THOMSON

VIDEO DVD VIDEO

SERVICE MANUAL
DOCUMENTATION TECHNIQUE
TECHNISCHE DOKUMENTATION
DOCUMENTAZIONE TECNICA
DOCUMENTACION TECNICA

DTH7500

DTH7500E
DTH7500U

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 : 357 275 80 - 0204 / 4,8M - DTH7500 Print.

Do not disconnect modules when they are energized!
Repairs on power supply section are to be carried out only with isolating transformer.

Ne pas retirer les modules lorsqu' ils sont sous tension. N'effectuer les travaux de maintenance sur la partie reliée au secteur (Switch Mode) qu'au travers d'un transformateur d'isolement.

Module nicht bei eingeschaltetem Gerät entfernen!
Servicearbeiten am Netzteil nur unter Verwendung eines Regeltrenntrafos durchführen.

Non scollegare le piastre quando sono alimentate!
Per le riparazioni sulla sezione alimentatore, utilizzare un trasformatore isolatore.

No desconectar los módulos cuando están activados. Las reparaciones en la sección de alimentación de energía deben ser ejecutadas solamente con un transformador de separación.

⚠ Indicates critical safety components, and identical components should be used for replacement. Only then can the operational safety be garanteed.

Le remplacement des éléments de sécurité (repérés avec le symbole ⚠) par des composants non homologués selon la Norme CEI 65 entraine la non-conformité de l'appareil. Dans ce cas, la responsabilité du fabricant n'est plus engagée.

Wenn Sicherheitsteile (mit dem Symbol ⚠ gekennzeichnet) nicht durch Original - Ersatzteile ersetzt werden, erlischt die Haftung des Herstellers.

La sostituzione dei componenti di sicurezza (evidenziati con il segno ⚠) con componenti non omologati secondo la norma CEI 65 comporta la non conformitá dell'apparecchio. In tal caso è "esclusa la responsabilità " del costruttore.

La sustitución de elementos de seguridad (marcados con el simbolo ⚠) por componentes no homologados segun la norma CEI 65, provoca la no conformidad del aparato. En ese caso, el fabricante cesa de ser responsable.

MEASUREMENT CONDITIONS - CONDITIONS DE MESURES - MESSBEDINGUNGEN CONDIZIONI DI MISURA - CONDICIONES DE MEDIDAS

RECEIVER :
On UHF,input level : 1 mV, bar test pattern :
- PAL, I standard, 100% white.

Via the scart socket, input level : 1 Vpp, bar test pattern :

Colour, contrast and brightness at mid-position, sound at minimum.
Programme selected : PR 01.

DC voltages measured between the point and earth using a digital voltmeter.

RECEPTEUR :
En UHF, niveau d'entrée 1 mV mire de barres
- SECAM, Norm L, Blanc 100%.

Par la prise Péritélévision, niveau d'entrée 1 Vcc, mire de barres .

Couleur, contraste, lumière à mi-course, son minimum.
Programme affecté PR 01.

Tensions continues relevées par rapport à la masse avec un voltmètre numérique.

EMPFÄNGER :
Bei UHF Eingangspegel 1 mV, Farbbalken :
- PAL, Norm G, Weiss 100%.

Über die Scartbuchse : Eingangspegel 1 Vss, Farbbalken :

Farbe, Kontrast, Helligkeit in der Mitte des Bereichs, Ton auf Minimum.
Zugeordnetes Programm PR 01.

Gleichspannungen mit einem digitalen Voltmeter zur Masse gemessen.

RICEVITORE :
In UHF, livello d'entrata 1 mV, monoscopio barre :
- PAL, norma G. bianco 100%.

Via SCART, livello d'entrata 1 Vpp, monoscopio barre :

Colore, Contrasto, Luminositá media, Suono minimo.
Programma selezionato PR 01.

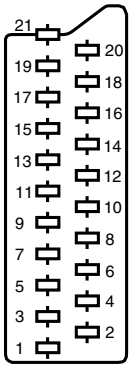
Tensioni continue rilevate rispetto alla massa con un voltmetro digitale.

RECEPTOR :
En UHF, nivel de entrada 1 mV, mira de barras :
- PAL, norma G, blanco 100%.

Por la toma Peritelevision, nivel de entrada 1 Vpp mira de barra.

Color, Contraste, luz a mitad de carrera, Sonido minimo.
Programa afectado PR 01.

Tensiones continuas marcadas en relacion a la masa con un voltimetro digital.



NOTE : (MAIN) *... etc. identifies each* pcb module.

NOTE : (MAIN) *... etc. repères des platines constituant l'appareil.*

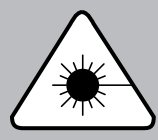
HINWEIS : (MAIN) *... usw. Kennzeichnung der Platinen, aus denen das Gerät zusammengesetzt ist.*

NOTA : (MAIN) *... ecc. sigla delle piastre dell' apparecchio.*

NOTA : (MAIN) *... etc. marcas de las placas que constituyen el aparato.*

		ENGLISH	FRANÇAIS	DEUTSCH	ITALIANO	ESPAÑOL
1	⊖	AUDIO "R"	AUDIO "D"	AUDIO "R"	AUDIO "D"	AUDIO "D"
2	⊕	AUDIO "R"	AUDIO "D"	AUDIO "R"	AUDIO "D"	AUDIO "D"
3	⊖	AUDIO "L"	AUDIO "G"	AUDIO "L"	AUDIO "S"	AUDIO "I"
4	⊥	AUDIO	AUDIO	AUDIO	AUDIO	AUDIO
5	⊥	"BLUE"	"BLEU"	"BLAU"	"BLU"	"AZUL"
6	⊕	AUDIO "L" MONO	AUDIO "G" MONO	AUDIO "L" MONO	AUDIO "S" MONO	AUDIO "I" MONO
7	⊕	"BLUE"	"BLEU"	"BLAU"	BLU	AZUL
8	⊕	SLOW SWITCH	COMMUT. LENTE	AV UMSCHALTUNG	"COMMUTAZIONE LENTA"	"CONMUTACION LENTA"
9	⊥	"GREEN"	"VERT"	"GRÜN"	"VERDE"	"VERDE"
10	⊕ ⊖	AV LINK	AV LINK	AV LINK	AV LINK	AV LINK
11	⊕	"GREEN"	"VERT"	"GRÜN"	"VERDE"	"VERDE"
12	NC					
13	⊥	"RED"	"ROUGE"	"ROT"	"ROSSO"	"ROJA"
14	NC					
15	⊕	"RED"	"ROUGE"	"ROT"	"ROSSO"	"ROJA"
16	⊕	FAST SWITCH	COMMUT. RAPIDE	AUSTASTUNG	"COMMUTAZIONE RAPIDA"	"CONMUTACION RAPIDA"
17	⊥	VIDEO	VIDEO	VIDEO	VIDEO	VIDEO
18	⊥	FAST SWITCH	COMMUT. RAPIDE	AUSTASTUNG	"COMMUTAZIONE RAPIDA"	"CONMUTACION RAPIDA"
19	⊖	VIDEO	VIDEO	VIDEO	VIDEO	VIDEO
20	⊕	VIDEO OR "SYNC"	VIDEO SYNCHRO	VIDEO ODER SYNCHRO	VIDEO O SINCRO	VIDEO O SINCRO
21	⊖	PLUG SCREEN BOX	BLINDAGE PRISE	ABSCHIRMUNG DES STECKERS	INVOLUCRO METAL-LICO DELLA PRESA	BLINDAJE DEL ENCHUFE

⊕ : INPUT - ENTRÉE - EINGANG - ENTRATA - ENTRADA • ⊖ : OUTPUT - SORTIE - AUSGANG - USCITA - SALIDA • ⊥ : EARTH - MASSE - MASSE - MASSA - MASA



CLASS 2 LASER PRODUCT
APPAREIL A LASER DE CLASSE 2
LASER KLASSE 2
APPARECCHIO CON LASER DI CLASSE 2
APARATO CON LASER DE CLASE 2

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 invisible. Evitare l'esposizione diretta durante la manutenzione.**
IMPORTANTE :	**El rayo laser es invisible. Evitar la exposición directa en el momento del mantenimiento.**

IMPORTANT SAFETY NOTICE
There are special components used in this equipment which are imporant for safety. These part are marked by ⚠ symbol on the schematic circuit diagrams and replacement part list. It is essential that these safety critical components are replaced with the manufacture's specified parts to prevent electric shock, fire, or other hazards. do not attempt to modify the original design without permission of the manufacturer.

REMARQUES DE SECURITE IMPORTANTE
Il y a des composants spéciaux utilise dans cet appareil qui sont important pour la sécurité. Ces pièces sont repérées par un symbole ⚠ sur les schémas de principes et la liste de pièces détachées. Il est essentiel que ces composants de sécurité soient remplacés par les pièces spécifiques du constructeur pour éviter les chocs électriques, feux ou autres risques. Ne tentez pas de modifier la conception originale sans autorisation du constructeur.

WICHTIGER SICHERHEITSHINWEIS
In diesem Gerät wurden sicherheitsrelevante ⚠ Komponenten verwendet. Diese Teile sind im Schaltbild und in der Ersatzteilliste mit einem Symbol markiert. Es ist wichtig, dass diese kritischen Komponenten ausschließlich durch solche ersetzt werden, die den Spezifikationen des Herstellers entsprechen. Die Produkthaftung des Herstellers erlischt bei Einsatz von nicht den Spezifikationen entsprechenden Sicherheitsbauteilen und bei eigenmächtigen Schaltungsänderungen.

IMPORTANTE INFORMAZIONE DI SICUREZZA
Ci sono speciali componenti usati in questa apparecchiatura che sono importanti per la sicurezza. queste parti sono facilmente identificabili, sullo schema e sulla lista parti, da un apposito simbolo ⚠ . E' indispensabile che questi componenti di sicurezza, nel caso di alterazioni o guasti, vengano sostituiti con specifici ricambi originali per evitare shock elettrici, fuoco o altri rischi. Non modificare mai il circuito senza autorizzazione della casa costruttrice.

AVISO IMPORTANTE SOBRE SEGURIDAD
En este equipo se utilizan componentes especiales que son muy importantes para la seguridad. están marcados con el símbolo ⚠ en los esquemas eléctricos y en las listas de repuestos. Es fundamental que estos componentes críticos de seguridad, sean reemplazados por las piezas originales indicadas por el fabricante para evitar los peligros de electrocución, de fuego, etc. y no modificar el diseño original sin autorización del fabricante.

EN Prevention of electro static discharge (esd) to Electrostatically Sensitive Devices (ESD)

Some semiconductor devices can be damaged easily by static electricity (integrated circuits, some field-effect transistors and semiconductor chip components. The following techniques should be used to help reduce the incidence of component damage caused by static electricity.

1. Immediately before handling any semiconductor component or semiconductor-equipped assembly, drain off any electrostatic charge on your body by touching a known earth ground or wear a discharging wrist strap device, which should be removed for potential shock reasons prior to applying power to the unit under test.
2. After removing an electrical assembly equipped with ESD devices, place the assembly on a conductive surface such as aluminum foil.
3. Use only a grounded-tip soldering iron to solder or unsolder ESD devices.
4. Use only an anti-static solder removal devices.
5. Do not use freon-propelled chemicals.
6. Do not remove a replacement ESD device from its protective package until immediately before your are ready to install it.
7. Immediately before removing the protective materials from the leads of a replacement ESD device, touch the protective material to the chassis or circuit assembly into which the device will be installed.
   CAUTION : Be sure no power is applied to the chassis or circuit, and observe all other safety precautions.
8. Minimize bodily motions when handling unpackaged replacement ESD devices

FR Prévention des composants et sous-ensembles contre les ESD (Décharge d'Electricité Statique)

Certains semi-conducteurs peuvent être facilement endommagés par l'électricité statique (les circuits intégrés et certains transistors à effet de champs, les composants semi-conducteurs de type chip ainsi que les diodes à émission laser équipant les lecteurs optiques). Les précautions suivantes doivent être utilisées pour réduire l'incidence des dommages causés par l'électricité statique.

1. Immédiatement avant de manipuler tout composant semi-conducteur ou ensemble équipé de semi-conducteurs, éliminez toute charge électrostatique de votre corps en touchant une terre connue. Ou bien, mettez un bracelet antistatique, qui doit être retiré, pour des raisons de choc électrique, avant de mettre l'appareil sous tension.
2. Après démontage d'un ensemble électrique équipé d'éléments sensibles aux ESD, Placez l'ensemble sur une surface conductrice telle qu'une feuille d'aluminium.
3. N'utilisez qu'un fer à souder relier à la masse pour souder ou dessouder ces composants.
4. Pour dessouder, n'utilisez que du matériel antistatique
5. N'utilisez pas de produits chimiques à propulsion de fréon.
6. Ne retirez pas ces composants de leur emballage de protection jusqu'à ce que vous soyez prêt à l'installer.
7. Juste avant de retirer la protection des broches de ces composants, touchez la protection sur le châssis ou le circuit dans lequel le composant va être installé.
   ATTENTION : Assurez-vous que le châssis ou le circuit n'est pas sous tension, et observez toutes les autres précautions de sécurité.
8. Minimisez les déplacements corporels lorsque vous manipulez un de ces composants de remplacement déballé.

DE Vermeidung von Elektrostatischer Entladung (ESD)

Manche elektronische Komponenten wie Transistoren, Integrierte Schaltkreise oder Chipelemente können leicht durch ESD beschädigt oder zerstört werden. Die folgenden Richtlinien helfen Schäden durch ESD zu vermeiden.

1. Unmittelbar vor dem Hantieren Halbleitern oder Baugruppen mit Halbleitern leiten Sie die statische Aufladung Ihres Körpers durch Berühren einen geerdeten Gegenstandes ab. Beschaffen Sie sich ein leitendes Hansgelenkband. Dieses müssen Sie allerdings vor dem Einschalten des zu prüfenden Gerätes ablegen.
2. Nach dem Ausbau einer empfindlichen elektronischen Baugruppe legen Sie diese auf einen leitende Unterlage wie Aluminium-Folie um eine elektrostatische Entladung zu vermeiden.
3. Benutzen Sie für Lotarbeiten an empfindlichen Komponenten einen geerdeten Lötkolben.
4. Benutzen Sie antistatisches Entlötwergzeug.
5. Verwenden Sie keine Sprays, die Freon als Treibmittel enthalten. Diese können ausreichend elektrostatische Ladung erzeugen, um empfindliche Komponenten zu schädigen.
6. Entfernen Sie die Antistatik-Schutzverpackung (Alu-Folie, Leitgummi, Leitfolie, ..) von Komponenten und Baugruppen erst wenn Sie diese benötigen.
7. Unmittelbar vor dem Entfernen der Schutzverpackung führen Sie ein Potentialausgleich durch Berühren des Gerätes mit der Komponente/Baugruppe durch. ACHTUNG: Stellen Sie Sicher, Dass das Gerät nicht unter Spannung steht und beachten Sie alle einschlägigen Sicherheitsvorschriften.
8. Bewegen Sie sich beim Hantieren mit empfindlichen Komponenten/Bausteinen möglichst wenig, da die Reibung Ihrer Kleidung oder der Füße auf dem Bodenbelag elektrostatische Ladung erzeugen kann.

IT Azioni preventive contro le scariche elettrostatiche (esd) sui Dispositivi Sensibili Elettrostaticamente (ESD)

Alcuni semiconduttoripossono essere facilmente danneggiati da elettricità statica (circuiti integrati, alcuni transistor ad effetto di campo e componenti chip semiconduttori). Al fine di ridurre l'incidenza dei componenti danneggiati a causa di elettricità statica si dovrebbero osservare le seguenti precauzioni.

1. Immediatamente prima di maneggiare qualsiasi tipo di componente semiconduttore o di apparecchio che impiega semiconduttori, scaricare le possibili cariche elettrostatiche del proprio corpo toccando un punto sicuramente collegato a terra. In alternativa, indossare un apposito braccialetto antistatico che dovrebbe però essere tolto, per possibili potenziali shock, immediatamente prima di alimentare l'apparecchiatura sotto test.
2. Dopo il disimballo porre l'apparecchiatura equipaggiata con dispositivi ESD su una superficie conduttiva tipo foglio di alluminio.
3. Usare saldatori con punta a massa per saldare o dissaldare dispositivi ESD.
4. Usare solo saldatorl antistatici.
5. Non usare prodotti chimici tipo freon.
6. Rimuovere il dispositivo ESD dal suo imballo protettivo solo immediatamente prima del suo utilizzo.
7. Immediatamente prima della rimozione del materiale protettivo dai piedini del dispositivo ESD di ricambio, toccare con il materiale protettivo il telaio o la massa del circuito stampato dove il dispositivo deve essere inserito.
   ATTENZIONE : Assicurarsi che il circuito o il telaio non sia alimentato, e osservare tutte le altre precauzioni di sicurezza.
8. Limitare gli spostamenti quando si maneggia un dispositivo ESD disimballato.

ES Prevención contra descargas electro-státicas (esd) para los DISPOSITIVOS SENSIBLES electrostáticamente (ESD)

Algunos dispositivos semiconductores, pueden ser dañados fácilmente por la electricidad estática (los circuitos integrados, algunos transistores de Efecto de Campo y los semiconductores "chip"). Las siguientes técnicas pueden ser utilizadas para ayudar a reducir la destrucción de los componentes causada por la electricidad estática.

1. Inmediatamente antes de manejar cualquier componente semiconductor o conjunto equipado con semiconductores, elimine la carga electrostática de su cuerpo tocando alguna toma de tierra conocida o utilizar una correa conductora conectada a una toma de tierra que se pone en la muñeca la cual debe ser quitada (por razones de seguridad) antes de conectar la alimentación al equipo bajo prueba.
2. Después de quitar un conjunto equipado con componentes ESD, coloque el conjunto sobre una superficie conductora, como papel aluminio.
3. Utilizar únicamente soldadores con la punta conectada a la toma de tierra para soldar o desoldar componentes ESD.
4. Utilizar solamente soldadores antiestáticos para quitar componentes.
5. No utilizar productos químicos con gas freón como propelente.
6. No sacar de su embalaje protector el nuevo componente ESD hasta inmediatamente antes de estar todo preparado para montarlo.
7. Inmediatamente antes de quitar los materiales de protección de las patillas del componente, tocar el material protector al chasis del conjunto donde se vaya a montar el componente.
   CUIDADO : Asegúrese de que la alimentación no esté aplicada al chasis o circuito, y cumpla todas las precauciones de seguridad.
8. Maneje sin movimientos bruscos el componente ESD una vez desempaquetado.

EN

HANDLING THE OPTICAL PICKUP

The laser diode used in the optical pickup may break down due to potential differences caused by electricity produced by clothing or the human body, care should therefore be taken to prevent electrostatic discharge whilst repairing the optical pickup.

The following method is recommended.

1) Place a conductive sheet on the work bench (The black sheet used for wrapping repair parts.)
2) Place the set on the conductive sheet so that the chassis is grounded to the sheet.
3) Place your hands on the conductive sheet (doing this gives them the same ground as the sheet.
4) Remove the optical pickup block
5) Perform work on top of the conductive sheet. Be careful not to let your clothes or any other static sources to touch the unit.

* Grounding the Human Body, use an antistatic wrist strap to discharge static electricity from your body.

* Grounding the work place, use either an antistatic matt or a sheet of steel on the area where the optical pickup is to be placed and ground the matt/sheet.

6) Short the short terminal on the PCB, which is inside the Pickup Assembly, before deconnecting the flexible cable for replacing the Pickup. (The short terminal is shorted when the Pickup Assembly is being lifted or moved.)
7) After replacing the Pickup, open the short terminal on the PCB.

FR

MANIPULATION DU BLOC OPTIQUE

La diode laser utilisée dans le bloc optique peut se détériorer à cause d'une différence de potentiel causé par l'électricité produite par les vêtements ou le corps humain, par conséquent des précautions doivent être prise pour éviter les décharges électrostatiques pendant la réparation du bloc optique.

Il est recommandé de suivre la méthode suivante.

1) Placez une feuille conductrice sur le banc de travail (la feuille noire utilisée pour envelopper les pièces détachées).
2) Placez l'ensemble sur la feuille conductrice pour que le châssis soit mis à la masse par la feuille.
3) Mettez vos mains sur la feuille conductrice (en faisant ceci, vous leur donnez la même masse que la feuille)
4) Retirez le bloc optique
5) Travaillez en haut de la feuille conductrice. Prenez soin de ne pas laisser vos vêtements ou autre source statique toucher le bloc optique.

* Mise à la terre du corps humain : utilisez un bracelet antistatique pour décharger l'électricité statique de votre corps.

* Mise à la terre du poste de travail : placez soit un tapis antistatique, soit une feuille d'acier sur le banc de travail où vous poserez le bloc optique après avoir relier le tapis ou la feuille à la masse.

6) Pour remplacer le bloc optique, soudez le court-circuit sur le circuit imprimé qui se trouve sur l'ensemble optique, avant de déconnecter le câble flexible (le court-circuit est soudé lorsque l'ensemble optique est levé ou déplacé).
7) Après le remplacement du bloc optique, dessoudez le court-circuit sur le circuit imprimé.

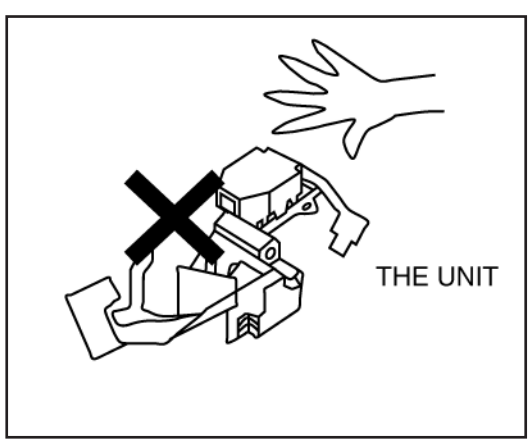


Fig. 1

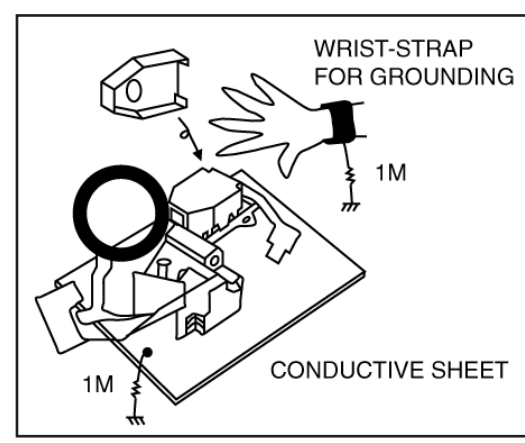


Fig. 2

SERVICE MODE - MODE SERVICE - SERVICE MODE - SERVICE MODE
SERVICE MODE - MODO SERVICIO

EN **Accessing the SERVICE MENU**
- Connect the recorder to the mains supply and a monitor television using a SCART lead.
- Switch **"ON"** the recorder and then press the **"MENU"** key on the RCU.
- The recorders **"MAIN MENU"** will now be displayed on the screen of the television.
- Next simultaneously press the **"STOP", "PAUSE"** and **"RECORD"** keys on the front panel depressed until the Service Menu is displayed on the screen of the television.

