MANUAL DE SERVIÇO

TELEVISORES LED C/ INTERNET

MODELOS: LE3252i(A) / LE4052i(A) / LE4652i(A) / LE5552i(A)

ESPECIFICAÇÕES

Tensão de rede: ---------- 110 - 220V ~ (60 Hz) automático.

Consumo -------- LE3252i ---------- Stand by ---------- < 1,0 Watt
Médio ---------- 60 Watts
LE4252i ---------- Stand by ---------- < 1,0 Watt
Médio ---------- 100 Watts
LE4652i ---------- Stand by ---------- < 1,0 Watt
Médio ---------- 110 Watts
LE5552i ---------- Stand by ---------- < 1,0 Watt
Médio ---------- 120 Watts

Sintonizador Analógico / Digital
Impedância de entrada de antena:---------- 75 ohm-tipo desbalanceada para VHF/UHF
Impedância de entrada de cabo:---------- 75 ohm-tipo desbalanceada para CABO
Sintonizador:---------- Circuito de recepção discreto
Sistema de sintonia---------- F.S. (Frequency synthetizer)-PLL
Sistema de televisão:---------- Padrão M-525 linhas
Faixa de frequencia de recepção 54MHz a 864 MHz
Freqüência intermediária (sinal digital):---------- 44MHz
Freqüências intermediárias (sinal analógico):---Portadora de vídeo---------- 45,75 MHz
Portadora de som ---------- 41,25 MHz/ 4,5MHz
Portadora de croma---------- 42,17 MHz
freqüências subportadoras de croma (sinal analógico):---------- 3,575611MHz ------- (PALM)
3,582056 MHz ------- (PALN)
3,579545 MHz ------- (NTSC)

Potência de áudio : ---------- 10W + 10W (RMS) / 6 ohm

Painel LE3252i (opção 1)
Código: ---------- LTA320AN01 - Samsung
Tipo: ---------- TFT - LED
Resolução: ---------- 1366 x 768 pixels
Cor: ---------- 16,7M
Angulo de visão: ---------- H:178°,V:178°
Tempo de resposta: ---------- 12,0 mseg
Taxa de contraste: ---------- 4000:1
Brilho: ---------- 400cd/m²

Painel LE3252i (opção 2)
Código ---------- LC320EXN SEA3 - LG
Tipo: ---------- TFT - LED
Resolução ---------- 1366 x 768 pixels
Cor: ---------- 16,7M
Angulo de visão: ---------- H:178°,V:178°
Tempo de resposta: ---------- 6,0 mseg
Taxa de contraste: ---------- 1200:1
Brilho: ---------- 380cd/m²

Painel LE4052i
Código ---------- LTA400HM 13 - Samsung
Tipo: ---------- TFT - LED
Resolução ---------- 1920 x 1080 pixels
Cor: ---------- 16,7M
Angulo de visão: ---------- H:178°,V:178°
Tempo de resposta: ---------- 8,0 mseg
Taxa de contraste: ---------- 4000:1
Brilho: ---------- 400cd/m²

Painel LE4652i
Código ---------- LTA460HQ12-C03 - Samsung
Tipo: ---------- TFT - LED
Resolução ---------- 1920 x 1080 pixels
Cor: ---------- 16,7M
Angulo de visão: ---------- H:178°,V:178°
Tempo de resposta: ---------- 6,0 mseg
Taxa de contraste: ---------- 4000:1
Brilho: ---------- 400cd/m²

Painel LE5552i
Código ---------- LTA550HJ12 - Samsung
Tipo: ---------- TFT - LED
Resolução ---------- 1920 x 1080 pixels
Cor: ---------- 16,7M
Angulo de visão: ---------- H:178°,V:178°
Tempo de resposta: ---------- 6,0 mseg
Taxa de contraste: ---------- 5000:1
Brilho: ---------- 400cd/m²

Peso/ Dimensões(LxAxP): LE3252i ---------- 11,08 Kg (c/ pedestal: 783 x 561 x 240 mm)
(s/ pedestal: 783 x 526 x 41 mm)
LE4052i ---------- 17,6 Kg (c/ pedestal: 977 x 690 x 255 mm)
(s/ pedestal: 977 x 648 x 41 mm)
LE4652i ---------- 18,0 Kg (c/ pedestal: 1109 x 748 x 290 mm)
(s/ pedestal: 1109 x 694 x 45 mm)
LE5552i ---------- 25,5 Kg (c/ pedestal: 1304 x 858 x 289 mm)
(s/ pedestal: 1304 x 810 x 50 mm)

