A2 |
|-------|---------|---------|---------|---------|---------|---------|---------|



## KEY-CDC BOARD - COMPONENT LAYOUT

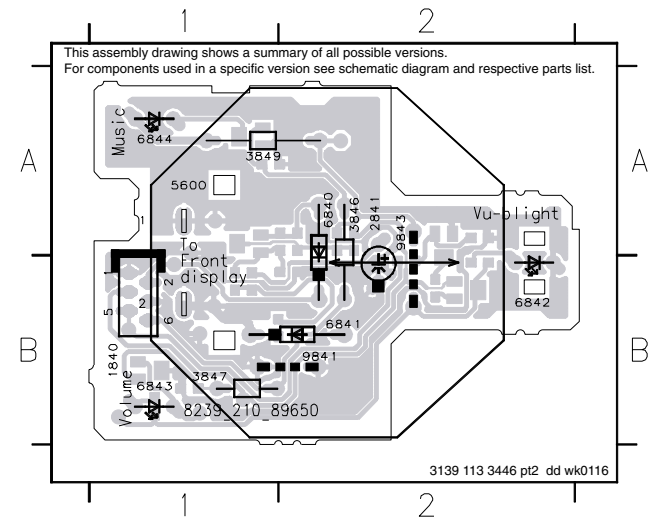


## KEY-CDC BOARD - CHIP LAYOUT



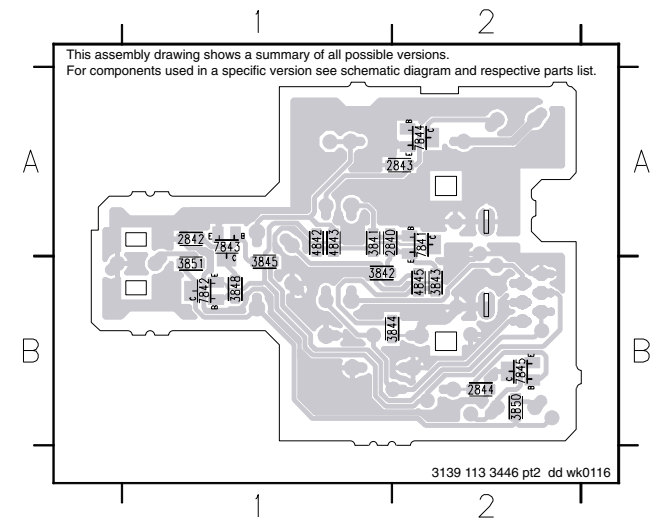
## VU METER BOARD - COMPONENT LAYOUT

1840 B1 3846 A2 3849 A1 6840 A2 6842 B2 6844 A1 9843 A2  
2841 A2 3847 B1 5600 A1 6841 B2 6843 B1 9841 B2



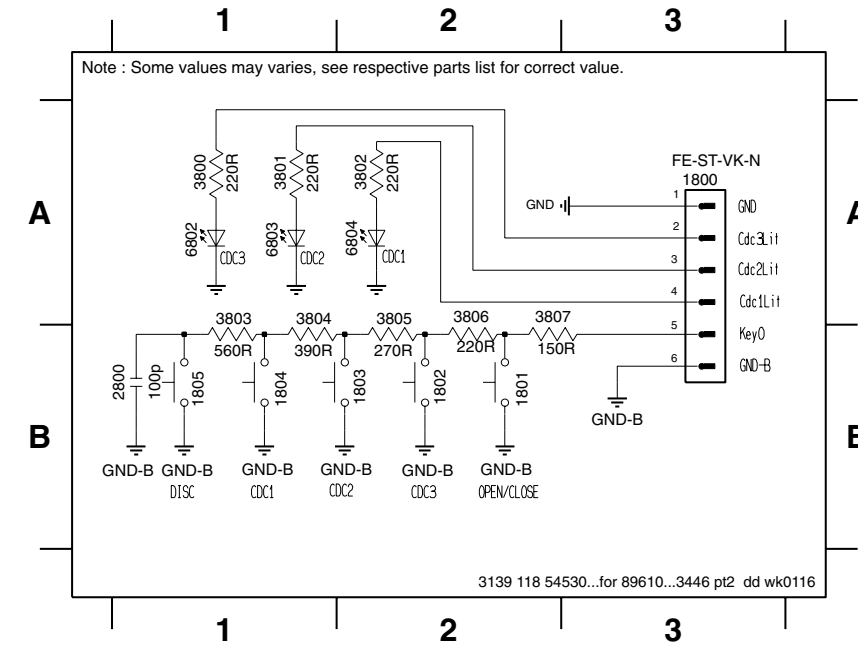
## VU METER BOARD - CHIP LAYOUT

2840 A1 2844 B2 3843 B2 3848 B1 4842 A1 7841 A2 7844 A2  
2842 A1 3841 A1 3844 B1 3850 B2 4843 A1 7842 B1 7845 B2  
2843 A2 3842 B1 3845 B1 3851 B1 4845 B2 7843 A1



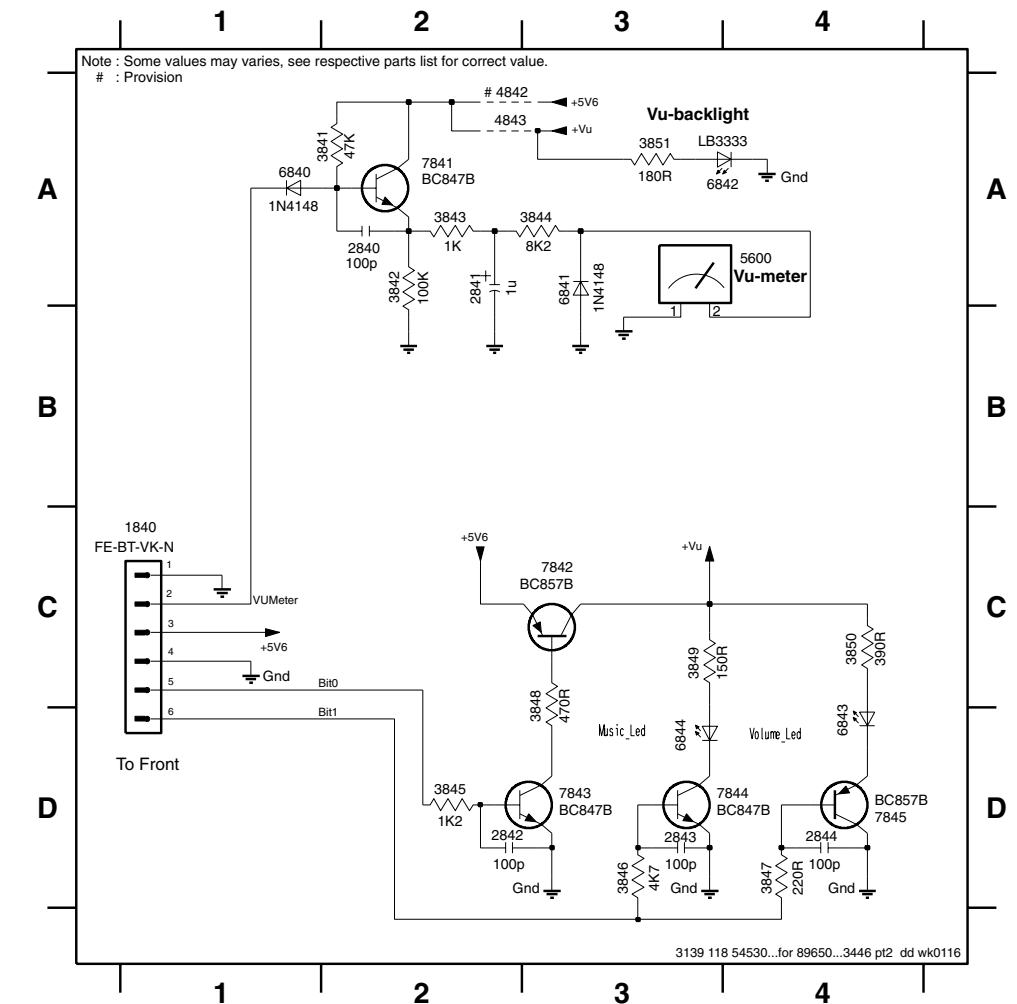
## KEY-CDC BOARD - CIRCUIT DIAGRAM

1800 A3 1802 B2 1804 B1 2800 B1 3801 A1 3803 A1 3805 A2 3807 A2 6803 A1  
1801 B2 1803 B2 1805 B1 3800 A1 3802 A2 3804 A1 3806 A2 6802 A1 6804 A2



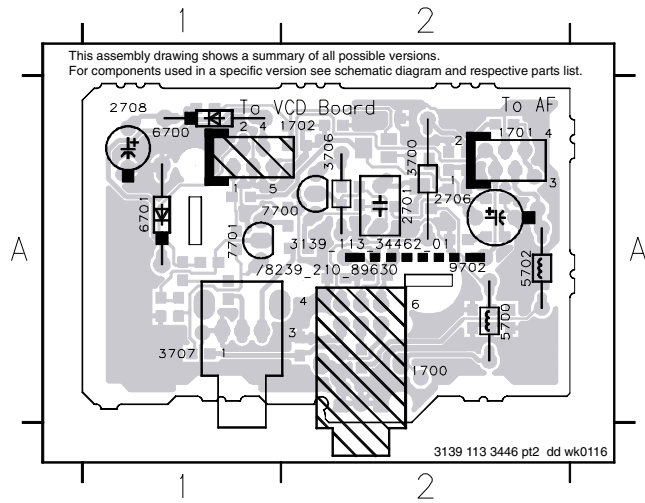
## VU METER BOARD - CIRCUIT DIAGRAM

1840 C1 2842 D2 3841 A2 3844 A3 3847 D4 3850 C4 4843 A2 6841 A3 6844 D3 7843 D3  
2840 A2 2843 D3 3842 A2 3845 D2 3848 C3 3851 A3 5600 A4 6842 A4 7841 A2 7844 D3  
2841 A2 2844 D4 3843 A2 3846 D3 3849 C3 4842 A2 6840 A1 6843 D4 7842 C3 7845 D4



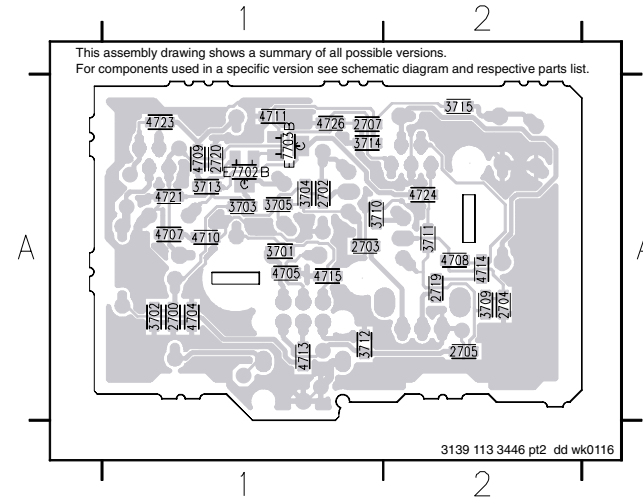
## KARAOKE BOARD - COMPONENT LAYOUT

1700 A2 2701 A2 3700 A2 5700 A2 6701 A1 9702 A2  
 1701 A2 2706 A2 3706 A2 5702 A2 7700 A1  
 1702 A2 2708 A1 3707 A1 6700 A1 7701 A1



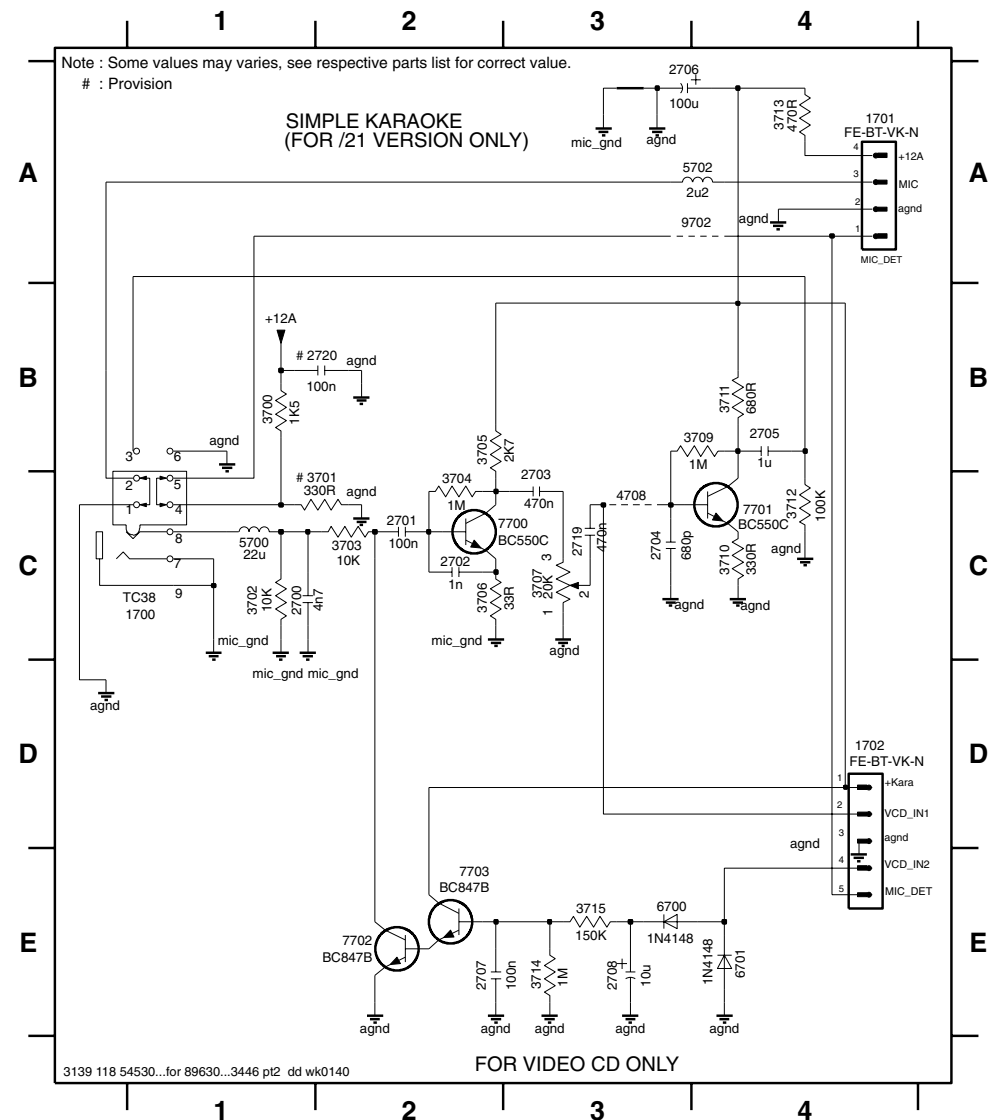
## KARAOKE BOARD - CHIP LAYOUT

2700 A1 2719 A2 3705 A1 3714 A1 4709 A1 4721 A1  
 2702 A1 2720 A1 3709 A2 3715 A2 4710 A1 4723 A1  
 2703 A1 3701 A1 3710 A1 4704 A1 4711 A1 4724 A2  
 2704 A2 3702 A1 3711 A2 4705 A1 4713 A1 4726 A1  
 2705 A2 3703 A1 3712 A1 4707 A1 4714 A2 7702 A1  
 2707 A1 3704 A1 3713 A1 4708 A2 4715 A1 7703 A1