DE **Aktivierung des SERVICE-MENÜS**
- Verbinden Sie den Recorder mit der Netzspannung und mittels eines SCART-Kabels einem TV-Gerät.
- Schalten Sie den Recorder mit **„ON"** ein und drücken auf der Fernbedienung die **„MENU"**-Taste.
- Auf dem Bildschirm wird das Hauptmenü des Recorder angezeigt.
- Drücken Sie am Bedienfeld des Recorders gleichzeitig die Tasten **„STOP", „PAUSE"** und **„RECORD"** bis auf dem Bildschirm das Service-Menü angezeigt wird.

ES **Acceso al modo servicio.**
- Conectar el aparato a la red. Un menú aparecerá.
- Seleccionar el menú principal pulsando la tecla **"MENU"** del telemando
- Pulsar a la vez las teclas **" STOP "**, **"PAUSE "** y **" RECORD "**.
- Mantener las 3 teclas pulsadas hasta que aparezca el menú principal del Modo Servicio

FR **Accès au mode service.**
- Mettre l' appareil sous tension. Le menu principal apparait.
- Sélectionner le menu principal en appuyant sur la touche **"MENU"** de la télécommande
- Appuyer sur les touches **" STOP ", "PAUSE "** et **" RECORD ".**
- Maintenir enfoncées les touches ensembles jusqu'a l'apparition du menu principal du mode service

IT **Accesso al Service Mode**
- Collegare l'apparecchio alla rete
- Premere il tasto **"MENU"** del telecomando per far apparire il Menu principale.
- Premere e mantenere premuti i tasti **"STOP"** , **"PAUSA"** e **"RECORD"** fino all'apparizione del menu principale del service Mode.

Service Menu

			VERSION
I2C BUS I	OK	ST20	A2LEU_S4.01
I2C BUS II	OK	ST9	N2_S3.10
USB COM	OK	KDB	S2.00
HDD Status	OK	Bootloader	C3-S2.00
		Gob Version	0x5
HDD Error	0	TVM50x	0x3a20 0x0107

FORMAT / INITIALIZATION - FORMATAGE / INITIALISATION
FORMATIERUNG / NEUINITIALISIERUNG - FORMATTAZIONE/INIZIALIZZAZIONE
FORMATEO / INICIALIZACIÓN

EN

1. To ERASE and RE-FORMAT the hard drive,
- Switch **"ON"** the recorder and wait until **"MENU"** is displayed in the front panel display.
- Simultaneously press the **"AV"** and **"STOP"** keys on the front panel until the display changes to read **"FORMAT"** and then release the keys.
- The hard drive will now be re-formatted and all video recordings, MP3 audio and JPEG picture files will be erased.
- When the hard drive has been re-formatted the display will flash **"FORMAT OK"** for a split second.
- To complete the process, the recorder will switch itself "OFF" and then back **"ON"** again.

2. To RE_INITIALIZE the recorder to factory defaults settings,
- Switch "ON" the recorder and wait until "MENU" is displayed in the front panel display.
- Simultaneously press the **"STOP"**, **"PAUSE"** and **"STANDBY"** keys on the front panel until the display changes to read "INIT" and then release the keys.
- When the recorder has been re-initialized the display will flash **"INIT OK"** for a split second.
- Now all the previous setting will be reset to the original factory default settings.

DE

1. Formatierung der Festplatte
- Schalten Sie das Gerät ein; das normale Hauptmenü erscheint.
- Drücken Sie am Gerät gleichzeitig die Tasten AV und STOP bis auf dem Geräte-Display **" FORMAT "** erscheint
- Die Formatierung der Festplatte benötigt einige Zeit. Wenn die Formatierung beendet ist, erscheint kurz **" FORMAT OK "**, das Gerät schaltet sich selbstständig kurz aus und dann wieder ein.
- ACHTUNG: Bei der Formatierung der Festplatte werden alle Video-, JPEG- und MP3-Dateien gelöscht!

2. Wiederherstellen der Fabrikeinstellungen (Neuinitialisierung)
Schalten Sie das Gerät ein; das normale Hauptmenü erscheint.
- Drücken Sie am Gerät gleichzeitig die Tasten **STOP, PAUSE** und **STANDBY / ON** bis auf dem Geräte-Display **" INIT "** erscheint.
- Die Neuinitialisierung des Gerätes benötigt einige Zeit.
- Wenn die Neuinitialisierung abgeschlossen ist, erscheint **" INIT OK "**.
- Alle vorherigen Einstellungen sind nun auf die Fabrikeinstellungen zurückgesetzt.

ES

1. Instrucciones para re-formatear el disco duro.
- Conectar el aparato a la red. Aparecerá el menú.
- Mantener pulsadas las teclas AV y STOP en el panel frontal hasta que aparezca en el display, el mensaje " FORMAT "
- El formateo se realiza en unos pocos segundos. Cuando se haya completado, se mostrará el mensaje " FORMAT OK ". A continuación, él solo se apagará y encenderá de nuevo.
- Todos los ficheros de MP3, JPEG y títulos de vídeo han sido borrados.

FR

1.**Formatage du disque dur.**
-Mettre l' appareil sous tension. Le menu principal apparait.
-Appuyer et maintenir enfoncées les touches **"AV"** et **"STOP"** de la face avant jusqu'a l'apparition du message **" FORMAT "** dans l'afficheur
-le formatage s'effectue pendant un temp relativement court .
l'orsqu'il est complet le message **" FORMAT OK "** s'affiche.
-L'appareil commute ON et OFF sequentiellement. Les fichiers MP3 et JPEG et les titres video sont effacés.

2.**Initialisation des valeurs par déffaut.**
Mettre l' appareil sous tension. Le menu principal apparait.
-Appuyer et maintenir enfoncées les touches **"STOP", "PAUSE"** et **"STANDBY" / "ON"** du clavier de la face avant jusqu'a l'apparition du message **" INIT "** dans l'afficheur.
-L'orsque l'initialisation est complète le message **" INIT OK "** s'affiche. Les réglages son initialisés aux valeurs usines.

IT

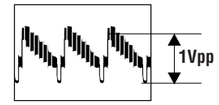
1. Formattazione del disco fisso.
- Collegare l'apparecchio alla rete e far visualizzare il menu principale.
- Premere e mantenere premuti i tasti "AV" e "STOP" del frontale fino all'apparizione del messaggio "FORMAT" sul display.
- La formattazione viene eseguita in un tempo relativamente breve e, alla fine di questa fasse, verrà visualizzato il messaggio "FORMAT OK" sul display.
-L'apparecchio commuta ON e OFF in sequenza. I titoli MP3, JPEG e video sono cancellati.

2.Inizializzazione dei valori di default
-Collegare l'apparecchio alla rete e far visualizzare il menu principale.
- Premere e mantenere premuti i tasti "STOP" , "PAUSA" e "STANDBY/ON"del frontale fino all'apparizione del messaggio "INIT" sul display.
- Alla fine dell'operazione, verrà visualizzato il messaggio "INIT OK" sul display.
Le regolazioni sono inizializzate ai valori di "DEFAULT".

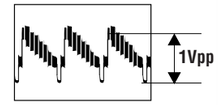
2.Inicialización de los ajustes a los valores por defecto.
Conectar el aparato a la red. Aparecerá el menú.
- Mantener pulsadas las teclas **STOP, PAUSE** y **STANDBY / ON** en el panel frontal hasta que salga el mensaje **" INIT "** en el display.
- En unos pocos segundos se habrán restaurado los ajustes.
- Cuando se ha completado, se verá el mensaje **" INIT OK "**.
- Los ajustes habrán sido inicializados a los valores por defecto de fábrica.

CHECKS AND MEASUREMENTS - CONTRÔLES ET VERIFICATIONS - CONTROLLI E VERIFICHE - AJUSTES Y COMBROBACIONES

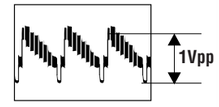
Hard disk Video Record / Playback - Contrôle Vidéo Enregistrement / Lecture du Disque dur - Videoaufnahme/-Wiedergabe von Festplatte Controllo Registrazione/Riproduzione su Hard Disc - Grabacion de Video / Lectura del disco duro

N°	Item	Mode & Signal	Test equipment	Test point	Adjustment point	Description
A	CVBS RECORD / PLAY level	REC / PB Select AV1 colour bar test pattern 20 BW125 (Top SCART) 1Vpp record then play enregistrer puis lecture	Oscilloscope	AV1 pin19 BW125 (Top SCART)	None	Check for CVBS= 1Vpp ± 0.1Vpp 

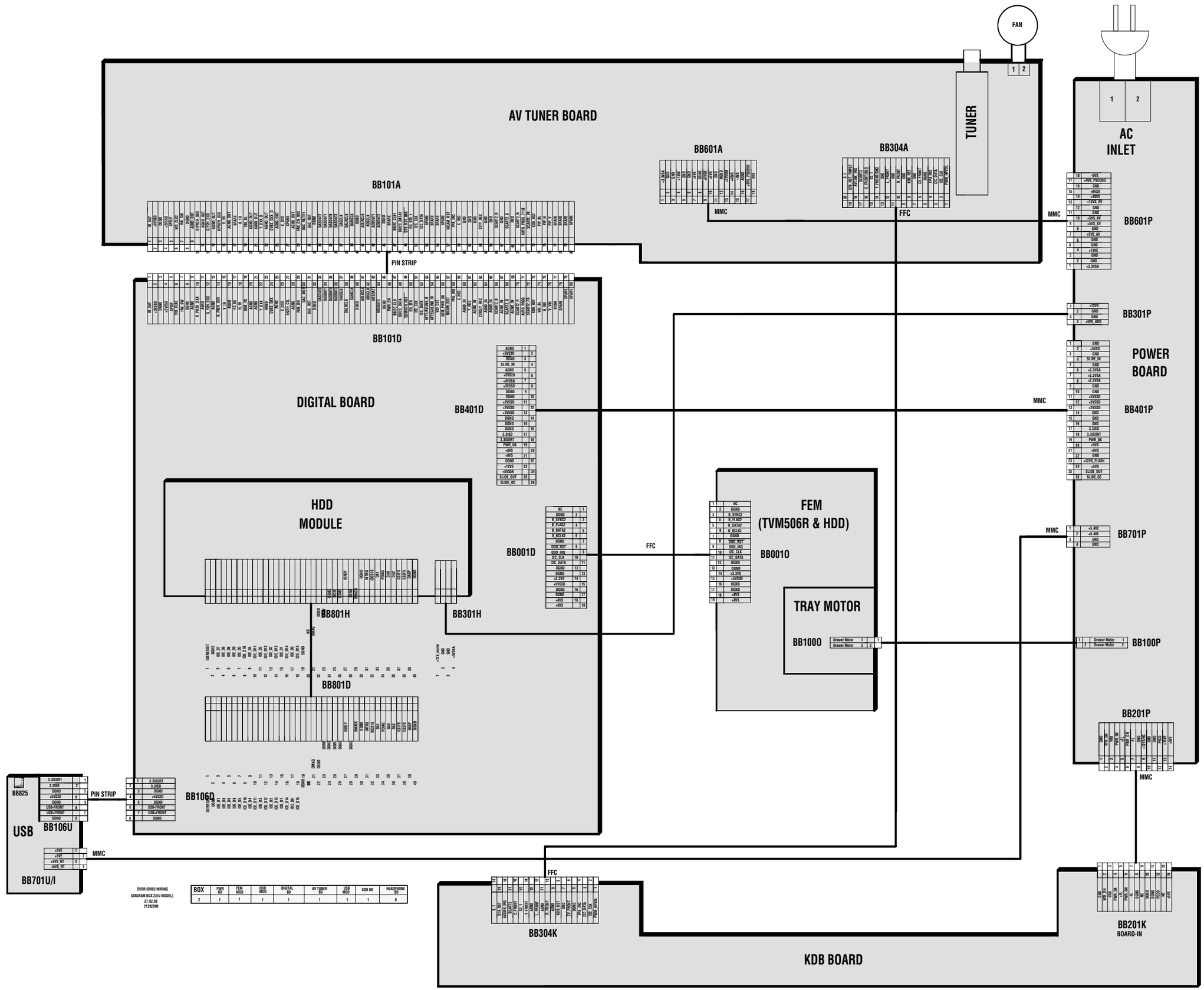
Video Playback Output Signal check - (Disk) Controle Video Lecture Video - Überprüfung Videowiedergabepegel - Controllo uscita Riproduzione Video Nivel de salida de reproduccion de video

N°	Item	Mode & Signal	Test equipment	Test point	Adjustment point	Description
B	CVBS PB level (DVD)	Select AV1 PAL / SECAM colour bar test pattern	Oscilloscope (DVD disk test)	AV1 pin19 BW125 (Top SCART)	None	Check for CVBS= 1Vpp ± 0.1Vpp BURST = 286mVpp ± 28,6 mVpp 

Video -E to E (AV input/AV output) - Video EE (AV . Entree / Sortie AV) - Video EE (AV-Eingang/AV-Ausgang) - Video -EE (AV input/AV output - Video EE (entrada / salida AV)

N°	Item	Mode & Signal	Test equipment	Test point	Adjustment point	Description
C	CVBS EE level	Select AV1 PAL / SECAM colour bar test pattern 20 BW125 (Top SCART) 1Vpp	Oscilloscope	AV1 pin19 BW125 (Top SCART)	None	Check for CVBS= 1Vpp ± 0.1Vpp 

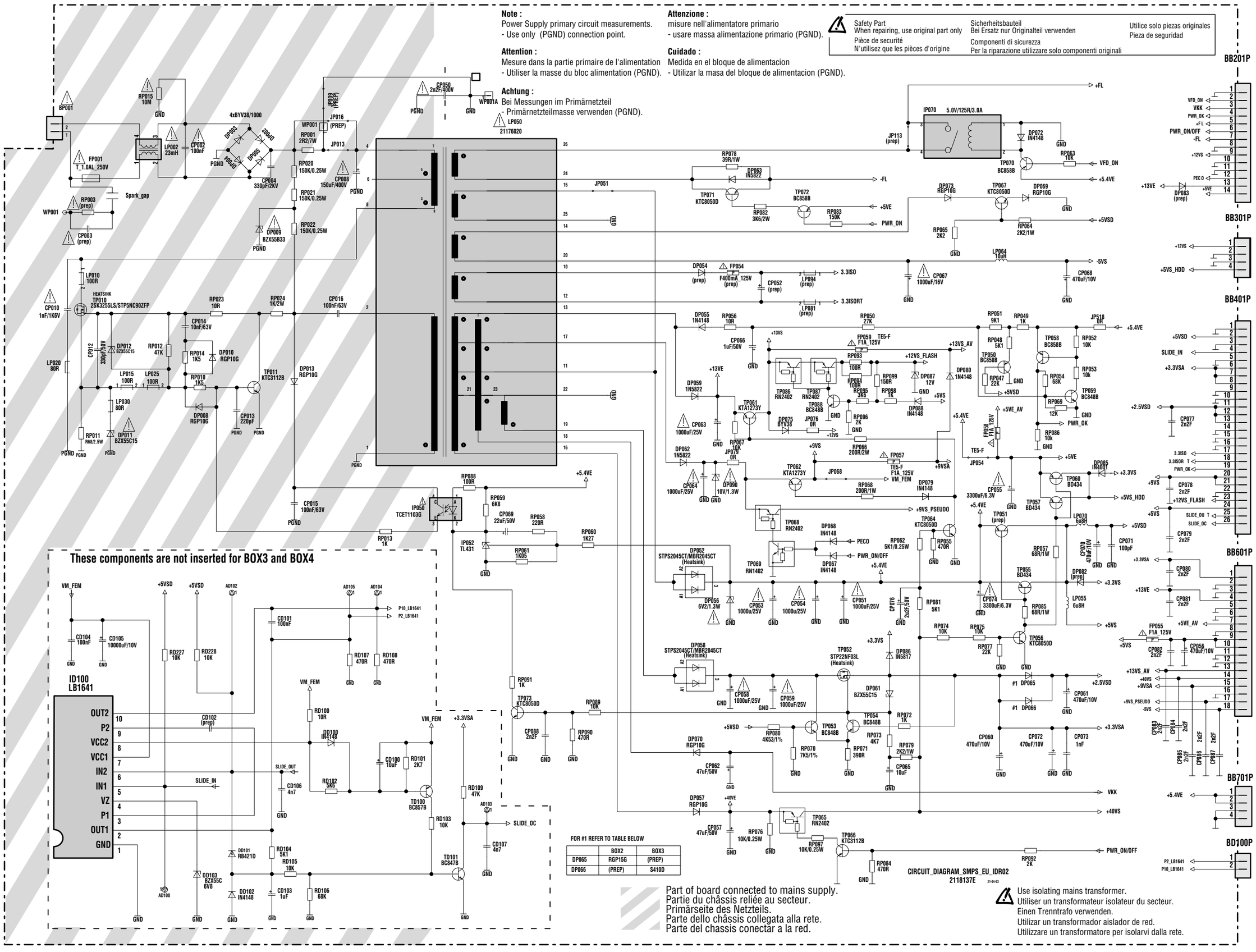
WIRING DIAGRAM - SCHEMA D'INTERCONNEXIONS - VERDRAHTUNGSPLAN - DIAGRAMMA DELLE INTERCONNESSIONI - ESQUEMA DE INTERCONEXIONES



BOX	PWR BD	FEM MOD	HDD MOD	DIGITAL BD	AV TUNER BD	USB MOD	KDB BD	HEADPHONE BD
2	1	1	1	1	1	1	1	0

POWER SUPPLY INTERFACE - INTERFACE ALIMENTATION - NETZTEIL - ALIMENTAZIONE - INTERFAZ ALIMENTACIÓN

SCHEMATIC DIAGRAM - SCHEMA DE PRINCIPE - SCHALTBILD - SCHEMA - ESQUEMA



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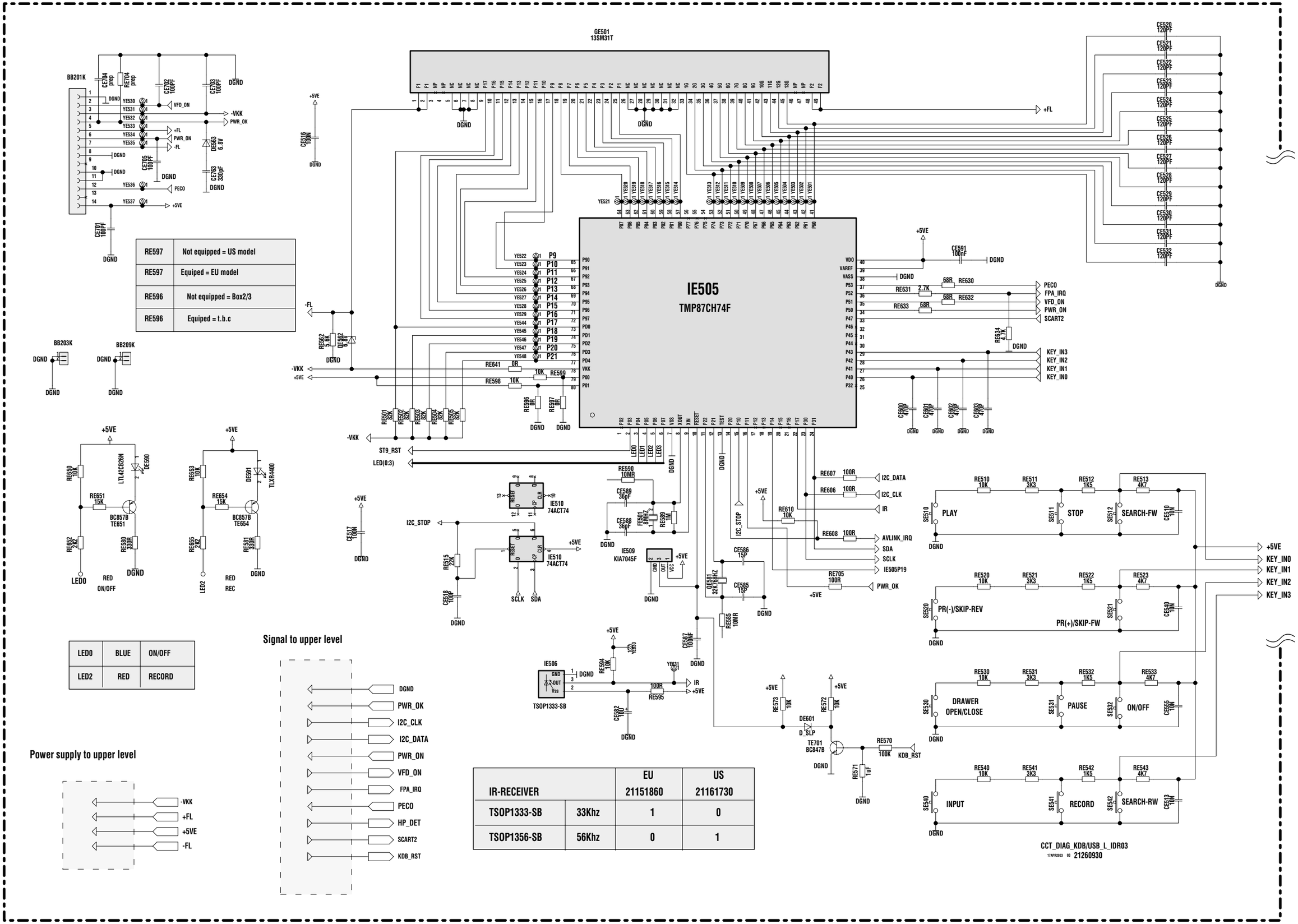
KEYBOARD WITH DISPLAY - PLATINE DE COMMANDES AVEC AFFICHEUR - BEDIENTEIL MIT DISPLAY - TASTIERA CON DISPLAY - PLATINA MANDOS CON VISUALIZADOR