INDÍCE

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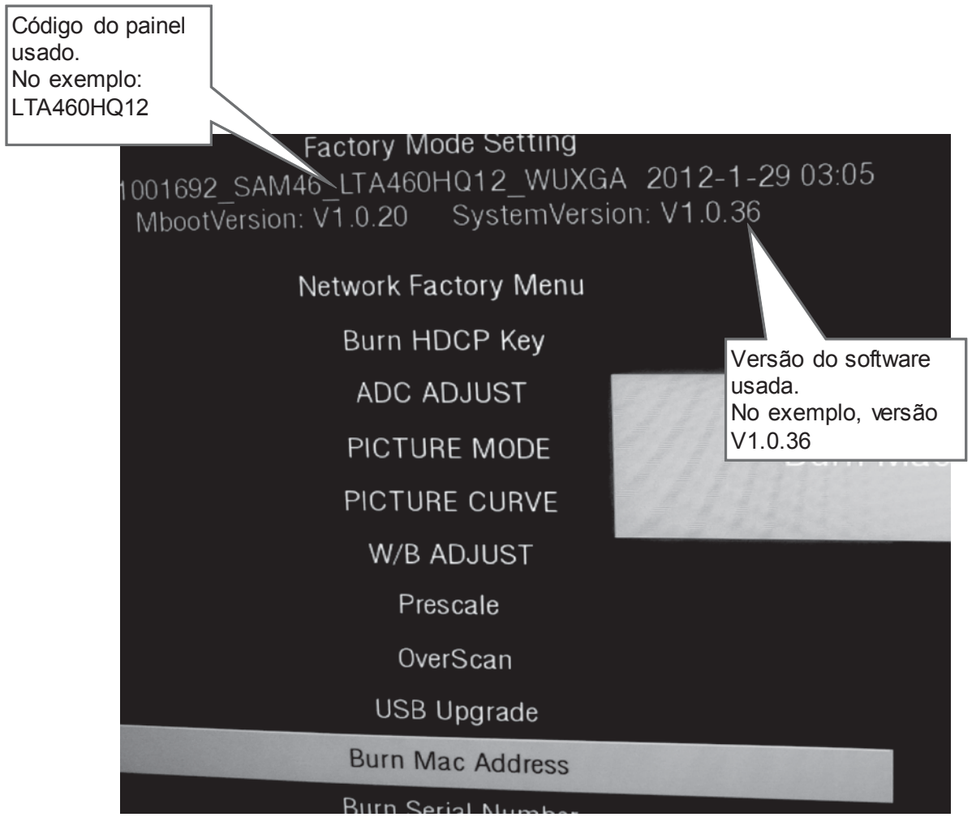
CHECAGEM

VERIFICAÇÃO DA VERSÃO DO SOFTWARE (Menu de Serviço).

Usando o Controle Remoto no Menu Imagem, digite "2008". Esta opção abre o Menu de Fábrica do aparelho.



INFORMAÇÕES UTEIS

DESBLOQUEIO DO APARELHO
Caso o cliente esquecer o código de bloqueio das entradas / classificação indicativa, entre com o código "1980" para desbloquear

TECLAS DE OPERAÇÃO DO MENU DE SERVIÇO
Utilize a tecla "Enter" para acessar os menus de serviço, tecla "Menu" para voltar 1 menu anterior e teclas ∇, Δ, < e > para selecionar ou ajustar

ATUALIZAÇÃO DE SOFTWARE

GRAVAÇÃO DO SOFTWARE (Via USB).
Deverá ser gravado o software “MstarUpgrade.bin” a ser instalado na raiz (Não colocá - lo em pastas ou subpastas) de um dispositivo USB.
Conectar o dispositivo na porta USB2 (terminal XS616).

Pode-se utilizar o Menu do usuário para atualizá - lo:
Abrir o Menu e mover até o Menu " Config. ", no submenu escolher a opção " Atualização de Software (USB), selecione USB e confirmar na opção "Sim".

Pode-se utilizar o Menu de fábrica para atualizá - lo:
No Menu Imagem, digitar "2008" para abrir o Menu de Fábrica e selecionar a opção " USB Upgrade " e selecione a opção Software Upgrade

Pode -se fazer a atualização da seguinte forma:
- Com o TV em stand by e o pen drive conectado, pressione e mantenha pressionado a tecla POWER no painel frontal do TV até que apareça uma tela azul com a barra de percentagem de atualização do SW.

Em todas as atualizações, é necessário esperar a atualização completa do software. Após a atualização deve-se fazer o "Factory Reset" e após isso desligar e ligar o TV da energia elétrica.

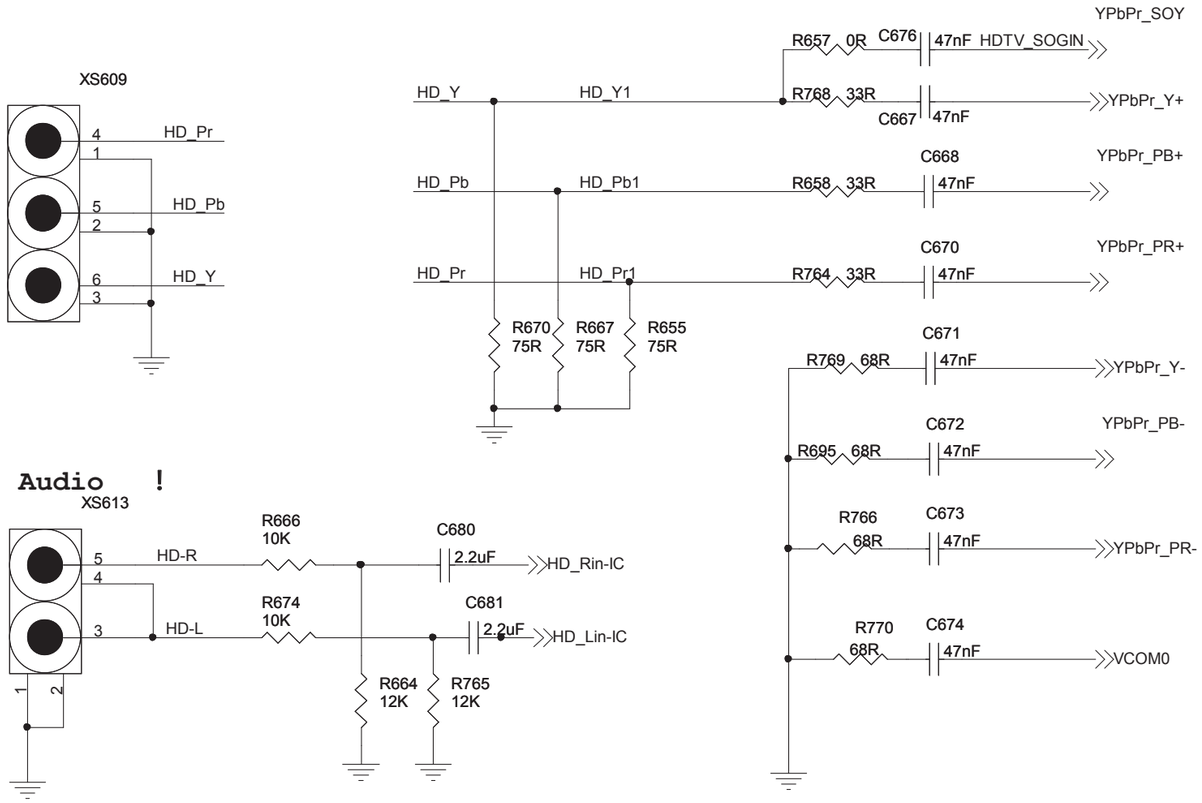
AJUSTE DO GANHO DE VIDEO (após a troca do painel LCD ou Atualização de Software)

