



### SERVICE MANUAL DOCUMENTATION TECHNIQUE TECHNISCHE DOKUMENTATION DOCUMENTAZIONE TECNICA DOCUMENTACION TECNICA

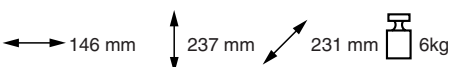
## CS100 CS105

Version (PC\*): A

\*PC: The version code is indicated either in the battery compartment or on the back of the unit - ce code version est indiqué dans le compartiment à piles ou au dos de l'appareil - PC: Version des Geräts wird im Batteriefach oder auf der Rückseite angegeben - il codice della versione è indicato nello scompartimento delle batterie o sul retro dell'apparecchio - el código de la versión está indicado en el compartimento de las pilas o en la parte trasera del aparato.



#### Technical data - Caractéristiques principales Technische Daten - Dati tecnici - Características del aparato

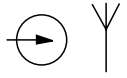
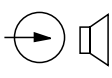
|                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                    |  |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| <b>Type of set:</b> Two-in-one horizontale combination/DAD<br><b>Type d'appareil:</b> Ensemble compact stéréophonique<br><b>Geräteart:</b> DAD-2er Horizontal Kompaktanlage<br><b>Tipo d'apparecchio:</b> Compatto Hifi/CD<br><b>Tipo de aparato:</b> Equipo compacto estereofónico/DAD |                                                                                                                                                                                                                                                                                                        |                                                                                                                                                |  |
| <b>Power supply:</b><br><b>Alimentation:</b><br><b>Stromversorgung:</b> 230 V ~ 50Hz<br><b>Alimentazione:</b><br><b>Alimentación:</b>                                                                                                                                                   |                                                                                                                                                                                                                                                                                                        | <b>Nominal output power:</b><br><b>Puissance nominale de sortie:</b> 2 x 5W (rms)<br><b>Nennausgangsleistung:</b> 2 x 20W (music)<br><b>Potenza nominale di uscita:</b><br><b>Potencia nominal de salida:</b>                      |  |
|                                                                                                                                                                                                                                                                                         | <b>FM - MF:</b> 87,5 - 108 MHz<br><b>MW - PO:</b> 522 - 1620 kHz<br><b>LW - GO:</b> 146 - 281 kHz                                                                                                                                                                                                      | <b>Sensitivity:</b><br><b>Sensibilité:</b> FM - MF: 20 $\mu$ V (S/N = 30 dB)<br><b>Empfindlichkeit:</b> MW - PO: 2000 $\mu$ V/m (S/N = 20 dB)<br><b>Sensibilità:</b> LW - GO: 2000 $\mu$ V/m (S/N = 20 dB)<br><b>Sensibilidad:</b> |  |
|                                                                                                                                                                                                                                                                                         | <b>Frequency response:</b><br><b>Courbe de réponse:</b> 125 Hz - 6,3 kHz<br><b>Frequenzgang:</b> (+3/-5 dB)<br><b>Curva di risposta:</b><br><b>Curva de respuesta:</b><br><b>Wow and flutter:</b><br><b>Fluctuations:</b> 0,35%<br><b>Gleichlauf:</b><br><b>Fluttuazioni:</b><br><b>Fluctuaciones:</b> | <b>Signal to noise ratio:</b><br><b>Rapport signal / bruit:</b> 40 dB<br><b>Geräuschspannungsabstand:</b><br><b>Rapporto segnale / disturbo:</b><br><b>Relación señal / ruido:</b>                                                 |  |
|                                                                                                                                                                                                                                                                                         | <b>Disc rotation speed:</b><br><b>Vitesse de rotation du disque:</b> 200 $\Rightarrow$ 500 tr/mn<br><b>CD-Drehgeschwindigkeit:</b><br><b>Velocità di rotazione del disco:</b><br><b>Velocidad de rotación del disco:</b>                                                                               | <b>Frequency response:</b><br><b>Courbe de réponse:</b> 100 Hz - 16 kHz<br><b>Frequenzgang:</b> (-4/+2 dB)<br><b>Curva di risposta:</b><br><b>Curva de respuesta:</b>                                                              |  |
|                                                                                                                                                                                                                                                                                         | <b>Dynamic range:</b><br><b>Gamme dynamique:</b> 60 dB<br><b>Dynamikumfang:</b><br><b>Dinamica:</b><br><b>Dinámica:</b>                                                                                                                                                                                | <b>Signal to noise ratio:</b><br><b>Rapport signal / bruit:</b> 54 dB<br><b>Geräuschspannungsabstand:</b><br><b>Rapporto segnale / disturbo:</b><br><b>Relación señal / ruido:</b>                                                 |  |

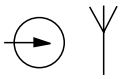
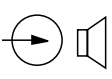
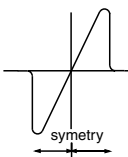


**WARNING :** Before servicing this chassis please read the safety recommendations.  
**ATTENTION :** Avant toute intervention sur ce châssis, lire les recommandations de sécurité.  
**ACHTUNG :** Vor jedem Eingriff auf diesem Chassis, die Sicherheitsvorschriften lesen.  
**ATTENZIONE :** Prima di intervenire sullo chassis, leggere le norme di sicurezza.  
**IMPORTANTE :** Antes de cualquier intervención, leer las recomendaciones de seguridad.