SCHEMATIC DIAGRAM - SCHEMA DE PRINCIPE - SCHALTBILD - SCHEMA - ESQUEMA



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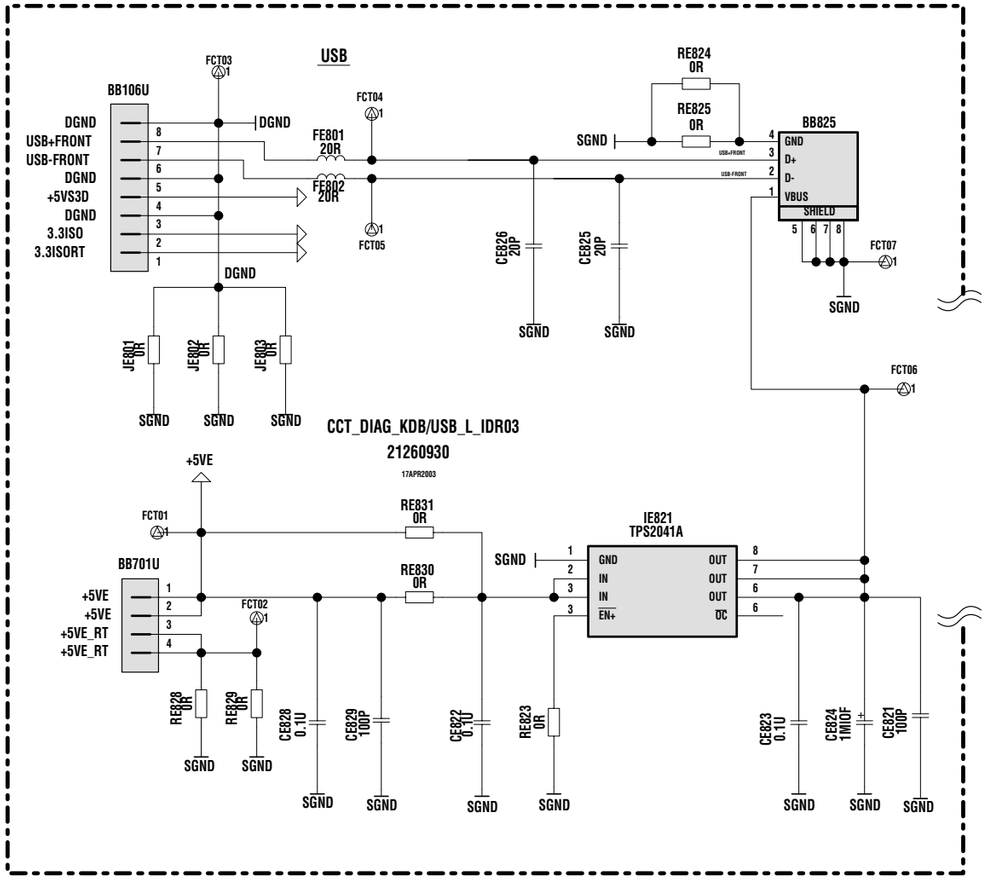
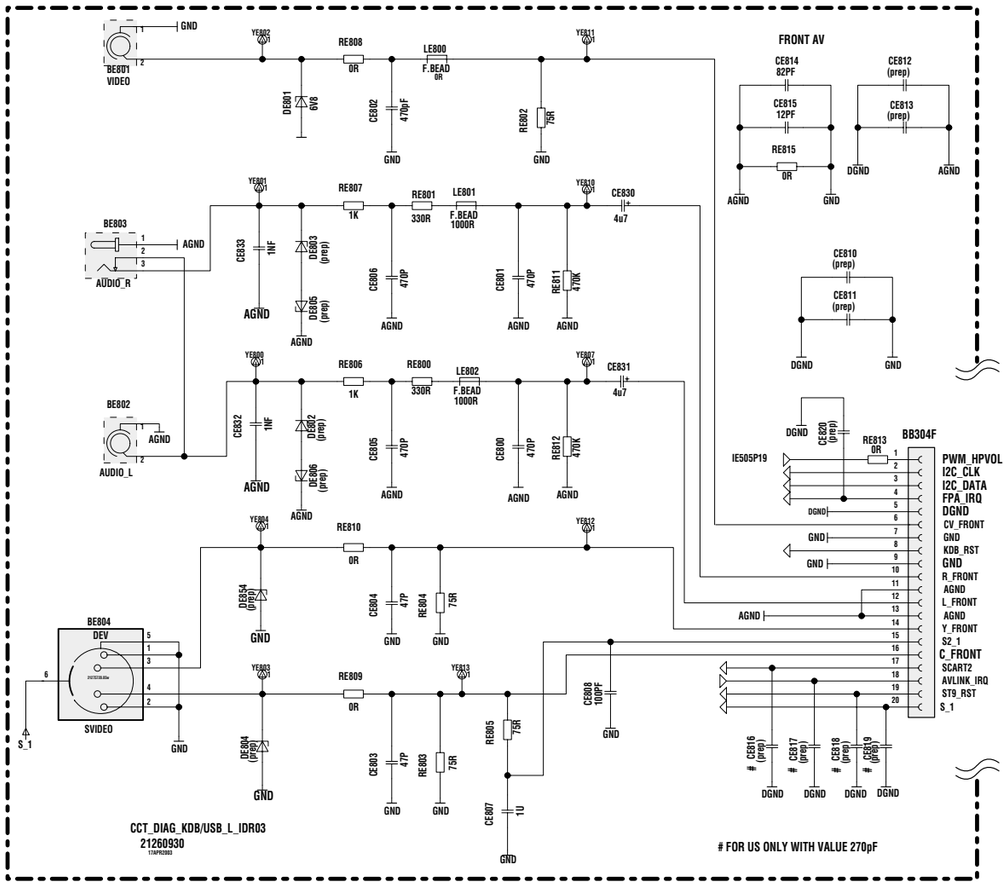
USB MODULE - MODULE USB - USB MODUL - MODULO USB - MÒDULO USB

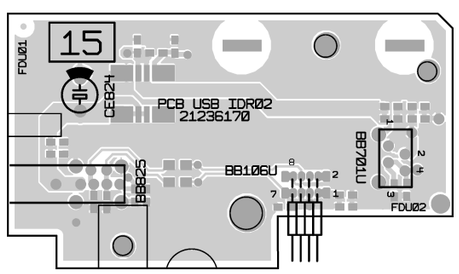


INPUT/OUTPUT - ENTREES/SORTIES - EINGÄNGE/AUSGÄNGE INGRESSO/USCITA - ENTRADA/SALIDA

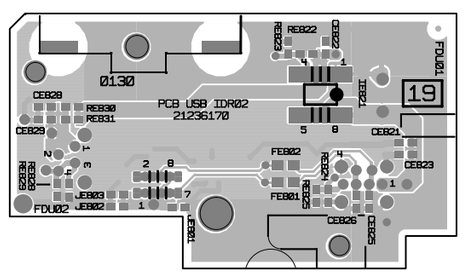


USB MODULE - MODULE USB - USB MODUL - MODULO USB - MÓDULO USB

COMPONENT SIDE - COTÉ COMPOSANTS - BESTÜCKUNGSSEITE - LATO COMPONENTI - LADO COMPONENTES



SOLDER SIDE - COTÉ CUIVRE - LÖTSEITE - LATO SALDATURE - LADO DEL COBRE



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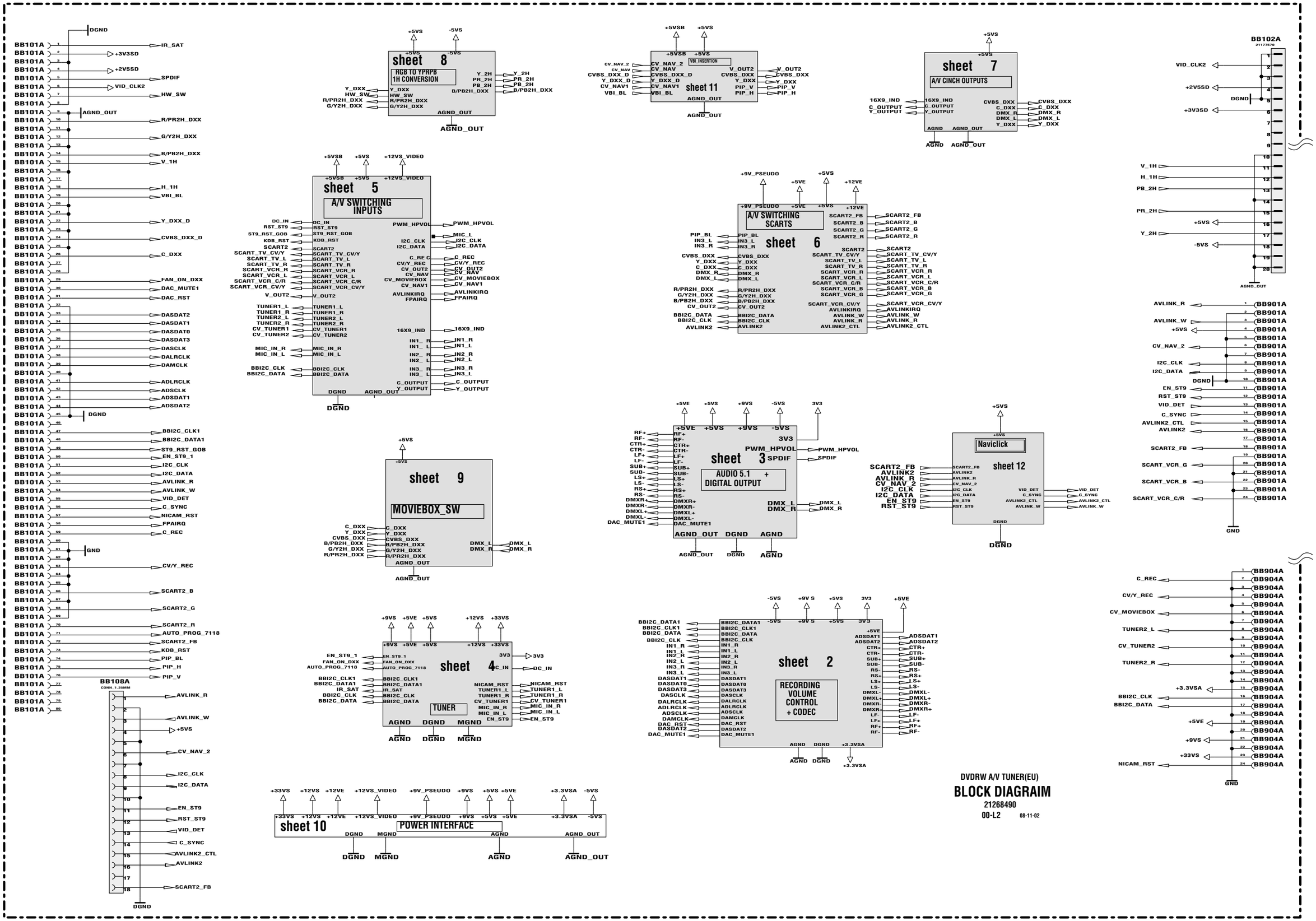
SCART INTERFACE / TUNER SCHEMATIC DIAGRAM - SCHEMA DE L'INTERFACE PERITELEVISION / TUNER - SCHALTBILD EUROPA NORMBUCHSE / TUNER SCHEMA DELLA PRESA PERITEL / SINTONIZZATORE - ESQUEMA INTERFAZ EUROTOMA / SINTONIZADOR

(AV TUNER BOARD 1/11)



DVDRW A/V TUNER(EU)

BLOCK DIAGRAIM

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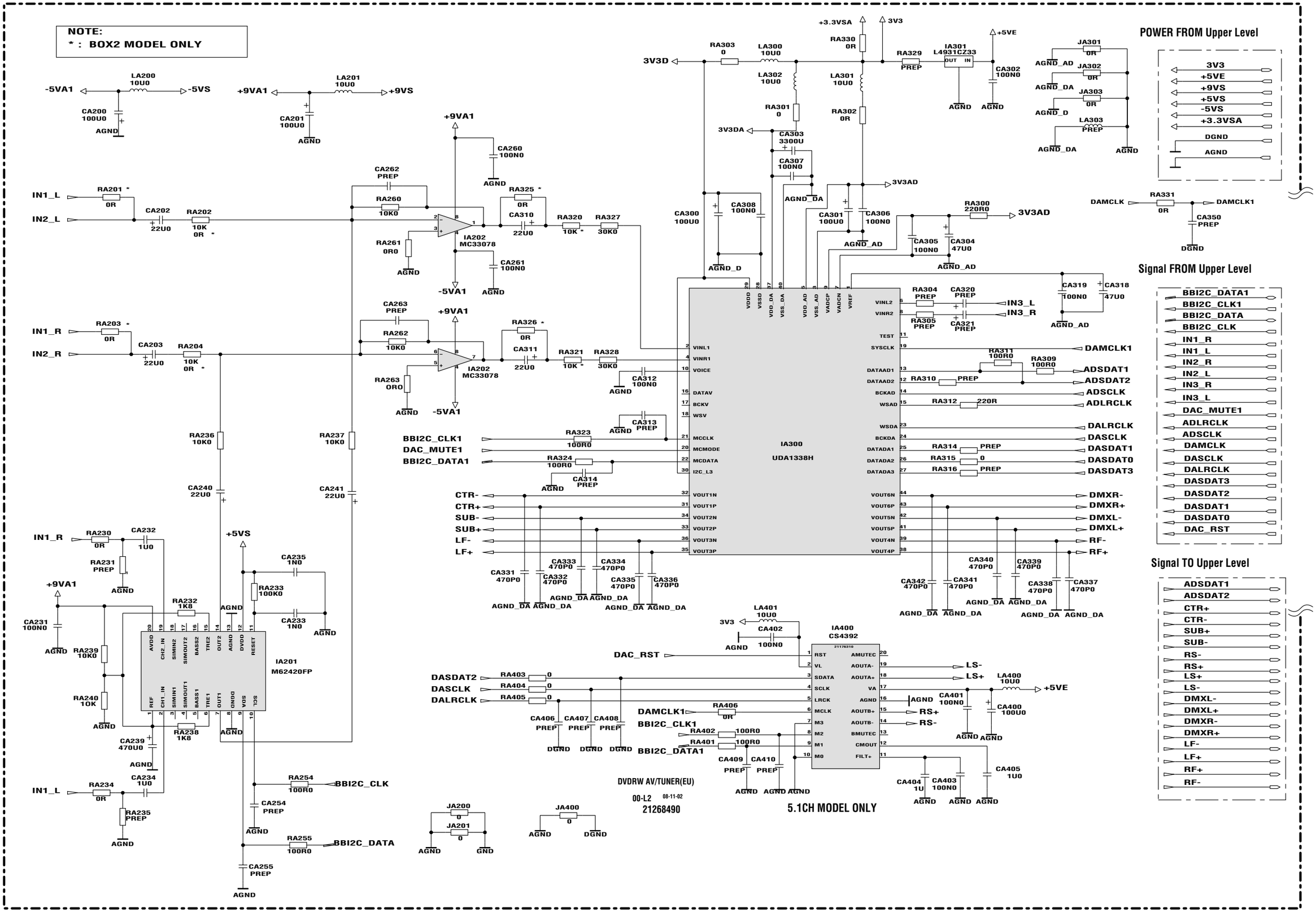
SCART INTERFACE / TUNER SCHEMATIC DIAGRAM - SCHEMA DE L'INTERFACE PERITELEVISION / TUNER - SCHALTBILD EUROPA NORMBUCHSE / TUNER SCHEMA DELLA PRESA PERITEL / SINTONIZZATORE - ESQUEMA INTERFAZ EUROTOMA / SINTONIZADOR

(AV TUNER BOARD 2/11)



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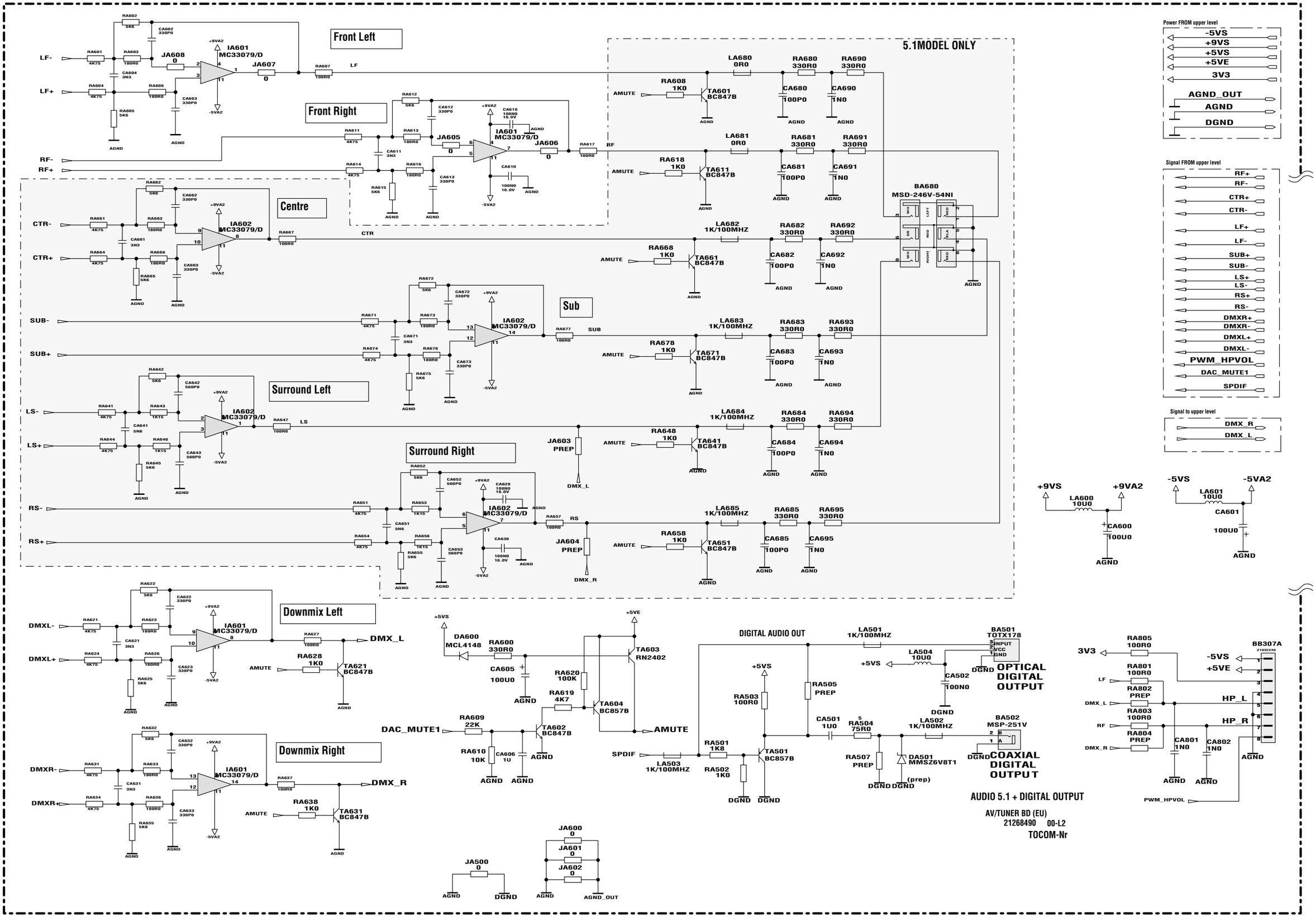
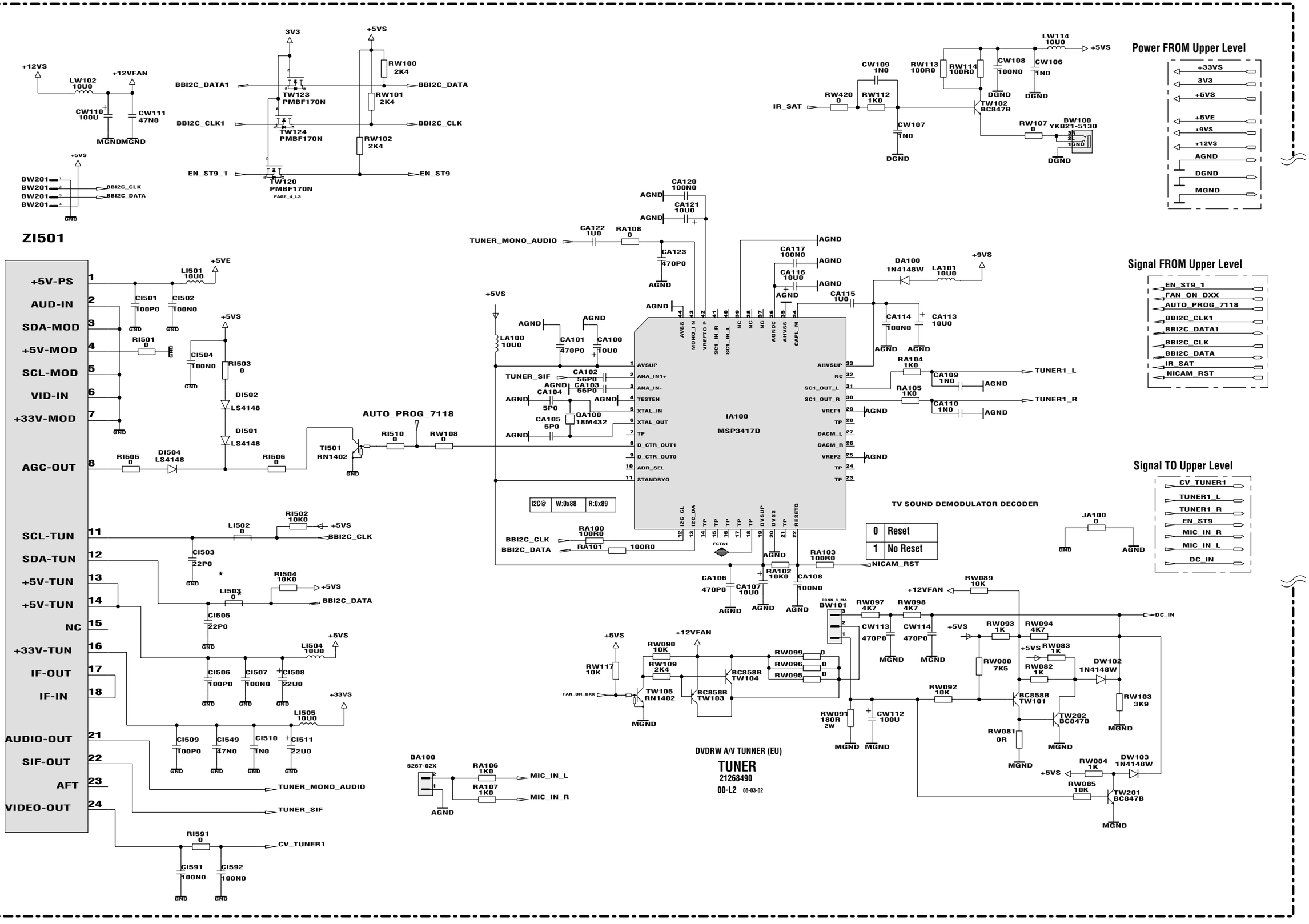
SCART INTERFACE / TUNER SCHEMATIC DIAGRAM - SCHEMA DE L'INTERFACE PERITELEVISION / TUNER - SCHALTBILD EUROPA NORMBUCHSE / TUNER SCHEMA DELLA PRESA PERITEL / SINTONIZZATORE - ESQUEMA INTERFAZ EUROTOMA / SINTONIZADOR