AJUSTE DE GANHO ADC (OFFSET) DE VÍDEO COMPONENTE E PC-RGB
Conecte um sinal de barras coloridas ou escala de cinza na entrada a ser ajustada, Componente (YPbPr) ou PC-RGB.
Selecione a entrada a ser ajustada (Componente ou PC) e depois entre no Modo de Serviço.
Selecione o menu de ajuste "ADC ADJUST".
No menu "ADC ADJUST", selecione o item "AUTO ADC" e inicie o auto ajuste através das teclas direcionais "**<**" ou "**>**".

Obs: Na entrada Componente (YPbPr) é necessário ajustar em HD (720 ou 1080) e SD (480).

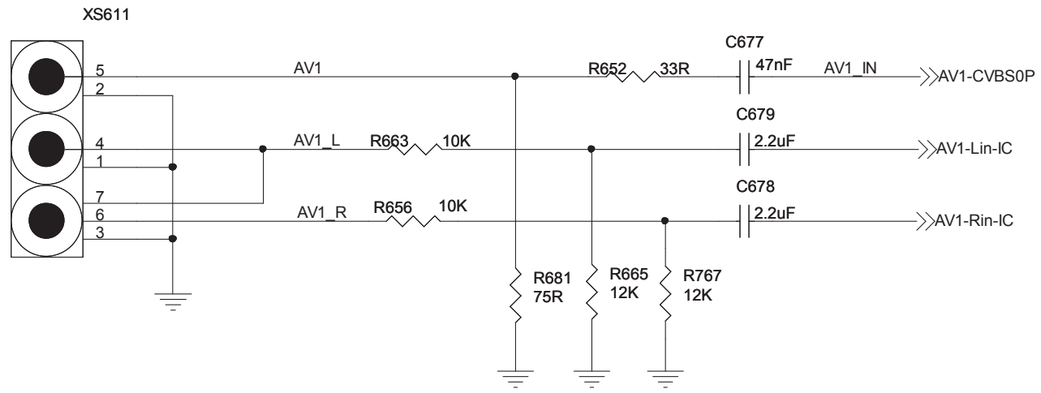
PCI Principal 32" e 40"