## KARAOKE BOARD - CIRCUIT DIAGRAM

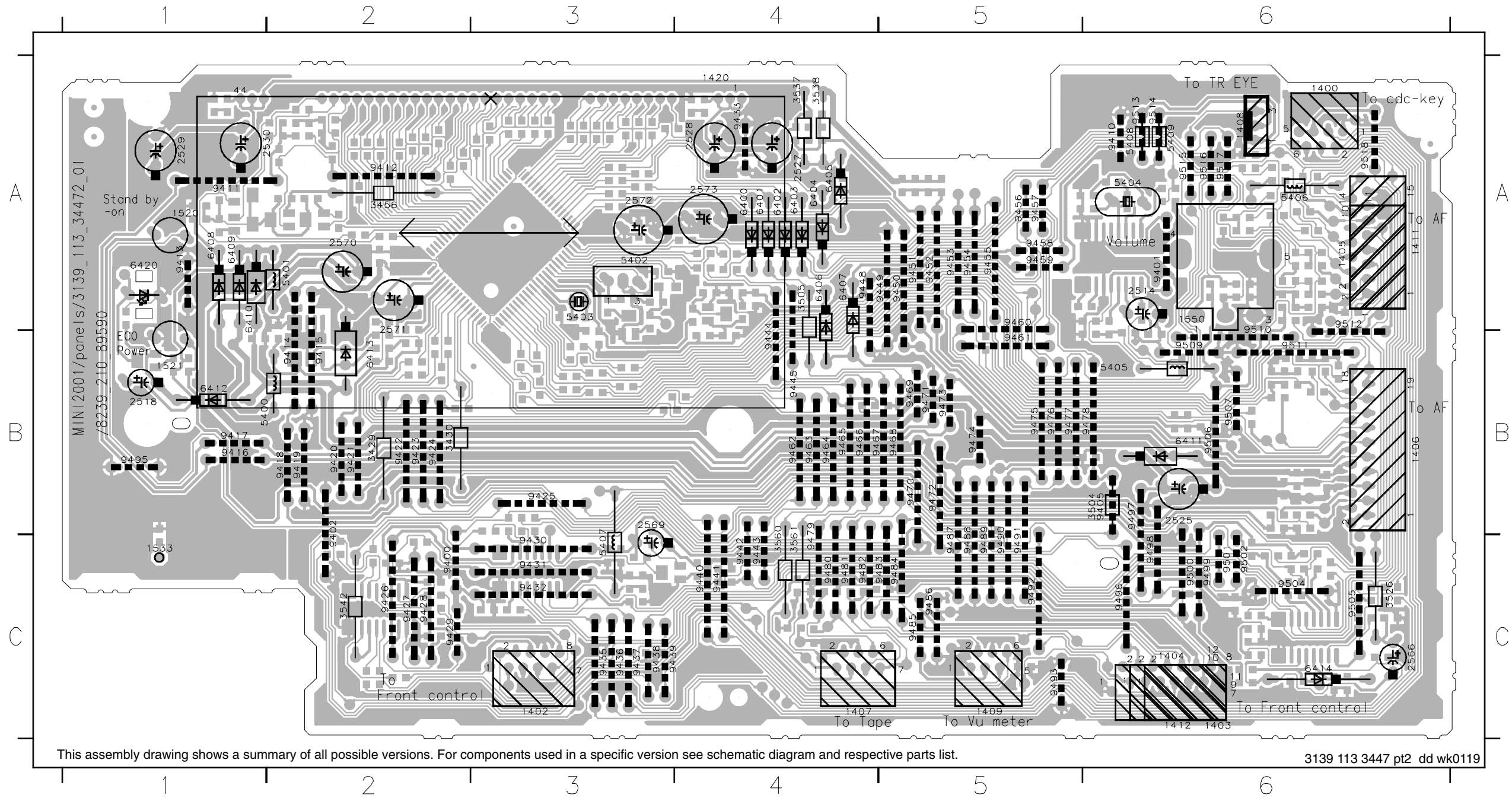
1700 C1 2700 C1 2703 C3 2706 A3 2719 C3 3701 C2 3704 C2 3707 C3 3711 B4 3714 E3 5700 C1 6701 E4 7702 E2  
 1701 A4 2701 C2 2704 C3 2707 E2 2720 B2 3702 C1 3705 B2 3709 B4 3712 C4 3715 E3 5702 A4 7700 C2 7703 E2  
 1702 D4 2702 C2 2705 B4 2708 E3 3700 B1 3703 C2 3706 C2 3710 C4 3713 A4 4708 C3 6700 E3 7701 C4 9702 A4



**FRONT DISPLAY BOARD**

**FRONT DISPLAY BOARD - COMPONENT LAYOUT**

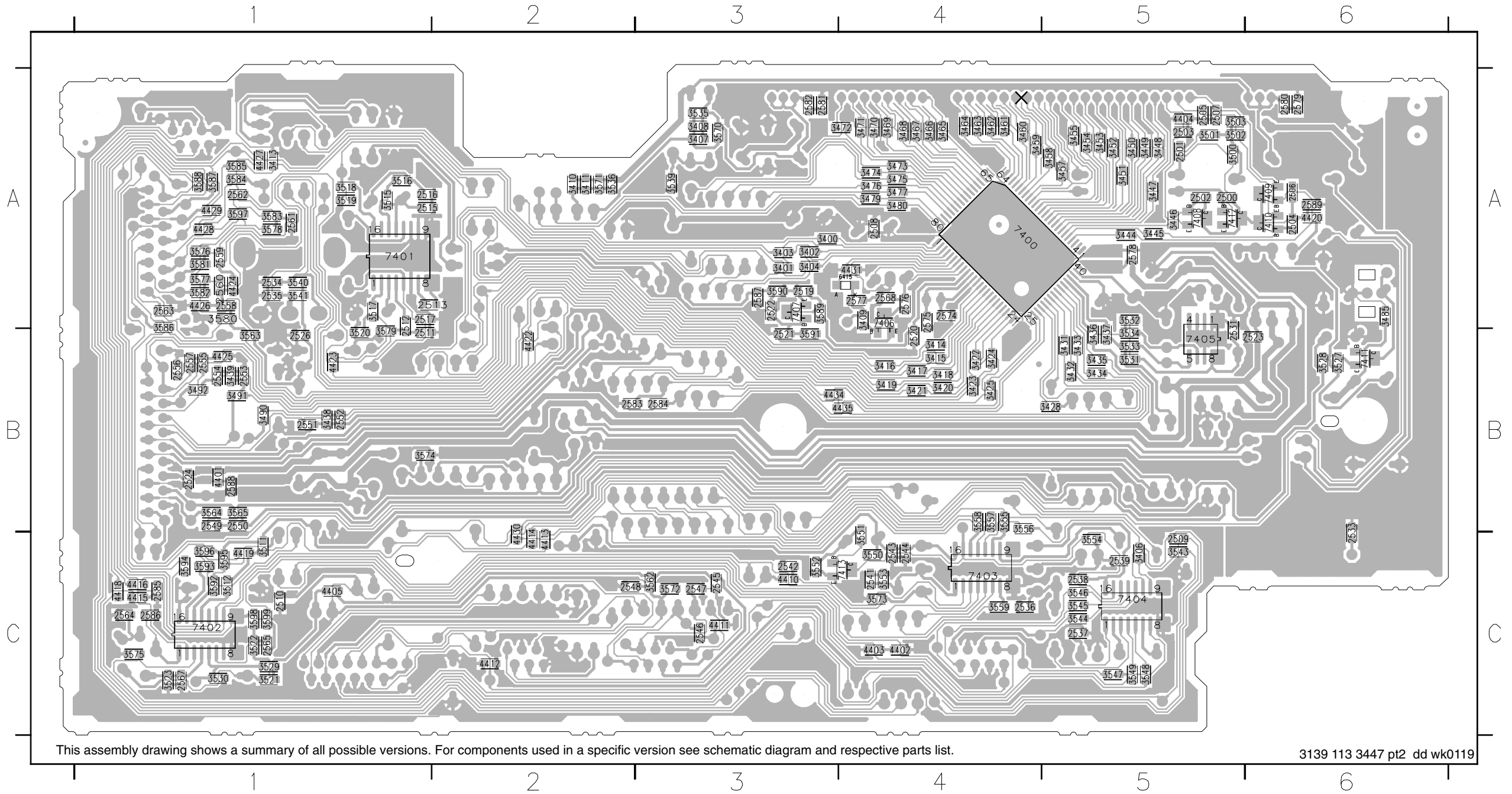
1400 A6	1409 C5	2514 A6	2569 B3	3504 B6	5400 B1	5408 A6	6406 A4	6414 C6	9412 A2	9420 B2	9428 C2	9437 C3	9445 B4	9455 A5	9463 B4	9471 B5	9479 C4	9487 C5	9496 C6	9505 C6	9514 A6
1402 C3	1411 A6	2518 B1	2570 A2	3505 A4	5401 A2	5409 A6	6407 A4	6420 A1	9413 A1	9421 B2	9429 C2	9438 C3	9448 A4	9456 A5	9464 B4	9472 B5	9480 C4	9488 C5	9497 B6	9506 B6	9515 A6
1403 C6	1412 C6	2525 B6	2571 A2	3526 C6	5402 A3	6400 A4	6408 A1	9400 C2	9414 B2	9422 B2	9430 C3	9439 C3	9449 A5	9457 A5	9465 B4	9473 B5	9481 C4	9489 C5	9498 C6	9507 B6	9516 A6
1404 C6	1420 A4	2527 A4	2572 A3	3537 A4	5403 A3	6401 A4	6409 A1	9401 A6	9415 B2	9423 B2	9431 C3	9440 C4	9450 A5	9458 A5	9466 B4	9474 B5	9482 C4	9490 C5	9499 C6	9509 B6	9517 A6
1405 A6	1520 A1	2528 A4	2573 A4	3538 A4	5404 A6	6402 A4	6410 A1	9402 B2	9416 B1	9424 B2	9432 C3	9441 C4	9451 A5	9459 A5	9467 B4	9475 B5	9483 C5	9491 C5	9500 C6	9510 A6	9518 A6
1406 B6	1521 B1	2529 A1	3429 B2	3542 C2	5405 B6	6403 A4	6411 B6	9405 B6	9417 B1	9425 B3	9433 A4	9442 C4	9452 A5	9460 A5	9468 B5	9476 B5	9484 C5	9492 C5	9501 C6	9511 B6	
1407 C4	1533 C1	2530 A1	3430 B2	3560 C4	5406 A6	6404 A4	6412 B1	9410 A6	9418 B2	9426 C2	9435 C3	9443 C4	9453 A5	9461 B5	9469 B5	9477 B5	9485 C5	9493 C5	9502 C6	9512 A6	
1408 A6	1550 A6	2566 C6	3456 A2	3561 C4	5407 C3	6405 A4	6413 B2	9411 A1	9419 B2	9427 C2	9436 C3	9444 B4	9454 A5	9462 B4	9470 B5	9478 B6	9486 C5	9495 B1	9504 C6	9513 A6	



This assembly drawing shows a summary of all possible versions. For components used in a specific version see schematic diagram and respective parts list.