(AV TUNER BOARD 3/11)



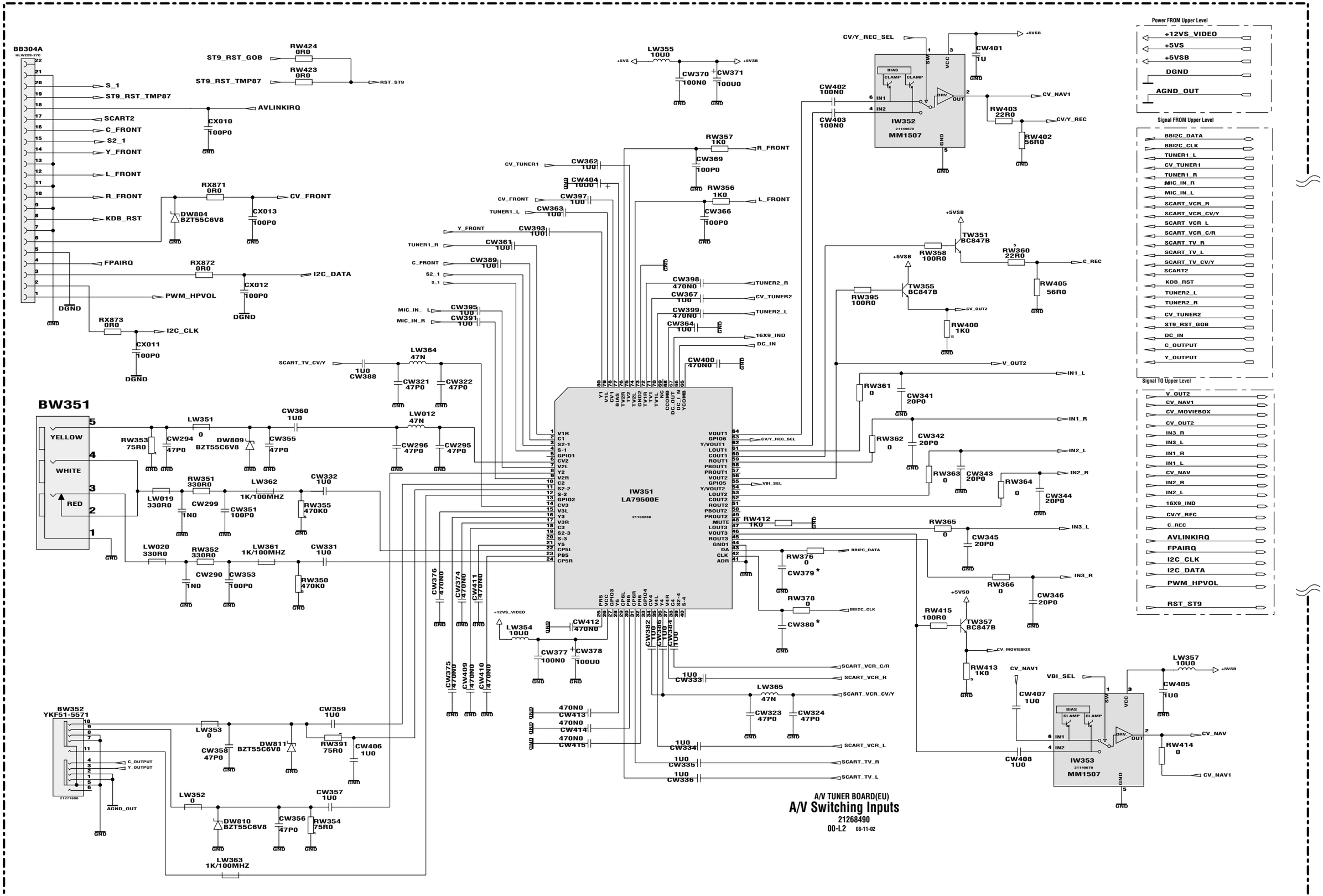
SCART INTERFACE / TUNER SCHEMATIC DIAGRAM - SCHEMA DE L'INTERFACE PERITELEVISION / TUNER - SCHALTBILD EUROPA NORMBUCHSE / TUNER SCHEMA DELLA PRESA PERITEL / SINTONIZZATORE - ESQUEMA INTERFAZ EUROTOMA / SINTONIZADOR

(AV TUNER BOARD 4/11)



SCART INTERFACE / TUNER SCHEMATIC DIAGRAM - SCHEMA DE L'INTERFACE PERITELEVISION / TUNER - SCHALTBILD EUROPA NORMBUCHSE / TUNER SCHEMA DELLA PRESA PERITEL / SINTONIZZATORE - ESQUEMA INTERFAZ EUROTOMA / SINTONIZADOR

(AV TUNER BOARD 5/11)



A/V TUNER BOARD(EU)

A/V Switching Inputs

21268490

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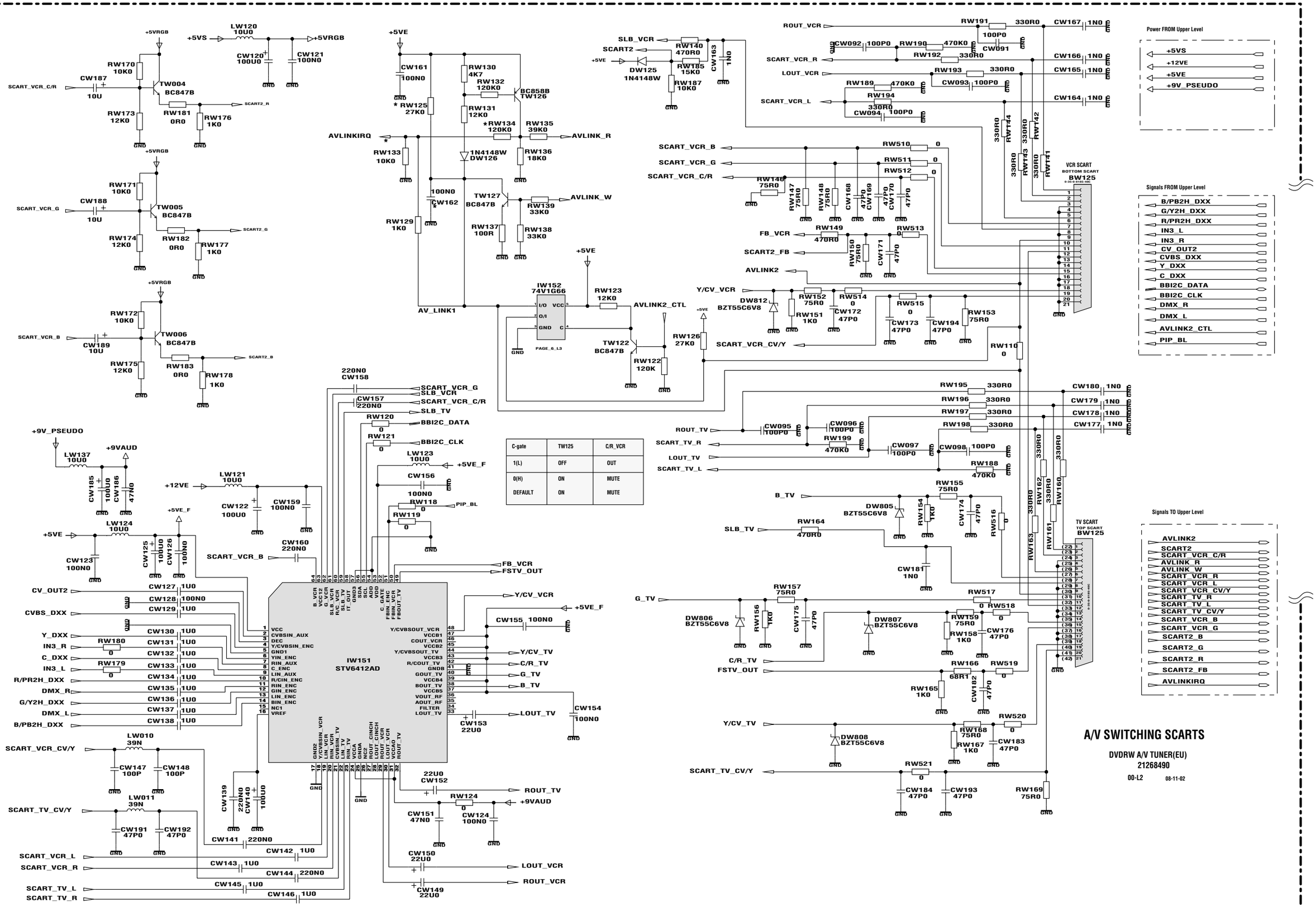
SCART INTERFACE / TUNER SCHEMATIC DIAGRAM - SCHEMA DE L'INTERFACE PERITELEVISION / TUNER - SCHALTBILD EUROPA NORMBUCHSE / TUNER SCHEMA DELLA PRESA PERITEL / SINTONIZZATORE - ESQUEMA INTERFAZ EUROTOMA / SINTONIZADOR

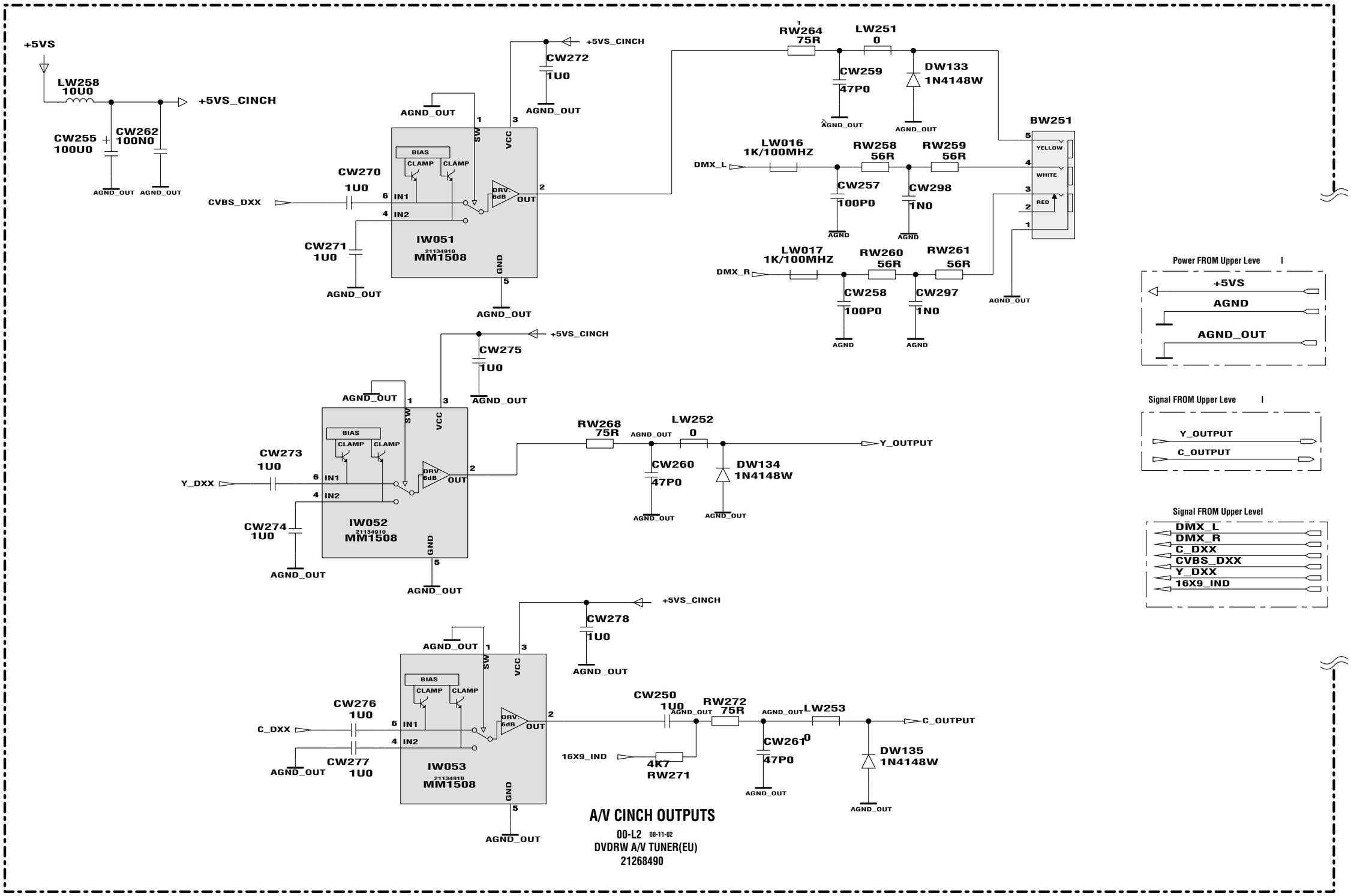
(AV TUNER BOARD 6/11)



C-gate	TW125	C/R_VCR
1(L)	OFF	OUT
0(H)	ON	MUTE
DEFAULT	ON	MUTE

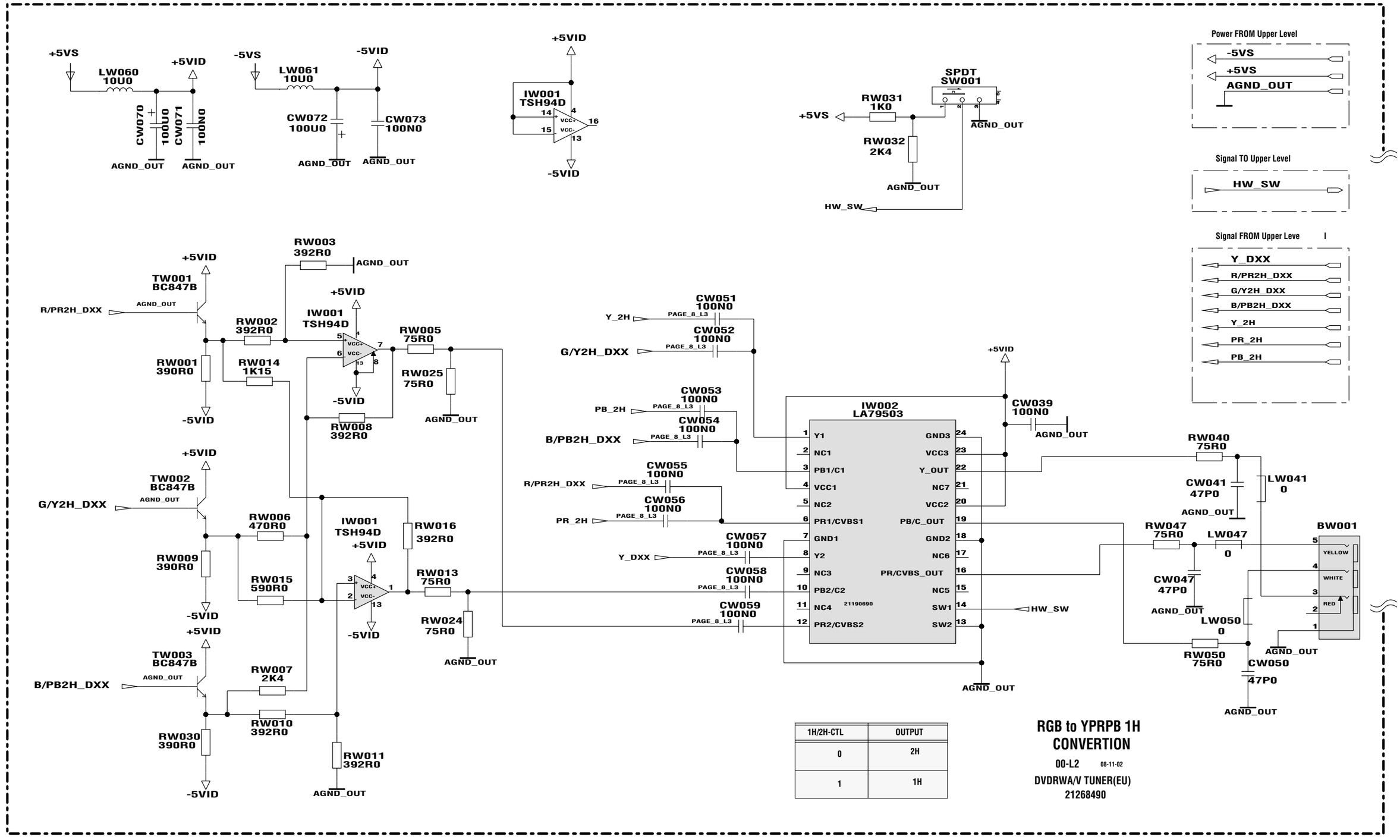
SCART INTERFACE / TUNER SCHEMATIC DIAGRAM - SCHEMA DE L'INTERFACE PERITELEVISION / TUNER - SCHALTBILD EUROPA NORMBUCHSE / TUNER SCHEMA DELLA PRESA PERITEL / SINTONIZZATORE - ESQUEMA INTERFAZ EUROTOMA / SINTONIZADOR

(AV TUNER BOARD 7/11)



SCART INTERFACE / TUNER SCHEMATIC DIAGRAM - SCHEMA DE L'INTERFACE PERITELEVISION / TUNER - SCHALTBILD EUROPA NORMBUCHSE / TUNER SCHEMA DELLA PRESA PERITEL / SINTONIZZATORE - ESQUEMA INTERFAZ EUROTOMA / SINTONIZADOR

(AV TUNER BOARD 8/11)



1H/2H-CTL	OUTPUT
0	2H
1	1H

RGB to YPRPB 1H CONVERTION

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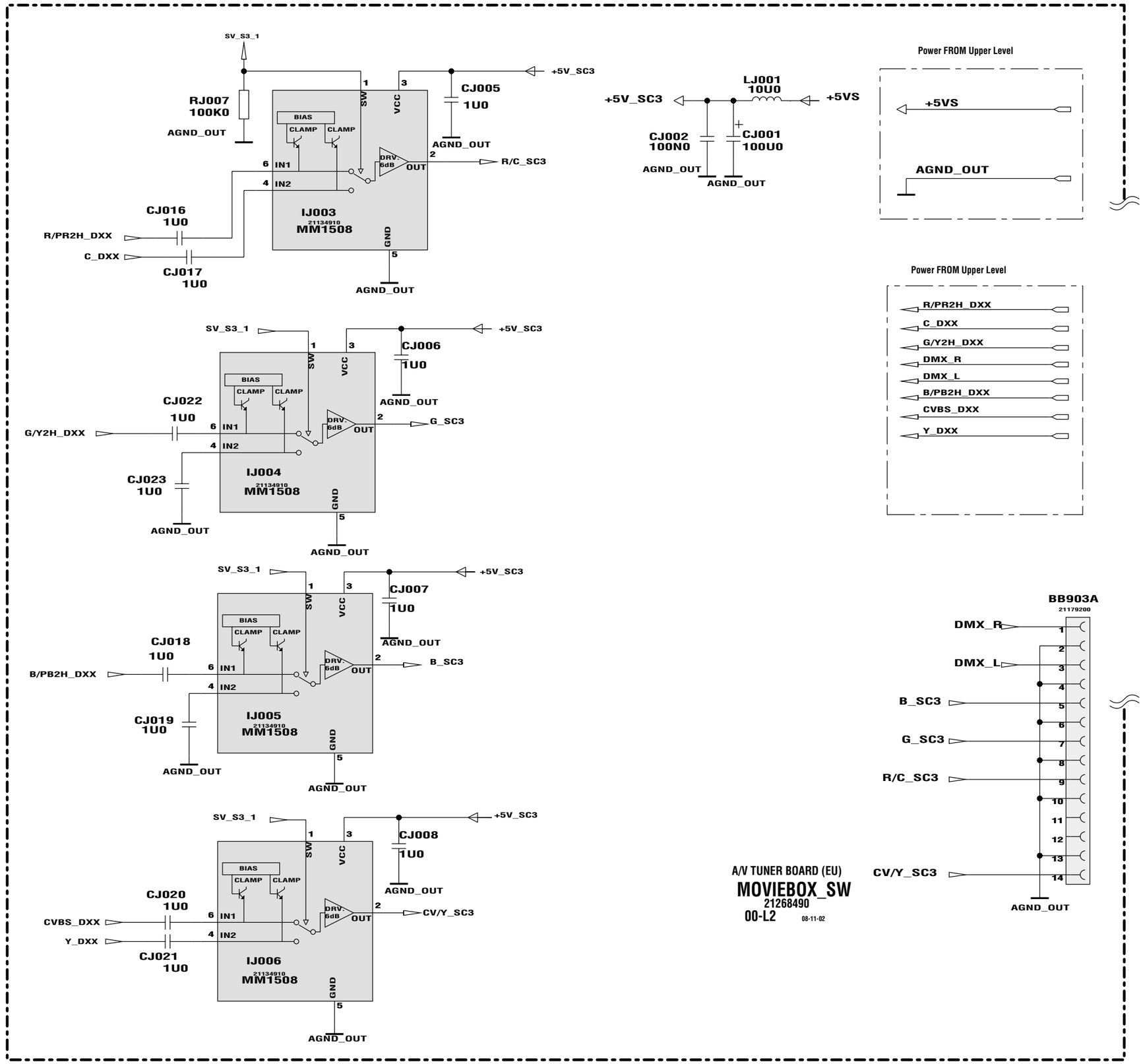
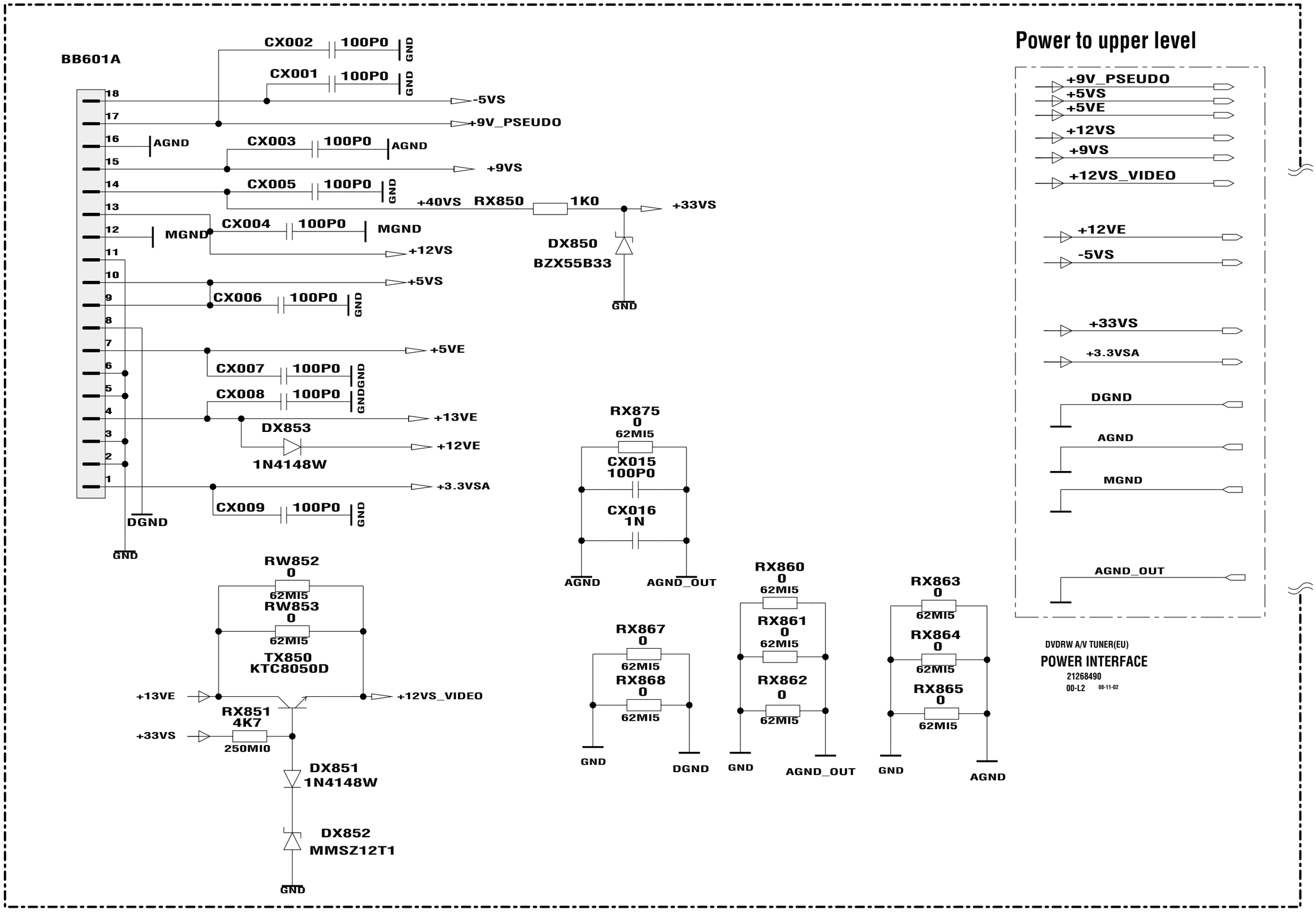
(AV TUNER BOARD 9/11)