YPbPr/AV2 in

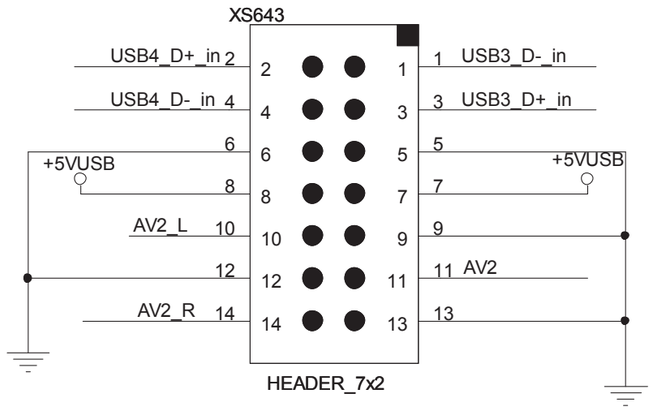


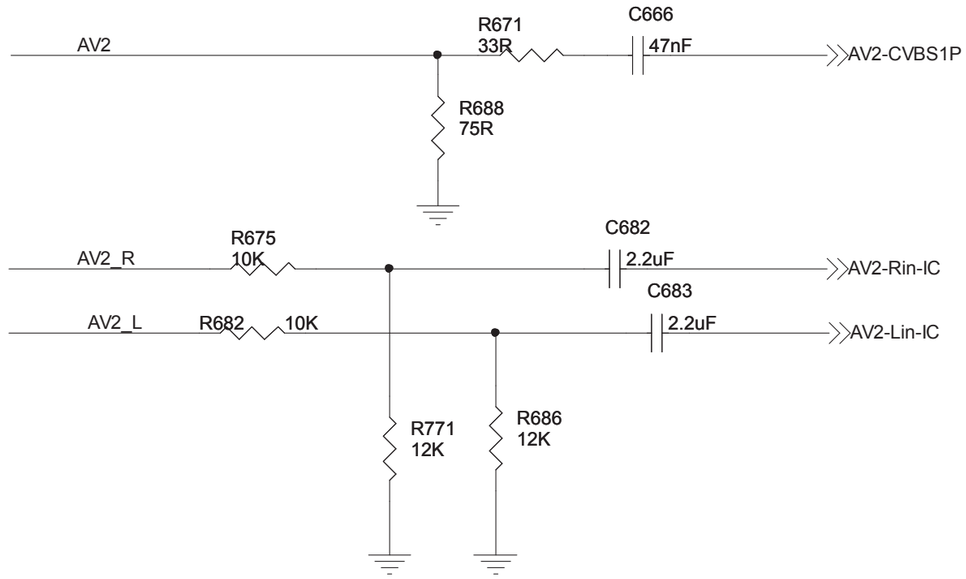
Audio !

AV1

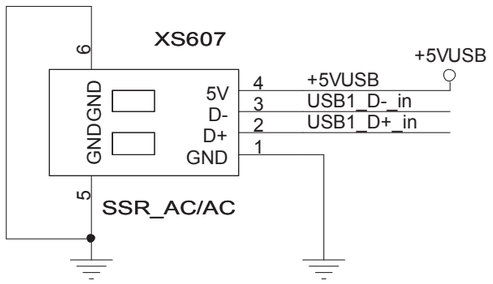


PCI Principal 32" e 40"