# FRONT DISPLAY BOARD - CHIP LAYOUT

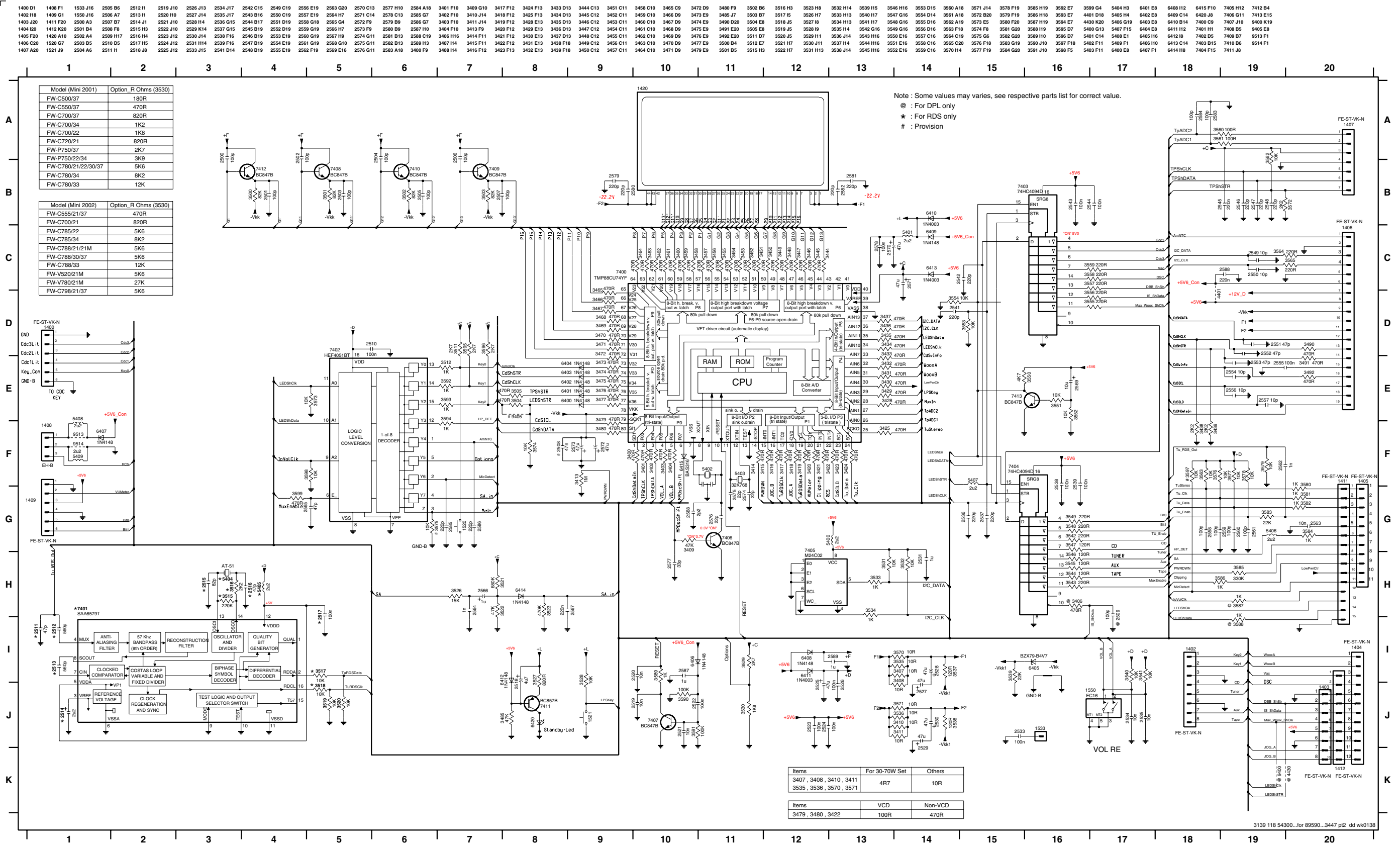
2500 A5	2512 A1	2531 B5	2545 C3	2557 B1	2575 A4	2587 A3	3410 A2	3423 B4	3439 B1	3455 A5	3468 A4	3485 A6	3517 A1	3532 A5	3547 C5	3559 C4	3577 A1	3589 A3	4402 C4	4419 C1	4434 B3	7409 A6
2501 A5	2513 A2	2533 C6	2546 C3	2558 A1	2576 A4	2588 B1	3411 A2	3424 B4	3444 A5	3457 A5	3469 A4	3490 B1	3518 A1	3533 B5	3548 C5	3562 C3	3578 A1	3590 A3	4403 C4	4420 A6	4435 B4	7410 A6
2502 A5	2515 A1	2534 A1	2547 C3	2559 A1	2577 A4	2589 A6	3413 A1	3425 B4	3445 A5	3458 A5	3470 A4	3491 B1	3519 A1	3534 B5	3549 C5	3563 B1	3579 B1	3591 B3	4404 A5	4422 B2	6415 A4	7411 B6
2503 A5	2516 A1	2535 A1	2548 C2	2560 A1	2578 A5	3400 A3	3414 B4	3428 B5	3446 A5	3459 A4	3471 A4	3492 B1	3520 B1	3535 A3	3550 C4	3564 B1	3580 A1	3592 C1	4405 C1	4423 B1	7400 A4	7412 A5
2504 A6	2517 A1	2536 C4	2549 B1	2561 A1	2579 A6	3401 A3	3415 B4	3431 B5	3447 A5	3460 A4	3472 A4	3500 A5	3521 C1	3536 A2	3551 C4	3565 B1	3581 A1	3593 C1	4410 C3	4424 A1	7401 A1	7413 C4
2505 A5	2519 A3	2537 C5	2550 B1	2562 A1	2580 A6	3402 A3	3416 B4	3432 B5	3448 A5	3461 A4	3473 A4	3501 A5	3522 C1	3539 A3	3552 C3	3570 A3	3582 A1	3594 C1	4411 C3	4425 B1	7402 C1	
2506 A6	2520 B4	2538 C5	2551 B1	2563 A1	2581 A3	3403 A3	3417 B4	3433 B5	3449 A5	3462 A4	3474 A4	3502 A5	3523 C1	3540 A1	3553 C4	3571 A2	3583 A1	3595 C1	4412 C2	4426 A1	7403 C4	
2507 A5	2521 B3	2539 C5	2552 B1	2564 C1	2582 A3	3404 A3	3418 B4	3434 B5	3450 A5	3463 A4	3475 A4	3503 A5	3527 B6	3541 A1	3554 C5	3572 C3	3584 A1	3596 C1	4413 C2	4427 A1	7404 C5	
2508 A4	2522 A3	2541 C4	2553 B1	2565 C1	2583 B2	3406 C5	3419 B4	3435 B5	3451 A5	3464 A4	3476 A4	3511 C1	3528 B6	3543 C5	3555 B4	3573 C4	3585 A1	3597 A1	4414 C2	4428 A1	7405 B5	
2509 C5	2523 B6	2542 C3	2554 B1	2567 C1	2584 B3	3407 A3	3420 B4	3436 B5	3452 A5	3465 A4	3477 A4	3512 C1	3529 C1	3544 C5	3556 B4	3574 B1	3586 A1	3598 C1	4415 C1	4429 A1	7406 A4	
2510 C1	2524 B1	2543 C4	2555 B1	2568 A4	2585 C1	3408 A3	3421 B4	3437 B5	3453 A5	3466 A4	3479 A4	3515 A1	3530 C1	3545 C5	3557 B4	3575 C1	3587 A1	3599 C1	4416 C1	4430 C2	7407 A3	
2511 B1	2526 B1	2544 C4	2556 B1	2574 A4	2586 C1	3409 A4	3422 B4	3438 B1	3454 A5	3467 A4	3480 A4	3516 A1	3531 B5	3546 C5	3558 B4	3576 A1	3588 A1	4401 B1	4418 C1	4431 A4	7408 A5	



This assembly drawing shows a summary of all possible versions. For components used in a specific version see schematic diagram and respective parts list.

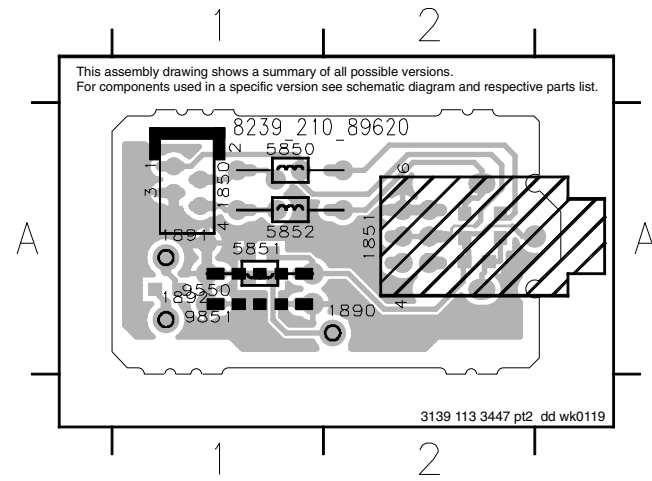


# FRONT DISPLAY BOARD - CIRCUIT DIAGRAM



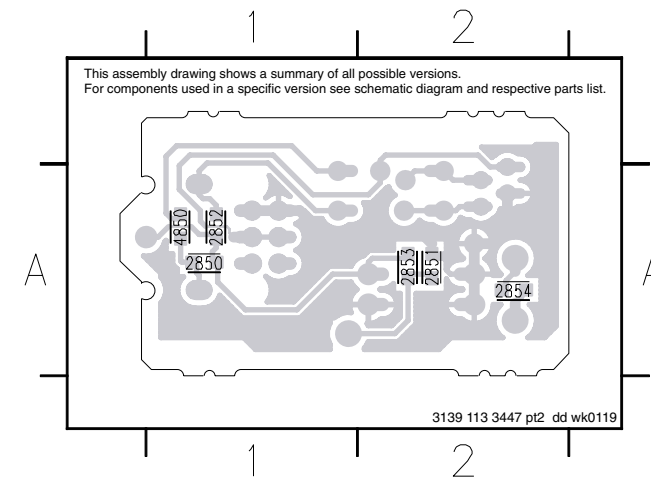
### HEADPHONE BOARD - COMPONENT LAYOUT

1850 A1 1891 A1 5851 A1 9851 A1  
 1851 A2 1892 A1 5852 A1  
 1890 A2 5850 A1 9550 A1



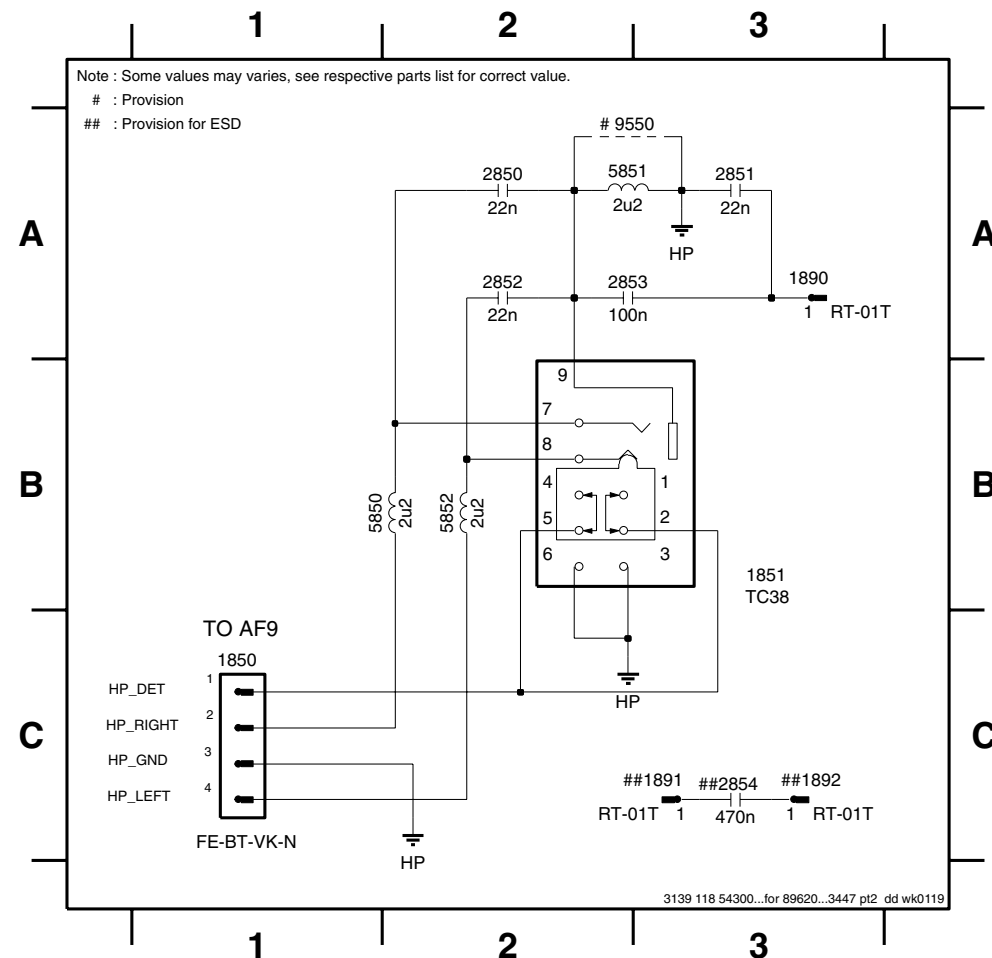
### HEADPHONE BOARD - CHIP LAYOUT

2850 A1 2852 A1 2854 A2  
 2851 A2 2853 A2 4850 A1



### HEADPHONE BOARD - CIRCUIT DIAGRAM

1850 C1 1890 A3 1892 C3 2851 A3 2853 A2 5850 B1 5852 B2  
 1851 B3 1891 C3 2850 A2 2852 A2 2854 C3 5851 A2 9550 A2

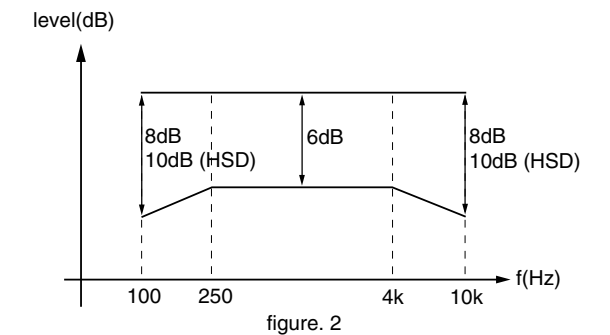
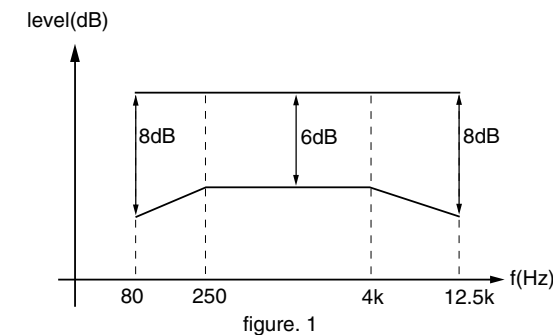


### TAPE ADJUSTMENT & CHECK TABLE

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

SBC419A^: 4822 397 30069  
 SBC420 : 4822 397 30071

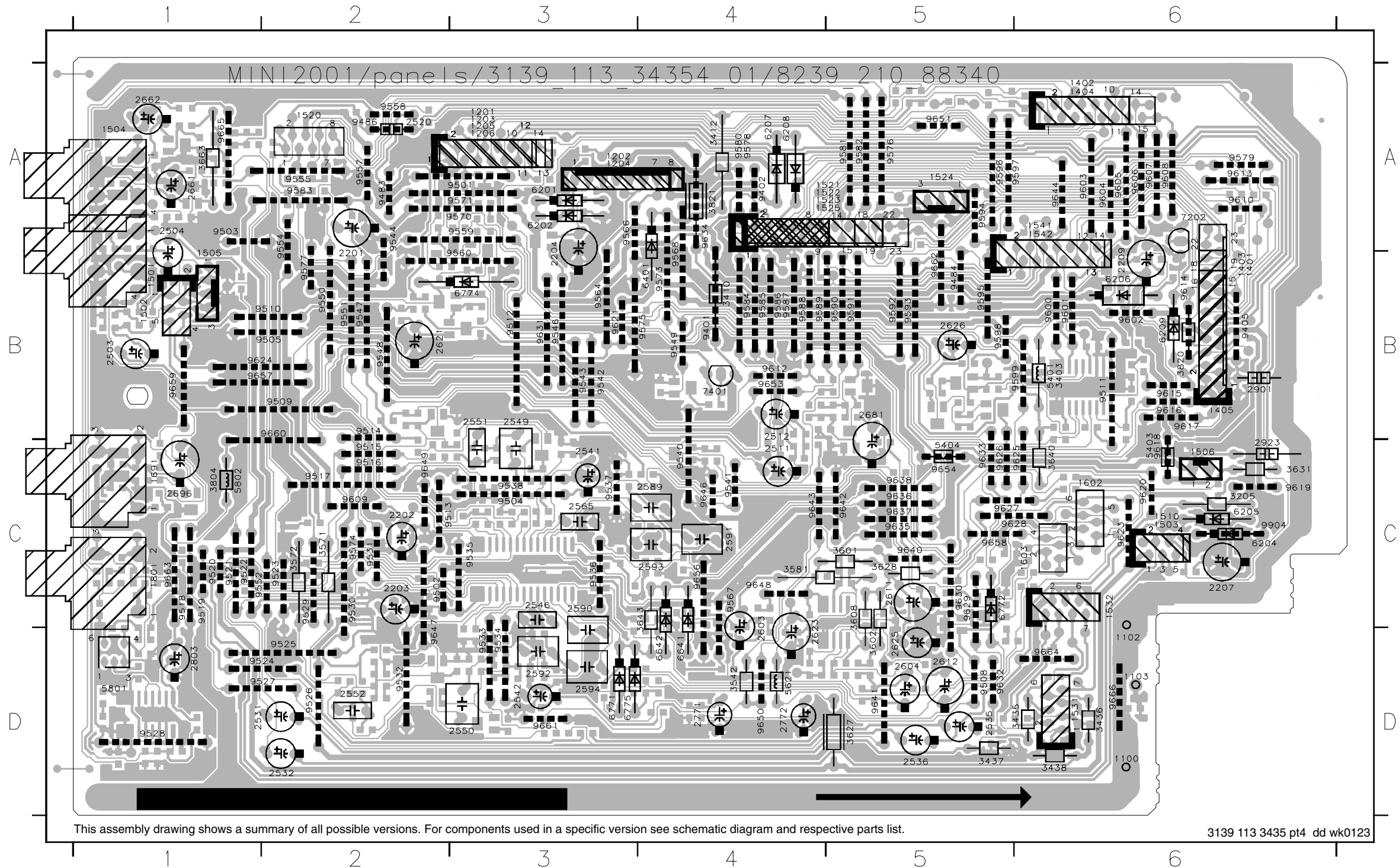
# For Auto-reverse version only  
 \* If high frequencies are not within limits, decrease bias and re-measure.  
 If distortion is too high, increase bias and re-measure  
 ^ Not applicable for Ferro version