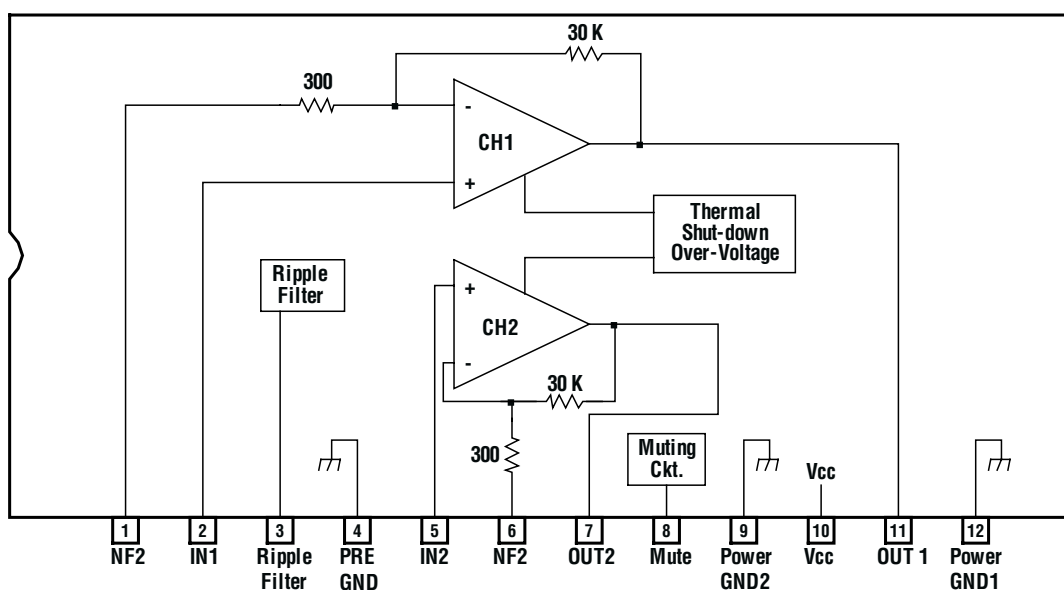
Code : 357 268 00 - 1003 / 3,7M - CRKD2110Print.

# ADJUSTMENTS - RÉGLAGES - EINSTELLUNGEN - REGOLAZIONI - AJUSTES

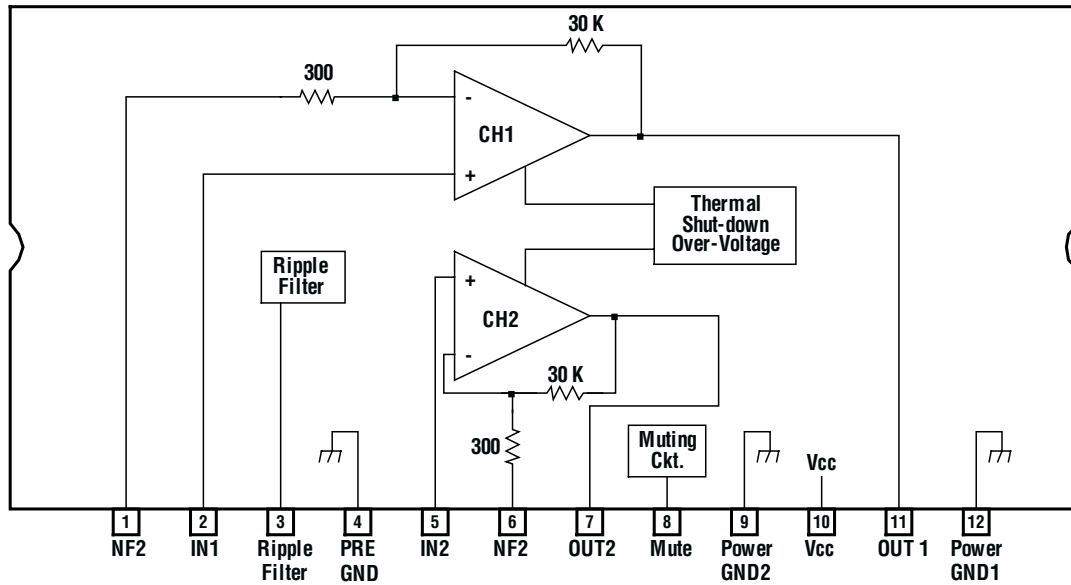
| AM alignment |   |                                                                                                                                                                     |          |                                                                                   |                                                                                                                                                                       |                                                                                                                                                                                                                                                             |
|--------------|---|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |   |   | <b>f</b> |  |   |    |
| IF           | 1 |                                                                                                                                                                     | 450 kHz  |  | T201                                                                                                                                                                  | Max.                                                                                                                                                                                                                                                        |
| Osc          | 2 | MW                                                                                                                                                                  | 522 kHz  |  | L206                                                                                                                                                                  | Vt = 1.1 ±0.1 V                                                                                                                                                                                                                                             |
|              | 3 |                                                                                                                                                                     | 1620 kHz |  |                                                                                      | Vt = 7.5 ±0.5 V                                                                                                                                                                                                                                             |
|              | 4 | LW                                                                                                                                                                  | 150 kHz  |  | L205                                                                                                                                                                  | Vt = 1.8 ±0.1V                                                                                                                                                                                                                                              |
|              | 5 |                                                                                                                                                                     | 283 kHz  |  |                                                                                      | Vt = 5.5 ±0.5V                                                                                                                                                                                                                                              |
| MW           | 6 |   | 603 kHz  | 603 kHz                                                                           | MW coil                                                                                                                                                               | Max.                                                                                                                                                                                                                                                        |
|              | 7 |                                                                                                                                                                     | 1404 kHz | 1404 kHz                                                                          | TC203                                                                                                                                                                 |                                                                                                                                                                                                                                                             |
| LW           | 8 | Ve = 1 mV                                                                                                                                                           | 164 kHz  | 164 kHz                                                                           | LW coil                                                                                                                                                               | Max.                                                                                                                                                                                                                                                        |
|              | 9 |                                                                                                                                                                     | 272 kHz  | 272 kHz                                                                           | TC202                                                                                                                                                                 |                                                                                                                                                                                                                                                             |