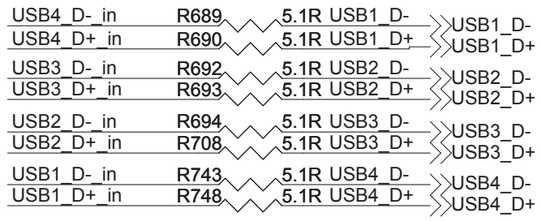


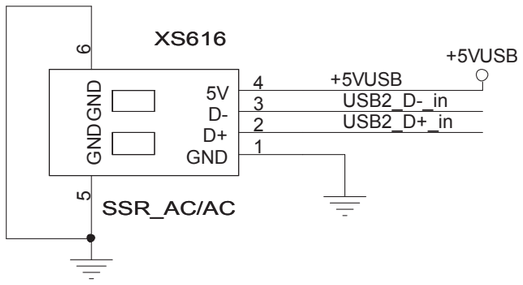


USB Input



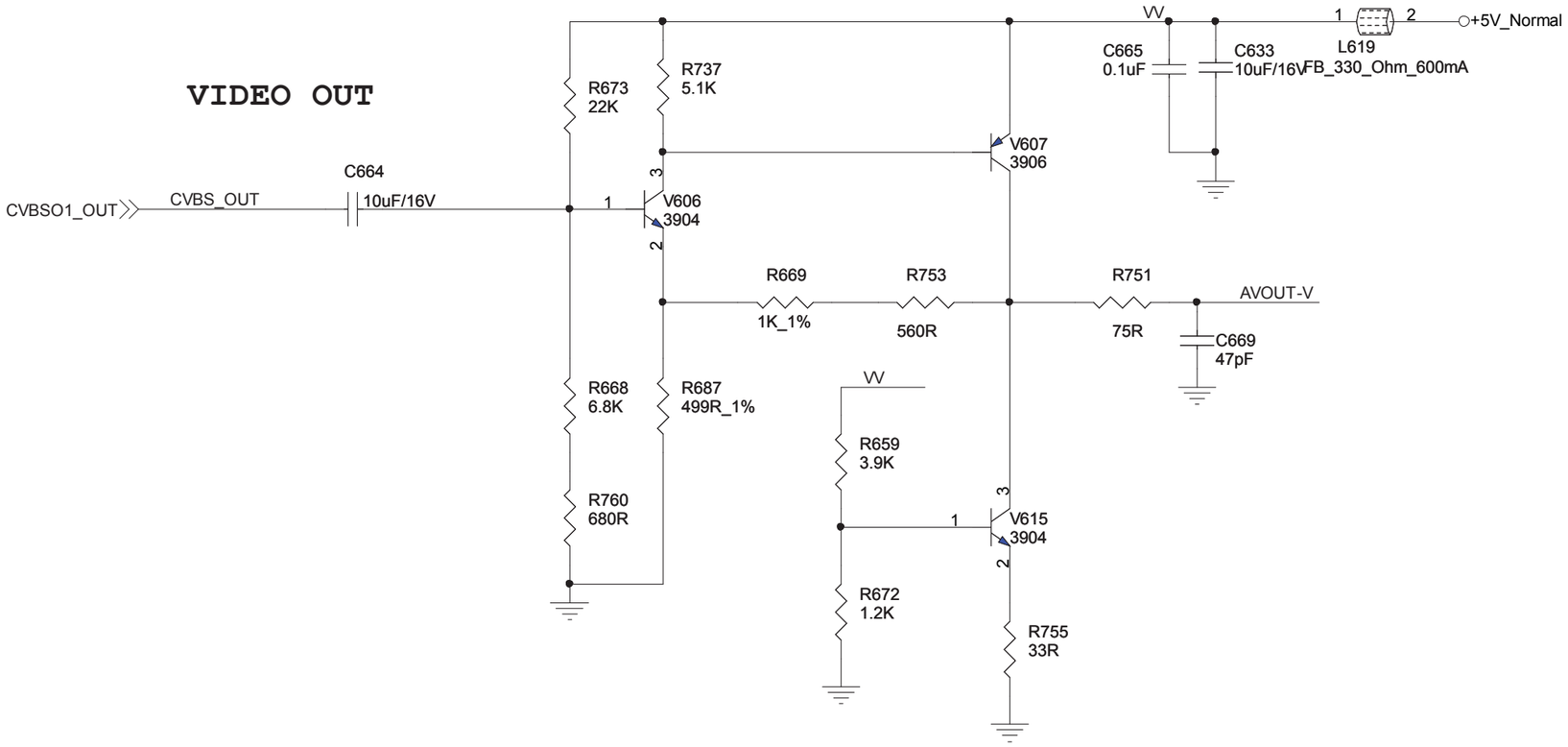
USB1

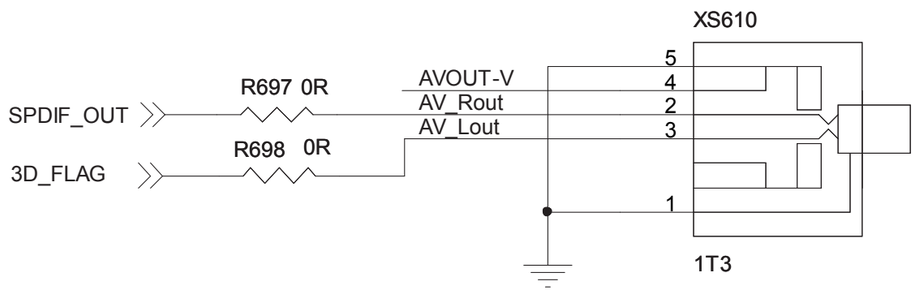


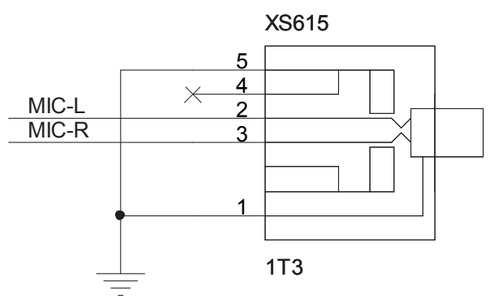


USB2

PCI Principal 32" e 40"