**AF9 BOARD**

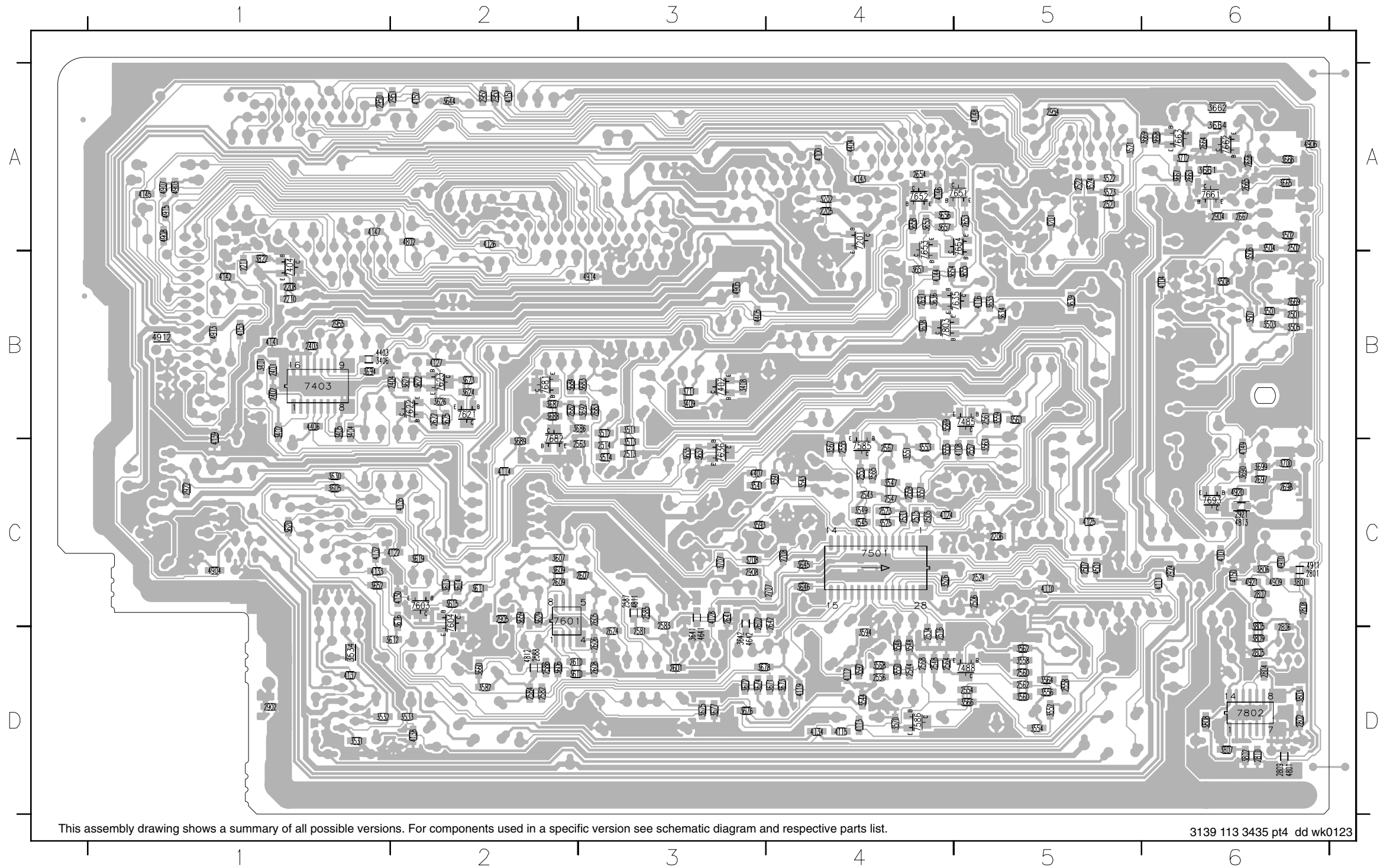
**AF9 BOARD - COMPONENT LAYOUT**

1100 D6	1503 C6	1603 C6	2535 D5	2603 D4	2923 C6	3627 D5	6202 A3	9401 B4	9513 C2	9529 C2	9547 B2	9570 A3	9587 B4	9603 A6	9620 C6	9637 C5	9657 B1
1102 D6	1504 A1	1691 C1	2536 D5	2604 D5	3205 C6	3628 C5	6204 C6	9402 A4	9514 B2	9530 C2	9548 B2	9571 A3	9588 B4	9604 A6	9621 B3	9638 C5	9658 C5
1103 D6	1505 B1	1801 C1	2541 C3	2611 C5	3403 B6	3631 C6	6205 C6	9405 B6	9515 C2	9531 C2	9549 B4	9573 B4	9589 B4	9605 A6	9623 C6	9640 C5	9659 B1
1201 A3	1506 C6	2201 B2	2542 D3	2612 D5	3410 B4	3640 C6	6206 B6	9483 A2	9516 C2	9532 D2	9550 B2	9574 C2	9590 B5	9606 A6	9624 B1	9641 D5	9660 B2
1202 A3	1510 C6	2202 C2	2546 C3	2621 B2	3412 A4	3643 C4	6207 A4	9484 B5	9517 C2	9533 D3	9551 B2	9575 B4	9591 B5	9607 A6	9625 C6	9642 C5	9661 D3
1203 A3	1520 A2	2203 C2	2549 B3	2623 D4	3435 D6	3663 A1	6208 A4	9486 A2	9518 C1	9534 D3	9552 C1	9576 A5	9592 B5	9608 A6	9626 C5	9643 C4	9662 B5
1204 A3	1521 A5	2204 B3	2550 D3	2625 D5	3436 D6	3804 C1	6209 B6	9501 A3	9519 C1	9535 C3	9554 A2	9577 B2	9593 B5	9609 C2	9627 C5	9644 A6	9663 C1
1205 A3	1522 A5	2207 C6	2551 B3	2626 B5	3437 D5	3820 B6	6401 B4	9502 C1	9520 C1	9536 C3	9555 A2	9578 A4	9594 A5	9610 A6	9628 C5	9646 C4	9664 D6
1206 A3	1523 A5	2209 B6	2552 D2	2661 A1	3438 D6	3821 A4	6641 D4	9503 A1	9521 C1	9537 C3	9557 A2	9579 A6	9595 B5	9612 B4	9629 C5	9647 D2	9665 A1
1401 B6	1524 A5	2503 B1	2565 C3	2662 A1	3542 D4	5401 B6	6642 D4	9504 C3	9522 C1	9538 C3	9558 A2	9580 A4	9596 A5	9613 A6	9630 C5	9648 C4	9666 D6
1402 A6	1525 A5	2504 A1	2589 C4	2681 B5	3571 C2	5403 C6	6771 D3	9505 B2	9523 C2	9540 C4	9559 A3	9581 A5	9597 A6	9614 B6	9631 B3	9649 C2	9904 C6
1403 B6	1531 D6	2511 C4	2590 C3	2696 C1	3572 C2	5404 C5	6772 C5	9508 D5	9524 D2	9541 C4	9560 B3	9582 A5	9598 B5	9615 B6	9632 D5	9650 D4	
1404 A6	1532 C6	2512 B4	2591 C4	2771 D4	3581 C4	5621 D4	6774 B3	9509 B2	9525 D2	9542 B3	9564 B3	9583 A2	9599 B6	9616 B6	9633 C5	9651 A5	
1405 B6	1541 A6	2520 A2	2592 D3	2772 D4	3601 C5	5801 D1	6775 D3	9510 B2	9526 D2	9543 B3	9566 A3	9584 B4	9600 B6	9617 B6	9634 A4	9653 B4	
1501 B1	1542 A6	2531 D1	2593 C4	2803 D1	3602 D5	5802 C1	7202 A6	9511 B6	9527 D2	9544 A2	9567 C4	9585 B4	9601 B6	9618 C6	9635 C5	9654 C5	
1502 B1	1602 C6	2532 D2	2594 D3	2901 B6	3608 C5	6201 A3	7401 B4	9512 B3	9528 D1	9546 B3	9568 B4	9586 B4	9602 B6	9619 C6	9636 C5	9656 C4	