| FM alignment |   |                                                                                                                                                                     |          |                                                                                     |                                                                                                                                                                       |                                                                                                                                                                                                                                                             |
|--------------|---|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|-------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |   |   | <b>f</b> |    |   |    |
| IF           | 1 | <br>Ve = 1 mV                                                                    | 10,7 MHz |  |                                                                                    | Max.                                                                                                                                                                   |
|              |   |                                                                                                                                                                     |          |                                                                                     |                                                                                                                                                                       |                                                                                                                                                                                                                                                             |
|              |   |                                                                                                                                                                     |          |                                                                                     |                                                                                                                                                                       |                                                                                                                                                                                                                                                             |
| Osc          | 2 | <br>Ve = 1 mV                                                                    | 87,5 MHz |  | L202                                                                                                                                                                  | Vt = 2.0 ±0.1 V                                                                                                                                                                                                                                             |
|              | 3 |                                                                                                                                                                     | 108 MHz  |  |                                                                                    | Vt = 7.0 ±0.5 V                                                                                                                                                                                                                                             |
| RF           | 4 | <br>Ve = 1 mV                                                                    | 90 MHz   | 90 MHz                                                                              | L201                                                                                                                                                                  | Max.                                                                                                                                                                                                                                                        |
|              | 5 |                                                                                                                                                                     | 106 MHz  | 106 MHz                                                                             | TC201                                                                                                                                                                 |                                                                                                                                                                                                                                                             |