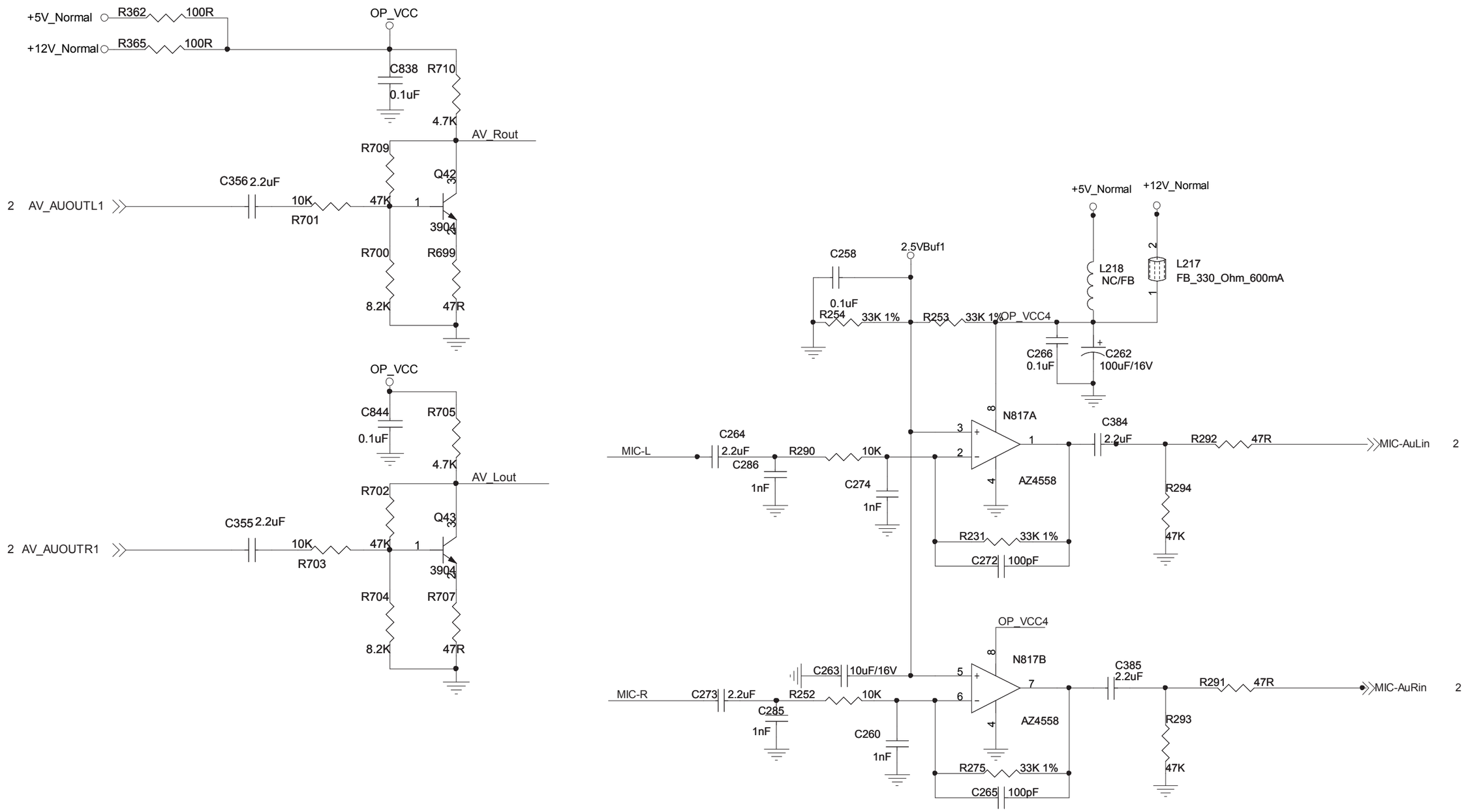






AV_OUT/ SPDIF/3D_FLAG

PCI Principal 32" e 40"



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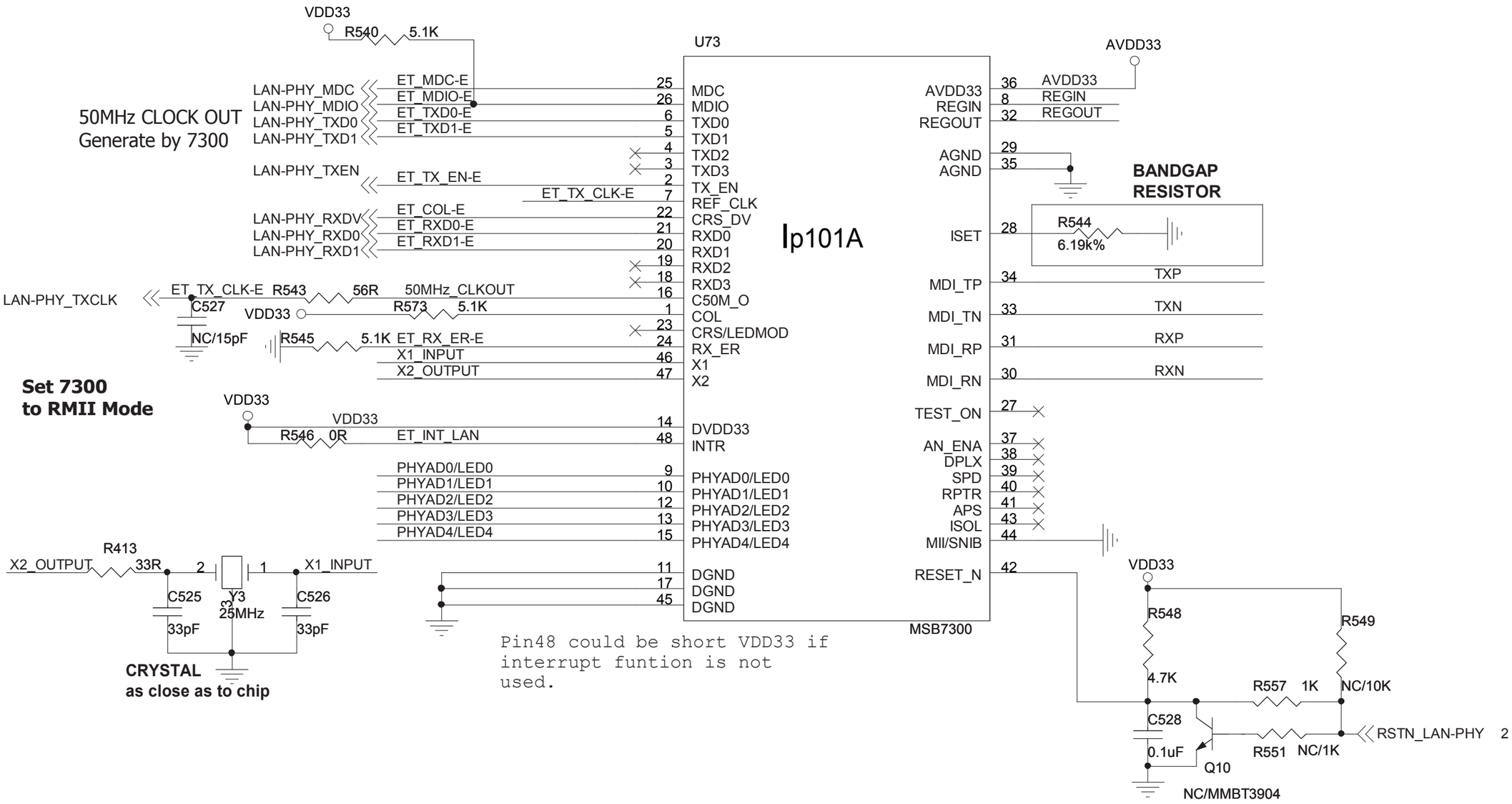

