

Service Information

Already published Service Informations: A02-162 3139 785 30076

CHANGES DURING PRODUCTION

* From production wk233 onwards a new 3CDC-LC-MP3CD2002 module will be introduced due to cost reduction.

This new 3CDC-LC-MP3CD2002 module can be recognized by the much smaller square shape MP3CD2002 board instead of a shielded MPEG board.

A completely new chapter 10 is attached.
This chapter will replace the existing MPEG-01B board (chapter 8) and 3CDC-LC-VCD module (chapter 10).

This changeover must be synchronized with the following changes on the Front and Combi board:

Front Board:

7400 3103 308 84531 TMP87CS71BF "M355TIV85431"

Combi Board:

3507 4822 051 30562 5k6 5% 0,1W

3508 4822 051 30562 5k6 5% 0,1W



3CDC-LC-MP3CD2002

(3 Disc Carousel Changer+MP3 Board) Layout stage .2

TABLE OF CONTENTS

| | |
|----------------------|------|
| Service Hints | 10-2 |
| Wiring Diagram | 10-4 |
| Blockdiagram | 10-5 |

CD PART

| | |
|-----------------------------------|------|
| Component Layout Main Board | 10-6 |
| Circuit Diagram | 10-7 |

MP3 PART

| | |
|-----------------------------------|------|
| Component Layout Main Board | 10-8 |
| Circuit Diagram | 10-9 |

| | |
|---------------------|-------|
| Exploded View | 10-10 |
| Partslist | 10-12 |



Service hints

CAUTION

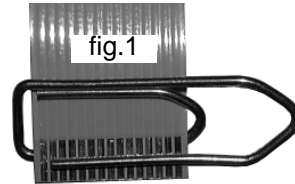
CHARGED CAPACITORS ON THE SERVO BOARD MAY DAMAGE THE CD DRIVE ELECTRONICS WHEN CONNECTING A NEW CD MECHANISM. THAT'S WHY, BESIDES THE SAFETY MEASURES LIKE

- **SWITCH OFF POWER SUPPLY**
- **ESD PROTECTION**

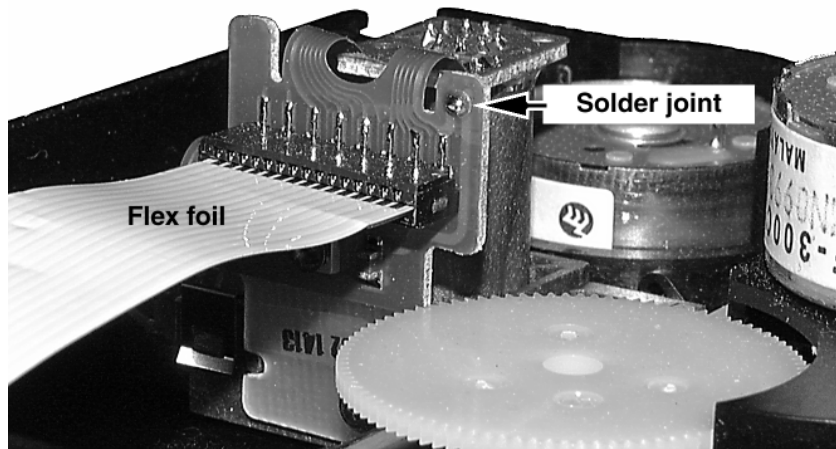
ADDITIONAL ACTIONS MUST BE TAKEN BY THE REPAIR TECHNICIAN.

The following steps have to be done when replacing the CD mechanism:

1. Disconnect flexfoil cable from the old CD drive
2. Put a paperclip on the flexfoil to short-circuit the contacts (fig.1)
3. Remove the old CD drive
4. Remove paperclip from the flexfoil and connect it to the new drive
5. Position the new CD drive in its studs
6. Remove solder joint from the Laserunit



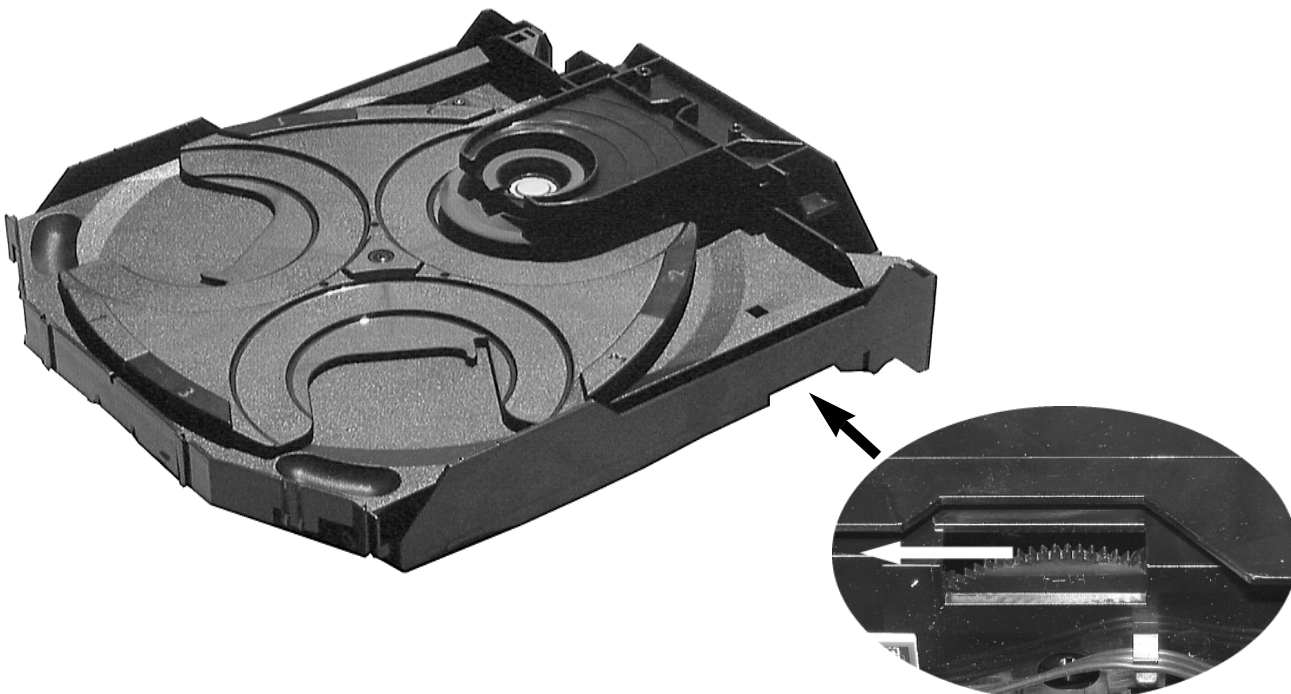
Attention: The laser diode of this CD drive is protected against ESD by a solder joint which shortcircuits the laserdiode to ground.
For proper functionality of the CD drive this solder joint must be removed **after** connection the drive to the set.



Emergency open

In case of a Supply fault, the tray can be opened manually.

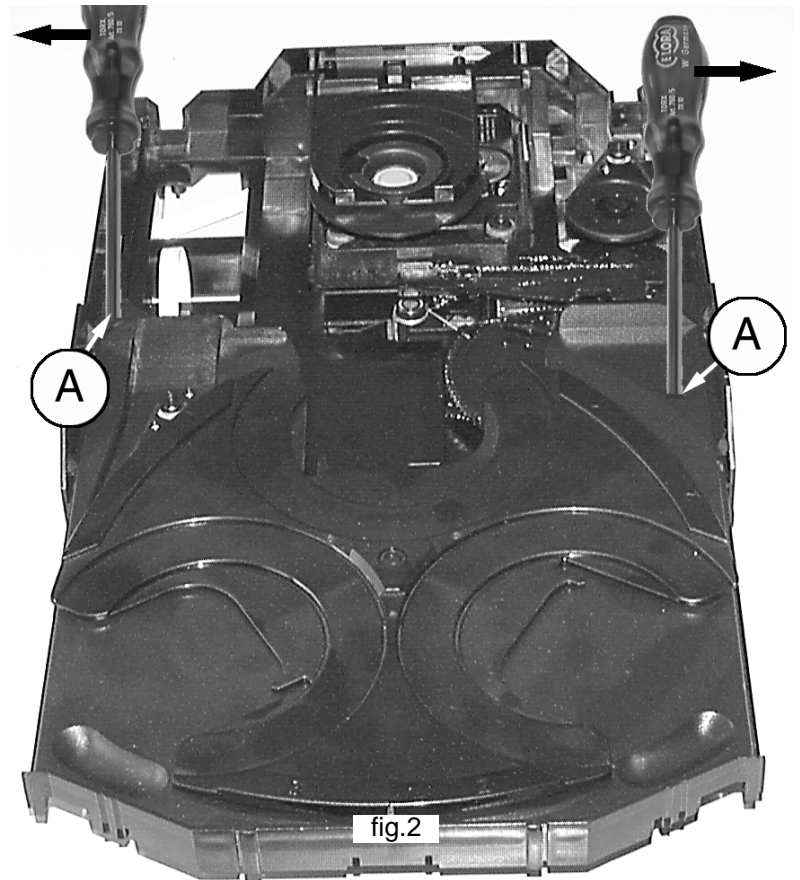
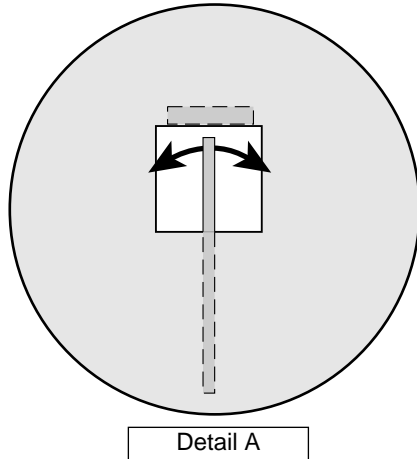
1. Remove the top cover of the set to get access to the Changer Module.
2. Turn gearwheel clockwise (as shown in picture below).