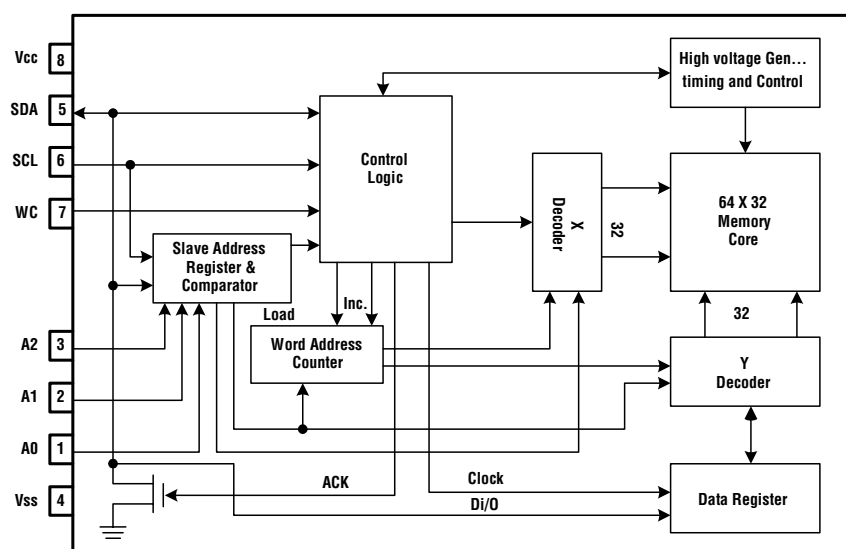
## IC204 LA4282



## IC204 LA4282

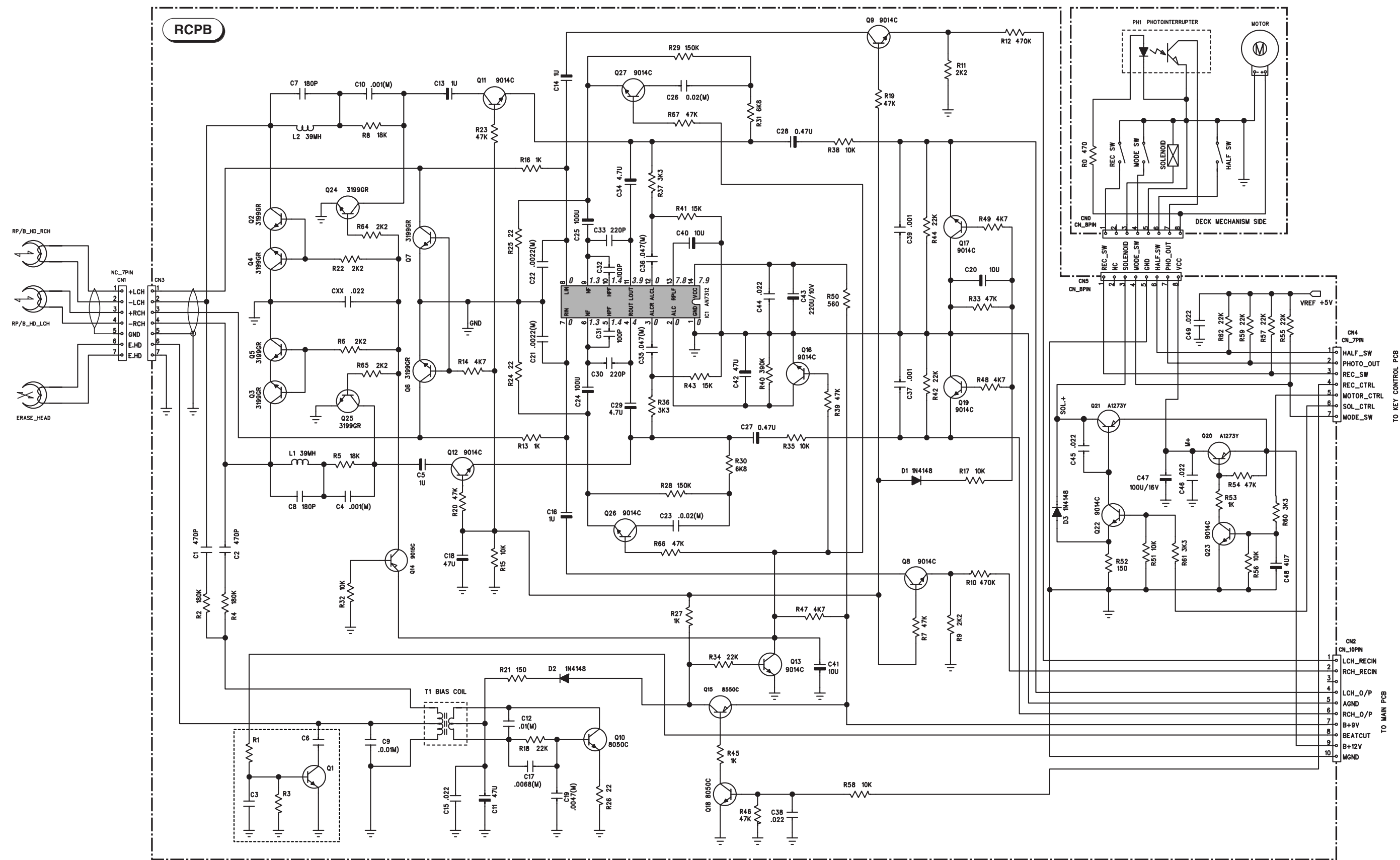


## IC4 ST24C02



## Abbreviations - Abreviations - Abkürzungen - Abbreviazioni - Abreviaciones

|                   |                        |                 |                                |
|-------------------|------------------------|-----------------|--------------------------------|
| <b>B_CUT</b>      | Beatcut                | <b>PWR_FAIL</b> | Power Failure                  |
| <b>CD_EN</b>      | CD Enable              | <b>PWR_SW</b>   | Power Switch                   |
| <b>E. HD</b>      | Erase Head             | <b>R.SPK+</b>   | Right Speaker positive         |
| <b>GND</b>        | Ground                 | <b>RCH</b>      | Right Chanel                   |
| <b>L.SPK+</b>     | Left Speaker positive  | <b>RCH_O/P</b>  | Right Chanel Output            |
| <b>LCH</b>        | Left Chanel            | <b>REC_CTRL</b> | Record Control                 |
| <b>LCH_O/P</b>    | Left Chanel Output     | <b>REC_SW</b>   | Record Switch                  |
| <b>LCH_RECIN</b>  | Left Chanel Record In  | <b>REC_SYNC</b> | Record Synchronisation         |
| <b>LCH_RECIN</b>  | Right Chanel Record In | <b>SPK-</b>     | Speaker negative               |
| <b>MOTOR_CTRL</b> | Motor Control          | <b>SYN_REC</b>  | Synchronisation in Record mode |
| <b>NC</b>         | Not Connected          | <b>TUNER_EN</b> | Tuner Enable                   |





CLASS 1 LASER PRODUCT  
APPAREIL A LASER DE CLASSE 1  
LASER KLASSE 1  
APARATO CON LASER DE CLASE 1  
APPARECCHIO CON LASER DI CLASSE 1

**DANGER :**

Invisible laser radiation when open and interlock failed or defeated. Avoid direct exposure to beam.

**ATTENTION :**

Le rayon laser est invisible. Eviter l'exposition directe lors de la maintenance.

**VORSICHT BEI REPARATUREN :**

Bei geöffneter Schublade und Defekt der Sicherheits - vorrichtungen besteht die Gefahr unsichtbaren Laserlichts. Niemals direkt in den Laserstrahl sehen.

**ATTENZIONE :**

Il raggio laser è invisibile. Evitare l'esposizione diretta durante la manutenzione.

**IMPORTANTE :**

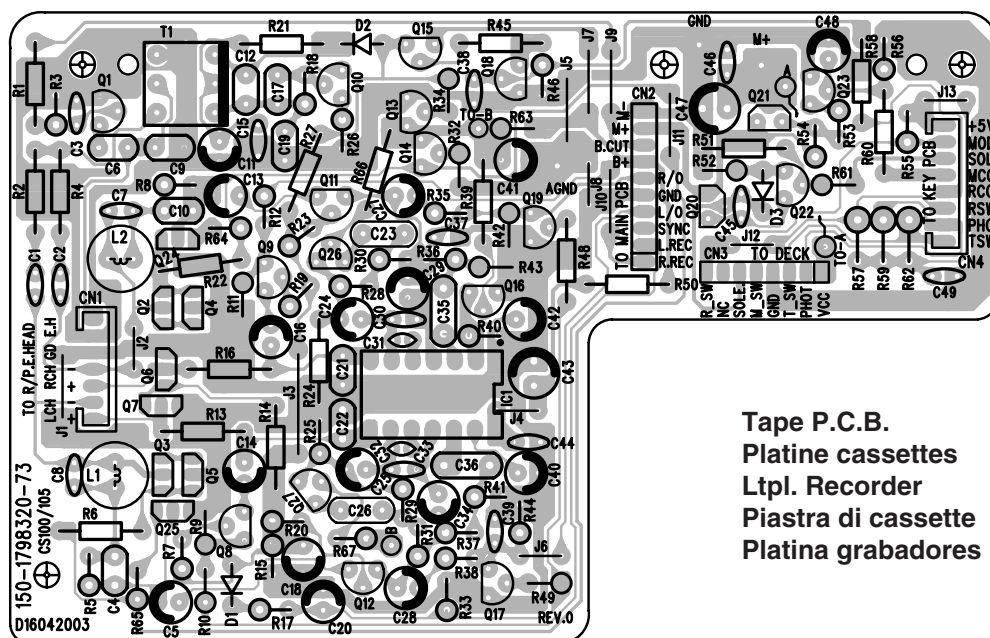
El rayo laser es invisible. Evitar la exposición directa en el momento del mantenimiento.

The complete Digital Processing Module is available from A.S.S. under Part Number :  
En SAV, l'ensemble du module traitement digital est géré sous le code :  
Die Service Bestell-Nr. für das Modul "Digital Processing kompl." ist :  
Il codice del modulo completo di elaborazione digitale è :  
En postventa, el modulo completo tratamiento digital lleva el código :