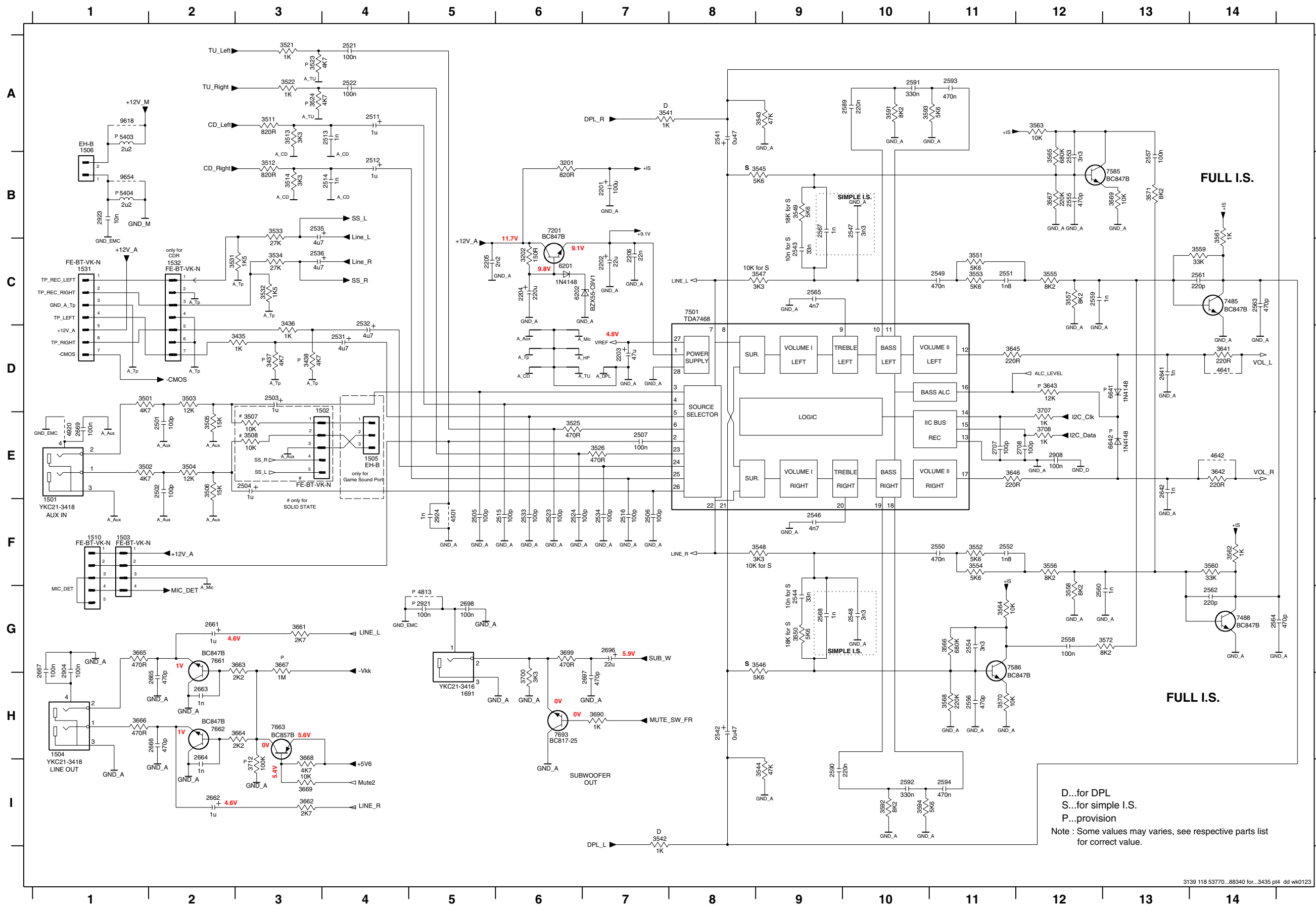
# AF9 BOARD - CHIP LAYOUT

2205 A4	2523 C4	2567 C4	2641 C3	2805 D6	3202 A4	3521 A5	3552 D5	3591 C4	3624 B2	3654 B4	3676 D3	3803 D6	4124 C4	4148 A5	4904 C1	7501 C4	7693 C6
2206 C5	2524 C5	2568 D4	2642 C4	2806 D6	3401 B1	3522 A5	3553 C4	3592 D4	3625 B2	3655 B5	3677 D3	3805 C6	4125 C5	4149 C6	4905 B3	7585 C4	7802 D6
2208 B1	2533 C4	2581 D3	2653 A5	2807 C6	3402 B1	3523 A5	3554 D5	3593 C3	3626 B2	3656 A4	3678 D3	3806 C6	4126 A2	4150 C6	4906 A6	7586 D4	7803 B4
2210 B1	2534 D4	2582 D2	2654 A4	2808 C6	3404 B1	3524 A5	3555 C4	3594 D4	3629 C2	3657 A4	3683 B3	3807 D6	4127 B2	4151 A2	4907 A1	7601 C2	
2211 B1	2543 C4	2583 C3	2663 A6	2809 D6	3405 B1	3525 C4	3556 D5	3605 C1	3630 C1	3658 A4	3684 B2	3808 D6	4128 C3	4152 A2	4908 A1	7603 C2	
2401 B1	2544 D4	2584 D2	2664 A6	2810 D6	3406 B1	3526 C4	3557 C4	3606 D2	3633 B5	3659 C2	3686 B3	3809 D6	4130 C2	4153 B1	4909 C6	7604 C2	
2402 B1	2547 C4	2585 C3	2665 A6	2902 D1	3408 B3	3531 D1	3558 D5	3607 C2	3634 B5	3660 D2	3687 B2	3822 B1	4132 C1	4403 B1	4910 C6	7621 B2	
2403 B1	2548 D4	2586 D2	2666 A6	2904 A6	3409 B3	3532 D1	3559 B5	3609 C2	3635 C3	3661 A6	3688 B2	4100 A4	4133 C1	4404 A4	4911 C6	7622 B2	
2404 B2	2553 C4	2587 C3	2667 A6	2905 C2	3501 B6	3533 D2	3560 D5	3610 D2	3636 B4	3662 A6	3689 C2	4101 C6	4134 D4	4405 B3	4912 B1	7623 B2	
2501 B6	2554 D5	2588 D2	2669 B6	2908 C3	3502 A6	3534 D1	3561 B5	3611 C2	3637 C3	3664 A6	3690 C6	4104 B6	4135 C2	4406 B1	4913 B1	7635 B5	
2502 A6	2555 C4	2601 D3	2682 B2	2921 C6	3503 B6	3541 C3	3562 D5	3612 D2	3638 B4	3665 A6	3692 B3	4108 C5	4137 D1	4407 C3	4914 B3	7636 C3	
2505 C4	2556 D4	2602 C3	2683 B3	2922 C1	3504 A6	3543 C4	3563 C5	3613 C2	3639 B5	3666 A6	3694 B1	4110 C5	4138 D2	4501 C5	4915 A1	7651 A5	
2506 C5	2557 C5	2605 C3	2691 B4	2924 C6	3505 B6	3544 D4	3564 D5	3614 C2	3641 D3	3667 A6	3699 C6	4111 C6	4139 B1	4641 D3	4920 C6	7652 A4	
2507 C5	2558 D5	2606 D3	2697 C6	2950 A1	3506 B6	3545 C4	3565 C4	3615 C2	3642 D3	3668 A6	3700 C6	4112 D4	4141 B1	4642 D3	4921 C6	7653 A4	
2513 C3	2559 C4	2607 C3	2698 C6	2951 A2	3507 B6	3546 D4	3566 D5	3616 C2	3644 A2	3669 A6	3707 C3	4113 D4	4142 B1	4801 D6	7201 A4	7654 A5	
2514 C3	2560 D5	2608 D3	2707 C4	2952 A2	3508 B6	3547 C4	3567 C4	3619 C2	3645 C4	3671 D4	3708 C3	4114 C2	4143 A4	4802 A2	7402 B3	7661 A6	
2515 C4	2561 B5	2609 C2	2708 C4	2953 A2	3511 B3	3548 D4	3568 D4	3620 C1	3646 C4	3672 D3	3711 B3	4115 D4	4144 B4	4811 C3	7403 B1	7662 A6	
2516 D4	2562 D5	2610 D2	2801 C6	2954 A5	3512 B3	3549 D4	3569 B4	3621 B2	3651 B4	3673 D4	3712 A6	4116 B5	4145 A1	4812 D2	7404 B1	7663 A6	
2521 A5	2563 C3	2622 B2	2802 D6	2955 B1	3513 C3	3550 D4	3570 D4	3622 B2	3652 C1	3674 D3	3801 C6	4119 D4	4146 A4	4813 C6	7485 B5	7681 B2	
2522 A5	2564 D4	2624 D3	2804 D6	3201 A5	3514 C3	3551 C4	3582 D2	3623 B2	3653 A4	3675 D3	3802 D6	4122 C2	4147 A1	4903 A1	7488 D5	7682 B2	



This assembly drawing shows a summary of all possible versions. For components used in a specific version see schematic diagram and respective parts list.

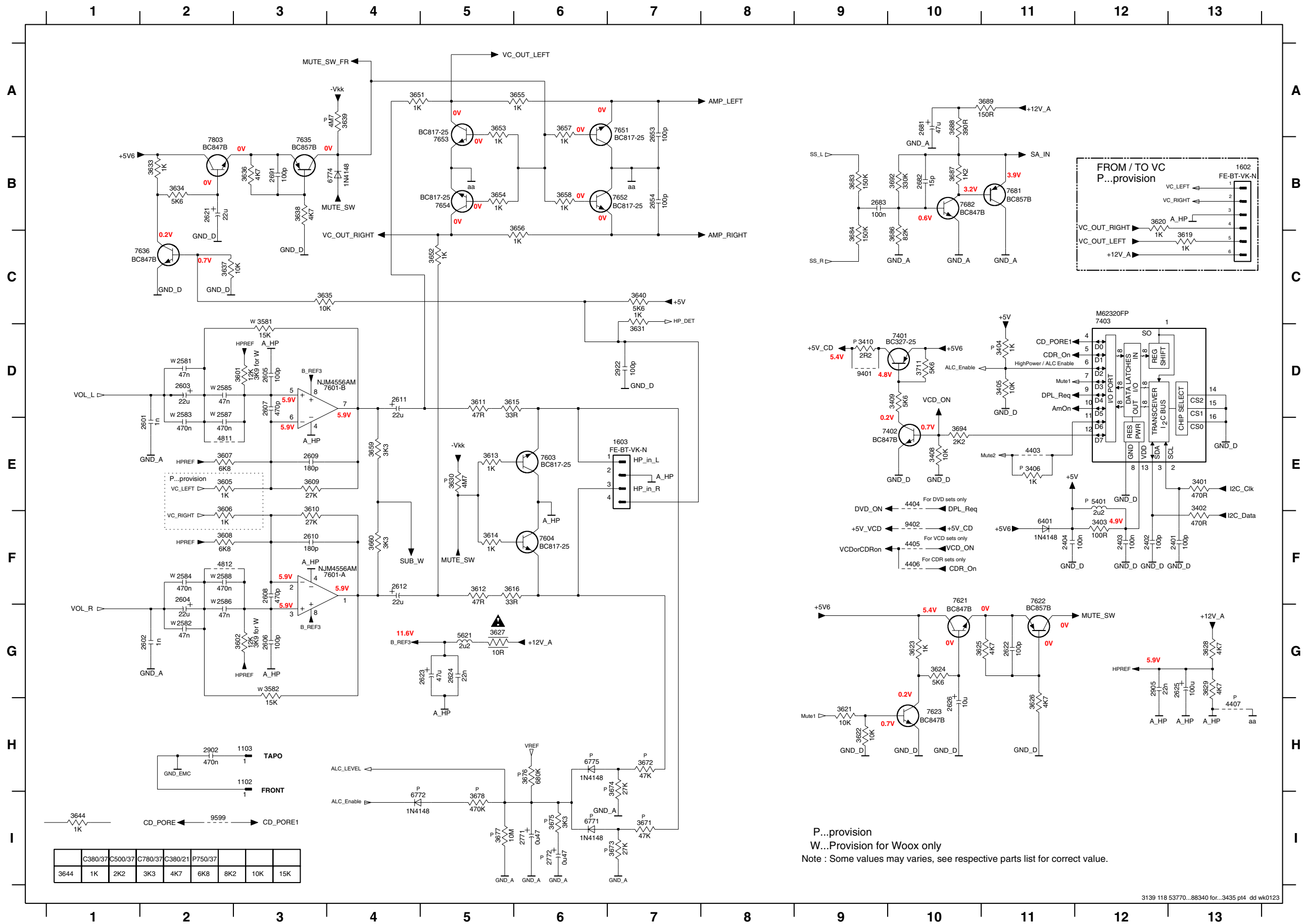
# AF9 BOARD - CIRCUIT DIAGRAM (PART 1)



1501 E1	3511 A3
1502 E3	3512 B3
1503 F1	3513 A3
1504 H1	3514 B3
1505 E4	3521 A3
1506 A1	3522 A3
1510 F1	3523 A3
1531 C1	3524 A3
1532 C2	3525 E6
1691 H5	3526 E7
2201 B7	3531 C2
2202 C7	3532 C3
2203 D7	3533 B3
2204 C6	3534 C3
2205 C5	3541 A7
2206 C7	3542 I7
2501 E2	3543 A9
2502 E2	3544 I9
2503 D3	3545 B9
2504 E3	3546 G9
2505 F5	3547 C9
2506 F7	3548 F9
2507 E7	3549 B9
2511 A4	3550 G9
2512 B4	3551 C11
2513 A4	3552 F11
2514 B4	3553 C11
2515 F6	3554 F11
2516 F7	3555 C12
2521 A4	3556 F12
2522 A4	3557 C12
2523 F6	3558 G12
2524 F6	3559 C14
2531 D4	3560 F14
2532 C4	3561 B14
2533 F6	3562 F14
2534 F7	3563 A12
2535 B3	3564 G11
2536 C3	3565 B12
2541 A8	3566 G11
2542 H8	3567 B12
2543 G9	3568 H11
2544 C9	3569 B13
2546 F9	3570 H11
2547 B10	3571 B13
2548 G10	3572 G13
2549 C11	3591 A10
2550 F11	3592 I10
2551 C11	3593 A10
2552 F11	3594 I10
2553 B12	3641 D14
2554 G11	3642 E14
2555 B12	3643 D12
2556 H11	3645 D11
2557 B13	3646 E11
2558 G12	3661 G3
2559 C12	3662 I3
2560 G12	3663 G3
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	7488 C14
2698 G5	7489 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	

D...for DPL  
 S...for simple I.S.  
 P...provision  
 Note : Some values may varies, see respective parts list for correct value.

# AF9 BOARD - CIRCUIT DIAGRAM (PART 2)

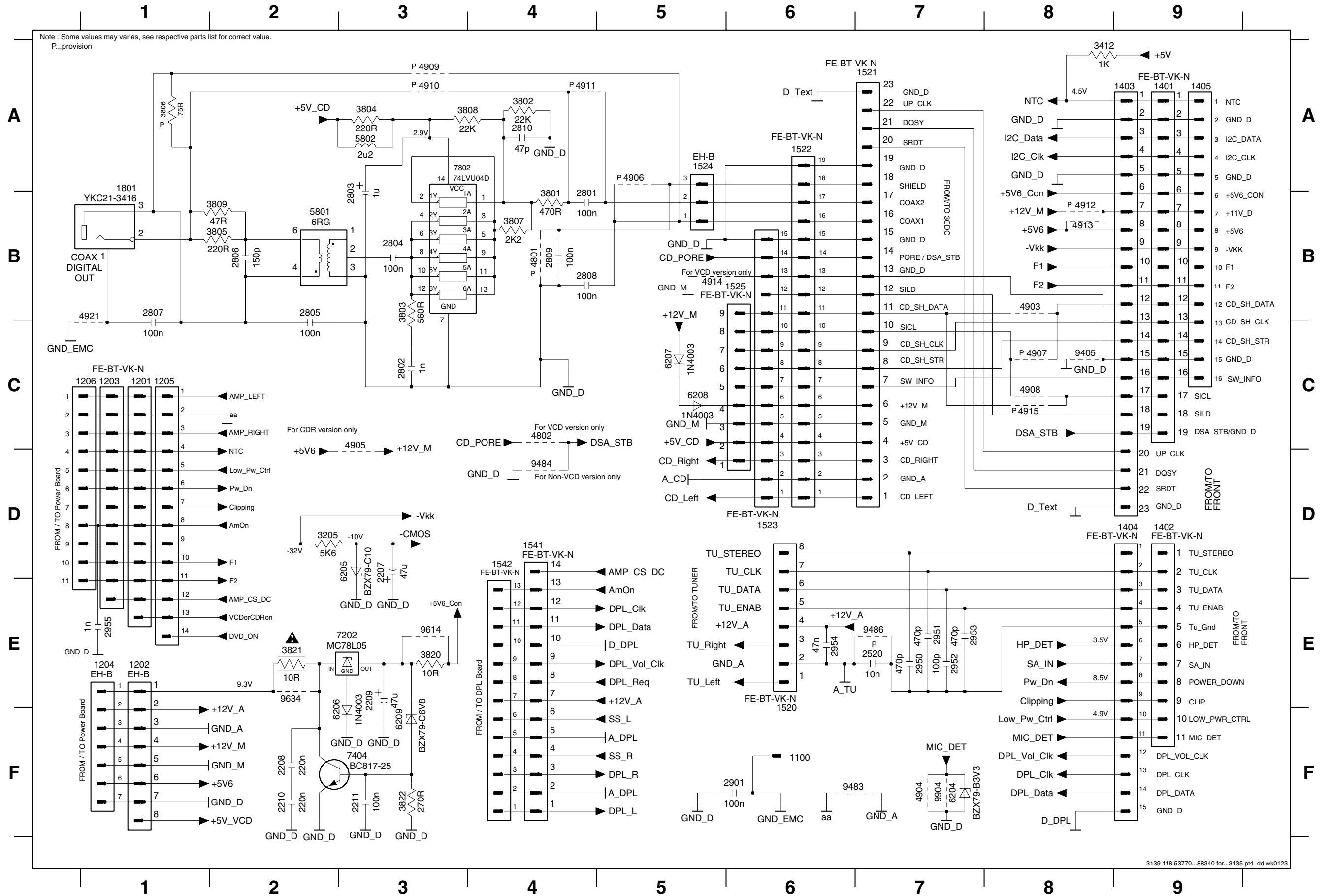


- 1102 H3
- 1103 H3
- 1602 B13
- 1603 E7
- 2401 F13
- 2402 F12
- 2403 F12
- 2404 F11
- 2581 D2
- 2582 G2
- 2583 D2
- 2584 F2
- 2585 D2
- 2586 F2
- 2587 D2
- 2588 F2
- 2601 E2
- 2602 G2
- 2603 D2
- 2604 F2
- 2605 D3
- 2606 G3
- 2607 D3
- 2608 F3
- 2609 E3
- 2610 F3
- 2611 D4
- 2612 F4
- 2621 B2
- 2622 G11
- 2623 G5
- 2624 G5
- 2625 G13
- 2626 H10
- 2653 A7
- 2654 B7
- 2681 A10
- 2682 B10
- 2683 B9
- 2691 B3
- 2711 I6
- 2721 I6
- 2902 H2
- 2905 G12
- 2922 D7
- 3401 E13
- 3402 E13
- 3403 F12
- 3404 D11
- 3405 D11
- 3406 E11
- 3408 E10
- 3409 D10
- 3410 D9
- 3581 D3
- 3582 G3
- 3601 D3
- 3602 G3
- 3605 E2
- 3606 F2
- 3607 E2
- 3608 F2
- 3609 E3
- 3610 F3
- 3611 D5
- 3612 F5
- 3613 E5
- 3614 F5
- 3615 D5
- 3616 F5
- 3619 C13
- 3620 B12
- 3621 H9
- 3622 H9
- 3623 G10
- 3624 G10
- 3625 G10
- 3626 H11
- 3627 G5
- 3628 G13
- 3629 G13
- 3630 E5
- 3631 D7
- 3633 B2
- 3634 B2
- 3635 C3
- 3636 B3
- 3637 C2
- 3638 B3
- 3639 A4
- 3640 C7
- 3644 I1
- 3651 A4
- 3652 C5
- 3653 A5
- 3654 B5
- 3655 A6
- 3656 C6
- 3657 A6
- 3658 B6
- 3659 E4
- 3660 F4
- 3671 I7
- 3672 H7
- 3673 I7
- 3674 H7
- 3675 I6
- 3676 H6
- 3677 I5
- 3678 I5
- 3683 B9
- 3684 C9
- 3686 C10
- 3687 B10
- 3688 A10
- 3689 A11
- 3692 B10
- 3694 E10
- 3711 D10
- 4403 E11
- 4404 E10
- 4405 F10
- 4406 F10
- 4407 H13
- 4811 E2
- 4812 F2
- 5401 E12
- 5621 G5
- 6401 F11
- 6771 I6
- 6772 I4
- 6774 B4
- 6775 H6
- 7401 D10
- 7402 E10
- 7403 C12
- 7601-A G3
- 7601-B D3
- 7603 E6
- 7604 F6
- 7621 F10
- 7622 F11
- 7623 H10
- 7635 B3
- 7636 C2
- 7651 A7
- 7652 B7
- 7653 B5
- 7654 B5
- 7681 B11
- 7682 B10
- 7803 B2
- 9401 D9
- 9402 F10
- 9599 I2

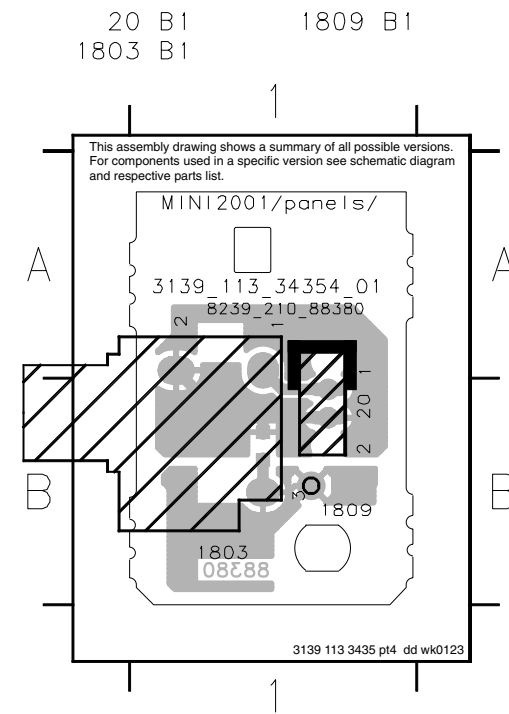
P...provision  
W...Provision for Woox only  
Note : Some values may varies, see respective parts list for correct value.