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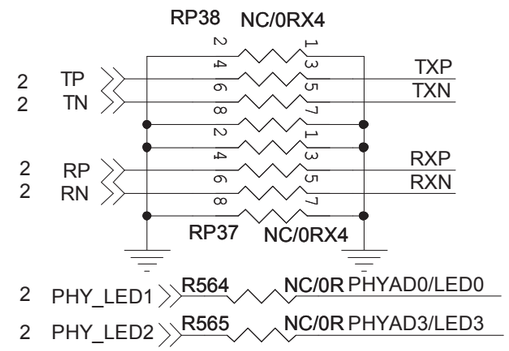
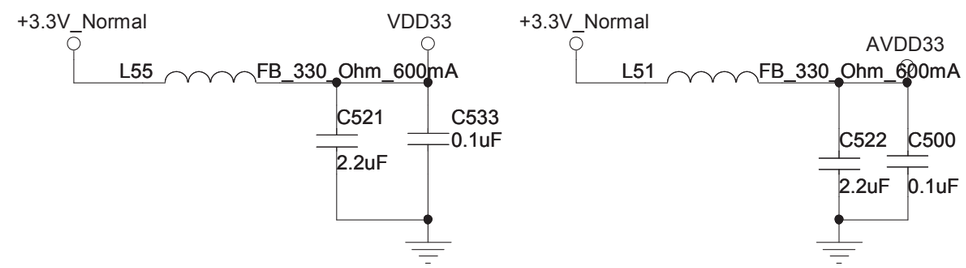
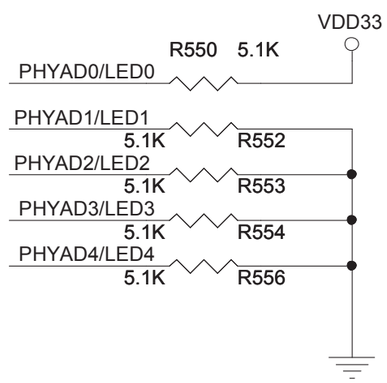
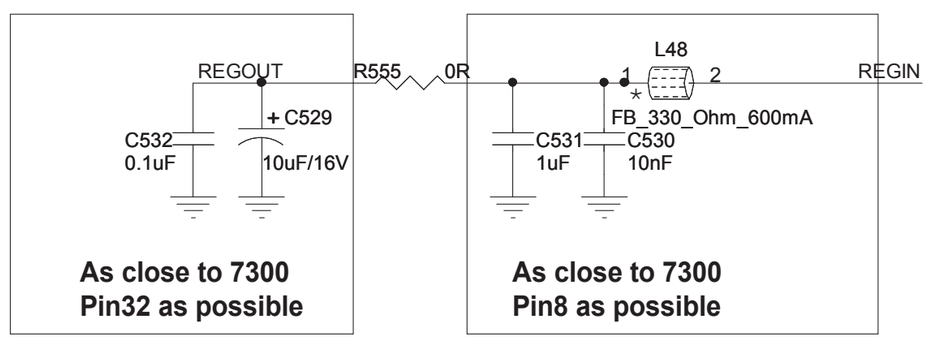




LED and PHY address Configuration

This schematic sets PHY address to 00001b.