107 357 90

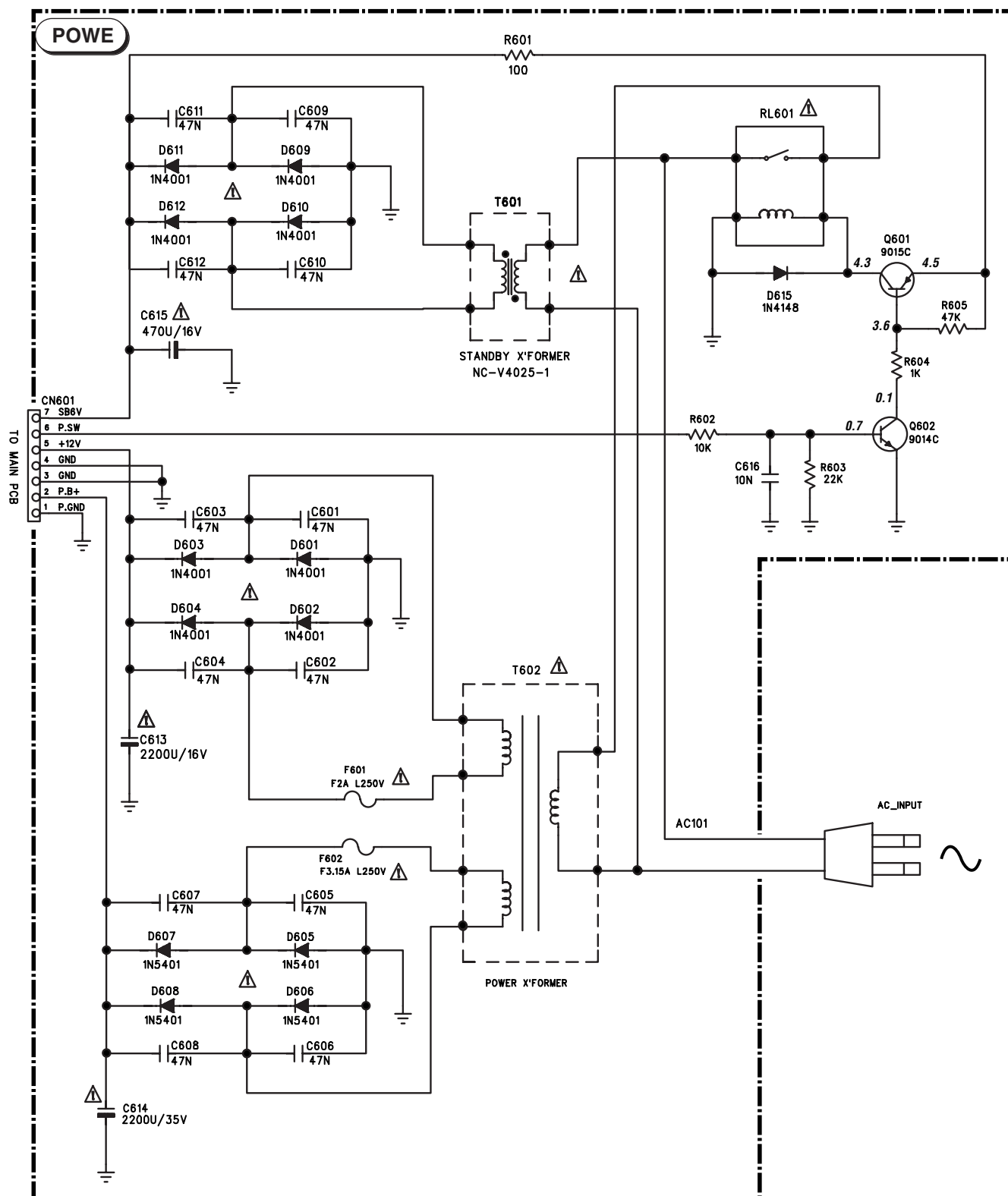


To Main Board

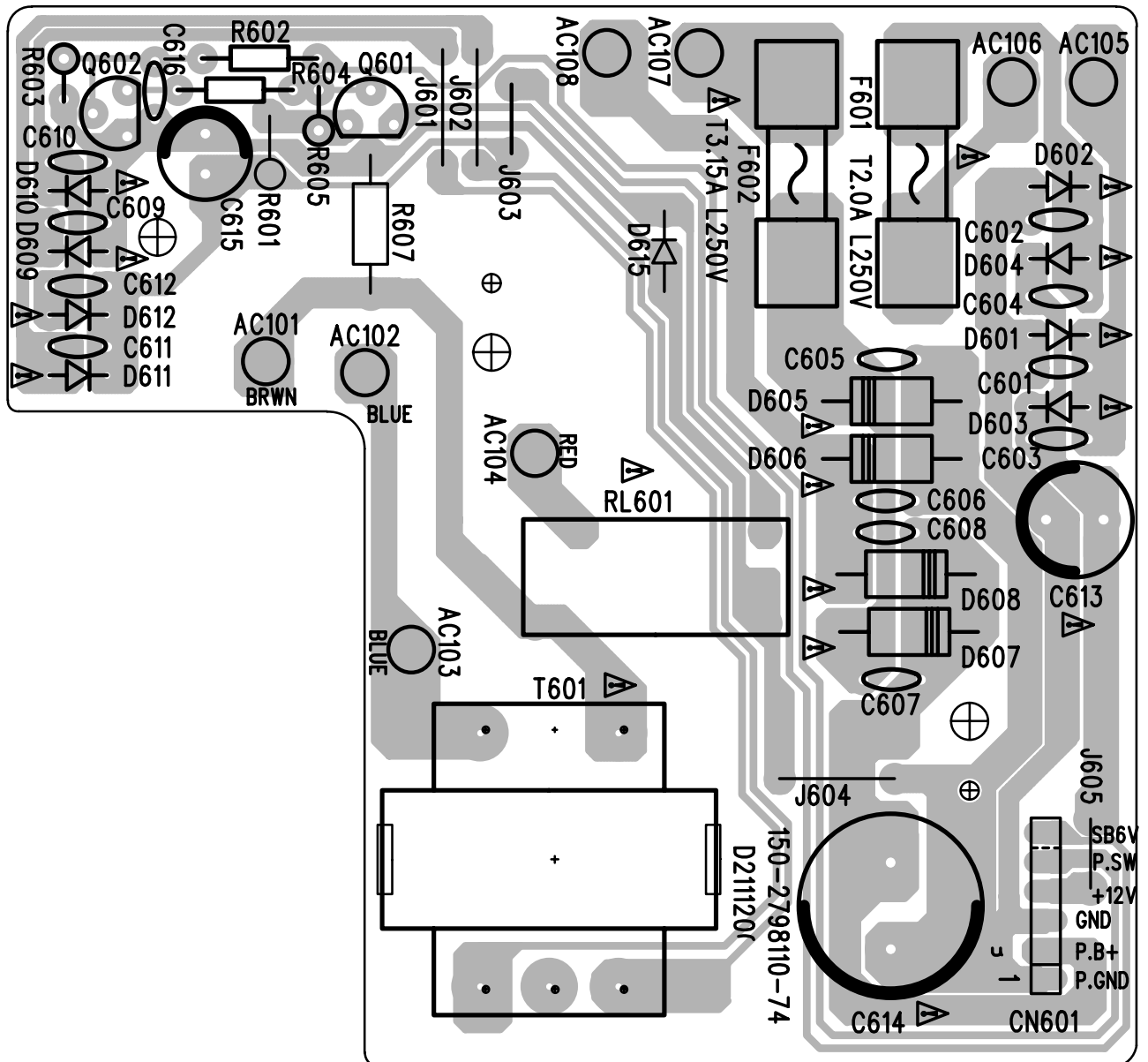


Tape P.C.B.  
Platine cassettes  
Ltpl. Recorder  
Piastra di cassette  
Platina grabadores

POWER SUPPLY SCHEMATIC DIAGRAM - SCHEMA DE L'ALIMENTATION - SCHALTBILD  