Service hints

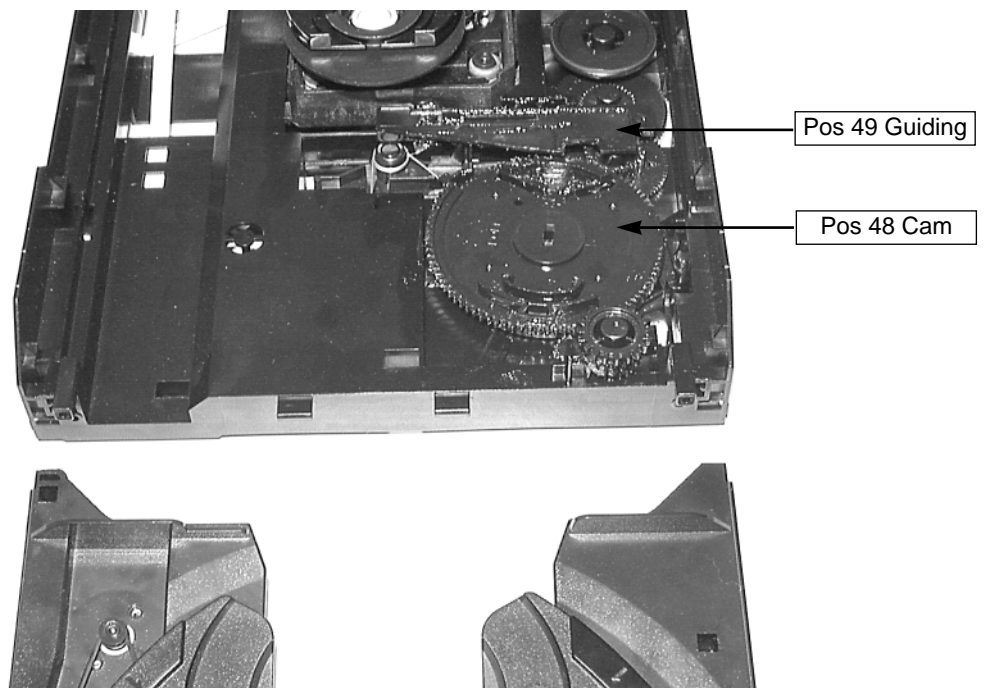
Dismantling of Tray

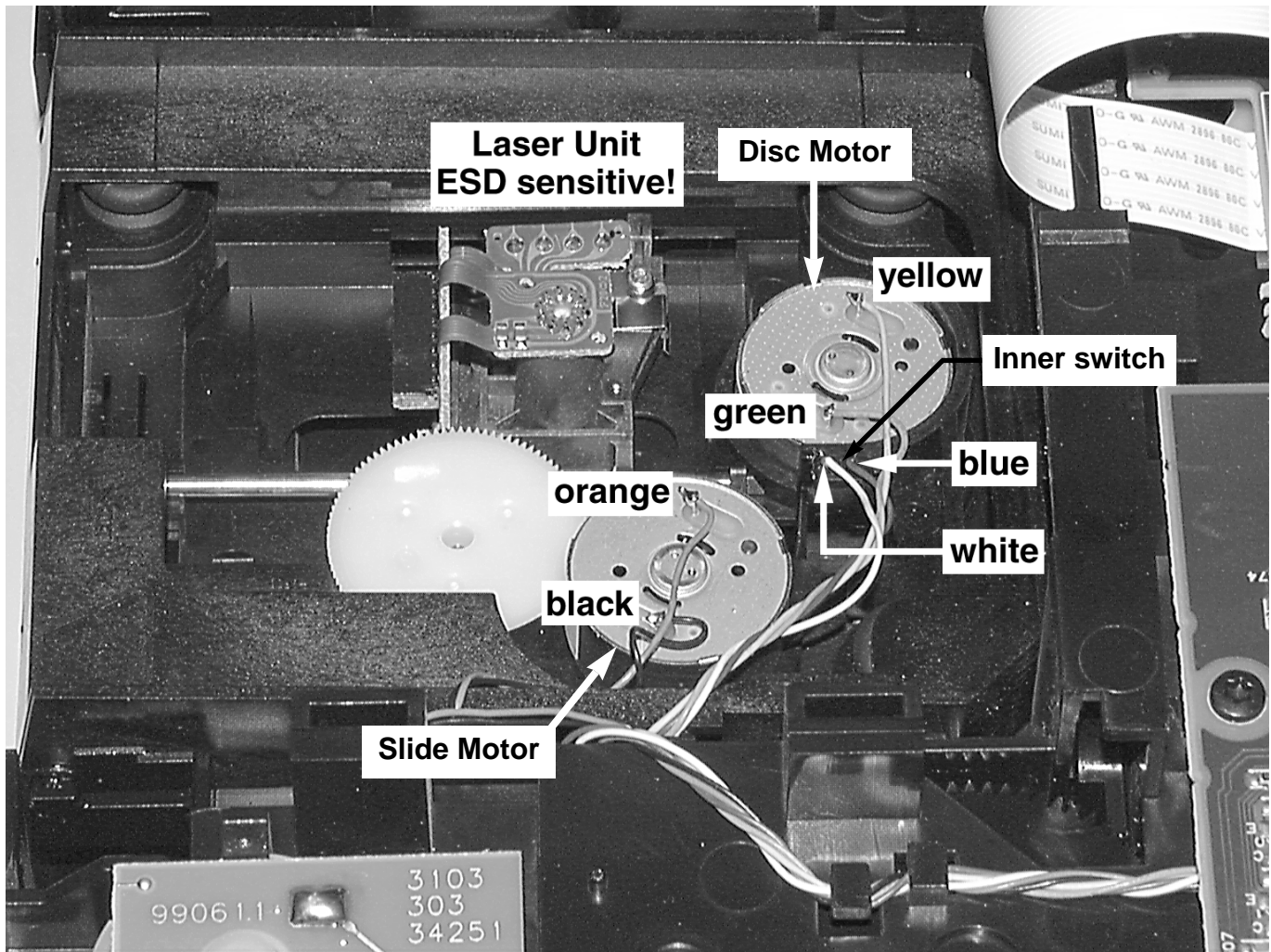
1. Open the tray.
2. Release 2x catch as shown in fig. 2 and Detail A
3. Pull tray out.



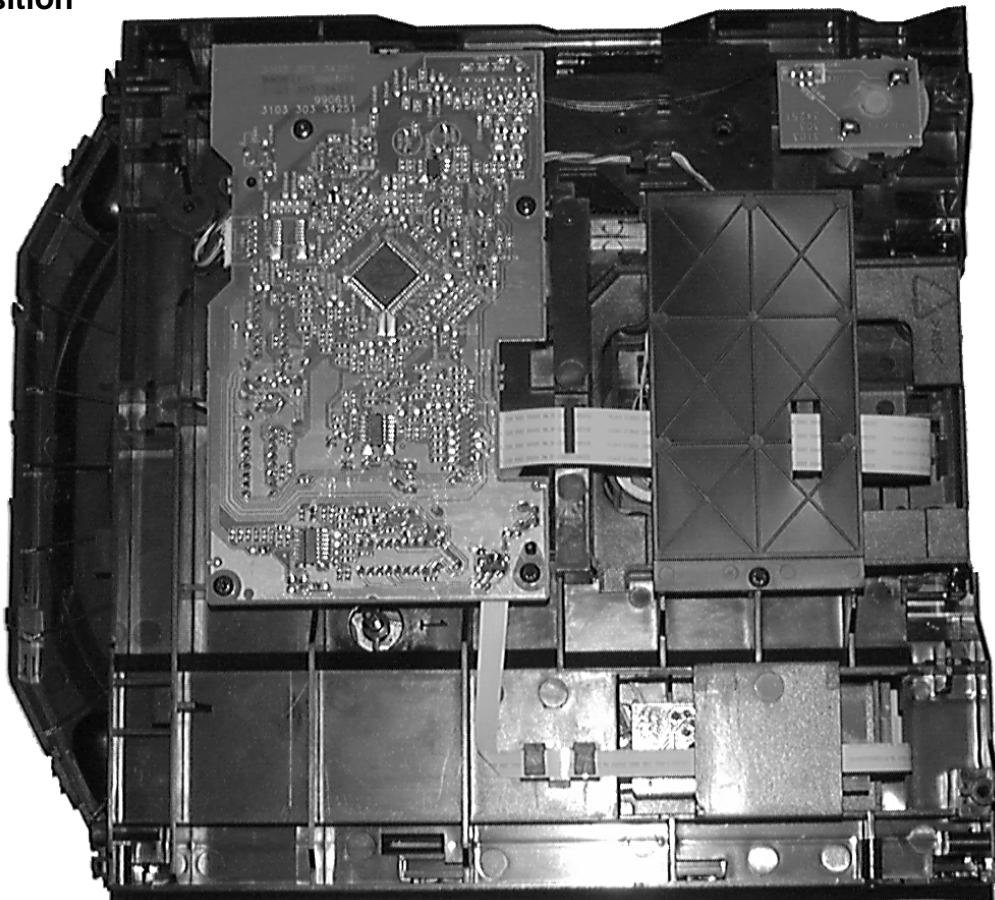
Assembling of Tray

1. Turn Cam (pos. 48) clockwise to end position.
2. If necessary - move Guiding (pos. 49) to the right end position.
3. Insert the Tray.