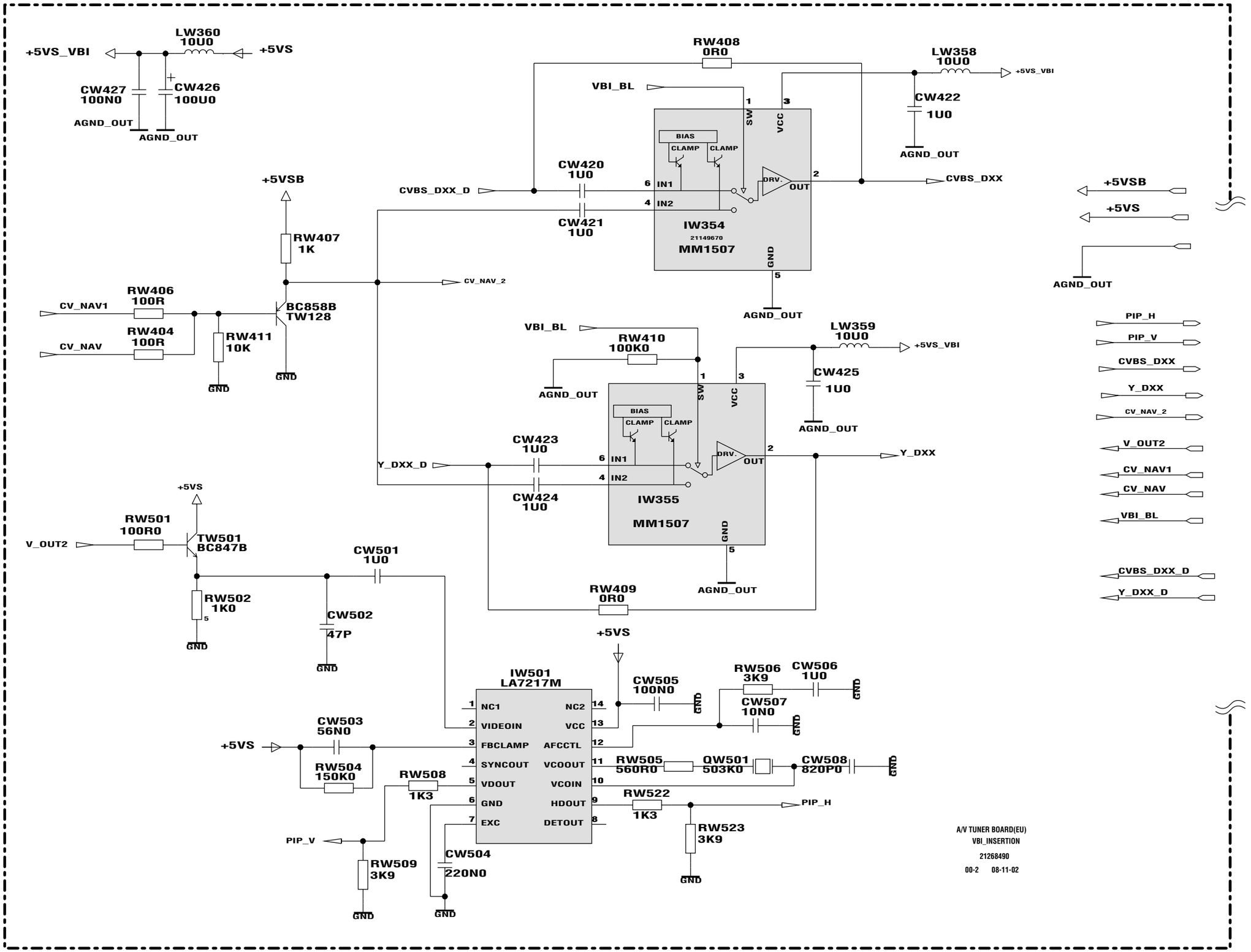
SCART INTERFACE / TUNER SCHEMATIC DIAGRAM - SCHEMA DE L'INTERFACE PERITELEVISION / TUNER - SCHALTBILD EUROPA NORMBUCHSE / TUNER
SCHEMA DELLA PRESA PERITEL / SINTONIZZATORE - ESQUEMA INTERFAZ EUROTOMA / SINTONIZADOR

(AV TUNER BOARD 10/11)



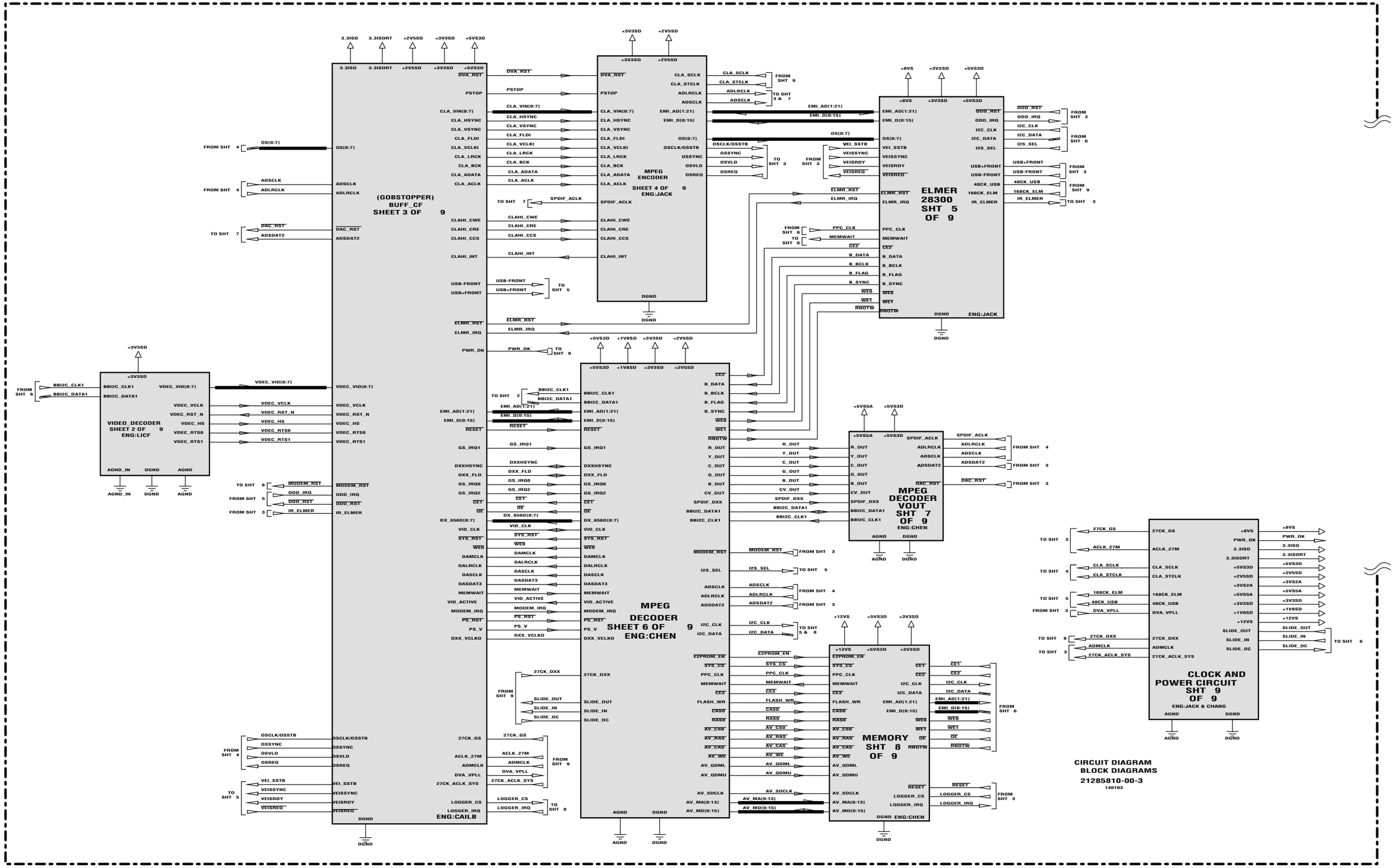
SCART INTERFACE / TUNER SCHEMATIC DIAGRAM - SCHEMA DE L'INTERFACE PERITELEVISION / TUNER - SCHALTBILD EUROPA NORMBUCHSE / TUNER SCHEMA DELLA PRESA PERITEL / SINTONIZZATORE - ESQUEMA INTERFAZ EUROTOMA / SINTONIZADOR

(AV TUNER BOARD 11/11)



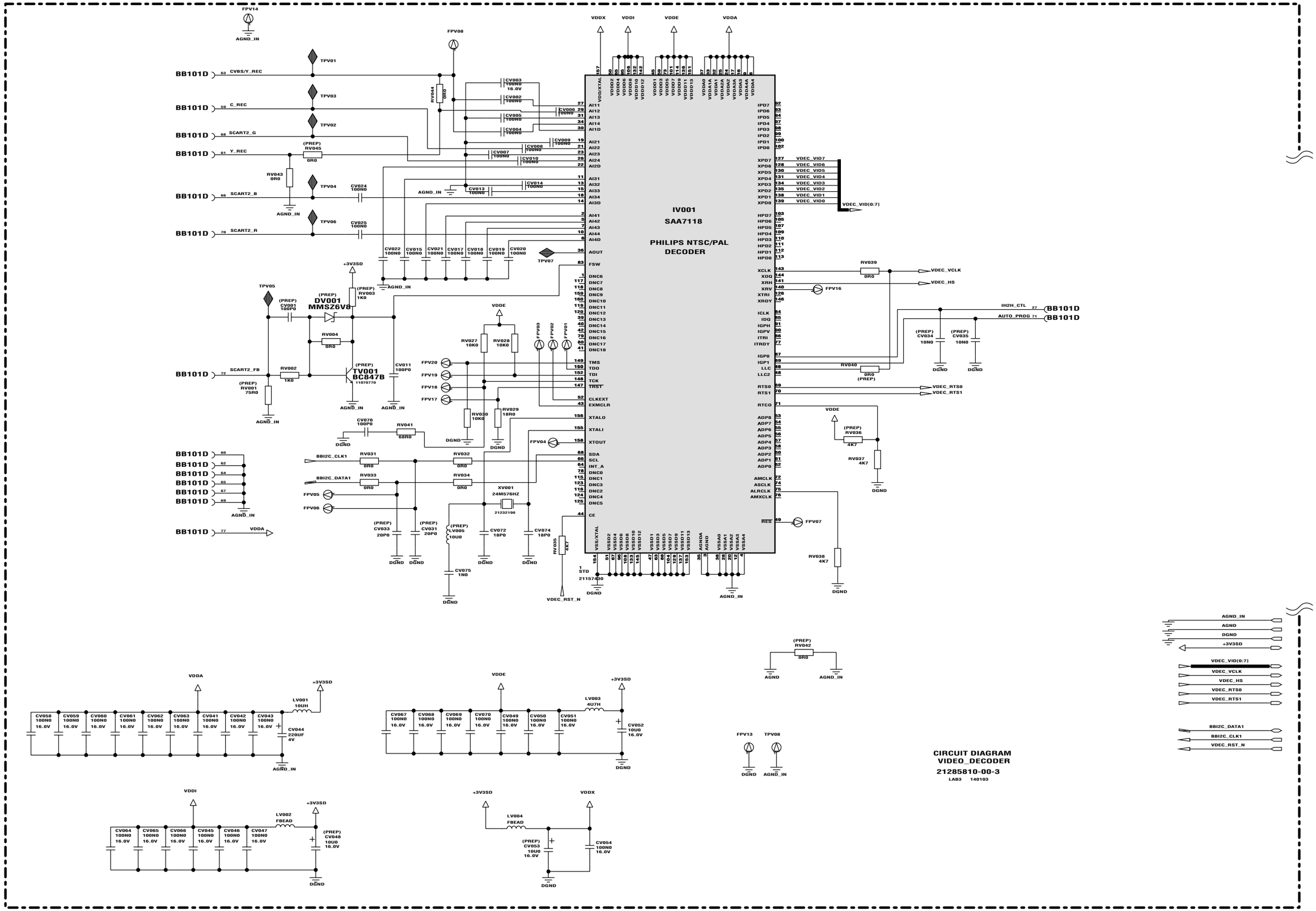
MAIN SCHEMATIC DIAGRAM - SCHEMA DE LA PLATINE PRINCIPALE - SCHALTBILD HAUPTPLATINE - SCHEMA DELLA PIASTRA PRINCIPALE- ESQUEMA DE LA PLATINA PRINCIPAL

(DIGITAL BOARD 1/9)



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

(DIGITAL BOARD 2/9)



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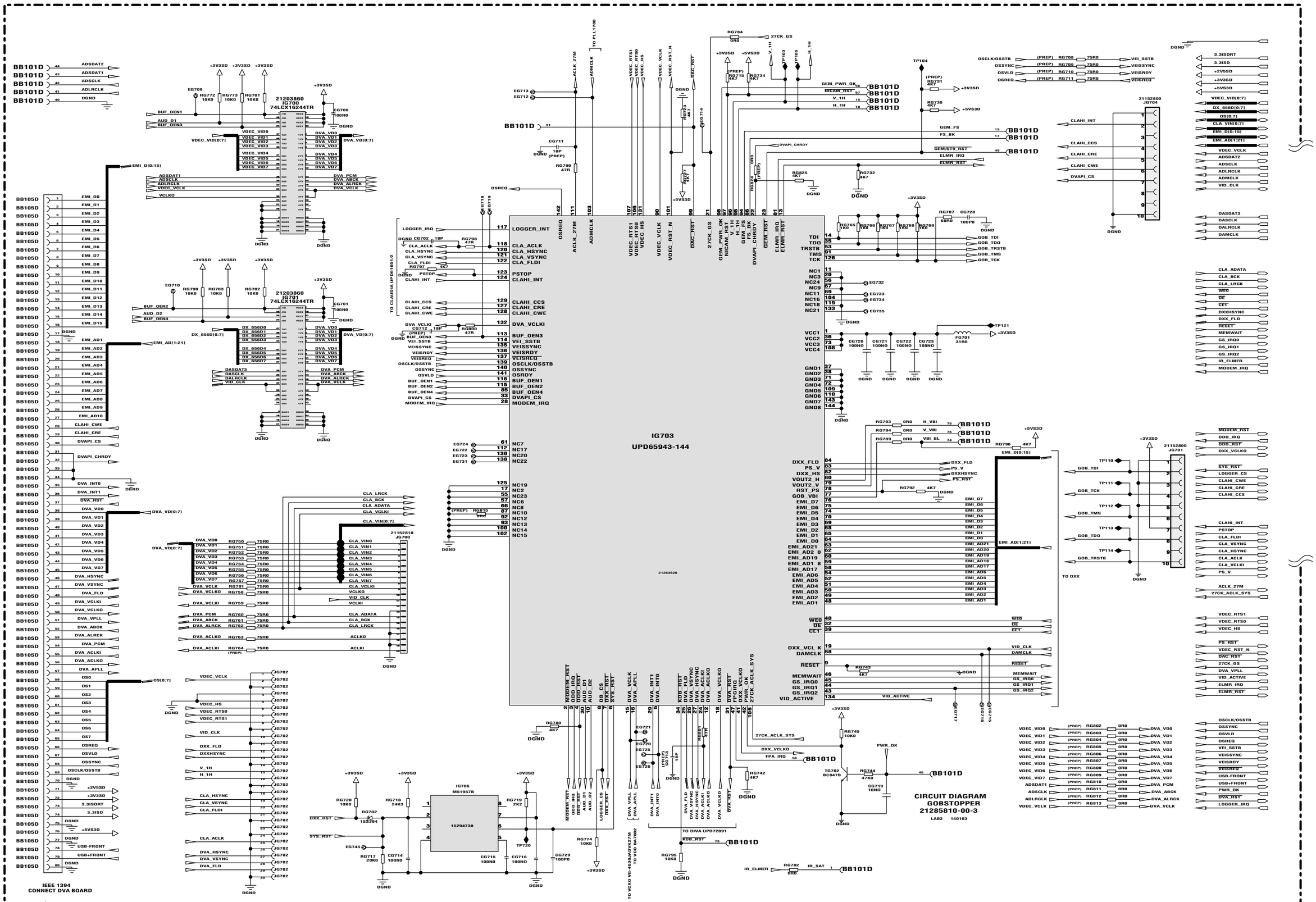
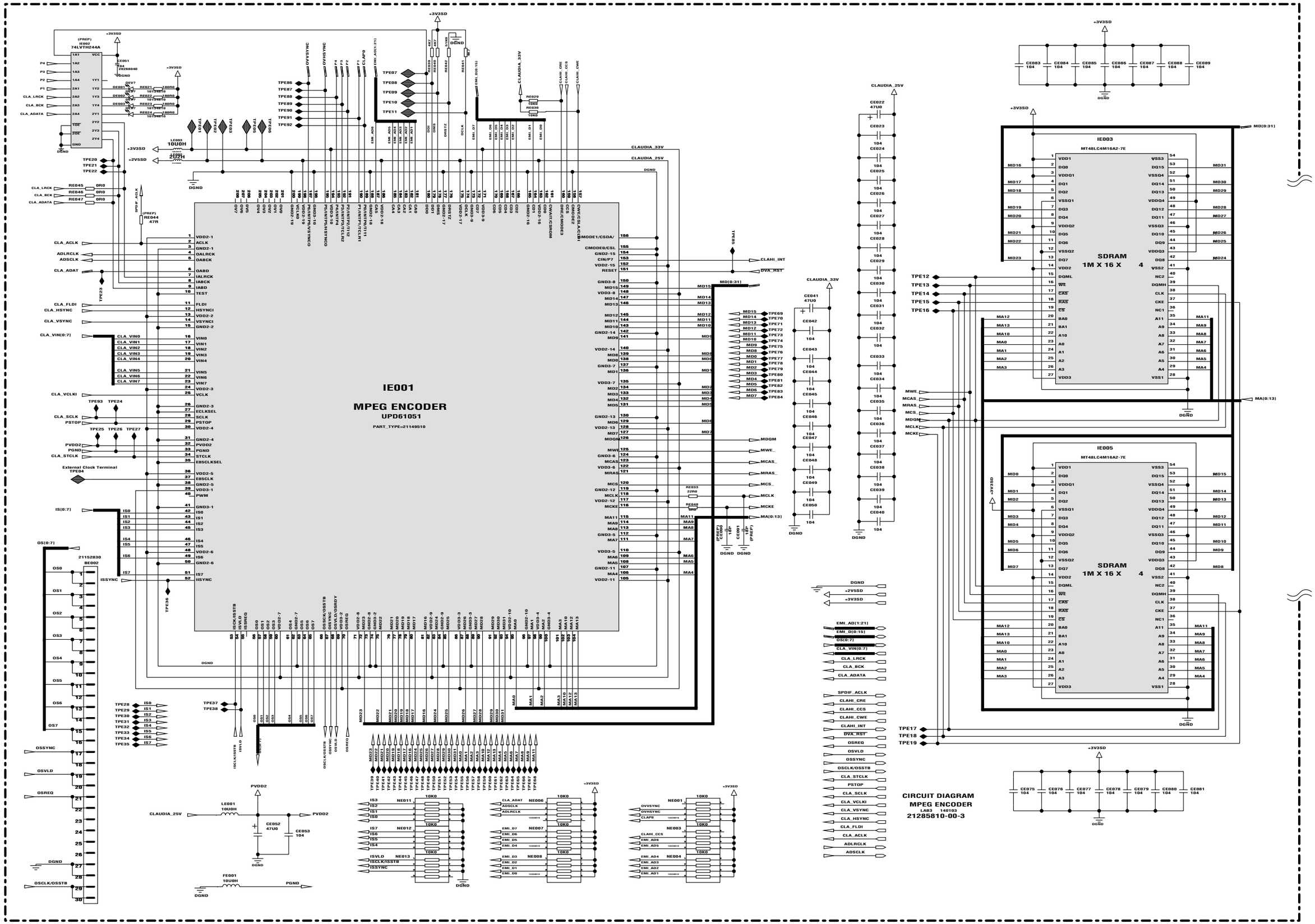
MAIN SCHEMATIC DIAGRAM - SCHEMA DE LA PLATINE PRINCIPALE - SCHALTBILD HAUPTPLATINE - SCHEMA DELLA PIASTRA PRINCIPALE- ESQUEMA DE LA PLATINA PRINCIPAL