NETZTEIL - SCHEMA DELL' ALIMENTAZIONE - ESQUEMA DE LA ALIMENTACIÓN

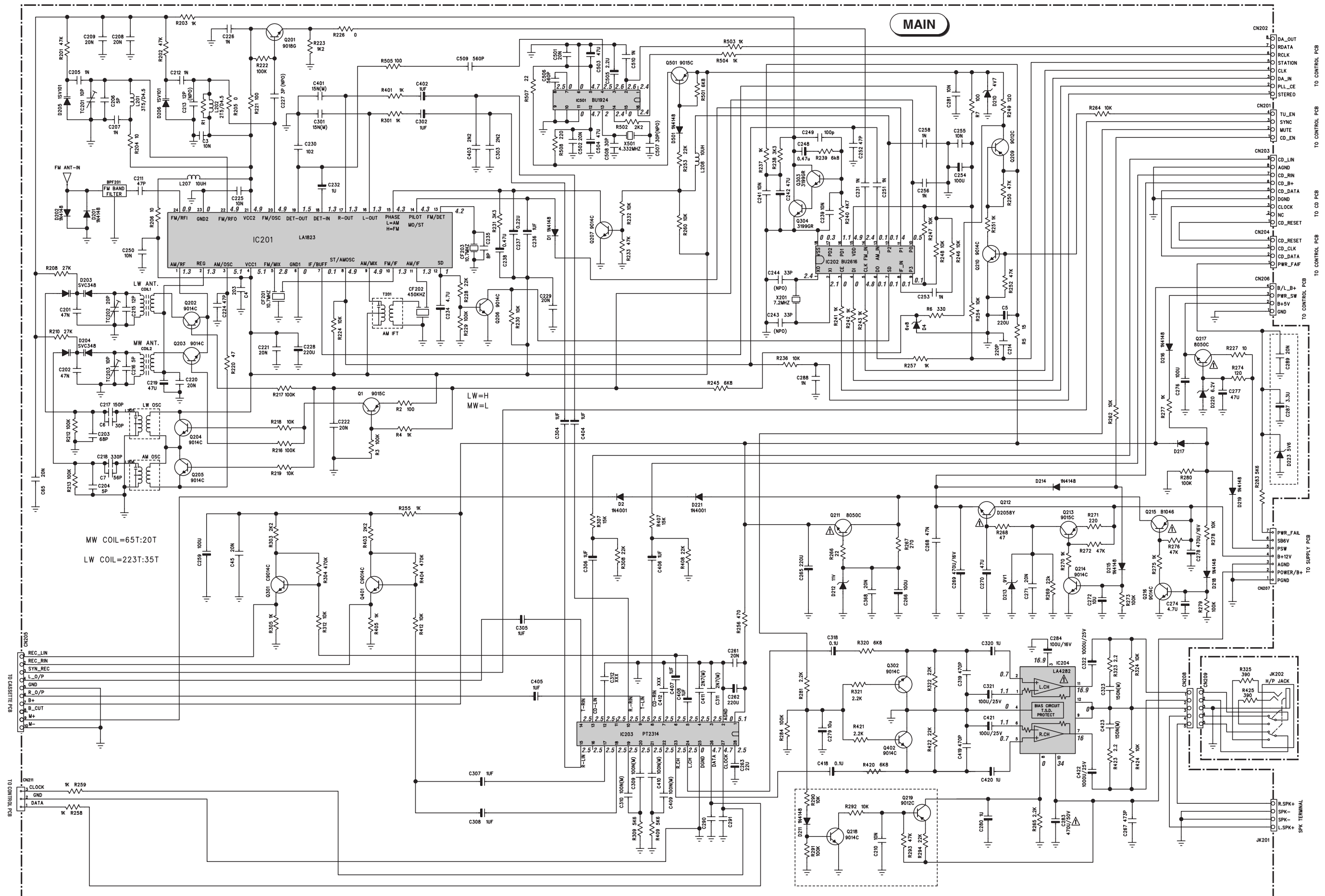


Power supply P.C.B.  
 Platine alimentation  
 Ltpl. Netzteil  
 Piastra alimentazione  
 Platina alimentación