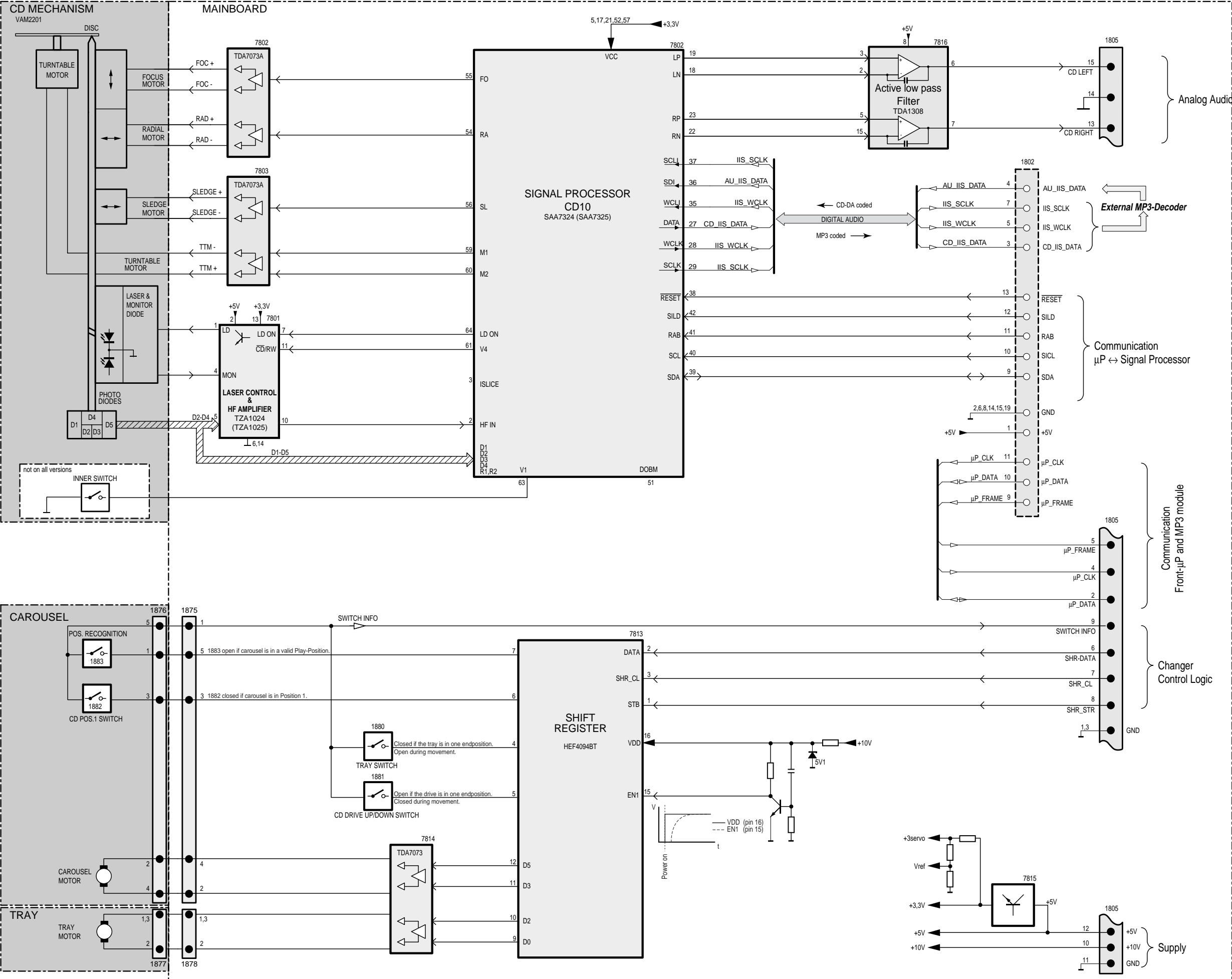


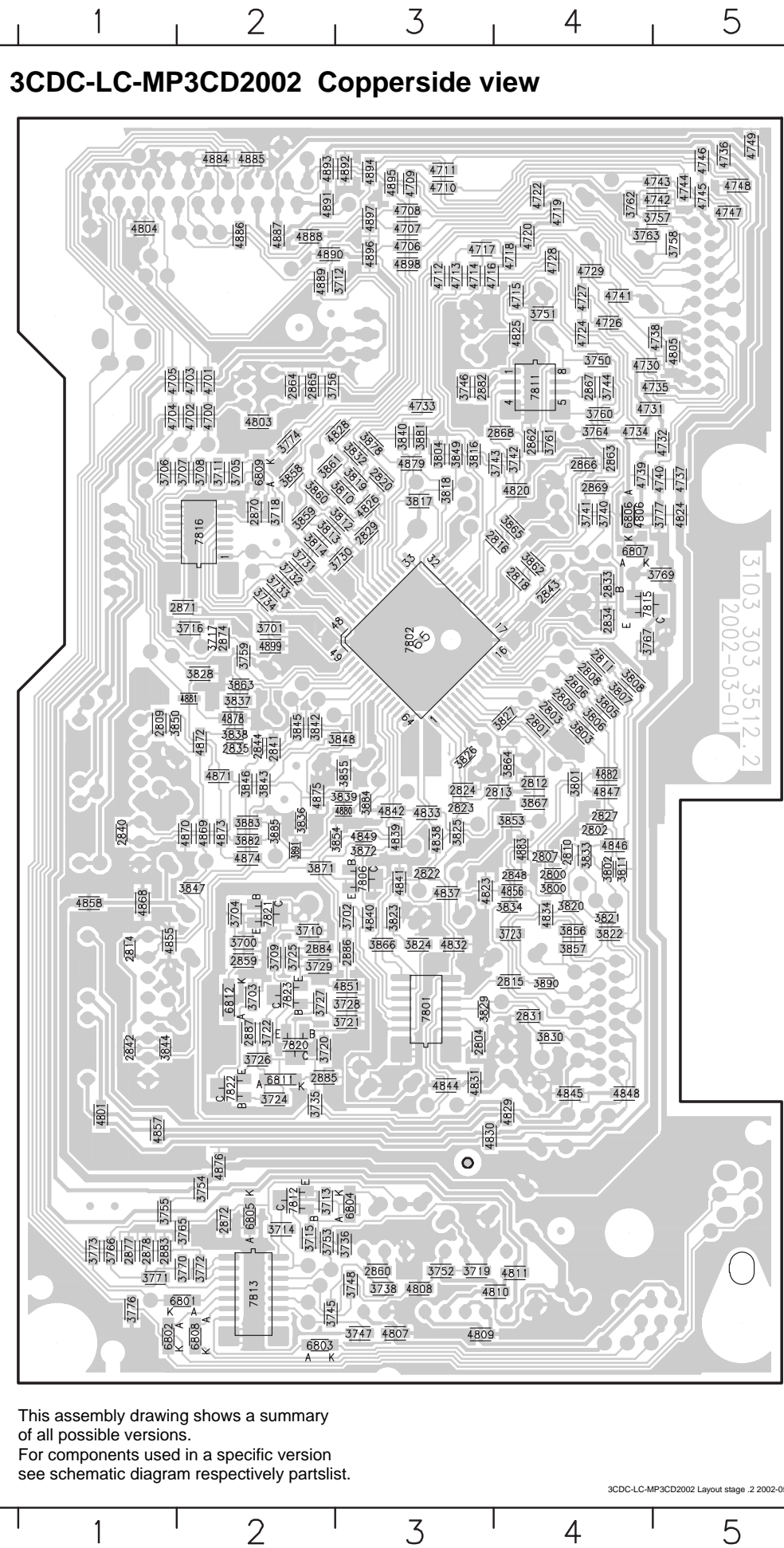


Service Position



BLOCK DIAGRAM 3CDC-LC MP3 Version



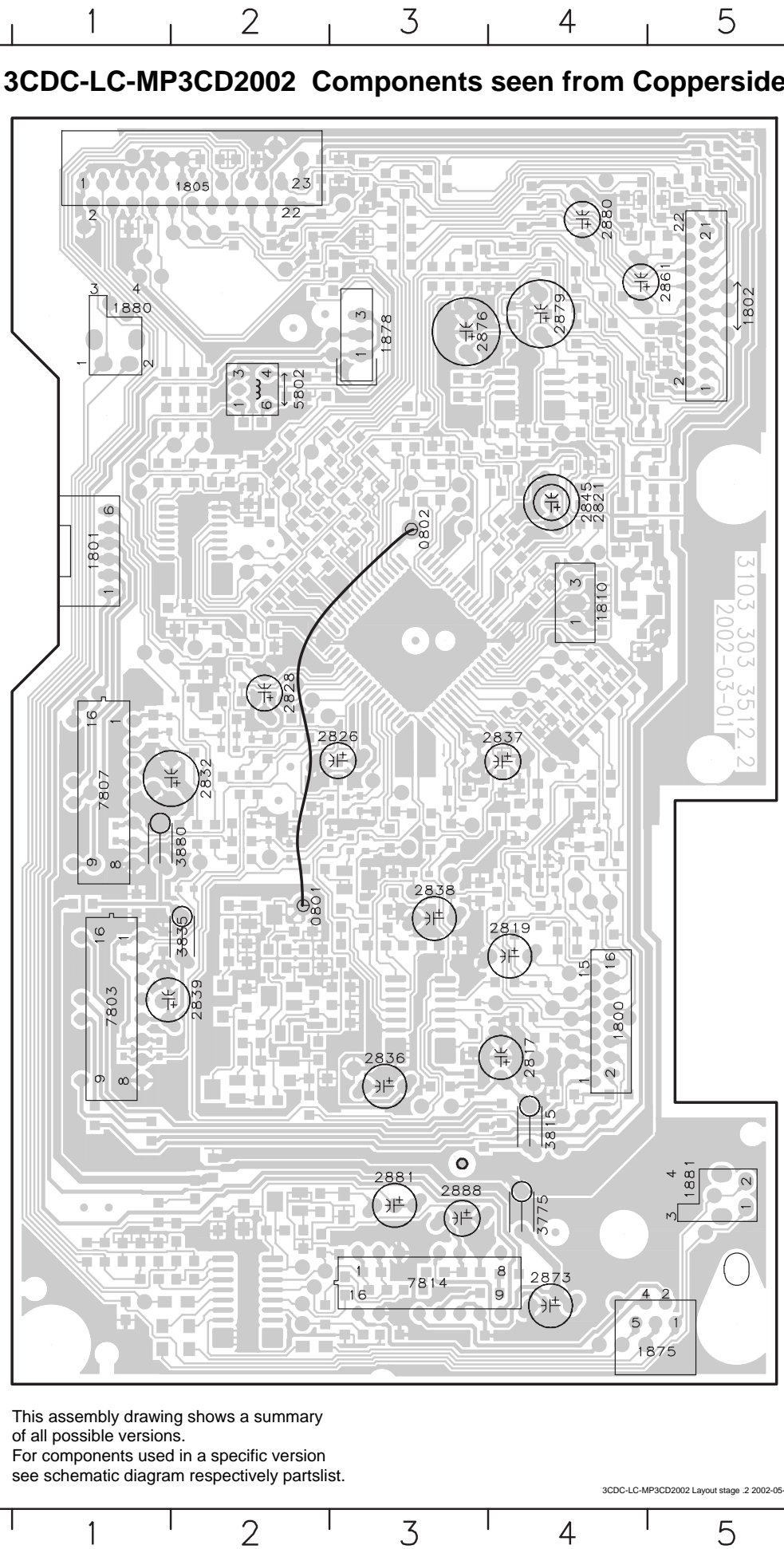


This assembly drawing shows a summary of all possible versions. For components used in a specific version see schematic diagram respectively partslist.