(DIGITAL BOARD 3/9)



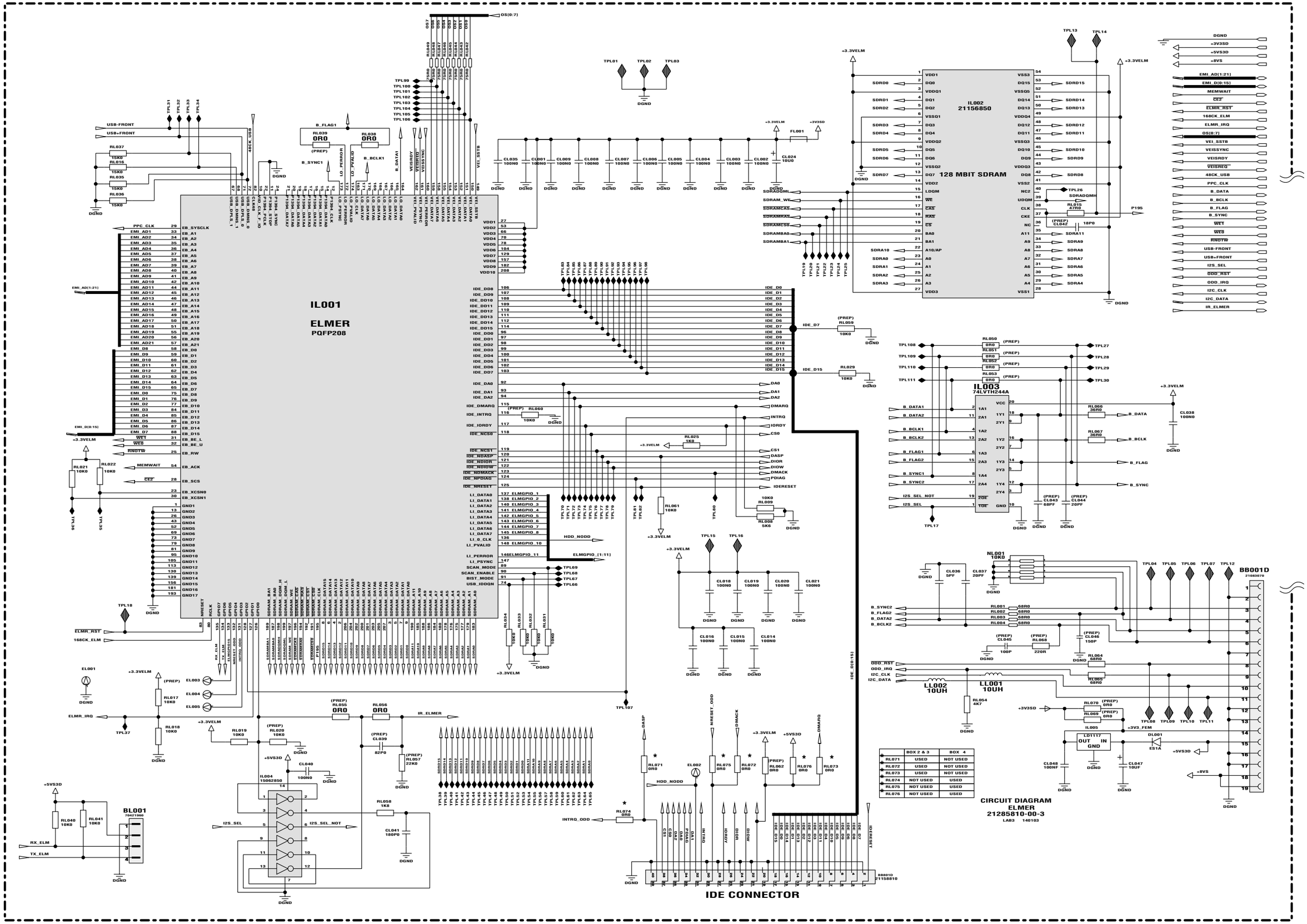
MAIN SCHEMATIC DIAGRAM - SCHEMA DE LA PLATINE PRINCIPALE - SCHALTBILD HAUPTPLATINE - SCHEMA DELLA PIASTRA PRINCIPALE- ESQUEMA DE LA PLATINA PRINCIPAL

(DIGITAL BOARD 4/9)



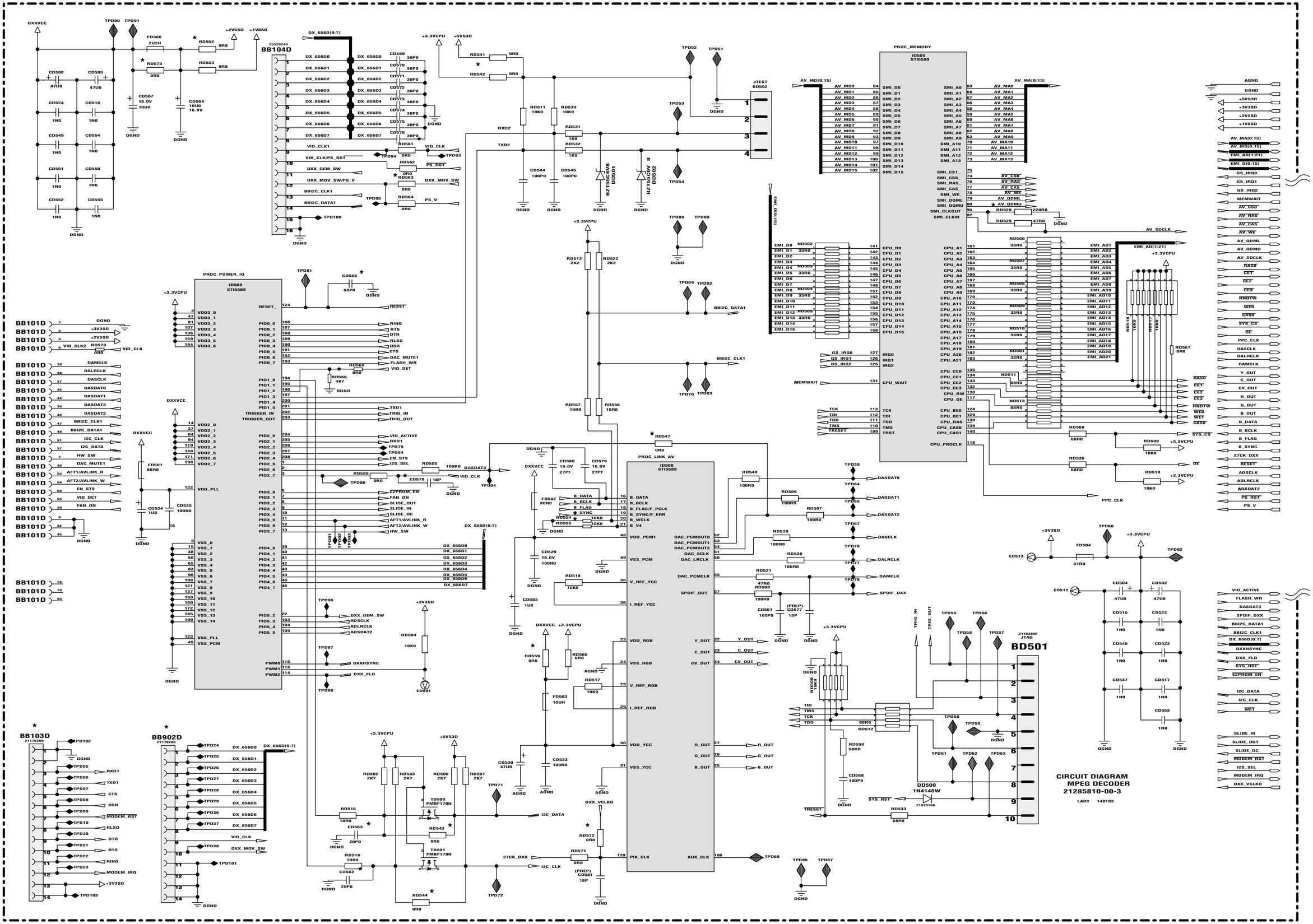
MAIN SCHEMATIC DIAGRAM - SCHEMA DE LA PLATINE PRINCIPALE - SCHALTBILD HAUPTPLATINE - SCHEMA DELLA PIASTRA PRINCIPALE- ESQUEMA DE LA PLATINA PRINCIPAL

(DIGITAL BOARD 5/9)



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

(DIGITAL BOARD 6/9)



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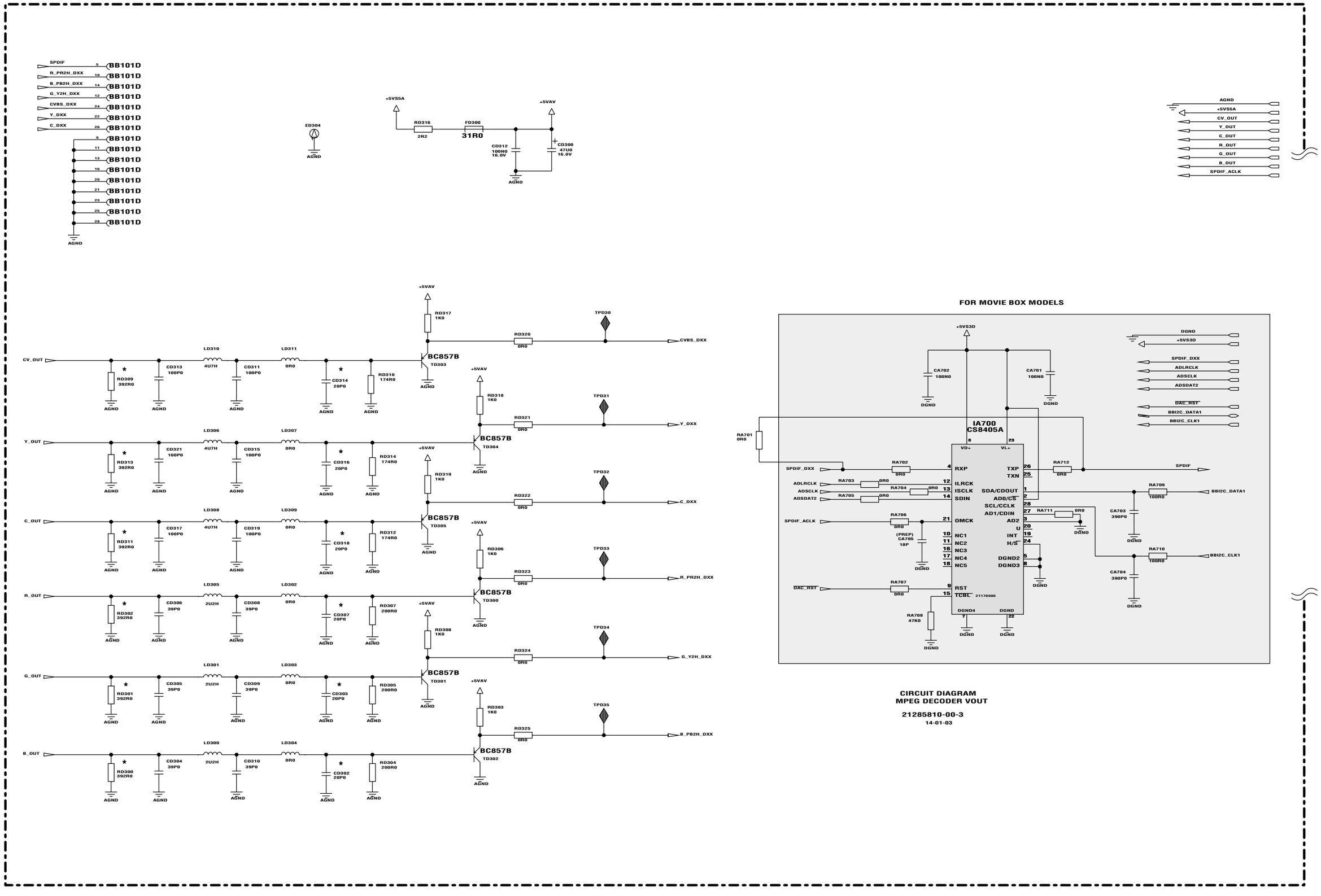
MAIN SCHEMATIC DIAGRAM - SCHEMA DE LA PLATINE PRINCIPALE - SCHALTBILD HAUPTPLATINE - SCHEMA DELLA PIASTRA PRINCIPALE- ESQUEMA DE LA PLATINA PRINCIPAL

(DIGITAL BOARD 7/9)

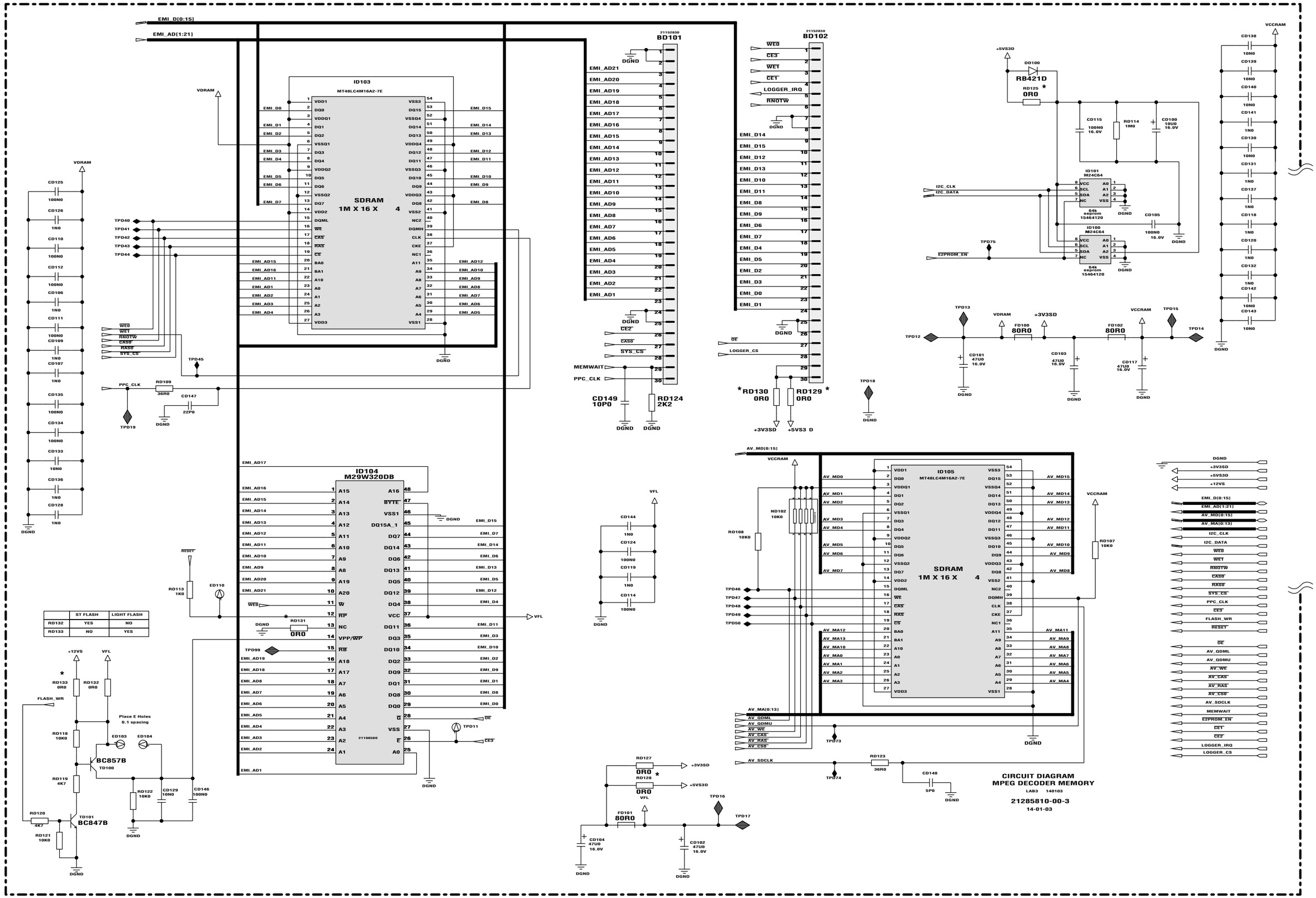


CIRCUIT DIAGRAM
MPEG DECODER VOUT

21285810-00-3
14-01-03

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

(DIGITAL BOARD 8/9)



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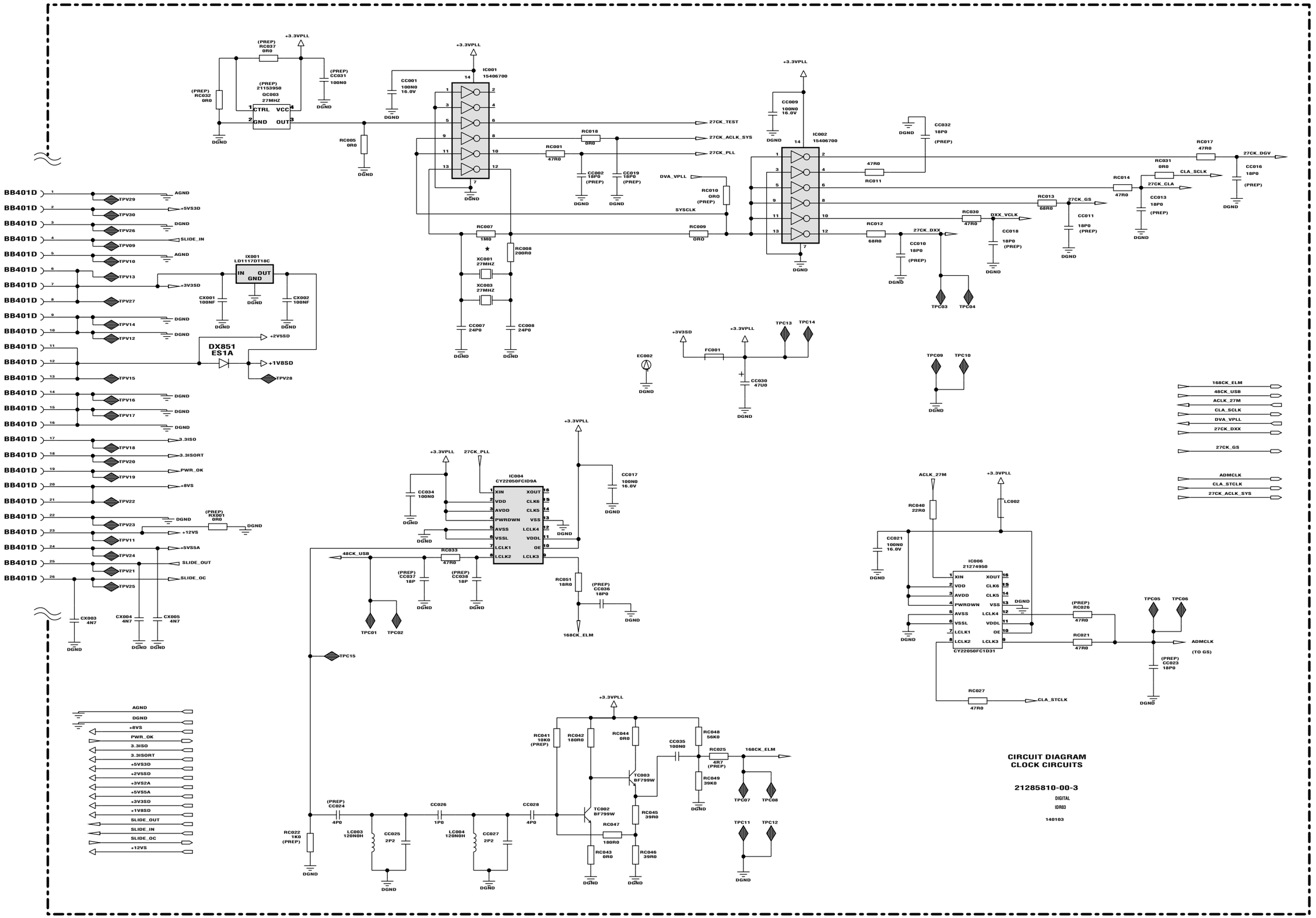
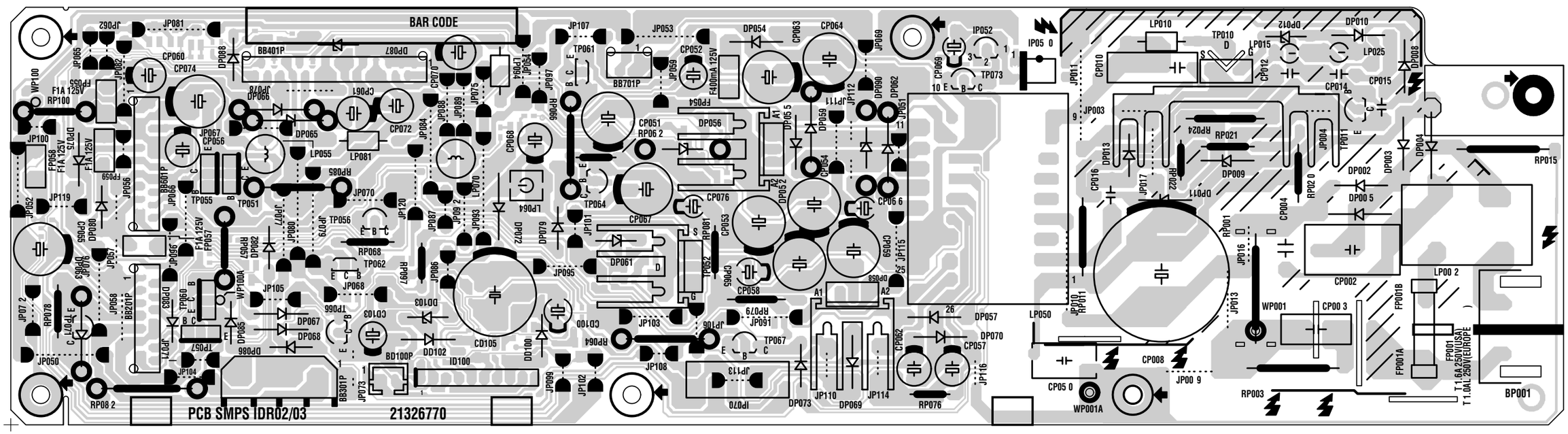
MAIN SCHEMATIC DIAGRAM - SCHEMA DE LA PLATINE PRINCIPALE - SCHALTBILD HAUPTPLATINE - SCHEMA DELLA PIASTRA PRINCIPALE- ESQUEMA DE LA PLATINA PRINCIPAL