# AF9 BOARD - CIRCUIT DIAGRAM (PART 3)

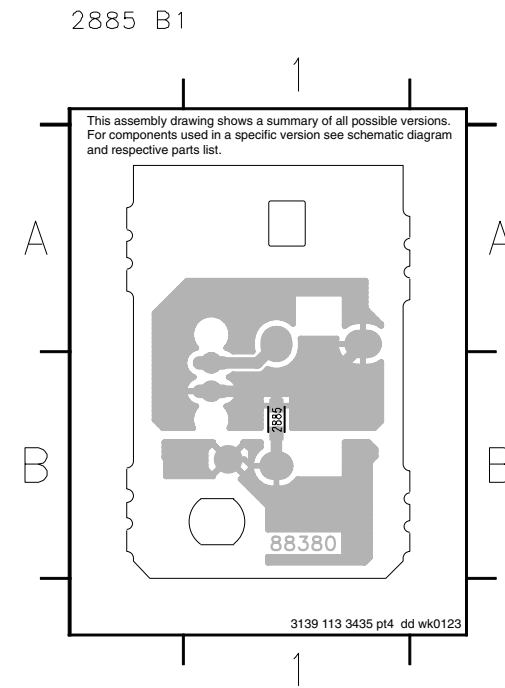
1100 F6	1203 C1	1206 C1	1403 A9	1520 E6	1523 D6	1541 D4	2207 D3	2210 F2	2801 B4	2804 B3	2807 B1	2810 A4	2951 E7	2954 E6	3412 A8	3803 B3	3806 A1	3809 B2	3822 F3	4903 B8	4906 A5	4909 A3	4912 B8	4915 C8	5802 A3	6206 F3	6209 F3	7802 A3	9484 D4	9634 E2
1201 C1	1204 E1	1401 A9	1404 D9	1521 A7	1524 A5	1542 D4	2208 F2	2211 F3	2802 C3	2805 B2	2808 B4	2901 F6	2952 E7	2955 E1	3801 B4	3804 A3	3807 B4	3820 E3	4801 B4	4904 F7	4907 C8	4910 A3	4913 B8	4921 B1	6204 F7	6207 C5	7202 E3	9405 C8	9486 E7	9904 F7
1202 E1	1205 C1	1402 D9	1405 A9	1522 A6	1525 B5	1801 A1	2209 E3	2520 E7	2803 B3	2806 B2	2809 B4	2950 E7	2953 E7	3205 D2	3802 A4	3805 B2	3808 A3	3821 E2	4802 C4	4905 C3	4908 C8	4911 A4	4914 B5	5801 B2	6205 D3	6208 C5	7404 F3	9483 F6	9614 E3	



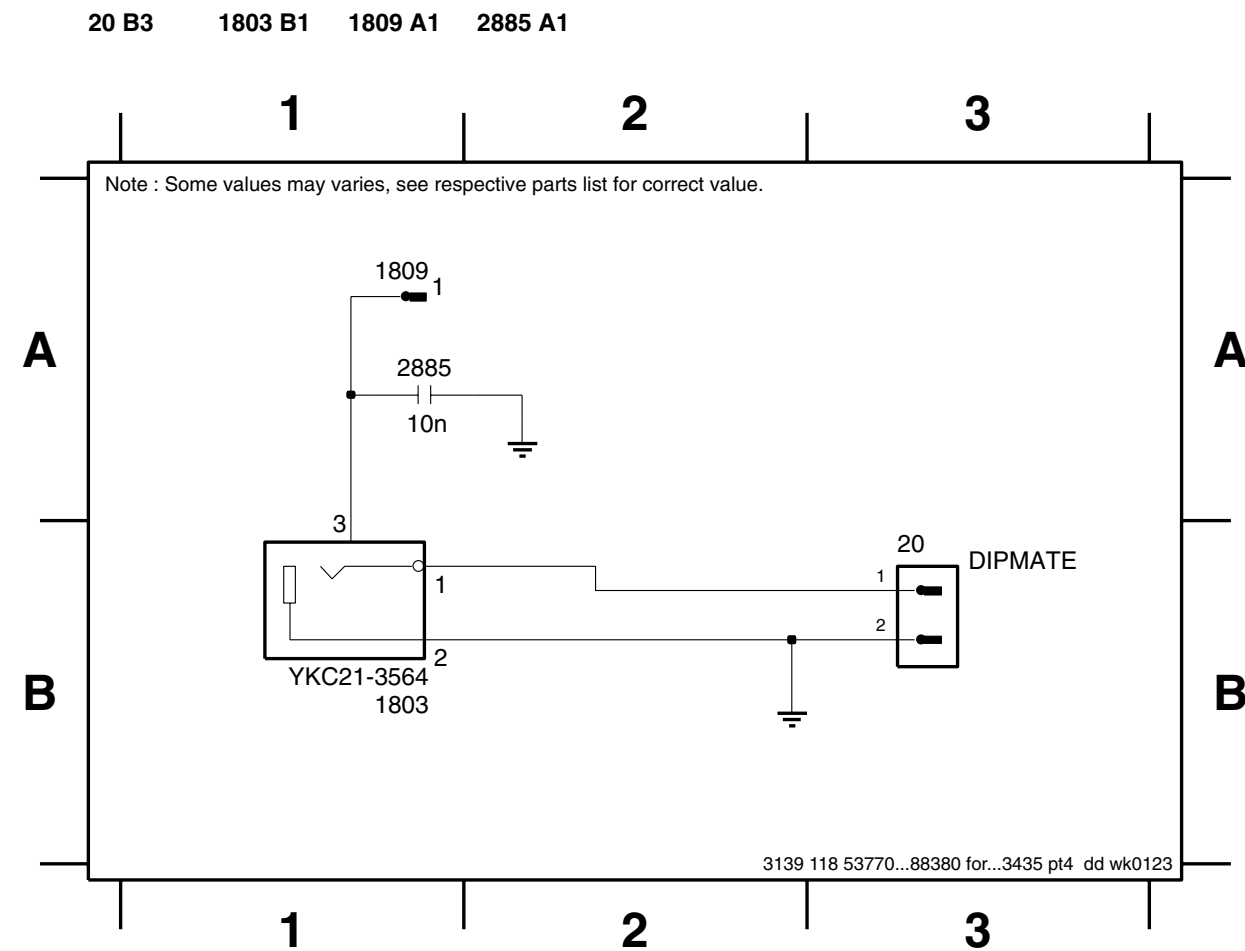
**VIDEO OUT CINCH BOARD -  
COMPONENT LAYOUT**



**VIDEO OUT CINCH BOARD -  
CHIP LAYOUT**



**VIDEO OUT CINCH PART - CIRCUIT DIAGRAM**

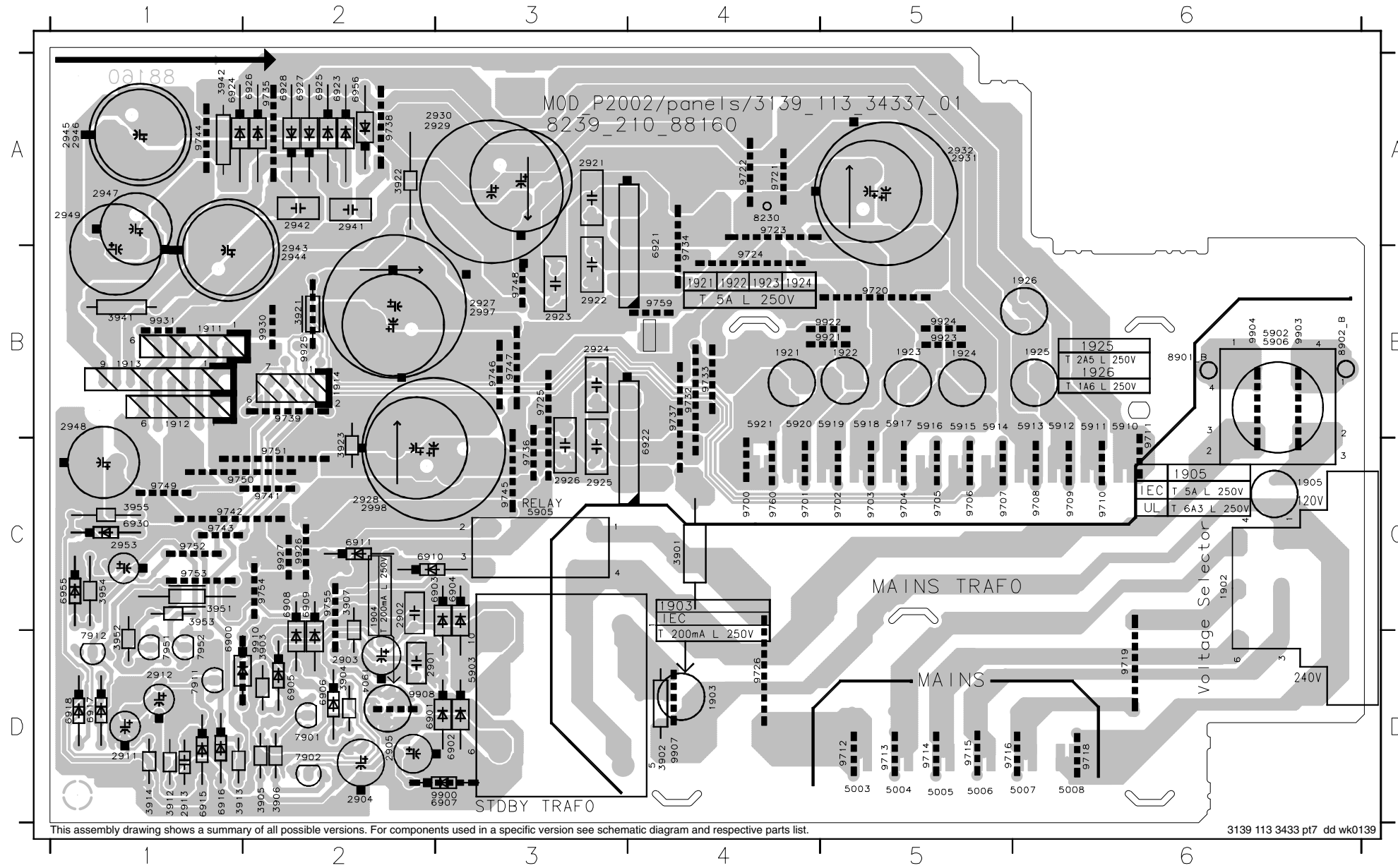




# MMPWR 100W MODULE

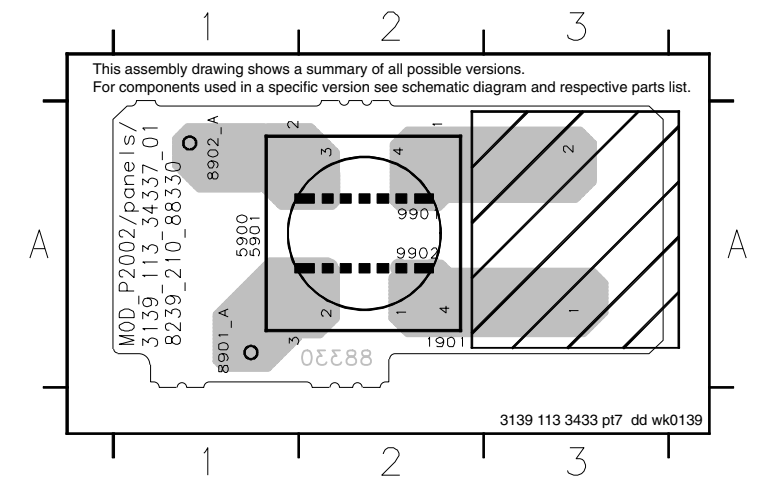
## MAINS BOARD - COMPONENT VIEW

1902 C6	1926 B6	2925 C3	2946 A1	3907 C2	3955 C1	5912 B6	6903 C2	6921 A4	7911 D1	9706 C5	9720 B5	9738 A2	9752 C1	9922 B5
1903 D4	2901 D2	2926 C3	2947 A1	3912 D1	5003 D5	5913 B6	6904 C3	6922 C4	7912 D1	9707 C5	9721 A4	9739 B2	9753 C1	9923 B5
1904 D2	2902 C2	2927 B3	2948 B1	3913 D1	5004 D5	5914 B6	6905 D2	6923 A2	7951 D1	9708 C6	9722 A4	9741 C2	9754 C2	9924 B5
1905 C6	2903 D2	2928 C2	2949 A1	3914 D1	5005 D5	5915 B6	6906 D2	6924 A1	7952 D1	9709 C6	9723 A4	9742 C1	9755 C2	9925 B2
1911 B1	2904 D2	2929 A3	2953 C1	3921 B2	5006 D5	5916 B6	6907 D3	6925 A2	8230 A4	9710 C6	9724 B4	9743 C1	9755 C2	9926 C2
1912 B1	2905 D2	2930 A3	2957 B3	3922 A2	5007 D6	5917 B6	6908 C2	6926 A2	8901 B B6	9711 B6	9725 B3	9744 A1	9760 C4	9927 C2
1913 B1	2911 D1	2931 A5	2958 C2	3923 C2	5008 D6	5918 B6	6909 C2	6927 A2	8902 B B6	9712 D5	9726 D4	9745 C3	9900 D3	9930 B2
1914 B2	2912 D1	2932 A5	2959 B4	3941 B1	5902 B6	5919 B6	6910 C2	6928 A2	9700 C4	9713 D5	9732 B4	9746 B3	9903 B6	9931 B1
1921 B4	2913 D1	2941 A2	2953 C1	3942 A1	5903 D3	5920 B4	6911 C2	6930 C1	9701 C4	9714 D5	9733 B4	9747 B3	9904 B6	
1922 B5	2921 A3	2942 A2	2953 C1	3942 A1	5905 C3	5921 B4	6915 D1	6935 C1	9702 C5	9715 D5	9734 B4	9748 B3	9907 D4	
1923 B5	2922 B3	2943 B2	2953 C1	3952 D1	5906 B6	6900 D1	6916 D1	6955 A2	9703 C5	9716 D5	9735 A2	9749 C1	9908 D2	
1924 B5	2923 B3	2944 B2	2953 C1	3953 C1	5910 B6	6901 D2	6917 D1	7901 D2	9704 C5	9718 D6	9736 C3	9750 C1	9910 D2	
1925 B6	2924 B3	2945 A1	2956 D2	3954 C1	5911 B6	6902 D3	6918 D1	7902 D2	9705 C5	9719 D6	9737 B4	9751 C2	9921 B5	