3CDC-LC-MP3CD2002 Layout stage. 2 2002-05-27

Mapping

| Copperside | | | | Componentside | |
|------------|---------|---------|---------|---------------|--|
| 2800 E4 | 3730 C3 | 3848 D3 | 4823 E3 | 1451 B5 | |
| 2801 D4 | 3731 C2 | 3849 C3 | 4824 C5 | 1455 A4 | |
| 2802 E4 | 3732 C2 | 3850 D1 | 4825 B4 | 2450 C1 | |
| 2803 D4 | 3733 C2 | 3853 E4 | 4826 C3 | 2451 B1 | |
| 2804 F3 | 3734 D2 | 3854 E3 | 4828 C3 | 2452 C2 | |
| 2805 D4 | 3735 G2 | 3855 E3 | 4829 G4 | 2453 B1 | |
| 2806 D4 | 3736 H3 | 3856 F4 | 4830 G3 | 2454 B1 | |
| 2807 E4 | 3738 H3 | 3857 F4 | 4831 G3 | 2455 D2 | |
| 2808 D4 | 3740 C4 | 3858 C2 | 4832 F3 | 2457 A2 | |
| 2809 D1 | 3741 C4 | 3859 C2 | 4833 E3 | 2461 D4 | |
| 2810 E4 | 3742 C4 | 3860 C2 | 4834 F4 | 2463 A3 | |
| 2811 D4 | 3743 C4 | 3861 C2 | 4837 E3 | 2464 D4 | |
| 2812 E4 | 3744 B4 | 3862 C4 | 4838 E3 | 2465 D4 | |
| 2813 E4 | 3745 H2 | 3863 D2 | 4839 E3 | 2466 A3 | |
| 2814 F1 | 3746 B3 | 3864 E4 | 4840 F3 | 2467 B4 | |
| 2815 F4 | 3747 H3 | 3865 C4 | 4841 E3 | 2468 B4 | |
| 2816 C4 | 3748 H3 | 3866 F3 | 4842 E3 | 2469 B4 | |
| 2818 C4 | 3750 B4 | 3867 E4 | 4844 G3 | 2472 D3 | |
| 2820 C3 | 3751 B4 | 3871 E2 | 4845 G4 | 3450 C1 | |
| 2822 E3 | 3752 H3 | 3872 E3 | 4846 E4 | 3451 B1 | |
| 2823 E3 | 3753 H2 | 3878 C3 | 4847 E4 | 3454 D2 | |
| 2824 E3 | 3754 G2 | 3881 C3 | 4848 G4 | 3465 C1 | |
| 2827 E4 | 3755 G1 | 3882 E2 | 4849 E3 | 3467 A3 | |
| 2829 C3 | 3756 B2 | 3883 E2 | 4851 F3 | 3468 A3 | |
| 2831 F4 | 3757 A5 | 3884 E3 | 4855 F1 | 3469 C4 | |
| 2833 C4 | 3758 A5 | 3885 E2 | 4856 E4 | 3470 D3 | |
| 2834 D4 | 3759 D2 | 3890 F4 | 4857 G1 | 3471 C4 | |
| 2835 D2 | 3760 B4 | 3891 E2 | 4858 E1 | 3473 C4 | |
| 2840 E1 | 3761 C4 | 4700 B2 | 4868 E1 | 3474 A3 | |
| 2841 D2 | 3762 A4 | 4701 B2 | 4869 E2 | 3475 C4 | |
| 2842 F1 | 3763 A4 | 4702 B2 | 4870 E2 | 3476 C4 | |
| 2843 D4 | 3764 C4 | 4703 B2 | 4871 E2 | 3477 B4 | |
| 2844 D2 | 3765 H2 | 4704 B1 | 4872 D2 | 3479 A2 | |
| 2848 E4 | 3766 H1 | 4705 B1 | 4873 E2 | 3480 C4 | |
| 2859 F2 | 3767 D4 | 4706 A3 | 4874 E2 | 3481 C4 | |
| 2860 H3 | 3769 C5 | 4707 A3 | 4875 E2 | 3484 B4 | |
| 2862 C4 | 3770 H2 | 4708 A3 | 4876 G2 | 3490 A4 | |
| 2863 C4 | 3771 H1 | 4709 A3 | 4878 D2 | 3494 A2 | |
| 2864 B2 | 3772 H2 | 4710 A3 | 4879 C3 | 3496 A4 | |
| 2865 B2 | 3773 H1 | 4711 A3 | 4880 E3 | 3499 C1 | |
| 2866 C4 | 3774 C2 | 4712 B3 | 4881 D2 | 4450 A4 | |
| 2867 B4 | 3776 H1 | 4713 B3 | 4882 E4 | 6451 D4 | |
| 2868 C4 | 3777 C5 | 4714 B3 | 4883 E4 | 7451 B3 | |
| 2869 C4 | 3800 E4 | 4715 B4 | 4884 A2 | 7456 D4 | |
| 2870 C2 | 3801 E4 | 4716 B3 | 4885 A2 | 7458 D1 | |
| 2871 D2 | 3802 E4 | 4717 A3 | 4886 A2 | | |
| 2872 G2 | 3803 D4 | 4718 A4 | 4887 A2 | | |
| 2874 D2 | 3804 C3 | 4719 A4 | 4888 A2 | | |
| 2877 H1 | 3805 D4 | 4720 A4 | 4889 B2 | | |
| 2878 H1 | 3806 D4 | 4722 A4 | 4890 A2 | | |
| 2882 B3 | 3807 D4 | 4724 B4 | 4891 A2 | | |
| 2883 H1 | 3808 D4 | 4726 B4 | 4892 A3 | | |
| 2884 F2 | 3810 C3 | 4727 B4 | 4893 A2 | | |
| 2885 G2 | 3811 E4 | 4728 A4 | 4894 A3 | | |
| 2886 F3 | 3812 C3 | 4729 A4 | 4895 A3 | | |
| 2887 F2 | 3813 C2 | 4730 B4 | 4896 A3 | | |
| 3700 F2 | 3814 C2 | 4731 B4 | 4897 A3 | | |
| 3701 D2 | 3816 C3 | 4732 C5 | 4898 A3 | | |
| 3702 F3 | 3817 C3 | 4733 B3 | 4899 D2 | | |
| 3703 F2 | 3818 C3 | 4734 C4 | 6801 H2 | | |
| 3704 F2 | 3819 C3 | 4735 B5 | 6802 H1 | | |
| 3705 C2 | 3820 E4 | 4736 A5 | 6803 H2 | | |
| 3706 C1 | 3821 F4 | 4737 C5 | 6804 G3 | | |
| 3707 C2 | 3822 F4 | 4738 B5 | 6805 G2 | | |
| 3708 C2 | 3823 F3 | 4739 C4 | 6806 C4 | | |
| 3709 F2 | 3824 F3 | 4740 C5 | 6807 C4 | | |
| 3710 F2 | 3825 E3 | 4741 B4 | 6808 H2 | | |
| 3711 C2 | 3826 E3 | 4742 A5 | 6809 C2 | | |
| 3712 B3 | 3827 D4 | 4743 A5 | 6811 G2 | | |
| 3713 G2 | 3828 D2 | 4744 A5 | 6812 F2 | | |
| 3714 H2 | 3829 F3 | 4745 A5 | 7801 F3 | | |
| 3715 H2 | 3830 F4 | 4746 A5 | 7802 D3 | | |
| 3716 D2 | 3832 C3 | 4747 A5 | 7806 E3 | | |
| 3717 D2 | 3833 E4 | 4748 A5 | 7811 B4 | | |
| 3718 C2 | 3834 E4 | 4749 A5 | 7812 G2 | | |
| 3719 H3 | 3836 E2 | 4801 G1 | 7813 H2 | | |
| 3720 F2 | 3837 D2 | 4803 B2 | 7815 D4 | | |
| 3721 F3 | 3838 D2 | 4804 A1 | 7816 C2 | | |
| 3722 F2 | 3839 E3 | 4805 B5 | 7820 F2 | | |
| 3723 F4 | 3840 C3 | 4806 C4 | 7821 F2 | | |
| 3724 G2 | 3842 D2 | 4807 H3 | 7822 G2 | | |
| 3725 F2 | 3843 E2 | 4808 H3 | 7823 F2 | | |
| 3726 F2 | 3844 F1 | 4809 H3 | | | |
| 3727 F2 | 3845 D2 | 4810 H4 | | | |
| 3728 F3 | 3846 E2 | 4811 H4 | | | |
| 3729 F2 | 3847 E2 | 4820 C4 | | | |



This assembly drawing shows a summary of all possible versions. For components used in a specific version see schematic diagram respectively partslist.

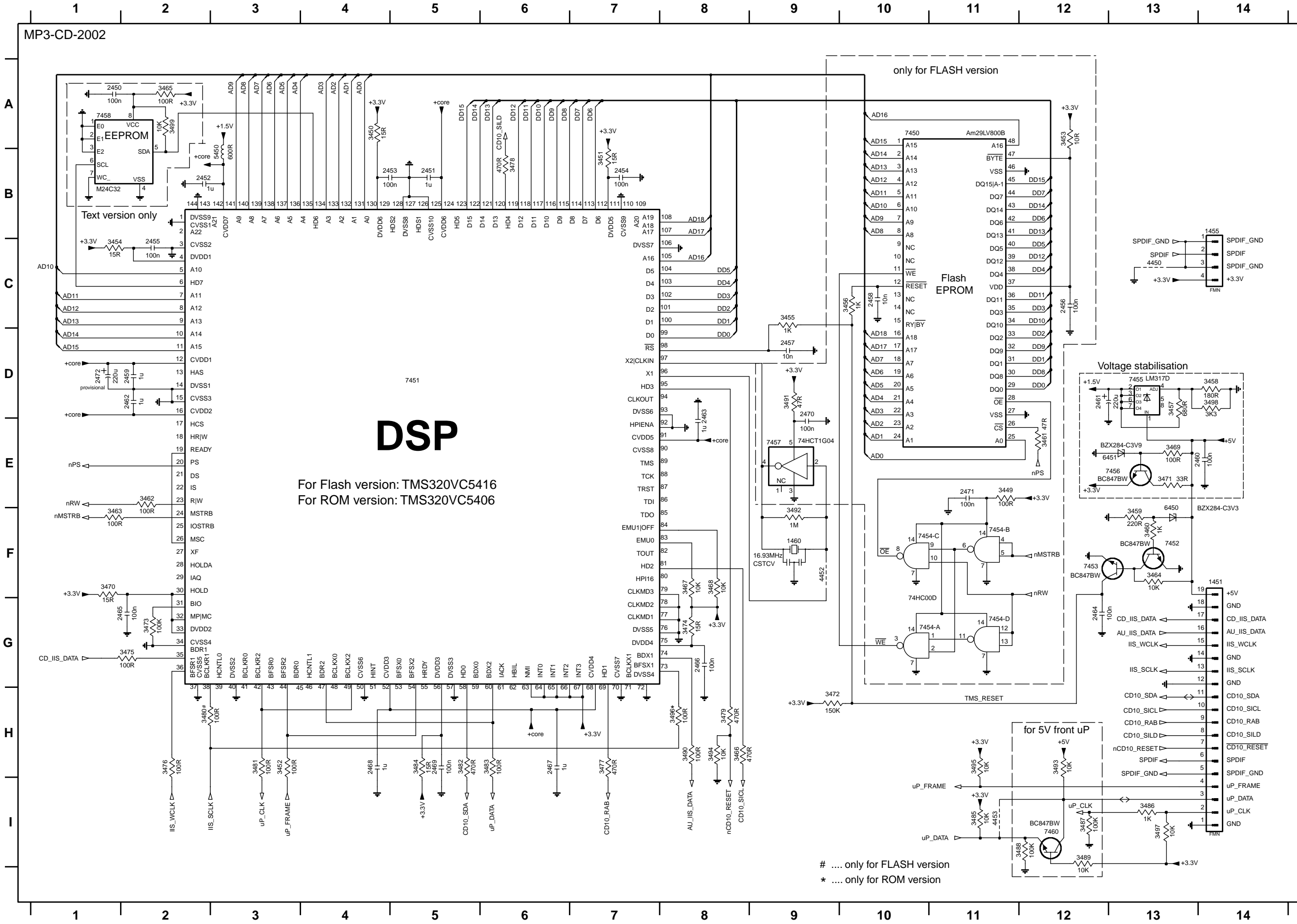
3CDC-LC-MP3CD2002 Layout stage. 2 2002-05-27





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respectively partslist.