(DIGITAL BOARD 9/9)

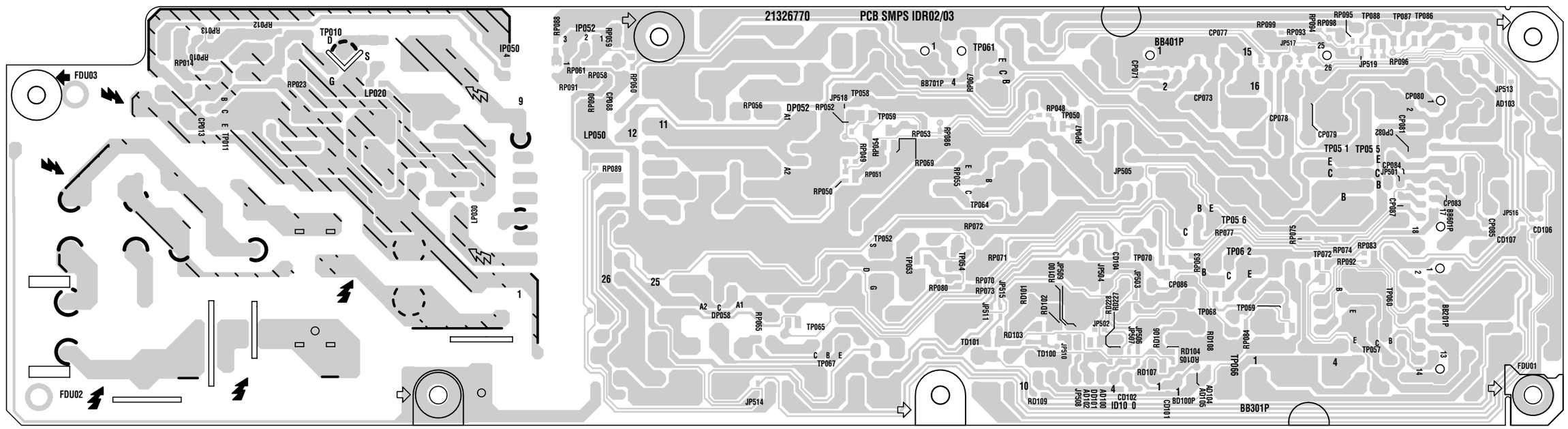


POWER SUPPLY CIRCUIT BOARD - CIRCUIT IMPRIME DE L'ALIMENTATION - LEITERPLATTE NETZTEIL - PIASTRA DEI CIRCUITI DI ALIMENTAZIONE - PLATINA ALIMENTACIÓN

COMPONENT SIDE - COTÉ COMPOSANTS - BESTÜCKUNGSSEITE - LATO COMPONENTI - LADO COMPONENTES

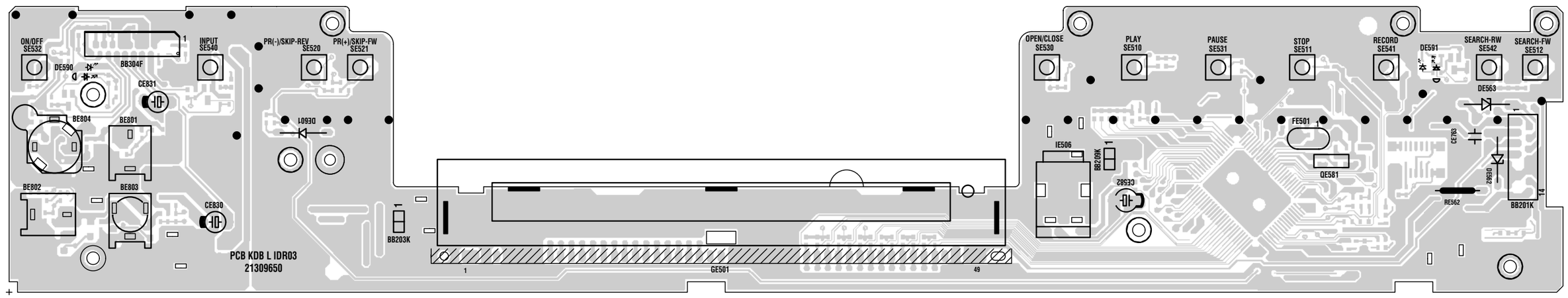


SOLDER SIDE - COTÉ CUIVRE - LÖTSEITE - LATO SALDATURE - LADO DEL COBRE

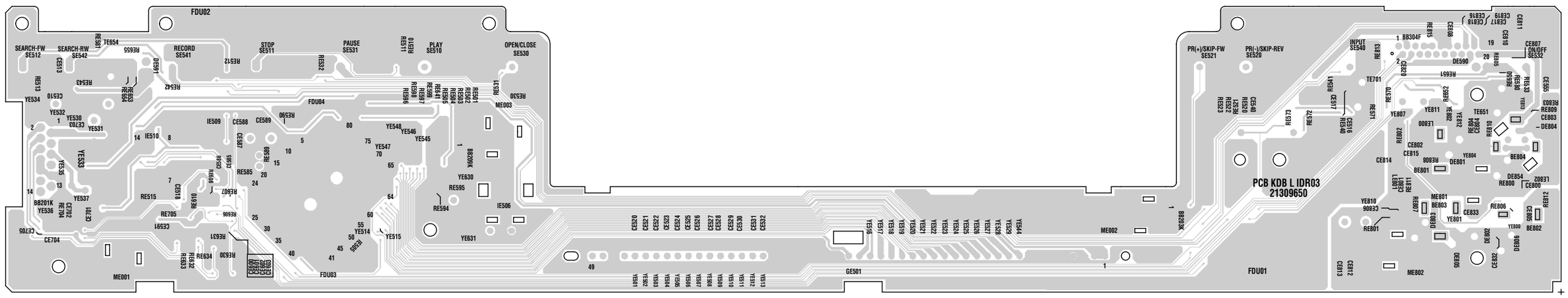


KEYBOARD CIRCUIT BOARDS - CIRCUITS IMPRIMES PLATINES COMMANDES - LEITERPLATTE BEDIENTEIL - PIASTRE TASTIERA - PLATINAS MANDOS

COMPONENT SIDE - COTÉ COMPOSANTS - BESTÜCKUNGSSEITE - LATO COMPONENTI - LADO COMPONENTES

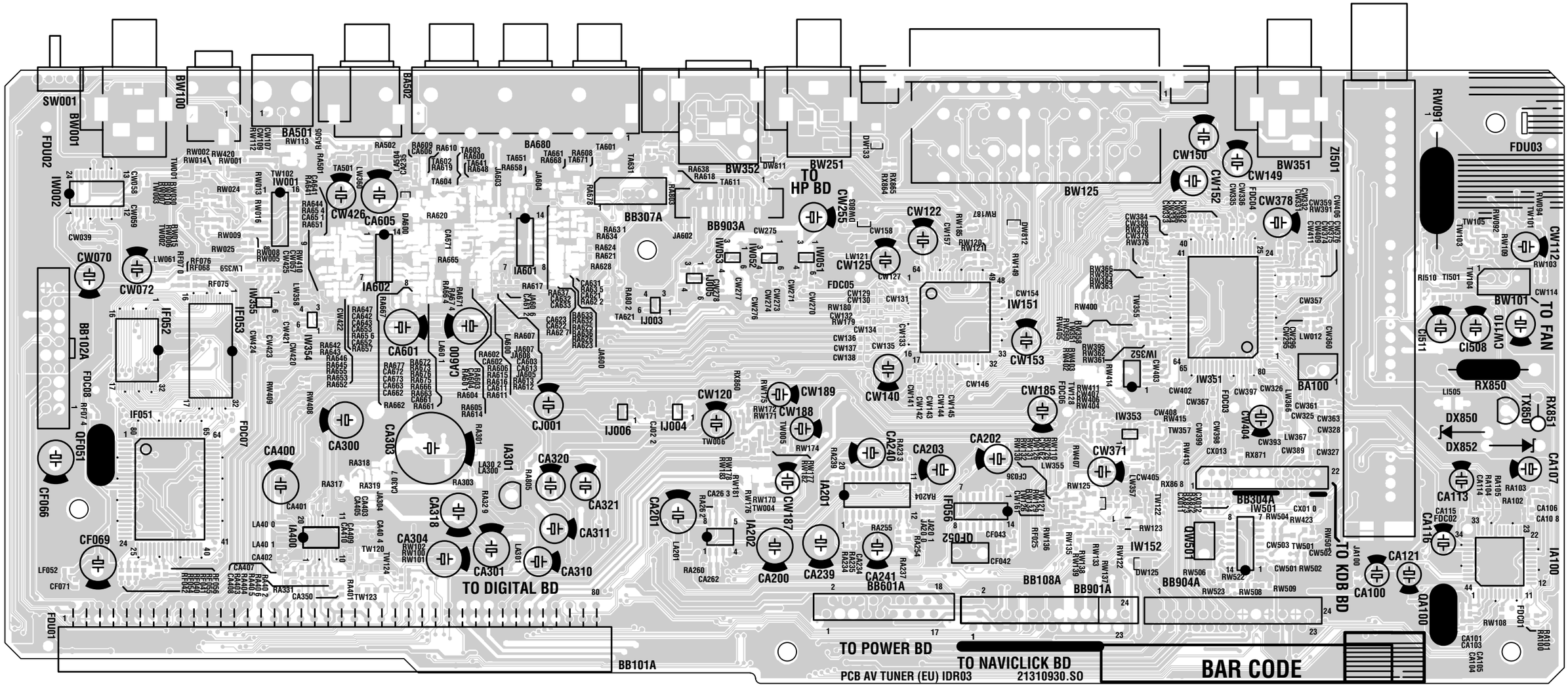


SOLDER SIDE - COTÉ CUIVRE - LÖTSEITE - LATO SALDATURE - LADO DEL COBRE



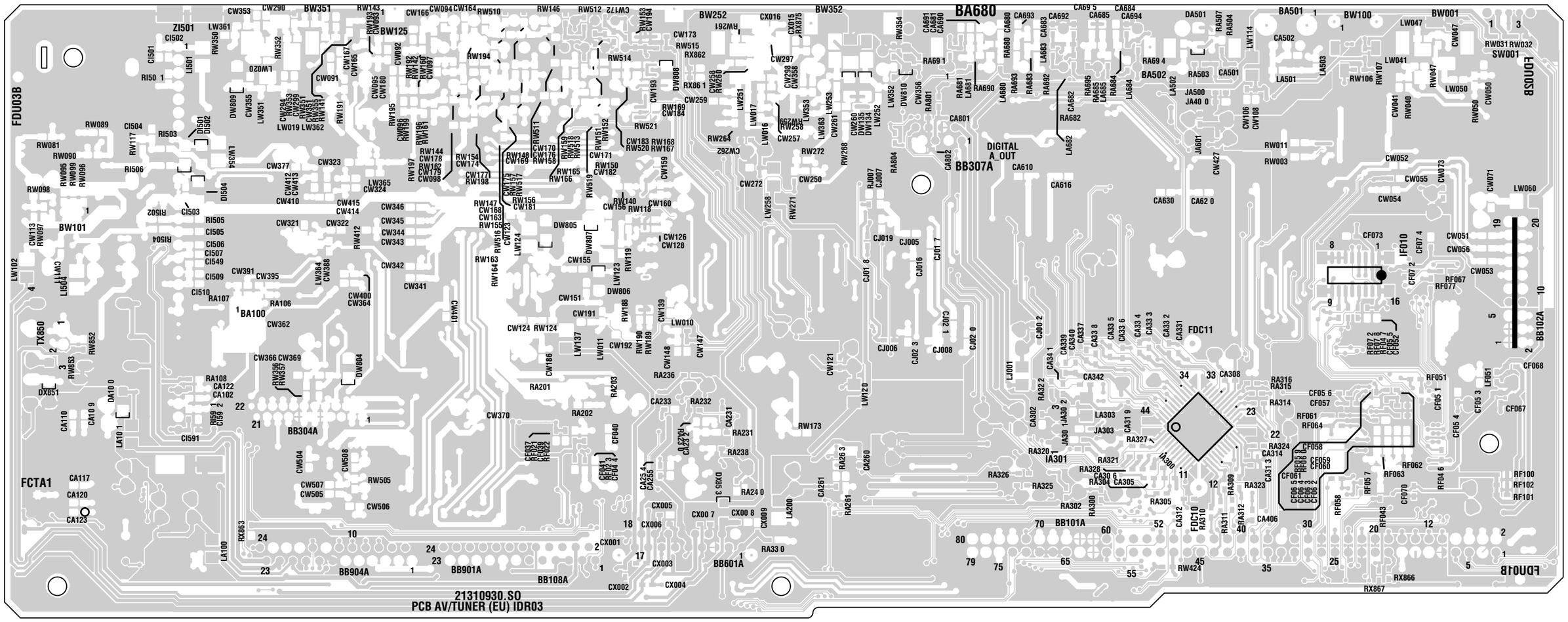
SCART INTERFACE P.C.B./TUNER - PLATINE INTERFACE PERITELEVISION/TUNER -LEITERPLATTE EUROPA NORMBUCHSE/TUNER - PIASTRA PRESA PERITEL/TUNER PLATINA INTERFAZ EUROTOMA/TUNER

COMPONENT SIDE - COTÉ COMPOSANTS - BESTÜCKUNGSSEITE - LATO COMPONENTI - LADO COMPONENTES



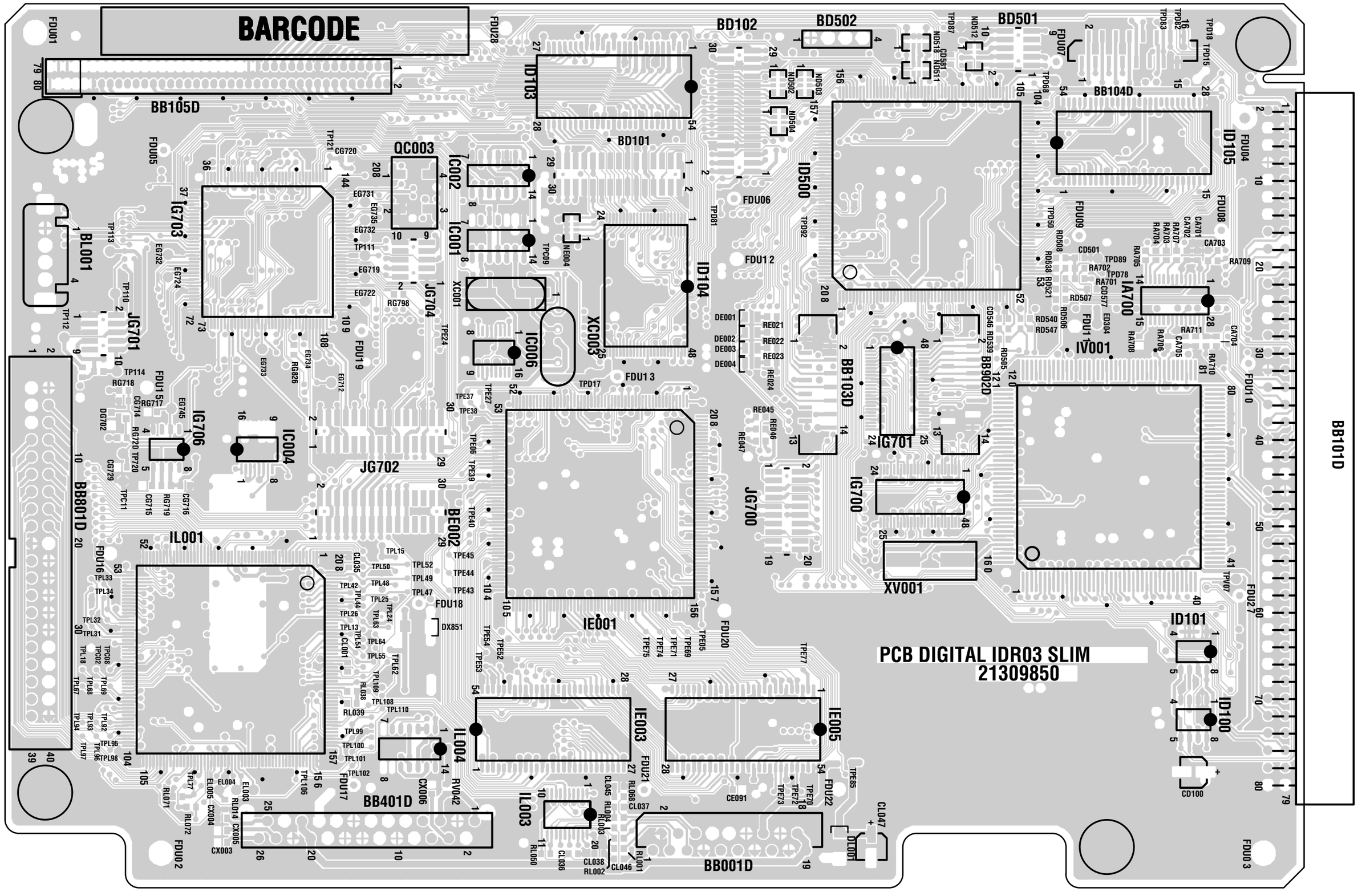
SCART INTERFACE P.C.B./TUNER - PLATINE INTERFACE PERITELEVISION/TUNER -LEITERPLATTE EUROPA NORMBUCHSE/TUNER - PIASTRA PRESA PERITEL/TUNER PLATINA INTERFAZ EUROTOMA/TUNER

SOLDER SIDE - COTÉ CUIVRE - LÖTSEITE - LATO SALDATURE - LADO DEL COBRE



DIGITAL PROCESSING P.C.B. - PLATINE TRAITEMENT DIGITAL - LTPL. DIGITALVERARBEITUNG - PIASTRA ELABORAZIONE DIGITALE - PLATINA TRATAMIENTO DIGITAL

COMPONENT SIDE - COTÉ COMPOSANTS - BESTÜCKUNGSSEITE - LATO COMPONENTI - LADO COMPONENTES



DTH7500 / DTH8000
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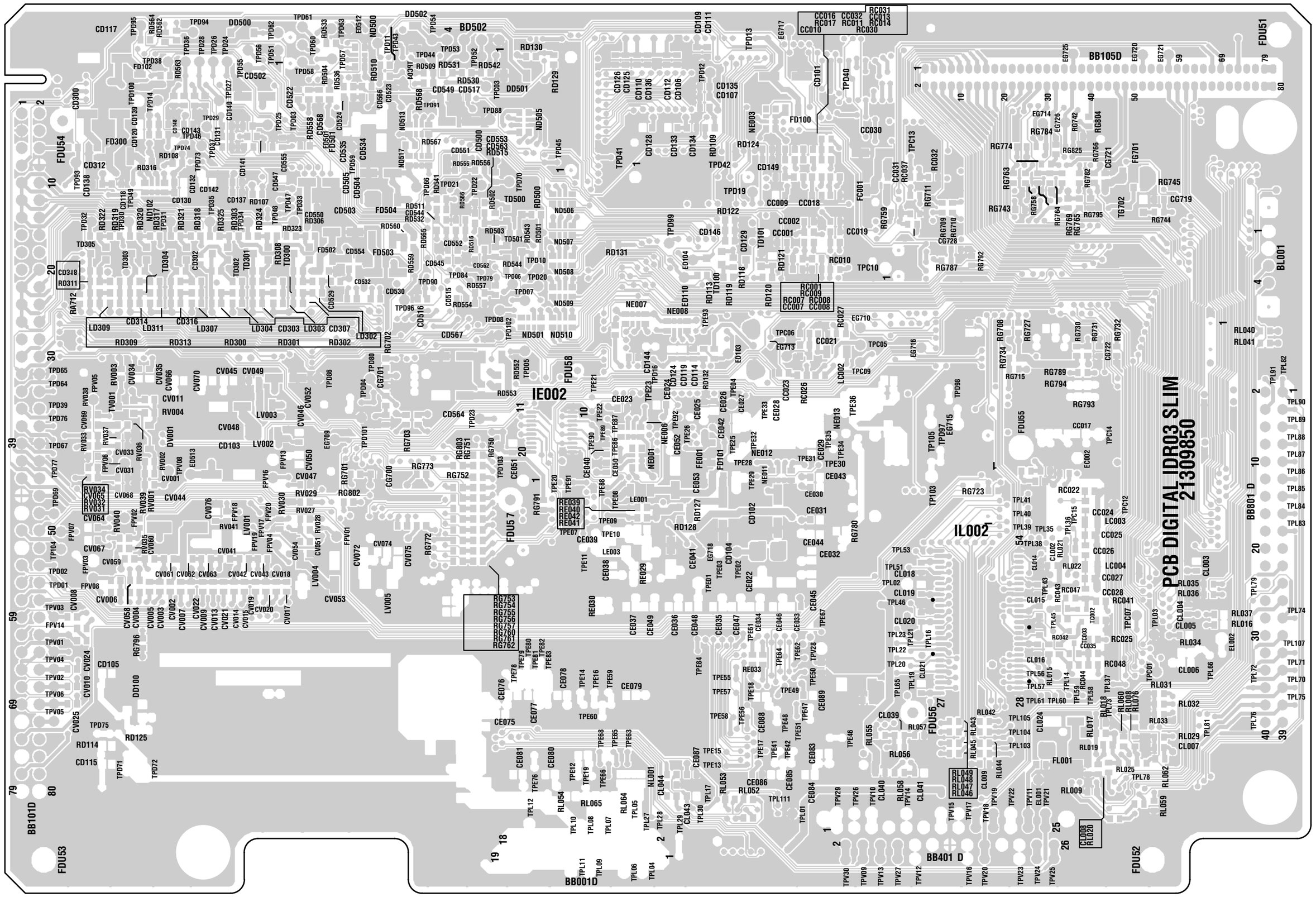
SOLDER SIDE - COTÉ CUIVRE - LÖTSEITE - LATO SALDATURE - LADO DEL COBRE