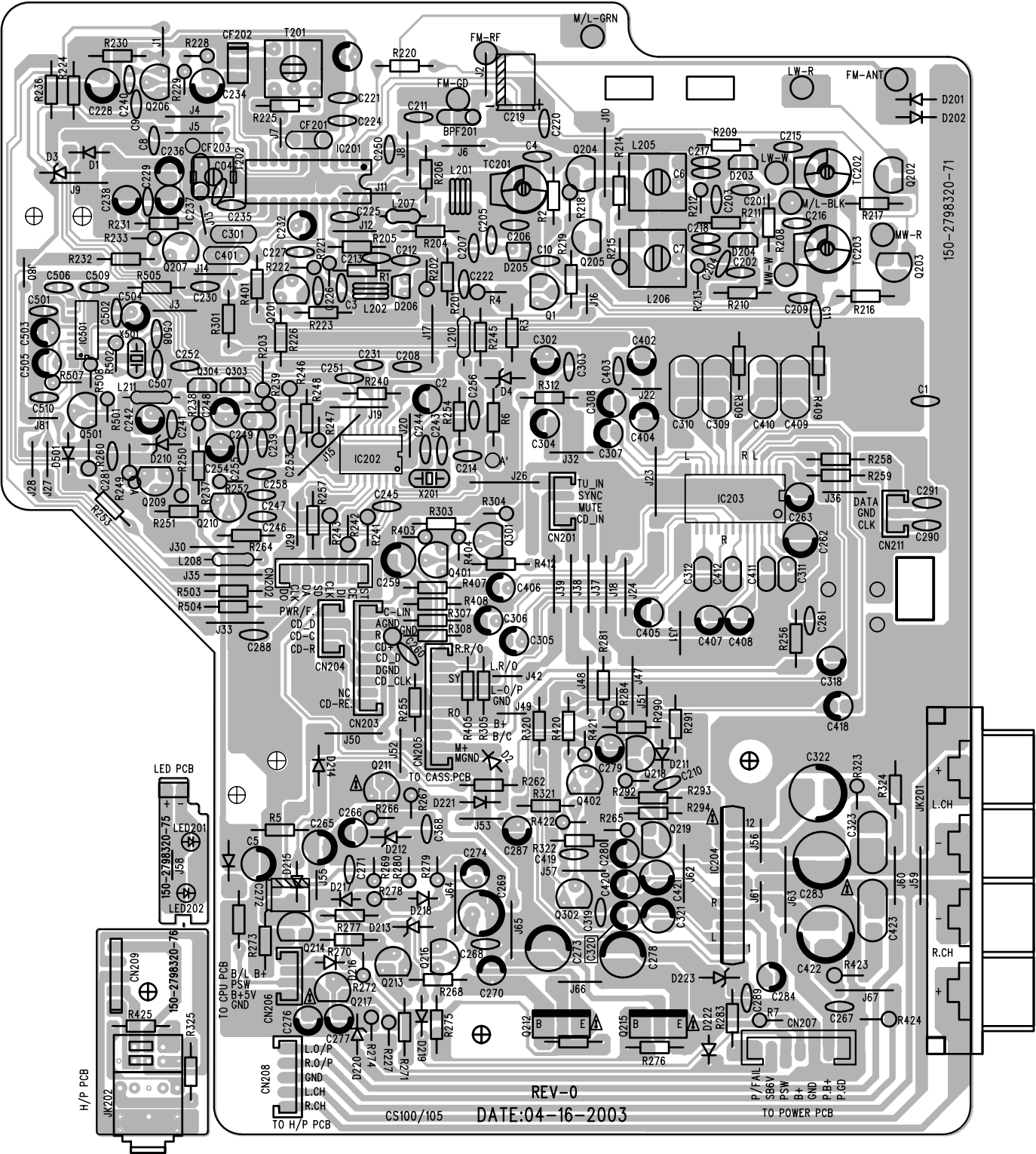




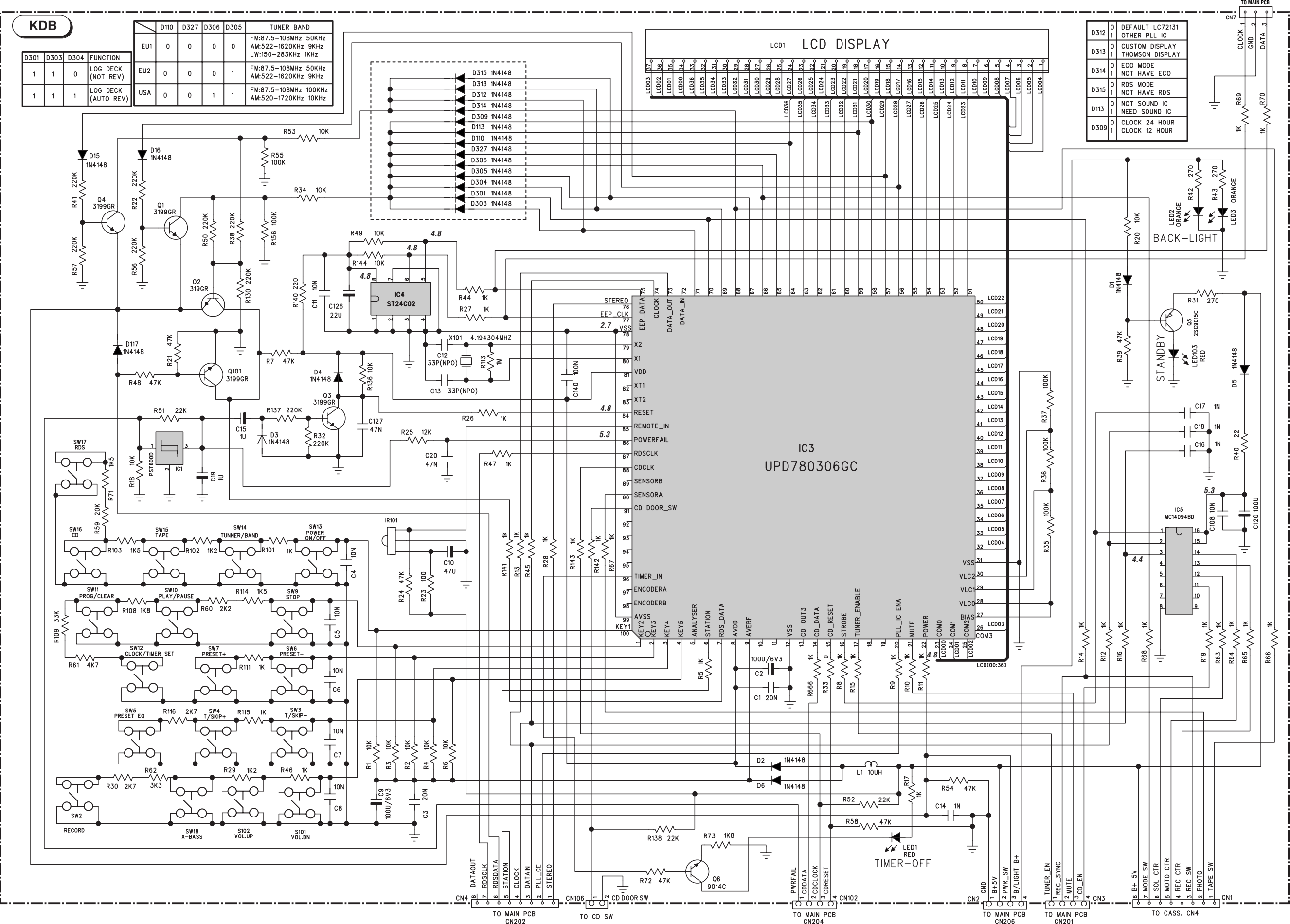
**MAIN SCHEMATIC DIAGRAM - SCHEMA DE LA PLATINE PRINCIPALE - GRUNDPLATTE SCHALTBILD - SCHEMA DELLA PIASTRA PRINCIPALE- ESQUEMA DE LA PLATINA PRINCIPAL**