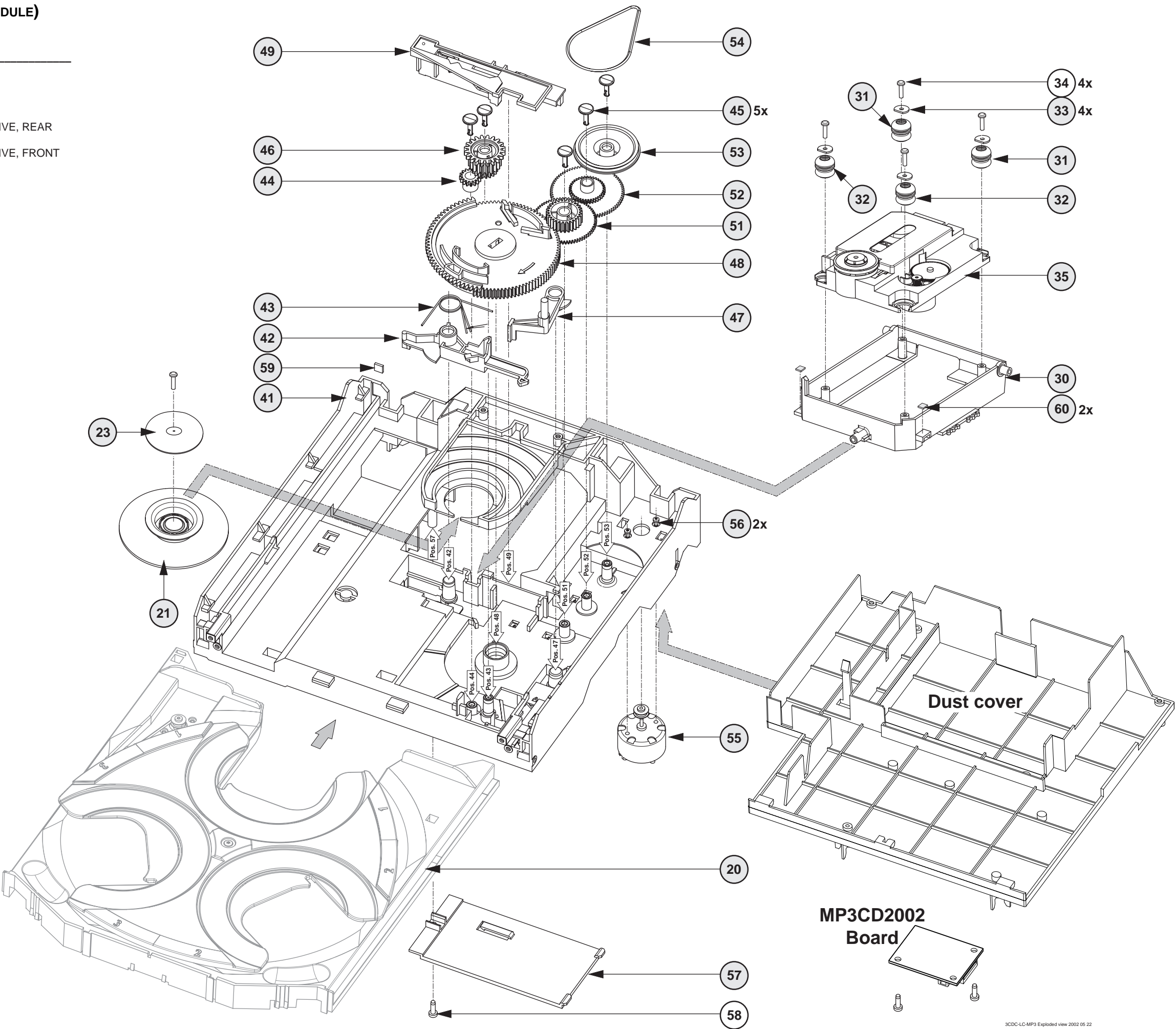


- 2451 B5
- 2452 B2
- 2453 B4
- 2454 B7
- 2455 C2
- 2456 C12
- 2457 D9
- 2458 C10
- 2459 D2
- 2460 E13
- 2461 D12
- 2462 D2
- 2463 D8
- 2464 G12
- 2465 G2
- 2466 G8
- 2467 H6
- 2468 H4
- 2469 H5
- 2470 D9
- 2471 E11
- 2472 D1
- 3449 E11
- 3450 A4
- 3451 B7
- 3452 H3
- 3453 A12
- 3454 C1
- 3455 C9
- 3456 C10
- 3457 D13
- 3458 D14
- 3459 F13
- 3460 F13
- 3461 E12
- 3462 E2
- 3463 F1
- 3464 F13
- 3465 A2
- 3466 H8
- 3467 F8
- 3468 F8
- 3469 E13
- 3470 F1
- 3471 E13
- 3472 H9
- 3473 G2
- 3474 G8
- 3475 G2
- 3476 H2
- 3477 H7
- 3478 B6
- 3479 H8
- 3480 H2
- 3481 H3
- 3482 H5
- 3483 H6
- 3484 H5
- 3485 I11
- 3486 I13
- 3487 I12
- 3488 I12
- 3489 I12
- 3490 H8
- 3491 D9
- 3492 F9
- 3493 H12
- 3494 H8
- 3495 H11
- 3496 H8
- 3497 I13
- 3498 D14
- 3499 A2
- 4450 C13
- 4452 F9
- 4453 I11
- 5450 B3
- 6450 E13
- 6451 E13
- 7450 A10
- 7451 D5
- 7452 F13
- 7453 F12
- 7454-A G11
- 7454-B F11
- 7454-C F11
- 7454-D G11
- 7455 D13
- 7456 E12
- 7457 E9
- 7458 A1
- 7460 I12

EXPLODED VIEW (3CDC-LC MODULE)

MECHANICAL PARTS *Loader*

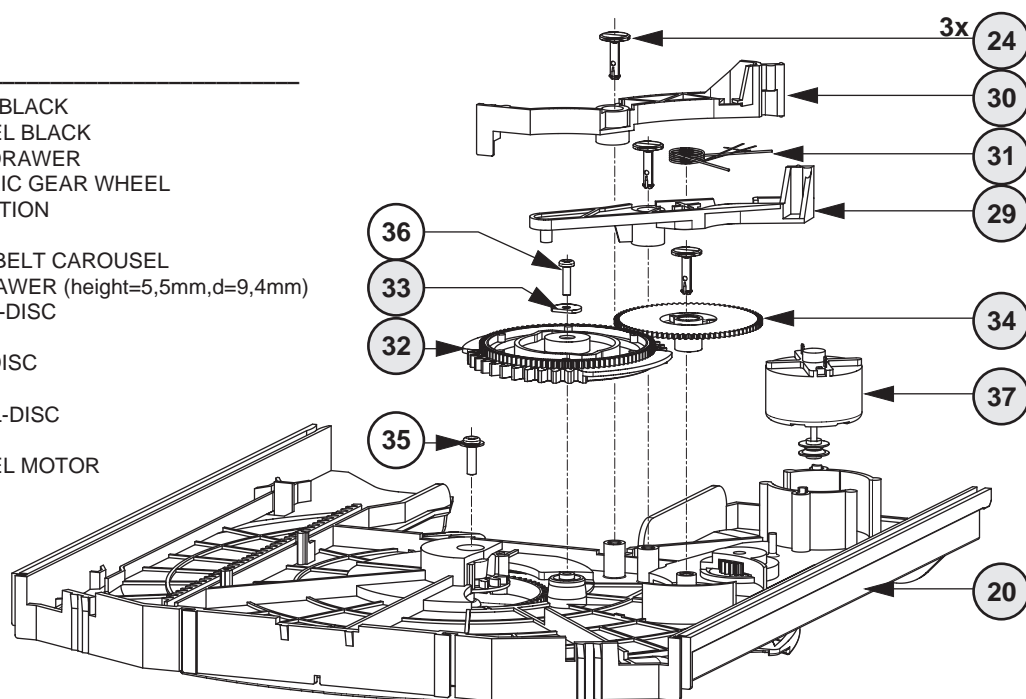
| | | |
|----|----------------|-------------------------------|
| 20 | 3103 304 66500 | DRAWER BLACK |
| 21 | 3140 114 29070 | PRESSURE RING-DA11 |
| 23 | 3140 111 21270 | METAL RING-DA11 |
| 30 | 3103 304 66560 | SUPPORT |
| 31 | 4822 529 10386 | RUBBER DAMPER CD DRIVE, REAR |
| 32 | 4822 529 10387 | RUBBER DAMPER CD DRIVE, FRONT |
| 33 | 3103 304 06970 | WASHER |
| 35 | 3103 309 05350 | CD DRIVE MCD1B |
| 41 | 3103 304 66480 | FRAME |
| 42 | 3103 304 66540 | BRACKET-GUIDING |
| 43 | 3103 301 06460 | SPRING-GUIDING |
| 44 | 3103 304 06890 | GEAR-3 |
| 45 | 3103 304 06980 | NAIL FIXATION |
| 46 | 3103 304 06880 | GEAR-2 |
| 47 | 3103 304 66530 | BRACKET-LOAD |
| 48 | 3103 304 06910 | CAM |
| 49 | 3103 304 66510 | GUIDING |
| 51 | 3103 304 06900 | GEAR-4 |
| 52 | 3103 304 06870 | GEAR-1 |
| 53 | 3103 304 06960 | PULLEY-FRAME |
| 54 | 3103 304 66910 | DRIVING-BELT-DRAWER |
| 55 | 4822 361 10753 | TRAY MOTOR |
| 56 | 4822 502 12548 | SCREW M2,6X3,5 |
| 57 | 3103 304 69880 | COVER-DA11 |
| 59 | 4822 466 12146 | RUBBER |