ABBREVIATIONS - ABREVIATIONS - ABKÜRZUNGEN - ABBREVIAZIONI - ABREVIACIONES

AV/TUNER ABBREVIATIONS

16X9_IND ..... 16X9 (or 4X3) format indication
1H/2H_CTL ..... Component video 1H or 2H selection
ADLRCLK ..... Audio ADC word clock
ADSCLK ..... Audio ADC bit clock
ADSDAT1 ..... Audio ADC 1 data
ADSDAT2 ..... Audio ADC 2 data
AGND ..... Audio ground
AGND_OUT ..... Video output(from DXX) ground
AUTO_PROG_7118 ... Auto program control from SAA7118
AVLINK2 ..... Scart 2 pin 10
AVLINKIRQ ..... Scart 1 or 2 pin 10 interrupt to
- TMP87
B/PB2H_DXX ..... Blue or (PB-2H) signal from DXX
BBI2C_CLK ..... Slow I2C -CLK (+5V)
BBI2C_DATA ..... Slow I2C- DATA (+5V)
BBI2C_DATA1 ..... Slow I2C-DATA (+3.3V)
C_DXX ..... Chroma signal output from DXX
C_REC ..... Chroma signal for recording to
- SAA7118
C_SYNC ..... Composite-sync (V+ H sync)
CTR ..... Center channel
CV/Y_REC ..... CVBS or Luma for recording to
- SAA7118
CV_MOVIEBOX ..... CVBS prepare to movie box
CV_NAV1 ..... CVBS to naviclick module
CV_OUT2 ..... CVBS to scart 2 output for decoder
CV_TUNER1 ..... CVBS signal from local AV board
- ..... Tuner
CVBS_DXX ..... CCVBS output from DXX to VBI
- ..... insertion IC
CVBS_DXX_D ..... CVBS output from DXX
DAC_MUTE1 ..... Audio mute control for DAC
DAC_RST ..... Reset control for CS4392 DAC
DALRCLK ..... Audio DAC word clock
DAMCLK ..... Audio DAC oversampling clock
DASCLK ..... Audio DAC bit clock
DASDAT0 ..... Audio DAC 0 data
DASDAT1 ..... Audio DAC 1 data
DASDAT2 ..... Audio DAC 2 data
DASDAT3 ..... Audio DAC 3 data
DC_IN ..... Fan detection
DMX_L ..... Audio Left downmix-channel out
DMX_R ..... Audio Right downmix-channel out
DMXL ..... Audio Left downmix-channel out
DMXR ..... Audio Right downmix-channel out
EN_ST9 ..... enable ST9
FAN_ON_DXX ..... Fan On/Off control from DXX
FPAIRQ ..... Front panel Interrupt
G/Y2H_DXX ..... Green/Y-2H output from DXX
H_PIP ..... Horizontal sync for picture in picture
HW_SW ..... 1H or 2H component video switch
- ..... control
I2C_CLK ..... Fast I2C- CLK for Naviclick module
I2C_DATA ..... Fast I2C- DATA for Naviclick module
IN1_L ..... Main audio_L source to ADC 1
IN1_R ..... Main audio_R source to ADC 1
IN2_L ..... Mixing audio_L source to ADC1
IN2_R ..... Mixing audio_R source to ADC1
IN3_L ..... Main audio_L source to ADC 2
IN3_R ..... Main audio_R source to ADC 2
IR_SAT T ..... IR- Blaster outout signal
KDB_RST ..... KDB reset
MIC_IN_L ..... Mic input Left to Sanyo switching IC
MIC_IN_R ..... Mic input Right to Sanyo switching IC
MIC_L ..... Mic input Left to Sanyo switching IC
MIC_R ..... Mic input Right to Sanyo switching IC
NICAM_RST ..... Nicam reset
PB_2H ..... Component videoPb(2H) from
- ..... Progressive Scan board
PIP_BL ..... Picture-in picture blanking
PR_2H T ..... Component video Pr(2H) form
- ..... Progressive Scan board
PWM_HPVO ..... PWM headphone volume control
- ..... signal
R/PR2H_DXX ..... Red(or Pr-2H) from DXX
RST_ST9 ..... ST9 reset
SC3_PIN8_16X9 ..... Pin 8 of 3rd scart control signal
SC3_PIN8_ACT ..... Pin 8 of 3rd scart control signal
SCART_TV_CV/Y ..... Scart1 video input
SCART_TV_L ..... Scart 1 audio left output
SCART_TV_R T ..... Scart 1 audio right output
SCART_VCR_B B ..... Scart 2 blue signal input
SCART_VCR_C/R ..... Scart 2 chroma(or Red) signal input
SCART_VCR_CV/Y ..... Scart 2 video signal output
SCART_VCR_G ..... Scart 2 green signal input
SCART_VCR_L ..... Scart 2 audio left input
SCART_VCR_R ..... Scart 2 audio right input
SCART2 ..... Scart 2 pin 8 (scale down)
- ..... to interrupt TMP87
SCART2_B ..... Scart 2 blue signal output
SCART2_FB ..... Scart2 pin 16 fast blanking
SPDIF ..... Sound Pro Digital interface
ST9_RST_GOB ..... ST9 reset from
- ..... Gobstopper(prepared)
TUNER1_L ..... RF audio from tuner1
TUNER1_R ..... RF audio from tuner1
TUNER2_L ..... RF audio from tuner 2
TUNER2_R ..... RF audio from tuner 2
+12VFAN ..... Fan supply
3V3DA ..... Supply voltage 3.3V
AFT1/AVLINK_R T ... AV Link Read signal
AMUTE ..... Audio mute control for Cinch output
AV_LINK1 ..... Scart 1 pin 10
B_SC3 ..... 3rd scart Blue signal output
B_TV ..... Scart 1 Blue signal output
C/R_TV ..... Scart 1 chroma(or Red) signal output
CV/Y_SC3 ..... 3rd scart video signal output (pin 19)
CV_FRONT ..... CVBS signal from Front input
FB_SC3 ..... 3rd scart fast blanking pin 16
FSTV_OUT ..... Scart 1 fast blanking output
G_SC3 ..... 3rd scart green signal output
G_TV ..... Scart 1 green signal output
HP_L ..... Left downmix-channel for
- ..... headphone
HP_R ..... Right downmix-channel for
- ..... headphone
LF ..... Left front channel
LOUT_TV ..... Scart 1 audio left output
LOUT_VCR ..... Scart 2 audio right output
LS ..... Left surround channel
PIN8_SC3 ..... 3rd scart pin 8
R/C_SC3 ..... Red(or Chroma) signal output
RF ..... Right front channel
ROUT_TV ..... Scart 1 audio right output
ROUT_VCR ..... Scart 2 audio right output
RS ..... Right surround channel
S2_1 ..... Front S_video 16x9 or 4x3
- ..... detection signal
SLB_TV ..... Slow blanking output,
- ..... scart 1 pin 8
SLB_VCR ..... Slow blanking input, scart 2 pin 8
ST9_RST_TMP87 ..... ST9 reset signal from TMP87
SUB ..... Subwoofer
SV_S3_1 ..... 3rd scart CVBS/RGB or
- ..... S_video select signal
TUNER_MONO_AUDIO . Tuner audio_Mono
TUNER_SIF ..... Tuner sound IF
V_1H ..... CVBS 1H output
V_OUT2 ..... CVBS signal for decoding output
V_PIP ..... Vertical sync for PIP purpose
VBI_BL ..... VBI blanking from Gobstopper
VBI_SEL ..... Video source selecting signal
- ..... (for Naviclick module)
VID_DET ..... Video valid signal detection
Y/CV_TV ..... Scart 1 video signal output
Y/CV_VCR ..... Scart 2 video signal output
Y_2H ..... Luma(2H) from progressive
- ..... scan board
Y_DXX ..... Luma output form DXX
- ..... (after VBI insertion)
Y_DXX_D ..... Luma outpu from DXX
- ..... (before VBI insertion)
Y_FRONT ..... Luma input from front pannel
CV/Y_REC_SEL ..... CVBS or Luma select signal
- ..... for Recording

DIGITAL BOARD ABBREVIATION

168CK_ELM ..... 168MHz Elmer clock
27CK_ACLK_SYS ..... 27MHz clock for PLL 12.288MHz
- ..... generator
27CK_CLA ..... 27MHz clock for Claudia
27CK_DGV ..... 27MHz clock for Progressive Scan
27CK_DXX ..... 27MHz clock for DXX
27CK_GS ..... 27MHz clock for Gobstopper
27CK_PLL ..... 27MHz clock for PLL 168MHz generator
48CK_USB ..... 48KHz clock for USB
ACLK_27M ..... Audio clocl 27 MHz
ACLKI ..... Audio clock input
ACLKO ..... Audio clock output
ADLRCLK ..... Audio ADC word clock
ADMCLK ..... Audio ADC oversampling clock
ADSCLK ..... Audio ADC bit clock
ADSDAT1 ..... Audio ADC 1 data
ADSDAT2 ..... Audio ADC 2 data
AGND ..... Audio analog ground
AUD_ADCNTR1 ..... (prepare for MP3)
AUD_ADCNTR2 ..... (prepare for MP3)
AUD_AST ..... (prepare for MP3)
AUD_CS ..... (prepare for MP3)
AUD_D1 ..... (prepare for MP3)
AUD_D2 ..... (prepare for MP3)
AUD_P10B ..... (prepare for MP3)
AUD_R/W_N ..... (prepare for MP3)
AUD_STB ..... (prepare for MP3)
AUTO_PROG ..... Auto programming
AV_CAS ..... SMI SDRAM column address select
AV_CS0 ..... SMI SDRAM chip select
AV_MA0..15 ..... SMI SDRAM address
AV_MD0..15 ..... SMI SDRAM data
AV_QDML ..... SMI SDRAM byte 0 enable
AV_QDMU ..... SMI SDRAM byte 1 enable
AV_RAS ..... SMI SDRAM row address select
AV_SDCLK ..... Clock for SMI SDRAM
AV_WE ..... SMI SDRAM write enable
AVDD25PLL ..... (prepare for MP3)
AVLINK ..... AV link (prepare)
B_BCLK ..... I2S bit clock
B_DATA ..... I2S data
B_FLAG ..... I2S flag
B_OUT ..... B/2H-Pb output from DXX
B_PB2H_DXX ..... B/2H-Pb output from low-pass filter
B_SYNC ..... I2S sync
BBI2C_CLK1 ..... Second pair of I2C clock
BBI2C_DATA1 ..... Second pair of I2C data
BUF_OEN1..4 ..... Buffer 1-4 output enable
C_DXX ..... Chroma output from low-pass filter
C_OUT ..... Chroma output from DXX
C_REC ..... Chroma input to Video decoder
C_SYNC ..... Composite sync(V+H sync)
CAS0 ..... Column address select
CE1 ..... Chip Enable 1
CE2 ..... Chip Enable 2
CE3 ..... Chip Enable 3
CLA_ACLK ..... MPEG Encoder Audio oversampling clock
CLA_ADAT ..... MPEG Encoder Audio data
CLA_ADATA ..... MPEG Encoder Audio data
CLA_BCK ..... MPEG Encoder audio bit clock
CLA_FLDI ..... MPEG Encoder Flied
CLA_HSYNC ..... MPEG Encoder horizontal sync
CLA_LRCK ..... MPEG Encoder Audio word clock
CLA_SCLK ..... MPEG Encoder Audio bit clock
CLA_STCLK ..... MPEG Encoder Audio bit clock
CLA_VCLKI ..... MPEG Encoder Digital video clock in
CLA_VIN0..7 ..... MPEG Encoder Digital data
CLA_VSYNC ..... MPEG Encoder vertical sync
CLAHI_CCS ..... MPEG Encoder chip select
CLAHI_CRE ..... MPEG Encoder read
CLAHI_CWAIT ..... MPEG Encoder wait
CLAHI_CWE ..... MPEG Encoder Write
CLAHI_INT ..... MPEG Encoder Interrupt
CLAP0 ..... MPEG Encoder
CLAUDIA_25V ..... Power supply +2.5V for Claudia
CLAUDIA_33V ..... Power supply +3.3V for Claudia
CS1FX ..... Chip select 0
CS3FX ..... Chip select 1
CTS ..... (prepare for Modem)
CV_OUT ..... CVBS from DXX
CVBS/Y_RE ..... CVBS/Y input to Video decoder
CVBS_DXX ..... CVBS from low-pass filter
DA0..2 ..... PCM output data 0-2
DAC_MUTE1 ..... Audio mute control for UDA1338 DAC and ----
- ..... output cinch
DAC_RST ..... Audio DAC reset for CS4392
DALRCLK ..... PCM left/right audio word clock
DAMCLK ..... Over sampling audio DAC oversamplin clock
DASCLK ..... Over sampling audio DAC bit clock
DASDAT0..3 ..... PCM output data audio DAC 0-3 data
DBBRRDY0_1 ..... (prepare for MP3)
DBBWRDY0_1 ..... (prepare for MP3)
DCLK ..... serial clock
DDI ..... data input
DGND ..... Digital Ground
DIOR ..... I/O read
DIOW ..... I/O write
DMACK ..... DMA acknowledge
DMS ..... operation mode
DRSTZ ..... N-wire reset
DSR ..... (prepare for Modem)
DTR ..... (prepare for Modem)
DVA_ABCK ..... V Link (IEEE1394)
DVA_ACLKI ..... AV Link (IEEE1394) Audio clock input
DVA_ACLKO ..... AV Link (IEEE1394) Audio clock output
DVA_ALRCK ..... AV Link (IEEE1394) Audio left/right clock
DVA_APLL ..... AV Link (IEEE1394) Audio PLL
DVA_FLD ..... AV Link (IEEE1394) Field
DVA_HSYNC ..... AV Link (IEEE1394) H-sync
DVA_INT0 ..... AV Link (IEEE1394) interrupt 0
DVA_INT1 ..... AV Link (IEEE1394) interrupt 1
DVA_PCM ..... AV Link (IEEE1394) PCM
DVA_RST ..... AV Link (IEEE1394) reset
DVA_VCLK ..... AV Link (IEEE1394) Video clock
DVA_VCLKI ..... AV Link (IEEE1394) Video clock input
DVA_VCLKO ..... AV Link (IEEE1394) Video clock output
DVA_VD0..7 ..... AV Link (IEEE1394) Video data bus
DVA_VPLL ..... AV Link (IEEE1394) Video PLL
DVA_VSYNC ..... AV Link (IEEE1394) V-sync
DVAPI_CHRDY ..... AV Link (IEEE1394) ch ready
DVAPI_CS ..... AV Link (IEEE1394) Chip select
DXX_656D0..7 ..... Digital Video output data from DXX
DXX_FLD ..... Field signal from DXX
DXX_GEM_SW ..... Input source select between DXX and
- ..... Gem for Progressive Scan
DXX_MOV_SW ..... Input source select between DXX and
- ..... Movie Board for Progressive Scan (prepare)
DXX_RST ..... MPEG Decoder Dxx reset
DXX_VCLK ..... MPEG Decoder Dxx video clock
DXXHSYNC ..... MPEG Decoder Dxx horizontal sync
DXXVCC ..... Power supply for DXX
E2PROM_EN ..... E2PROM enable
ELMGPIO15 ..... Elmer GPIO port
ELMR_IRQ ..... Elmer interrupt
ELMR_RST ..... Elmer reset
EMI_AD1..21 ..... EMI bus address line
EMI_D0..15 ..... EMI bus data line
EN_ST9 ..... ST9 enable
FAN_ON ..... Fan control
FLASH_WR ..... Flash write
FPA_IRQ ..... FPA interrupt
FS_BK ..... Fast blank
G_OUT ..... R/2H-Y element output from DXX
G_Y2H_DXX ..... R/2H-Y element output from low-pass filter
GEM_FS ..... Gem fast blank
GOB_TCK ..... Test clock of Gobstooper JTAG
GOB_TDI ..... Test data in of Gobstopper JTAG
GOB_TDO ..... Test data out of Gobstopper JTAG
GOB_TMS ..... Test mode select of Gobstopper JTAG
GOB_TRSTB ..... Test reset of Gobstopper JTAG
GS_IRQ0 ..... Gobstopper output interrupt 0
GS_IRQ1 ..... Gobstopper output interrupt 1
GS_IRQ2 ..... Gobstopper output interrupt 2
H_1H ..... H-sync for interlace mode
H_VBI ..... H-sync for PIP
HDD_NODD ..... HDD and ODD select
HW_SW ..... 1H/2H output hardware switch
I2C_CLK ..... First pair of I2C bus clock
I2C_DATA ..... First pair of I2C bus data
I2S_SEL ..... I2S select between Elmer output and ODD ---
- ..... output
I2S_SEL_NOT ..... not I2S select between Elmer output and -
- ..... ODD output
IDE_D0..15 ..... IDE data
IDERESET ..... IDE reset
IH2H_CTL ..... 1H/2H control signal
INTRQ ..... IDE interrupt
INTRQ_ODD ..... ODD interrupt
IORDY ..... IDE IO ready
IR_ELMER ..... IR blaster signal generated by Elmer
IR_GOB ..... IR blaster signal generated by Gobstopper
- ..... (prepare)
IR_SAT ..... IR blaster signal for satellite decoder
IS0..7 ..... input stream Data for MPEG encoder

ISCLK/ISSTB .....input stream clock for MPEG encoder
ISSYNC .....input stream sync for MPEG encoder
ISVLD .....Input stream
KDB_RST .....KDB reset
LOGGER_CS .....Logger Test Board chip select
LOGGER_IRQ .....Logger Test Board interrupt
MCAS_ .....Claudia SDRAM column address select
MCKE .....Claudia SDRAM clock enable
MCLK .....Claudia SDRAM clock
MCS_ .....Claudia SDRAM chip select
MDQMH .....Claudia SDRAM byte 1 enable
MDQM .....Claudia SDRAM byte 0 enable
MEMWAIT .....Memmory wait
MODEM_IRQ .....Modem Interrupt (perpare)
MODEM_RST .....Modem Reset (perpare)
MRAS .....Claudia SDRAM row address select
MWE .....Claudia SDRAM write enable
NICAM_RST .....Nicam Reset
ODD_IRQ .....ODD Interrupt
ODD_RST .....ODD Reset
OE .....Output enable
OS0..7 .....Output stream Data signal
OSCLK/OSSTB .....Output stream clock signal
OSREQ .....Output stream request signal
OSSYNC .....Output stream sync signal
OSVLD .....Output stream valid signal
OVHSYNC .....Output stream H-sync signal
OVVSYNC .....Output stream V-sync signal
PDIAG .....IDE Diaquostic pin
PGND .....PLL ground
PPC_CLK .....Clock for EMI SDRAM
PS_RST .....Progressive Scan reset
PS_V .....V-sync for Progressive Scan
PSTOP .....Part of reset for MPEG encoder
PVDD2 .....2.5V power supply for PLL
PWR_OK .....Power ok
R_OUT .....R/2H-Pr ouput from DXX
R_PR2H_DXX .....R/2H-Pr ouput from low-pass filter
RAS0 .....Row address select 0
RESET .....Reset
RING .....(prepare for Modem)
RLSD .....(prepare for Modem)
RNOTW .....Read nor write
RTS .....(prepare for Modem)
RX_ELM .....Receive Elmer
RXD1 .....Receive data 1
RXD2 .....Receive data 2
SDRA0..11 .....EMI SDRAM address
SDRADQMH .....EMI SDRAM byte 1 enable
SDRADQML .....EMI SDRAM byte 0 enable
SDRAM_WE .....EMI SDRAM write enable
SDRAMBA0 .....EMI SDRAM bank select
SDRAMCS0 .....EMI SDRAM column address select
SDRAMRAS .....EMI SDRAM row address select
SDRD0..15 .....EMI SDRAM data
SLIDE_IN .....ODD tray close control signal
SLIDE_OC .....ODD tray over-current detection
SLIDE_OUT .....ODD tray open control signal
SPDIF .....Sound Pro Digital Interface
SPDIF_DXX .....SPDIF output from DXX
SYS_CS .....Bank0 (EMI SDRAM) chip select
SYS_RST .....System reset
SYSCLK .....System clock
TCK .....Test clock of DXX JTAG
TDI .....Test data in of DXX JTAG
TDO .....Test data out of DXX JTAG
TMS .....Test mode select of DXX JTAG
TRESET .....Test reset of DXX JTAG
TRIG_IN .....Trigger in
TRIG_OUT .....Trigger out
TX_ELM .....Trasmit Elmer
TXD1 .....Transmit data 1
TXD2 .....Transmit data 2
USB+FRONT .....USB input +
USB-FRONT .....USB input -
V_1H .....V-sync for interlace mode
V_VBI .....V-sync for PIP (picture in picture)
- .....function
VBI_BL .....PIP blanking
VCCRAM .....VCC for EMI SDRAM and SMI SDRAM
VCLKI .....Video clock input
VCLKO .....Video clock output
VDDA .....Analog supply voltage for analog inputs
VDDE .....Digital supply voltage (peripheral cells)
VDDI .....Digital supply voltage 2 (core)
VDDX .....Supply voltage for crystal oscillator
VDEC_HS .....Video decoder H-sync output
VDEC_RST_N .....Video decoder reset
VDEC_RTS0 .....Video decoder real time status output
VDEC_RTS1 .....Video decoder real time status output
VDEC_VCLK .....Video decoder clock output
VDEC_VID0..7 .....Video decoder video data output
VDRAM .....Power supply +3.3V for SMI SDRAM and
- .....EMI SDRAM
VEI_SSTB .....VEIS Strobe
VEISRDY .....VEIS Ready
VEISREQ .....VEIS Request
VEISSYNC .....VEIS Ready
VFL .....Power supply +3.3V for Flash
VID_ACTIVE .....Video active
VID_CLK .....Video clock
VID_DET .....Video detect
WE0 .....Write enable 0
WE1 .....Write enable 1
Y_DXX .....Y output from low-pass filter
Y_OUT .....Y output from DXX

This technical documentation is for use by maintenance technicians only
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