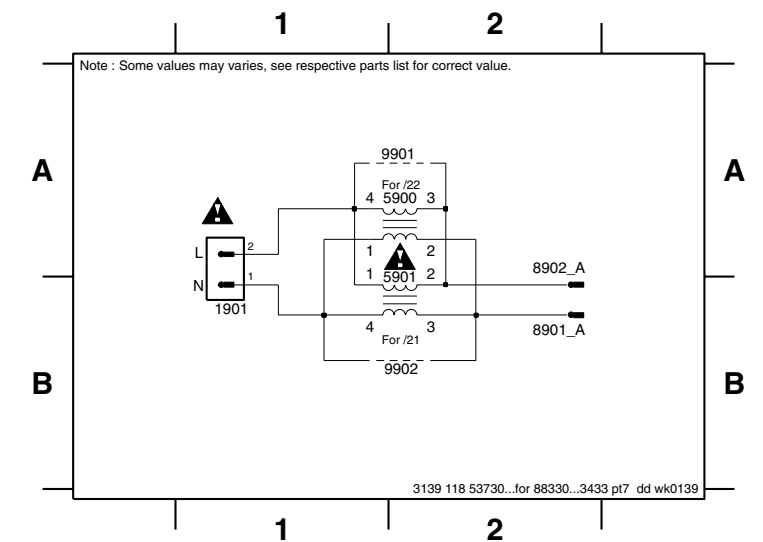
## MAINS SOCKET - COMPONENT VIEW

1901 A2	5901 A1	8902_A A1	9902 A2
5900 A1	8901_A A1	9901 A2	



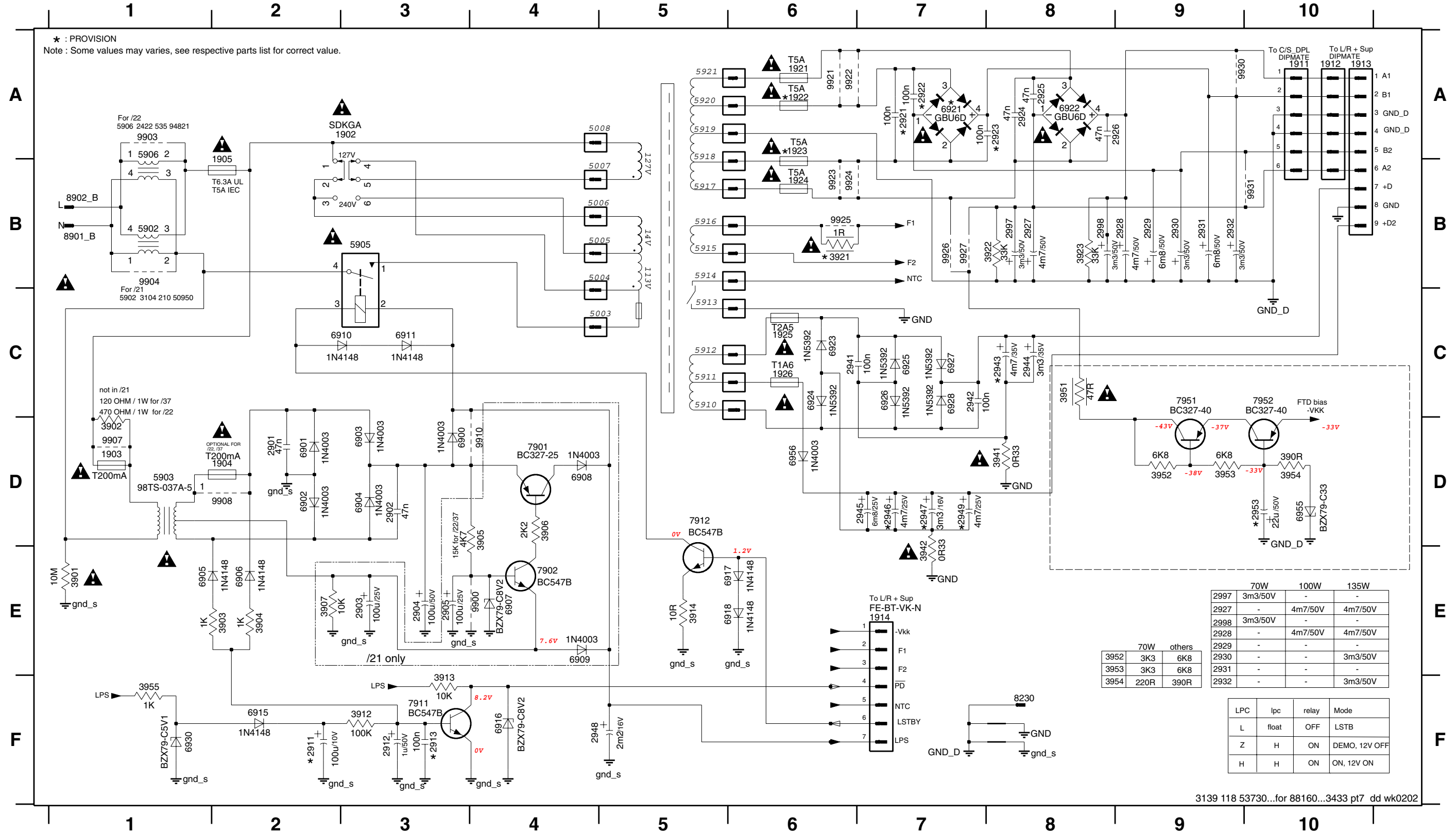
## MAINS SOCKET - CIRCUIT DIAGRAM

1901 B1	5901 A2	8902_A A2	9902 B2
5900 A2	8901_A B2	9901 A2	



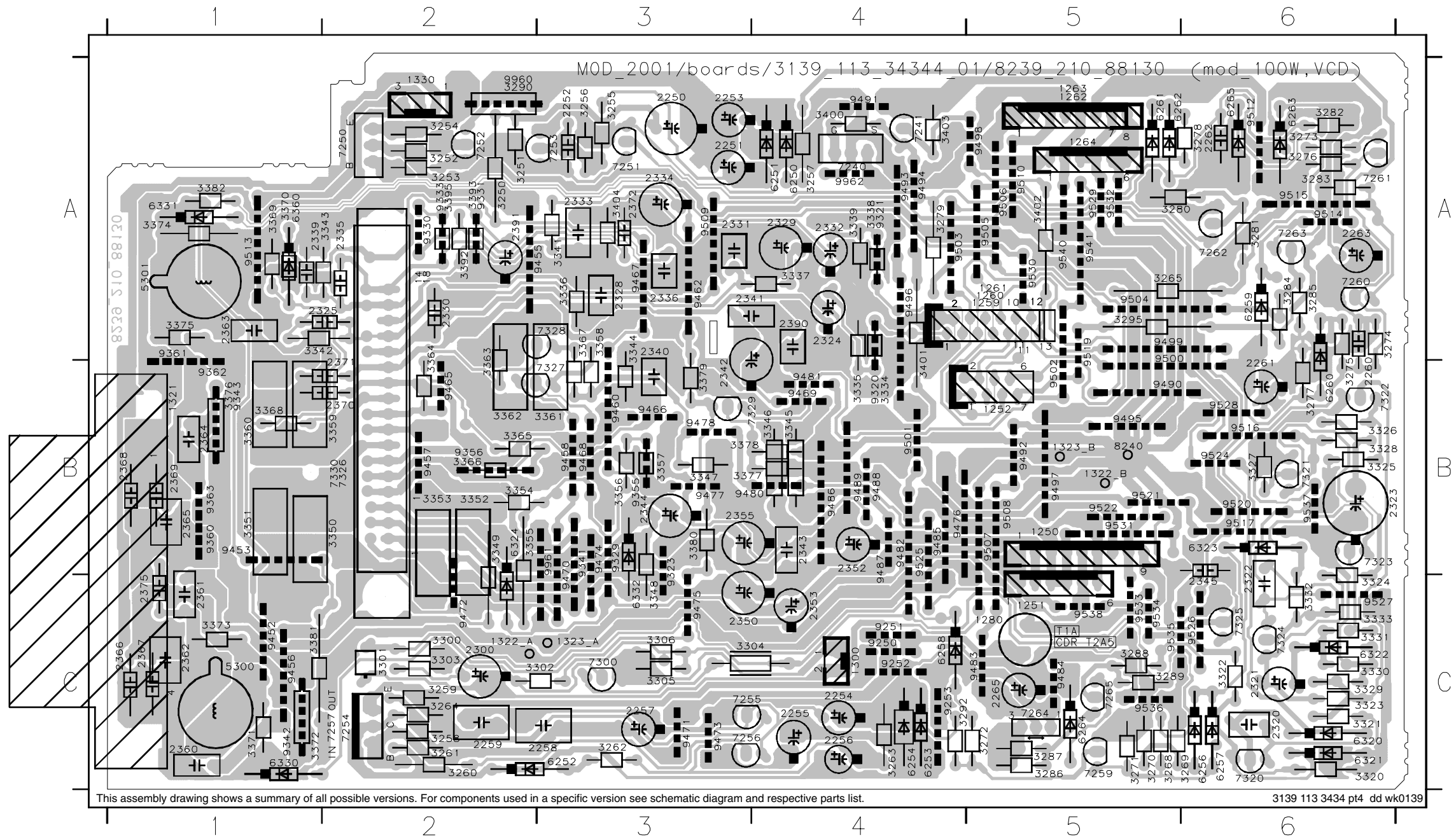
# MAINS BOARD - CIRCUIT DIAGRAM

1902 A3	1912 A10	1923 A6	2902 D3	2912 F3	2924 A8	2929 B9	2942 C7	2947 D7	2998 B8	3905 D4	3914 E5	3942 E7	3955 F1	6900 D3	6905 E1	6910 C3	6918 E6	6925 C7	6955 D10	7912 D5	8902_B B1	9908 D2	9924 B6	9931 B10
1903 D1	1913 A10	1924 B6	2903 E3	2913 F3	2925 A8	2930 B9	2943 C8	2948 F4	3901 E1	3906 D4	3921 B6	3951 C8	5902 B1	6901 D2	6906 E2	6911 C3	6921 A7	6926 C7	6956 D6	7951 C9	8900 E4	9910 D4	9925 B6	
1904 D2	1914 E7	1925 C6	2904 E3	2914 A7	2926 A8	2931 B9	2944 C8	2949 D7	3902 D1	3907 E2	3922 B7	3952 D9	5903 D1	6902 D2	6907 E4	6915 F2	6927 C7	6957 D4	7952 C10	8901 A6	9903 A1	9926 B7		
1905 B2	1921 A6	1926 C6	2905 E3	2922 A7	2927 B8	2932 B9	2945 D7	2953 D10	3903 E2	3912 F3	3923 B8	3953 D9	5905 B3	6903 D3	6908 D4	6916 F4	6923 C6	6928 C7	7902 E4	8230 F8	9904 B1	9922 A6	9927 B7	
1911 A10	1922 A6	2901 D2	2911 F2	2923 A8	2928 B9	2941 C6	2946 D7	2997 B8	3904 E2	3913 F3	3924 D8	3954 D10	5906 A1	6904 D3	6909 E4	6917 E6	6924 C6	6928 F1	7911 F3	8901_B B1	9907 D1	9923 B6	9930 A10	