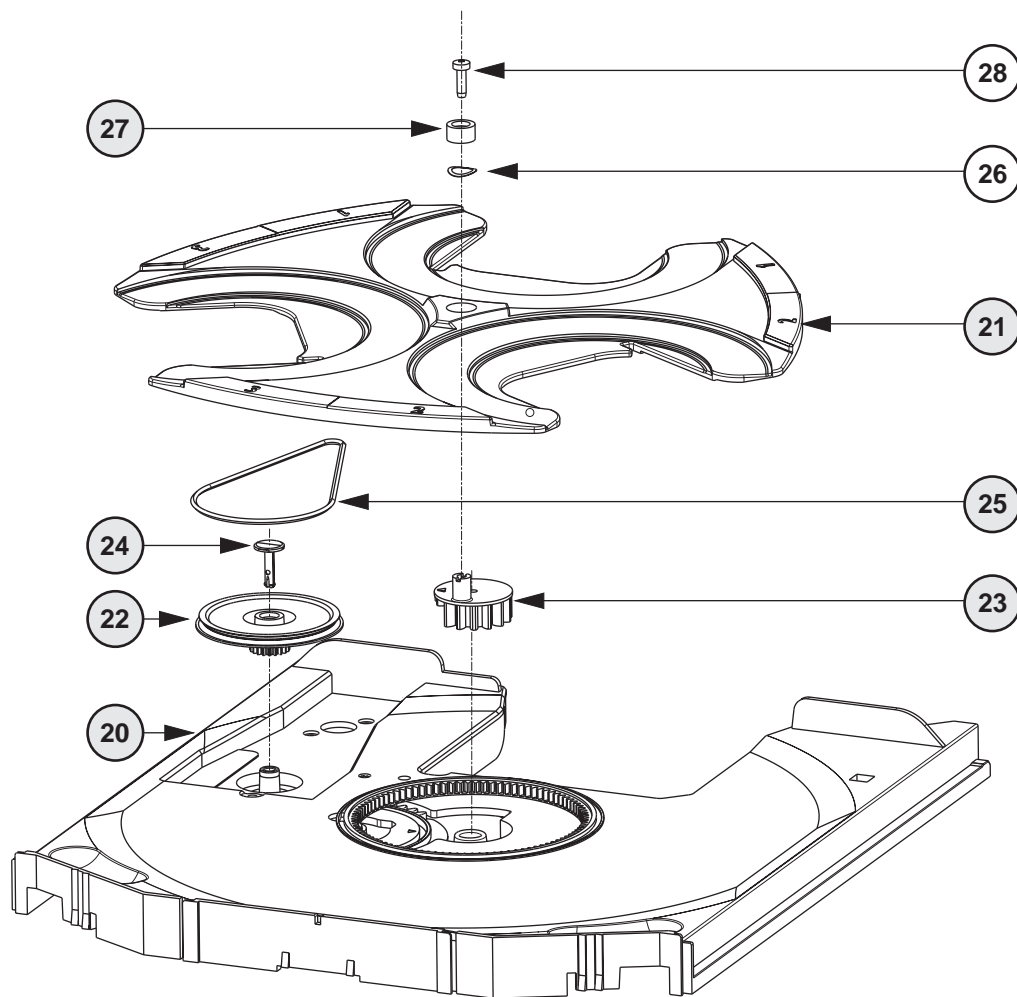
Drawer bottom view

MECHANICAL PARTS *Drawer*

| | | |
|----|----------------|------------------------------------|
| 20 | 3103 304 66500 | DRAWER BLACK |
| 21 | 3103 304 66490 | CAROUSEL BLACK |
| 22 | 3103 304 06860 | PULLEY-DRAWER |
| 23 | 3103 304 06850 | ECCENTRIC GEAR WHEEL |
| 24 | 3103 304 06980 | NAIL FIXATION |
| 25 | 3103 304 66850 | DRIVING BELT CAROUSEL |
| 27 | 4822 532 12365 | BUSH DRAWER (height=5,5mm,d=9,4mm) |
| 29 | 3103 304 66550 | BRACKET-DISC |
| 30 | 3103 304 66520 | TUMBLER |
| 31 | 3103 301 06470 | SPRING-DISC |
| 32 | 3103 304 06920 | CONTROL-DISC |
| 34 | 3103 304 06870 | GEAR-1 |
| 37 | 4822 361 10753 | CAROUSEL MOTOR |



Drawer top view



- (X) spare part
 (Y) non spare part

ELECTRICAL PARTSLIST 3CDC-LC MODULE**MISCELLANEOUS**

| | | |
|------|----------------|-------------------------------|
| 37 | 4822 361 10753 | CAROUSEL MOTOR |
| 55 | 4822 361 10753 | TRAY MOTOR |
| 1800 | 2422 025 17389 | FFC-CONNECTOR 16Pin |
| 1805 | 4822 265 10979 | FFC-CONNECTOR 15Pin |
| 1875 | 4822 267 10958 | FFC-CONNECTOR 5Pin |
| 1876 | 2422 025 08332 | FFC-CONNECTOR 5Pin |
| 1880 | 4822 276 13503 | SWITCH |
| 1881 | 4822 276 13503 | SWITCH |
| 1882 | 4822 276 13503 | SWITCH |
| 1883 | 4822 276 13503 | SWITCH |
| 8001 | 3103 308 93070 | FLEX FOIL CABLE 19P, 170mm BD |
| 8002 | 3103 308 91990 | FLEXFOIL CABLE, 5P, 200mm AD |
| 8005 | 3103 308 92930 | FLEX FOIL CABLE 16P 170mm 1:n |

CAPACITORS

| | | | | |
|-------|----------------|-------|-----|------|
| 2800© | 4822 122 33753 | 150pF | 5% | 50V |
| 2801© | 4822 126 13883 | 220pF | 5% | 50V |
| 2802© | 4822 122 33753 | 150pF | 5% | 50V |
| 2803© | 4822 126 13883 | 220pF | 5% | 50V |
| 2804© | 4822 126 13193 | 4,7nF | 10% | 63V |
| 2805© | 4822 126 13883 | 220pF | 5% | 50V |
| 2806© | 4822 126 13883 | 220pF | 5% | 50V |
| 2807© | 4822 126 14241 | 330pF | | 50V |
| 2808© | 4822 126 13883 | 220pF | 5% | 50V |
| 2809© | 4822 126 13879 | 220nF | 20% | 16V |
| 2810© | 4822 126 14508 | 180pF | 5% | 50V |
| 2811© | 4822 126 13883 | 220pF | 5% | 50V |
| 2812© | 3198 024 44730 | 47nF | 5% | 50V |
| 2813© | 4822 122 33177 | 10nF | 20% | 50V |
| 2814© | 4822 126 14247 | 1,5nF | 10% | 50V |
| 2815© | 4822 126 14076 | 220nF | 20% | 25V |
| 2816© | 4822 126 13344 | 1,5nF | 5% | 63V |
| 2817 | 4822 124 40769 | 4,7µF | 20% | 100V |
| 2818© | 4822 126 13344 | 1,5nF | 5% | 63V |
| 2819 | 4822 124 40769 | 4,7µF | 20% | 100V |
| 2820© | 5322 126 11578 | 1nF | 10% | 63V |
| 2821 | 4822 124 42383 | 220µF | 20% | 4V |
| 2822© | 4822 126 14238 | 2,2nF | 10% | 50V |
| 2823© | 4822 126 11785 | 47pF | 5% | 50V |
| 2824© | 5322 122 32654 | 22nF | 10% | 63V |
| 2826 | 4822 124 12362 | 47µF | 20% | 4V |
| 2827© | 4822 122 33753 | 150pF | 5% | 50V |
| 2828 | 4822 124 12362 | 47µF | 20% | 4V |
| 2829© | 4822 126 11669 | 27pF | 10% | 50V |
| 2832 | 4822 124 40433 | 47µF | 20% | 25V |
| 2833© | 2222 867 15339 | 33pF | 5% | 50V |
| 2835© | 3198 024 44730 | 47nF | 5% | 50V |
| 2836 | 4822 124 40769 | 4,7µF | 20% | 100V |
| 2837 | 4822 124 22726 | 4,7µF | 20% | 35V |
| 2838 | 4822 124 40248 | 10µF | 20% | 63V |
| 2839 | 4822 124 40433 | 47µF | 20% | 25V |
| 2840© | 4822 126 14585 | 100nF | 10% | 50V |
| 2841© | 4822 122 33216 | 270pF | 5% | 50V |
| 2842© | 4822 126 14238 | 2,2nF | 10% | 50V |
| 2843© | 4822 126 14585 | 100nF | 10% | 50V |
| 2844© | 4822 122 33216 | 270pF | 5% | 50V |
| 2848© | 4822 122 33753 | 150pF | 5% | 50V |
| 2860© | 4822 126 14494 | 22nF | 10% | 25V |
| 2861 | 4822 124 11947 | 10µF | 20% | 16V |
| 2862© | 4822 126 13883 | 220pF | 5% | 50V |
| 2863© | 4822 126 13883 | 220pF | 5% | 50V |
| 2865© | 5322 122 32654 | 22nF | 10% | 63V |
| 2866© | 4822 126 13751 | 47nF | 10% | 50V |

CAPACITORS

| | | | | |
|-------|----------------|-------|-----|------|
| 2867© | 4822 126 13883 | 220pF | 5% | 50V |
| 2868© | 2020 552 94427 | 100pF | 5% | 50V |
| 2869© | 2020 552 94427 | 100pF | 5% | 50V |
| 2872© | 3198 024 44730 | 47nF | 5% | 50V |
| 2873 | 4822 124 80231 | 47µF | 20% | 16V |
| 2876 | 4822 124 12245 | 220µF | 20% | 16V |
| 2877© | 4822 126 14226 | 82pF | | 50V |
| 2878© | 4822 126 13883 | 220pF | 5% | 50V |
| 2879 | 4822 124 12245 | 220µF | 20% | 16V |
| 2880 | 4822 124 11947 | 10µF | 20% | 16V |
| 2881 | 4822 124 40769 | 4,7µF | 20% | 100V |
| 2882© | 4822 126 13883 | 220pF | 5% | 50V |
| 2888 | 4822 124 11947 | 10µF | 20% | 16V |

RESISTORS

| | | | | |
|-------|----------------|-------|----|-------|
| 3713© | 4822 051 30223 | 22kΩ | 5% | 0,06W |
| 3714© | 4822 051 30103 | 10kΩ | 5% | 0,06W |
| 3715© | 4822 117 13632 | 100kΩ | 1% | 0,06W |
| 3719© | 4822 051 30392 | 3,9kΩ | 5% | 0,06W |
| 3723© | 4822 051 20273 | 27kΩ | 5% | 0,1W |
| 3730© | 4822 051 20333 | 33kΩ | 5% | 0,1W |
| 3736© | 4822 117 12925 | 47kΩ | 1% | 0,06W |
| 3738© | 4822 051 30271 | 270Ω | 5% | 0,06W |
| 3740© | 4822 051 20223 | 22kΩ | 5% | 0,1W |
| 3741© | 4822 051 20223 | 22kΩ | 5% | 0,1W |
| 3742© | 4822 051 20223 | 22kΩ | 5% | 0,1W |
| 3743© | 4822 051 20223 | 22kΩ | 5% | 0,1W |
| 3744© | 4822 051 30103 | 10kΩ | 5% | 0,06W |
| 3745© | 4822 117 10833 | 10kΩ | 1% | 0,1W |
| 3746© | 4822 051 30103 | 10kΩ | 5% | 0,06W |
| 3747© | 4822 117 12925 | 47kΩ | 1% | 0,06W |
| 3748© | 4822 051 30103 | 10kΩ | 5% | 0,06W |
| 3750© | 4822 051 30102 | 1kΩ | 5% | 0,06W |
| 3751© | 4822 051 30102 | 1kΩ | 5% | 0,06W |
| 3752© | 4822 117 13632 | 100kΩ | 1% | 0,06W |
| 3753© | 4822 117 13632 | 100kΩ | 1% | 0,06W |
| 3754© | 4822 051 30221 | 220Ω | 5% | 0,06W |
| 3755© | 4822 117 11503 | 220Ω | 5% | 0,1W |
| 3757© | 4822 117 11373 | 100Ω | 1% | 0,1W |
| 3758© | 4822 051 30101 | 100Ω | 5% | 0,06W |
| 3760© | 4822 117 10833 | 10kΩ | 1% | 0,1W |
| 3761© | 4822 051 30103 | 10kΩ | 5% | 0,06W |
| 3762© | 4822 051 30223 | 22kΩ | 5% | 0,06W |
| 3763© | 4822 051 30223 | 22kΩ | 5% | 0,06W |
| 3764© | 4822 117 11373 | 100Ω | 1% | 0,1W |
| 3765© | 4822 051 30103 | 10kΩ | 5% | 0,06W |
| 3766© | 4822 117 10833 | 10kΩ | 1% | 0,1W |
| 3767© | 4822 051 30339 | 33Ω | 5% | 0,06W |
| 3769© | 4822 051 30101 | 100Ω | 5% | 0,06W |
| 3770© | 4822 051 30102 | 1kΩ | 5% | 0,06W |
| 3771© | 4822 051 30102 | 1kΩ | 5% | 0,06W |
| 3772© | 4822 051 30471 | 470Ω | 5% | 0,06W |
| 3773© | 4822 117 10833 | 10kΩ | 1% | 0,1W |
| 3774© | 4822 117 11373 | 100Ω | 1% | 0,1W |
| 3775▲ | 4822 052 10338 | 3,3Ω | 5% | NFR25 |
| 3776© | 4822 051 30103 | 10kΩ | 5% | 0,06W |
| 3800© | 4822 051 30273 | 27kΩ | 5% | 0,06W |
| 3801© | 4822 117 10833 | 10kΩ | 1% | 0,1W |
| 3802© | 4822 051 30273 | 27kΩ | 5% | 0,06W |
| 3803© | 4822 117 10833 | 10kΩ | 1% | 0,1W |
| 3805© | 4822 051 30103 | 10kΩ | 5% | 0,06W |
| 3806© | 4822 051 30103 | 10kΩ | 5% | 0,06W |
| 3807© | 4822 051 30103 | 10kΩ | 5% | 0,06W |
| 3808© | 4822 051 30103 | 10kΩ | 5% | 0,06W |