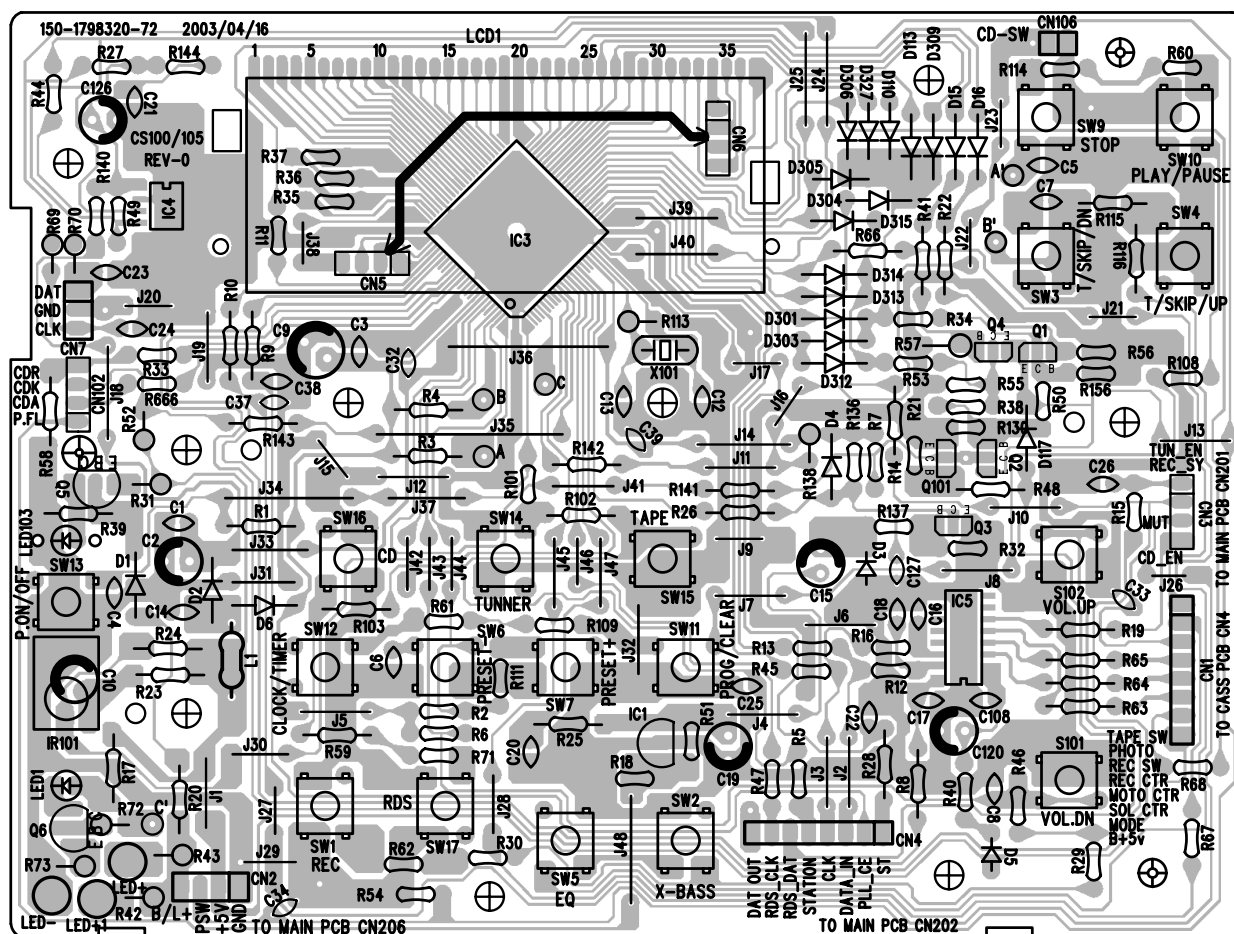
Main P.C.B.  
Platine principale  
Grundplatte  
Piastra principale  
Platina principal



CONTROL / DISPLAY SCHEMATIC DIAGRAM - SCHEMA COMMANDES / AFFICHEUR - BEDIENTEIL / ANZEIGE SCHALTBILD - SCHEMA COMANDI / INDICATORE - ESQUEMA MANDOS / INDICADOR



Controls / display P.C.B.  
 Platine commandes / afficheurs  
 Ltpl. Bedienteil / Anzeige  
 Piastra comandi / indicatori  
 Platina de mandos / indicadores



IC4 ST24C02