**LEFT/RIGHT AMPLIFIER & SUPPLY BOARD - COMPONENT VIEW**

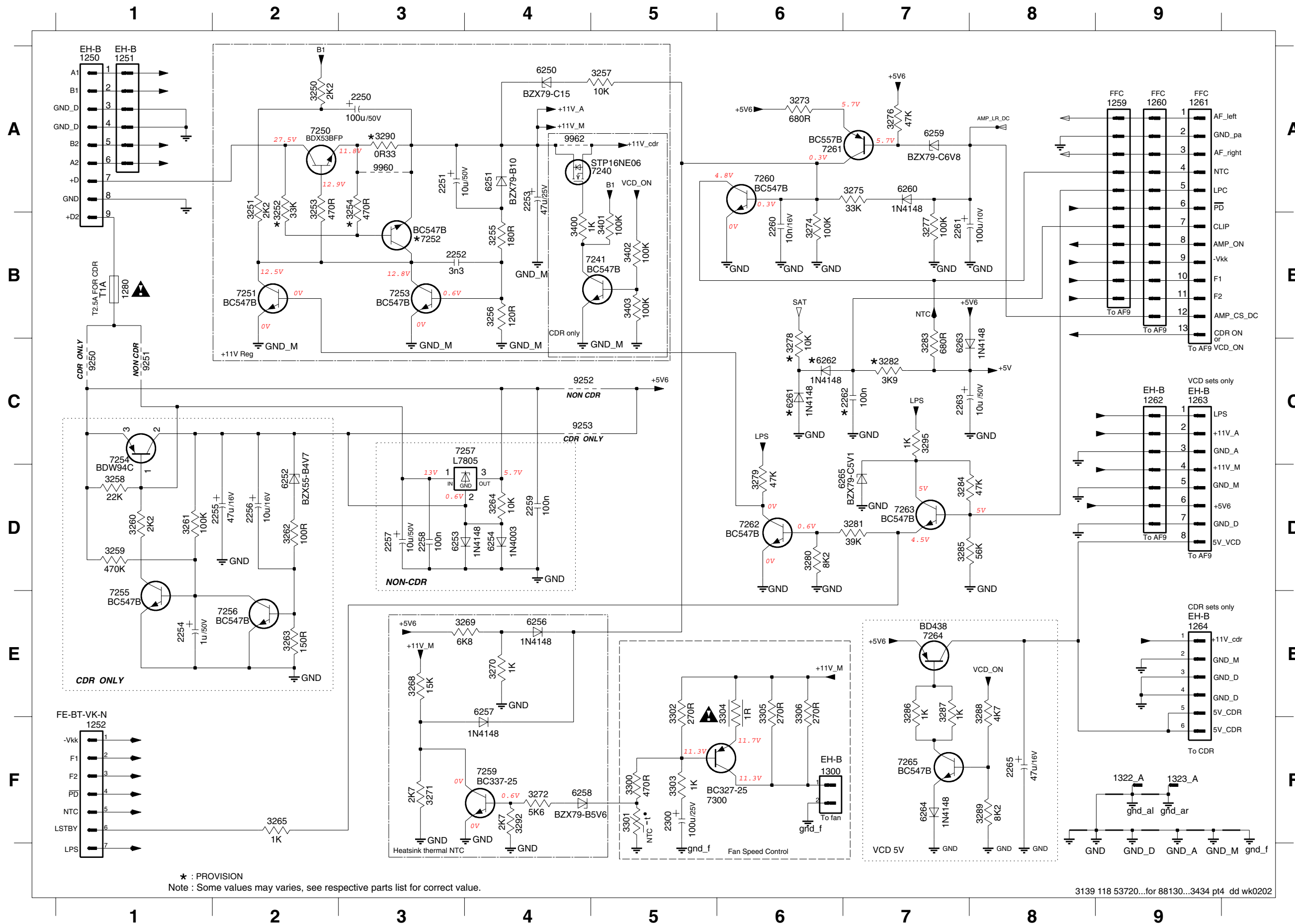
1250 B5	2261 B6	2352 B4	3259 C2	3289 C5	3337 A4	3366 B2	6251 A4	7253 A3	9253 C4	9468 B3	9497 B5	9528 B6
1251 C5	2262 A6	2353 C4	3260 C2	3290 A2	3338 A4	3367 A3	6252 C3	7254 C2	9320 B4	9469 B4	9498 A5	9529 A5
1252 B5	2263 A6	2355 B3	3261 C2	3292 C4	3339 A4	3368 B1	6253 C4	7255 C3	9321 A4	9470 C3	9499 A5	9530 A5
1259 A5	2265 C5	2360 C1	3262 C3	3295 A5	3341 A3	3369 A1	6254 C4	7256 C3	9323 B3	9471 C3	9500 A5	9531 B5
1260 A5	2300 C2	2361 C1	3263 C4	3300 C2	3342 A1	3370 A1	6256 C6	7257 C2	9329 B3	9472 C2	9501 B4	9532 A5
1261 A5	2320 C6	2362 C1	3264 C2	3301 C2	3343 A2	3371 C1	6257 C6	7259 C5	9330 A2	9473 C3	9502 B5	9533 C5
1262 A5	2321 C6	2363 A1	3265 A5	3302 C3	3344 A3	3372 C1	6258 C4	7260 A6	9331 A2	9474 B3	9503 A4	9534 C5
1263 A5	2322 C6	2364 B1	3268 C5	3303 C2	3345 B4	3373 C1	6259 A6	7261 A6	9333 A2	9475 C3	9504 A5	9535 C5
1264 A5	2323 B6	2365 B1	3269 C6	3304 C3	3346 B4	3374 A1	6260 B6	7262 A6	9341 B3	9476 B4	9505 A5	9536 C5
1280 C5	2324 A4	2366 C1	3270 C5	3305 C3	3347 B3	3375 A1	6261 A5	7263 A6	9342 C1	9477 B3	9506 A5	9537 B6
1300 C4	2325 A2	2367 C1	3271 C5	3306 C3	3348 C3	3376 B1	6262 A5	7264 C5	9343 B1	9478 B3	9507 B5	9538 C5
1321 B1	2328 A3	2368 B1	3272 C5	3320 C6	3349 B2	3377 B3	6263 A6	7265 C5	9355 B3	9480 B3	9508 B5	9540 A5
1322 A	2329 A4	2369 B1	3273 A6	3321 C6	3350 B2	3378 B3	6264 C5	7300 C3	9356 B2	9481 B4	9509 A3	9541 A5
1322 B	2330 A2	2370 B2	3274 A6	3322 C6	3351 B1	3379 B3	6265 A6	7320 C6	9360 B1	9482 B4	9510 A5	9560 A2
1323 A	2331 A3	2371 B2	3275 B6	3323 C6	3352 B2	3380 B3	6320 C6	7321 B6	9361 A1	9483 C5	9512 A6	9961 B3
1323 B	2332 A4	2372 A3	3276 A6	3324 C6	3353 B2	3381 C1	6321 C6	7322 B6	9362 B1	9484 C5	9513 A1	9962 A4
1330 A2	2333 A3	2375 C1	3277 B6	3325 B6	3354 B2	3382 A1	6322 C6	7323 B6	9363 B1	9485 B4	9514 A6	
2250 A3	2334 A3	2390 A4	3278 A6	3326 B6	3355 B2	3392 A2	6323 B6	7324 C6	9452 C1	9486 B4	9515 A6	
2251 A3	2335 A2	2391 A2	3279 A4	3327 B6	3356 B3	3393 A2	6324 B2	7325 C6	9453 B1	9487 B4	9516 B6	
2252 A3	2336 A3	3250 A2	3280 A5	3328 B6	3357 B3	3395 A2	6330 C1	7326 B2	9455 A3	9488 B4	9517 B6	
2253 A3	2339 A1	3251 A2	3281 A6	3329 C6	3358 A3	3400 A4	6331 A1	7327 B3	9456 C1	9489 B4	9519 A5	
2254 C4	2340 A3	3252 A2	3282 A6	3330 C6	3359 B2	3401 B4	6332 C3	7328 A3	9457 B2	9490 B5	9520 B6	
2255 C4	2341 A3	3253 A2	3283 A6	3331 C6	3360 B1	3402 A5	6360 A1	7329 B4	9458 B3	9491 A4	9521 B5	
2256 C4	2342 B3	3254 A2	3284 A6	3332 C6	3361 B3	3403 A4	7240 A4	7330 B2	9460 B3	9492 B5	9522 B5	
2257 C3	2343 B4	3255 A3	3285 A6	3333 C6	3362 B2	3404 A3	7241 A4	8240 B5	9462 A3	9493 A4	9524 B6	
2258 C3	2344 B3	3256 A3	3286 C5	3334 B4	3363 B2	5300 C1	7250 A2	9250 C4	9465 B2	9494 A4	9525 B4	
2259 C2	2345 C6	3257 A4	3287 C5	3335 B4	3364 A2	5301 A1	7251 A3	9251 C4	9466 B3	9495 B5	9526 C6	
2260 B6	2350 C3	3258 C2	3288 C5	3336 A3	3365 B2	6250 A4	7252 A2	9252 C4	9467 A3	9496 A4	9527 C6	



This assembly drawing shows a summary of all possible versions. For components used in a specific version see schematic diagram and respective parts list.

3139 113 3434 pt4 dd wk0139

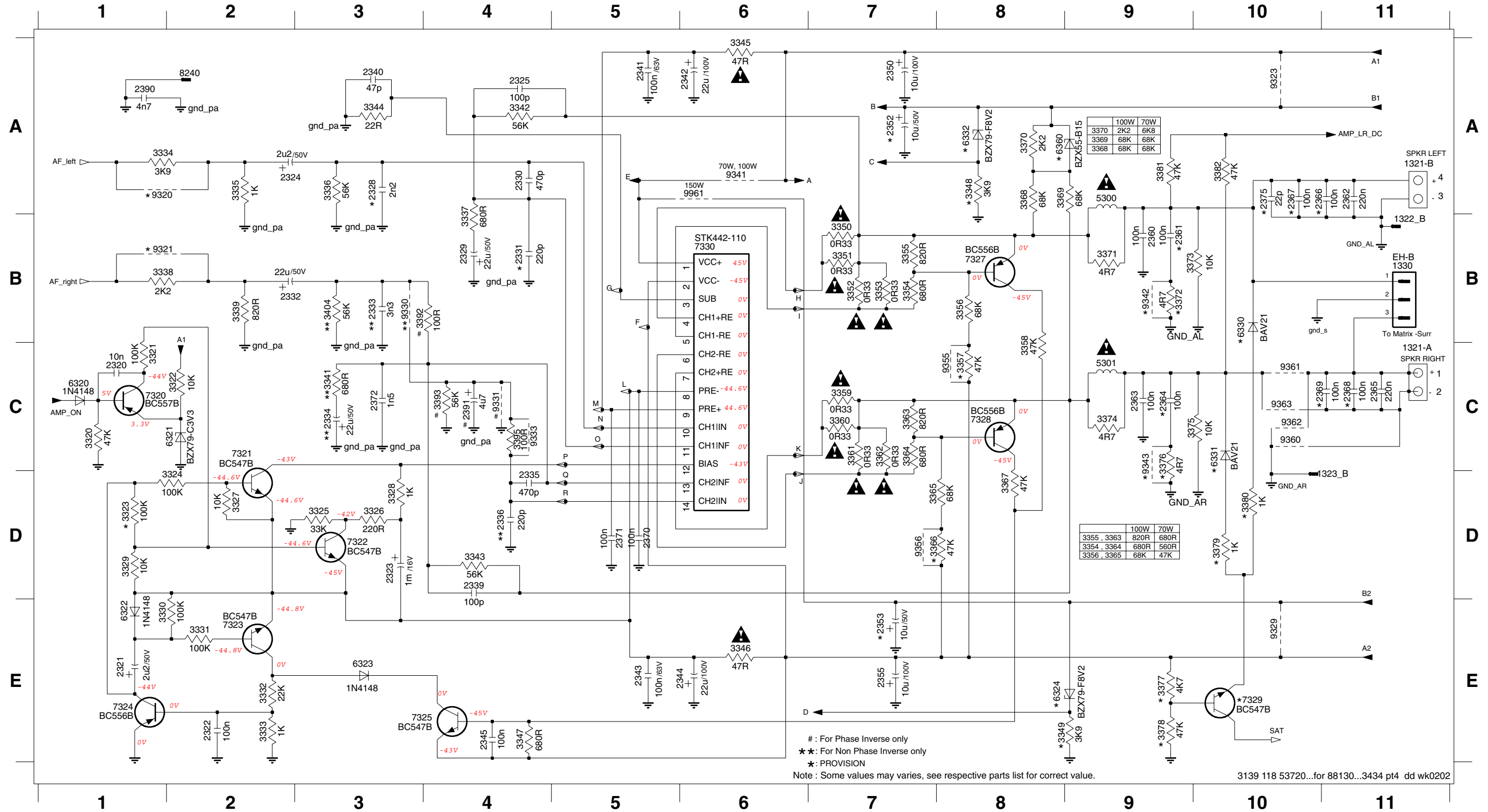
# LEFT/RIGHT AMPLIFIER & SUPPLY BOARD - CIRCUIT DIAGRAM (PART 1)



1250 A1	7255 E1
1251 A1	7256 E2
1252 F1	7257 C4
1259 A9	7259 F4
1260 A9	7260 A6
1261 A9	7261 A6
1262 C9	7262 D6
1263 C9	7263 D7
1264 E9	7264 E7
1280 B1	7265 F8
1300 F6	7300 F5
1322_A F9	9250 C1
1323_A F9	9251 C1
2250 A3	9252 C4
2251 A3	9253 C4
2252 B3	9254 A3
2253 A4	9960 A3
2254 E1	9962 A4
2255 D1	
2256 D2	
2257 D3	
2258 D3	
2259 D4	
2260 B6	
2261 B7	
2262 C7	
2263 C7	
2265 F8	
2300 F5	
3250 A2	
3251 A2	
3252 A2	
3253 A2	
3254 A3	
3255 B4	
3256 B4	
3257 A5	
3258 D1	
3259 D1	
3260 D1	
3261 D1	
3262 D2	
3263 D2	
3264 D4	
3265 F2	
3268 E3	
3269 E4	
3270 E4	
3271 F3	
3272 F4	
3273 A6	
3274 B6	
3275 A7	
3276 A7	
3277 B7	
3278 C6	
3279 D6	
3280 D6	
3281 D7	
3282 C7	
3283 C7	
3284 D7	
3285 D7	
3286 E7	
3287 E7	
3288 E8	
3289 F8	
3290 A3	
3292 F4	
3295 C7	
3300 F5	
3301 F5	
3302 E5	
3303 F5	
3304 E6	
3305 E6	
3306 E6	
3400 B4	
3401 B5	
3402 B5	
3403 B5	
6250 A4	
6251 A4	
6252 D2	
6253 D3	
6254 D4	
6256 E4	
6257 E4	
6258 F4	
6259 A7	
6260 A7	
6261 C6	
6262 C6	
6263 C7	
6264 F7	
6265 D6	
7240 A5	
7241 B5	
7250 A2	
7251 B2	
7252 B3	
7253 B3	
7254 C1	

# LEFT/RIGHT AMPLIFIER & SUPPLY BOARD - CIRCUIT DIAGRAM (PART 2)

1321-A C11	2323 D3	2333 B3	2343 E5	2361 B9	2369 C11	3321 C1	3329 D1	3337 B4	3346 E6	3354 B7	3362 C7	3370 A8	3378 E9	3404 B3	6330 B10	7324 E1	9321 B1	9343 C9
1321-B A11	2324 A2	2334 C3	2344 E6	2362 A11	2370 D5	3322 C2	3330 E1	3338 B1	3347 E4	3355 B7	3363 C7	3371 B9	3379 D10	5300 A9	6331 C10	7325 E4	9323 A10	9355 C8
1322_B B11	2325 A4	2335 D4	2345 E4	2363 C9	2371 D5	3323 D1	3331 E2	3339 B2	3348 A8	3356 B8	3364 C7	3372 B9	3380 D10	5301 C9	6332 A8	7327 B8	9329 E10	9356 D7
1323_B D11	2328 A3	2336 D4	2350 A7	2364 C9	2372 C3	3324 D2	3332 E2	3341 C3	3349 E8	3357 C8	3365 D8	3373 B10	3381 A9	6320 C1	6360 A8	7328 C8	9330 B3	9360 C10
1330 B11	2329 B4	2339 D4	2352 A7	2365 C11	2375 A10	3325 D3	3333 E2	3342 A4	3350 B7	3358 C8	3366 D8	3374 C9	3382 A10	6321 C1	7320 C1	7329 E10	9331 C4	9361 C10
2320 C1	2330 A4	2340 A3	2353 E7	2366 A10	2390 A1	3326 D3	3334 A1	3343 D4	3351 B7	3359 C7	3367 D8	3375 C10	3389 B3	6322 E1	7321 C2	7330 B6	9333 C4	9362 C10
2321 E1	2331 B4	2341 A5	2355 E7	2367 A10	2391 C4	3327 D2	3335 A2	3344 A3	3352 B7	3360 C7	3368 A8	3376 C9	3393 C4	6323 E3	7322 D3	8240 A2	9341 A6	9363 C10
2322 E2	2332 B2	2342 A6	2360 B9	2368 C11	3320 C1	3328 D3	3336 A3	3345 A6	3353 B7	3361 C7	3369 A8	3377 E9	3395 C4	6324 E8	7323 E2	9320 A1	9342 B9	9961 A6



# : For Phase Inverse only  
 \* : For Non Phase Inverse only  
 \* : PROVISION  
 Note : Some values may varies, see respective parts list for correct value.