ELECTRICAL PARTSLIST 3CDC-LC MODULE**RESISTORS**

| | | | | |
|------|----------------|-------------|------|-------|
| 3810 | 4822 051 30471 | 470Ω | 5% | 0,06W |
| 3811 | 4822 051 30273 | 27kΩ | 5% | 0,06W |
| 3812 | 4822 051 20471 | 470Ω | 5% | 0,1W |
| 3813 | 4822 051 20471 | 470Ω | 5% | 0,1W |
| 3814 | 4822 051 20471 | 470Ω | 5% | 0,1W |
| 3815 | 4822 052 10478 | 4,7Ω | 5% | NFR25 |
| 3816 | 4822 051 20471 | 470Ω | 5% | 0,1W |
| 3817 | 4822 051 30471 | 470Ω | 5% | 0,06W |
| 3818 | 4822 051 30471 | 470Ω | 5% | 0,06W |
| 3819 | 4822 051 20471 | 470Ω | 5% | 0,1W |
| 3820 | 4822 051 30332 | 3,3kΩ | 5% | 0,06W |
| 3821 | 4822 051 30332 | 3,3kΩ | 5% | 0,06W |
| 3822 | 4822 051 20332 | 3,3kΩ | 5% | 0,1W |
| 3823 | 4822 051 30102 | 1kΩ | 5% | 0,06W |
| 3824 | 4822 051 30102 | 1kΩ | 5% | 0,06W |
| 3825 | 4822 051 10102 | 1kΩ | 2% | 0,25W |
| 3826 | 4822 051 30223 | 22kΩ | 5% | 0,06W |
| 3827 | 4822 051 20273 | 27kΩ | 5% | 0,1W |
| 3829 | 4822 117 13608 | 4,7Ω | 5% | 0,06W |
| 3830 | 4822 051 20223 | 22kΩ | 5% | 0,1W |
| 3833 | 4822 051 30223 | 22kΩ | 5% | 0,06W |
| 3834 | 4822 051 30223 | 22kΩ | 5% | 0,06W |
| 3835 | 4822 052 10338 | 3,3Ω | 5% | NFR25 |
| 3836 | 4822 117 12903 | 1,8kΩ | 1% | 0,06W |
| 3837 | 4822 051 10102 | 1kΩ | 2% | 0,25W |
| 3838 | 4822 051 30102 | 1kΩ | 5% | 0,06W |
| 3839 | 4822 117 13632 | 100kΩ | 1% | 0,06W |
| 3840 | 4822 051 20471 | 470Ω | 5% | 0,1W |
| 3842 | 4822 117 10834 | 47kΩ | 1% | 0,1W |
| 3843 | 4822 051 20333 | 33kΩ | 5% | 0,1W |
| 3844 | 4822 051 30472 | 4,7kΩ | 5% | 0,06W |
| 3845 | 4822 117 10834 | 47kΩ | 1% | 0,1W |
| 3846 | 4822 051 20333 | 33kΩ | 5% | 0,1W |
| 3847 | 4822 051 30682 | 6,8kΩ | 5% | 0,06W |
| 3848 | 3198 021 52240 | 220kΩ | 5% | 0,1W |
| 3849 | 4822 051 30472 | 4,7kΩ | 5% | 0,06W |
| 3850 | 4822 051 30682 | 6,8kΩ | 5% | 0,06W |
| 3853 | 4822 051 20471 | 470Ω | 5% | 0,1W |
| 3854 | 4822 117 11373 | 100Ω | 1% | 0,1W |
| 3855 | 4822 117 12971 | 15Ω | 5% | 0,06W |
| 3856 | 4822 117 12521 | 68Ω | 1% | 0,1W |
| 3857 | 4822 117 12521 | 68Ω | 1% | 0,1W |
| 3861 | 4822 051 30103 | 10kΩ | 5% | 0,06W |
| 3862 | 4822 051 20121 | 120Ω | 5% | 0,1W |
| 3863 | 4822 051 30339 | 33Ω | 5% | 0,06W |
| 3864 | 4822 051 30101 | 100Ω | 5% | 0,06W |
| 3865 | 4822 051 30121 | 120Ω | 5% | 0,06W |
| 3866 | 4822 051 30103 | 10kΩ | 5% | 0,06W |
| 3871 | 4822 051 20683 | 68kΩ | 5% | 0,1W |
| 3872 | 4822 051 30472 | 4,7kΩ | 5% | 0,06W |
| 3878 | 4822 117 11503 | 220Ω | 5% | 0,1W |
| 3880 | 4822 052 10338 | 3,3Ω | 5% | NFR25 |
| 3881 | 4822 117 11503 | 220Ω | 5% | 0,1W |
| 3882 | 4822 117 10837 | 100kΩ | 1% | 0,1W |
| 3883 | 4822 051 10102 | 1kΩ | 2% | 0,25W |
| 3890 | 4822 051 30332 | 3,3kΩ | 5% | 0,06W |
| 3891 | 4822 051 30472 | 4,7kΩ | 5% | 0,06W |
| 4700 | 4822 051 20008 | CHIP JUMPER | 0805 | |
| 4701 | 4822 051 20008 | CHIP JUMPER | 0805 | |
| 4702 | 4822 051 20008 | CHIP JUMPER | 0805 | |
| 4703 | 4822 051 20008 | CHIP JUMPER | 0805 | |
| 4704 | 4822 051 20008 | CHIP JUMPER | 0805 | |
| 4705 | 4822 051 20008 | CHIP JUMPER | 0805 | |
| 4706 | 4822 051 20008 | CHIP JUMPER | 0805 | |

RESISTORS

| | | | |
|------|----------------|-------------|------|
| 4707 | 4822 051 20008 | CHIP JUMPER | 0805 |
| 4708 | 4822 051 20008 | CHIP JUMPER | 0805 |
| 4709 | 4822 051 20008 | CHIP JUMPER | 0805 |
| 4710 | 4822 051 20008 | CHIP JUMPER | 0805 |
| 4711 | 4822 051 20008 | CHIP JUMPER | 0805 |
| 4712 | 4822 051 20008 | CHIP JUMPER | 0805 |
| 4713 | 4822 051 20008 | CHIP JUMPER | 0805 |
| 4714 | 4822 051 20008 | CHIP JUMPER | 0805 |
| 4715 | 4822 051 20008 | CHIP JUMPER | 0805 |
| 4716 | 4822 051 20008 | CHIP JUMPER | 0805 |
| 4717 | 4822 051 30008 | CHIP JUMPER | 0603 |
| 4718 | 4822 051 20008 | CHIP JUMPER | 0805 |
| 4719 | 4822 051 20008 | CHIP JUMPER | 0805 |
| 4720 | 4822 051 20008 | CHIP JUMPER | 0805 |
| 4722 | 4822 051 20008 | CHIP JUMPER | 0805 |
| 4724 | 4822 051 20008 | CHIP JUMPER | 0805 |
| 4726 | 4822 051 20008 | CHIP JUMPER | 0805 |
| 4727 | 4822 051 20008 | CHIP JUMPER | 0805 |
| 4728 | 4822 051 20008 | CHIP JUMPER | 0805 |
| 4729 | 4822 051 20008 | CHIP JUMPER | 0805 |
| 4730 | 4822 051 20008 | CHIP JUMPER | 0805 |
| 4731 | 4822 051 30008 | CHIP JUMPER | 0603 |
| 4732 | 4822 051 20008 | CHIP JUMPER | 0805 |
| 4733 | 4822 051 30008 | CHIP JUMPER | 0603 |
| 4734 | 4822 051 20008 | CHIP JUMPER | 0805 |
| 4735 | 4822 051 20008 | CHIP JUMPER | 0805 |
| 4736 | 4822 051 30008 | CHIP JUMPER | 0603 |
| 4737 | 4822 051 30008 | CHIP JUMPER | 0603 |
| 4738 | 4822 051 30008 | CHIP JUMPER | 0603 |
| 4739 | 4822 051 30008 | CHIP JUMPER | 0603 |
| 4740 | 4822 051 30008 | CHIP JUMPER | 0603 |
| 4741 | 4822 051 20008 | CHIP JUMPER | 0805 |
| 4742 | 4822 051 20008 | CHIP JUMPER | 0805 |
| 4743 | 4822 051 20008 | CHIP JUMPER | 0805 |
| 4744 | 4822 051 30008 | CHIP JUMPER | 0603 |
| 4745 | 4822 051 20008 | CHIP JUMPER | 0805 |
| 4746 | 4822 051 20008 | CHIP JUMPER | 0805 |
| 4747 | 4822 051 20008 | CHIP JUMPER | 0805 |
| 4748 | 4822 051 20008 | CHIP JUMPER | 0805 |
| 4749 | 4822 051 30008 | CHIP JUMPER | 0603 |
| 4801 | 4822 051 20008 | CHIP JUMPER | 0805 |
| 4804 | 4822 051 20008 | CHIP JUMPER | 0805 |
| 4806 | 4822 051 20008 | CHIP JUMPER | 0805 |
| 4807 | 4822 051 20008 | CHIP JUMPER | 0805 |
| 4808 | 4822 051 20008 | CHIP JUMPER | 0805 |
| 4809 | 4822 051 20008 | CHIP JUMPER | 0805 |
| 4810 | 4822 051 20008 | CHIP JUMPER | 0805 |
| 4811 | 4822 051 20008 | CHIP JUMPER | 0805 |
| 4820 | 4822 051 20008 | CHIP JUMPER | 0805 |
| 4823 | 4822 051 30008 | CHIP JUMPER | 0603 |
| 4824 | 4822 051 30008 | CHIP JUMPER | 0603 |
| 4825 | 4822 051 20008 | CHIP JUMPER | 0805 |
| 4826 | 4822 051 20008 | CHIP JUMPER | 0805 |
| 4828 | 4822 051 30008 | CHIP JUMPER | 0603 |
| 4829 | 4822 051 20008 | CHIP JUMPER | 0805 |
| 4830 | 4822 051 20008 | CHIP JUMPER | 0805 |
| 4831 | 4822 051 20008 | CHIP JUMPER | 0805 |
| 4832 | 4822 051 30008 | CHIP JUMPER | 0603 |
| 4833 | 4822 051 20008 | CHIP JUMPER | 0805 |
| 4834 | 4822 051 20008 | CHIP JUMPER | 0805 |
| 4837 | 4822 051 20008 | CHIP JUMPER | 0805 |
| 4838 | 4822 051 30008 | CHIP JUMPER | 0603 |
| 4839 | 4822 051 20008 | CHIP JUMPER | 0805 |
| 4840 | 4822 051 20008 | CHIP JUMPER | 0805 |

ELECTRICAL PARTSLIST 3CDC-LC MODULE**RESISTORS**

| | | |
|--------|----------------|------------------|
| 4841 © | 4822 051 20008 | CHIP JUMPER 0805 |
| 4842 © | 4822 051 20008 | CHIP JUMPER 0805 |
| 4844 © | 4822 051 20008 | CHIP JUMPER 0805 |
| 4845 © | 4822 051 20008 | CHIP JUMPER 0805 |
| 4846 © | 4822 051 20008 | CHIP JUMPER 0805 |
| | | |
| 4847 © | 4822 051 20008 | CHIP JUMPER 0805 |
| 4848 © | 4822 051 20008 | CHIP JUMPER 0805 |
| 4849 © | 4822 051 30008 | CHIP JUMPER 0603 |
| 4851 © | 4822 051 30008 | CHIP JUMPER 0603 |
| 4855 © | 4822 051 20008 | CHIP JUMPER 0805 |
| | | |
| 4856 © | 4822 051 20008 | CHIP JUMPER 0805 |
| 4857 © | 4822 051 20008 | CHIP JUMPER 0805 |
| 4858 © | 4822 051 20008 | CHIP JUMPER 0805 |
| 4868 © | 4822 051 20008 | CHIP JUMPER 0805 |
| 4869 © | 4822 051 20008 | CHIP JUMPER 0805 |
| | | |
| 4870 © | 4822 051 20008 | CHIP JUMPER 0805 |
| 4871 © | 4822 051 20008 | CHIP JUMPER 0805 |
| 4872 © | 4822 051 20008 | CHIP JUMPER 0805 |
| 4873 © | 4822 051 20008 | CHIP JUMPER 0805 |
| 4874 © | 4822 051 20008 | CHIP JUMPER 0805 |
| | | |
| 4875 © | 4822 051 20008 | CHIP JUMPER 0805 |
| 4876 © | 4822 051 20008 | CHIP JUMPER 0805 |
| 4878 © | 4822 051 20008 | CHIP JUMPER 0805 |
| 4879 © | 4822 051 20008 | CHIP JUMPER 0805 |
| 4880 © | 4822 051 20008 | CHIP JUMPER 0805 |
| | | |
| 4882 © | 4822 051 20008 | CHIP JUMPER 0805 |
| 4883 © | 4822 051 20008 | CHIP JUMPER 0805 |
| 4884 © | 4822 051 20008 | CHIP JUMPER 0805 |
| 4885 © | 4822 051 20008 | CHIP JUMPER 0805 |
| 4886 © | 4822 051 20008 | CHIP JUMPER 0805 |
| | | |
| 4887 © | 4822 051 30008 | CHIP JUMPER 0603 |
| 4888 © | 4822 051 20008 | CHIP JUMPER 0805 |
| 4889 © | 4822 051 20008 | CHIP JUMPER 0805 |
| 4890 © | 4822 051 20008 | CHIP JUMPER 0805 |
| 4891 © | 4822 051 30008 | CHIP JUMPER 0603 |

RESISTORS

| | | |
|--------|----------------|------------------|
| 4892 © | 4822 051 20008 | CHIP JUMPER 0805 |
| 4893 © | 4822 051 20008 | CHIP JUMPER 0805 |
| 4894 © | 4822 051 20008 | CHIP JUMPER 0805 |
| 4895 © | 4822 051 20008 | CHIP JUMPER 0805 |
| 4896 © | 4822 051 20008 | CHIP JUMPER 0805 |
| | | |
| 4897 © | 4822 051 20008 | CHIP JUMPER 0805 |
| 4898 © | 4822 051 20008 | CHIP JUMPER 0805 |
| 4899 © | 4822 051 20008 | CHIP JUMPER 0805 |

COILS

| | | |
|------|----------------|--------------------|
| 1810 | 2422 540 98519 | RESONATOR 8,467MHz |
|------|----------------|--------------------|

DIODES

| | | |
|--------|----------------|-------------|
| 6801 © | 4822 130 11397 | BAS316 |
| 6802 © | 4822 130 11397 | BAS316 |
| 6803 © | 4822 130 11397 | BAS316 |
| 6804 © | 4822 130 11397 | BAS316 |
| 6805 © | 9340 548 52115 | BZX284-C5V1 |
| | | |
| 6807 © | 9322 129 34685 | BZX284-C3V9 |
| 6808 © | 4822 130 11397 | BAS316 |
| 6809 © | 9322 129 34685 | BZX284-C3V9 |

TRANSISTORS

| | | |
|--------|----------------|--------|
| 7806 © | 5322 130 60159 | BC846B |
| 7812 © | 5322 130 60159 | BC846B |
| 7815 © | 5322 130 60159 | BC846B |

INTEGRATED CIRCUITS

| | | |
|--------|----------------|--------------------------------|
| 7801 © | 9352 622 36118 | TZA1025T/V2 HF-Amplifier |
| 7802 © | 9352 641 80557 | SAA7324H/M2B,"CD10" SIGN.PROC. |
| 7803 | 4822 209 32852 | TDA7073A/N2 |
| 7807 | 4822 209 32852 | TDA7073A/N2 |
| 7811 © | 4822 209 33165 | TDA1308T/N1 |
| | | |
| 7813 © | 5322 209 11306 | HEF4094BT, SHIFT REGISTER |
| 7814 | 4822 209 32852 | TDA7073A/N2 |

ELECTRICAL PARTSLIST MP3CD2002 MODULE**MISCELLANEOUS**

3103 308 67020 complete MP3CD2002 Module
 1451 2422 025 17303 FLEX FOIL CONNECTOR 19P

CAPACITORS

2450© 2238 586 59812 100nF 10% 50V
 2451© 3198 017 41050 1µF 20% 10V
 2452© 3198 017 41050 1µF 20% 10V
 2453© 2238 586 59812 100nF 10% 50V
 2454© 2238 586 59812 100nF 10% 50V

2455© 2238 586 59812 100nF 10% 50V
 2456© 2238 586 59812 100nF 10% 50V
 2457© 5322 126 11583 10nF 10% 63V
 2458© 5322 126 11583 10nF 10% 63V
 2459© 3198 017 41050 1µF 20% 10V

2460© 2238 586 59812 100nF 10% 50V
 2461© 4822 124 81059 220µF 20% 4V
 2462© 3198 017 41050 1µF 20% 10V
 2463© 3198 017 41050 1µF 20% 10V
 2464© 2238 586 59812 100nF 10% 50V

2465© 2238 586 59812 100nF 10% 50V
 2466© 2238 586 59812 100nF 10% 50V
 2467© 3198 017 41050 1µF 20% 10V
 2468© 3198 017 41050 1µF 20% 10V
 2469© 2238 586 59812 100nF 10% 50V

2470© 2238 586 59812 100nF 10% 50V
 2471© 2238 586 59812 100nF 10% 50V

RESISTORS

3449© 4822 051 30101 100Ω 5% 0,06W
 3450© 4822 117 12971 15Ω 5% 0,06W
 3451© 4822 117 12971 15Ω 5% 0,06W
 3452© 4822 051 30101 100Ω 5% 0,06W
 3453© 4822 051 30109 10Ω 5% 0,06W

3454© 4822 117 12971 15Ω 5% 0,06W
 3455© 4822 051 30102 1kΩ 5% 0,06W
 3456© 4822 051 30102 1kΩ 5% 0,06W
 3457© 5322 117 13051 680Ω 1% 0,063W
 3458© 5322 117 13061 180Ω 1% 0,063W

3459© 4822 051 30221 220Ω 5% 0,06W
 3460© 4822 051 30102 1kΩ 5% 0,06W
 3461© 4822 051 30479 47Ω 5% 0,06W
 3462© 4822 051 30101 100Ω 5% 0,06W
 3463© 4822 051 30101 100Ω 5% 0,06W

3464© 4822 051 30103 10kΩ 5% 0,06W
 3465© 4822 051 30101 100Ω 5% 0,06W
 3466© 4822 051 30471 470Ω 5% 0,06W
 3467© 4822 051 30103 10kΩ 5% 0,06W
 3468© 4822 051 30103 10kΩ 5% 0,06W

3469© 4822 051 30101 100Ω 5% 0,06W
 3470© 4822 117 12971 15Ω 5% 0,06W
 3471© 4822 051 30339 33Ω 5% 0,06W
 3472© 4822 051 30154 150kΩ 5% 0,06W
 3473© 4822 117 13632 100kΩ 1% 0,06W

RESISTORS

3474© 4822 117 12971 15Ω 5% 0,06W
 3475© 4822 051 30101 100Ω 5% 0,06W
 3476© 4822 051 30101 100Ω 5% 0,06W
 3477© 4822 051 30471 470Ω 5% 0,06W
 3478© 4822 051 30471 470Ω 5% 0,06W

3479© 4822 051 30471 470Ω 5% 0,06W
 3480© 4822 051 30101 100Ω 5% 0,06W
 3481© 4822 051 30101 100Ω 5% 0,06W
 3482© 4822 051 30471 470Ω 5% 0,06W
 3483© 4822 051 30101 100Ω 5% 0,06W

3484© 4822 117 12971 15Ω 5% 0,06W
 3486© 4822 051 30101 100Ω 5% 0,06W
 3488© 4822 117 13632 100kΩ 1% 0,06W
 3489© 4822 051 30103 10kΩ 5% 0,06W
 3490© 4822 051 30101 100Ω 5% 0,06W

3491© 4822 051 30479 47Ω 5% 0,06W
 3492© 4822 051 30105 1MΩ 5% 0,06W
 3493© 4822 051 30103 10kΩ 5% 0,06W
 3494© 4822 051 30103 10kΩ 5% 0,06W
 3495© 4822 051 30103 10kΩ 5% 0,06W

3497© 4822 051 30103 10kΩ 5% 0,06W
 3498© 4822 051 30332 3,3kΩ 5% 0,06W
 3499© 4822 051 30103 10kΩ 5% 0,06W
 4450© 4822 051 30008 CHIP JUMPER 0603

COILS

1460 4822 242 10989 CER.RES. 16,9MHz
 5450© 4822 157 11074 100µH

DIODES

6450© 4822 130 11411 BZX284-C3V3
 6451© 4822 130 11366 BZX284-C3V9
 7454 4822 130 34174 BZX79-B4V7

TRANSISTORS

7452© 3198 010 42310 BC847BW
 7453© 3198 010 42310 BC847BW
 7456© 3198 010 42310 BC847BW
 7460© 3198 010 42310 BC847BW

INTEGRATED CIRCUITS

7450© not available please order complete MP3 module
 7451© not available please order complete MP3 module
 7455© 4822 209 17108 LM317LD Voltage Regulator
 7457© 9352 456 50115 HC1G04, Inverter
 7458© 9322 130 41668 M24C64, EEPROM

3103 308 67020 complete MP3CD2002 Module