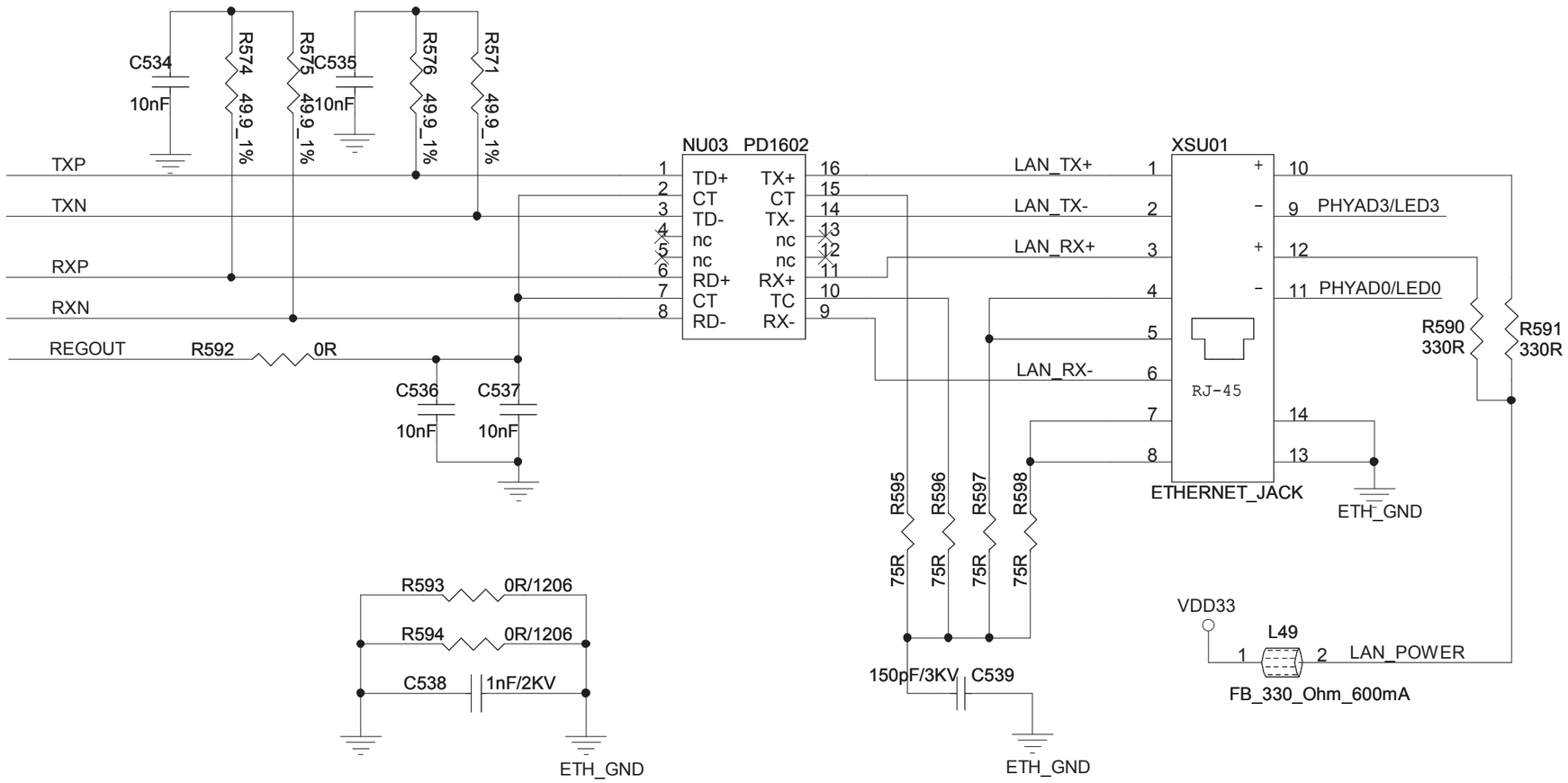


LED0	LED1	LED2	LED3	LED4
Link	Dupx	10Act	100Act	COL

**** Bead should be placed as close to 7300 as possible and in the same side as 7300.**

* : Optional ,but recommended

PCI Principal 32" e 40"



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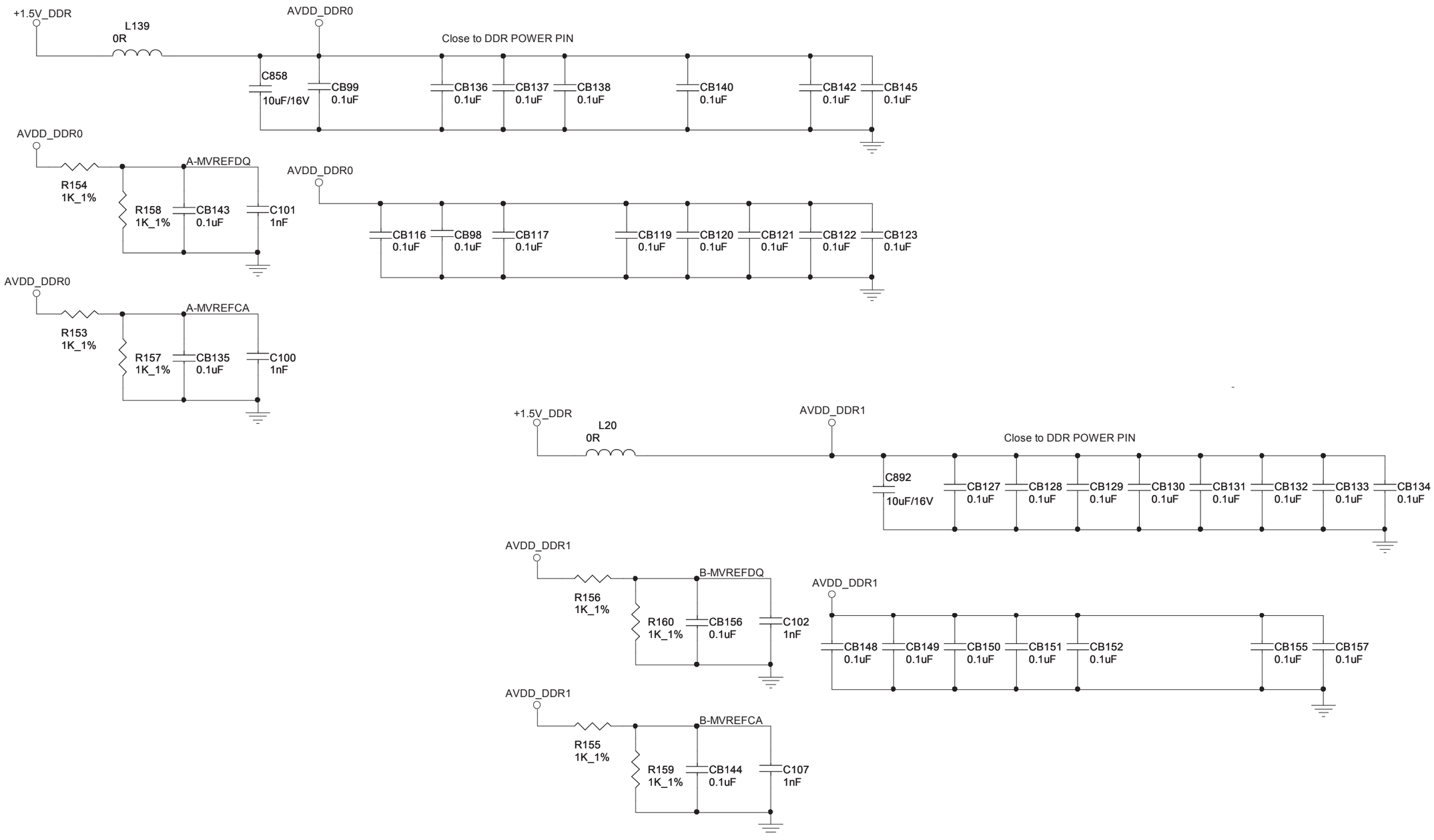

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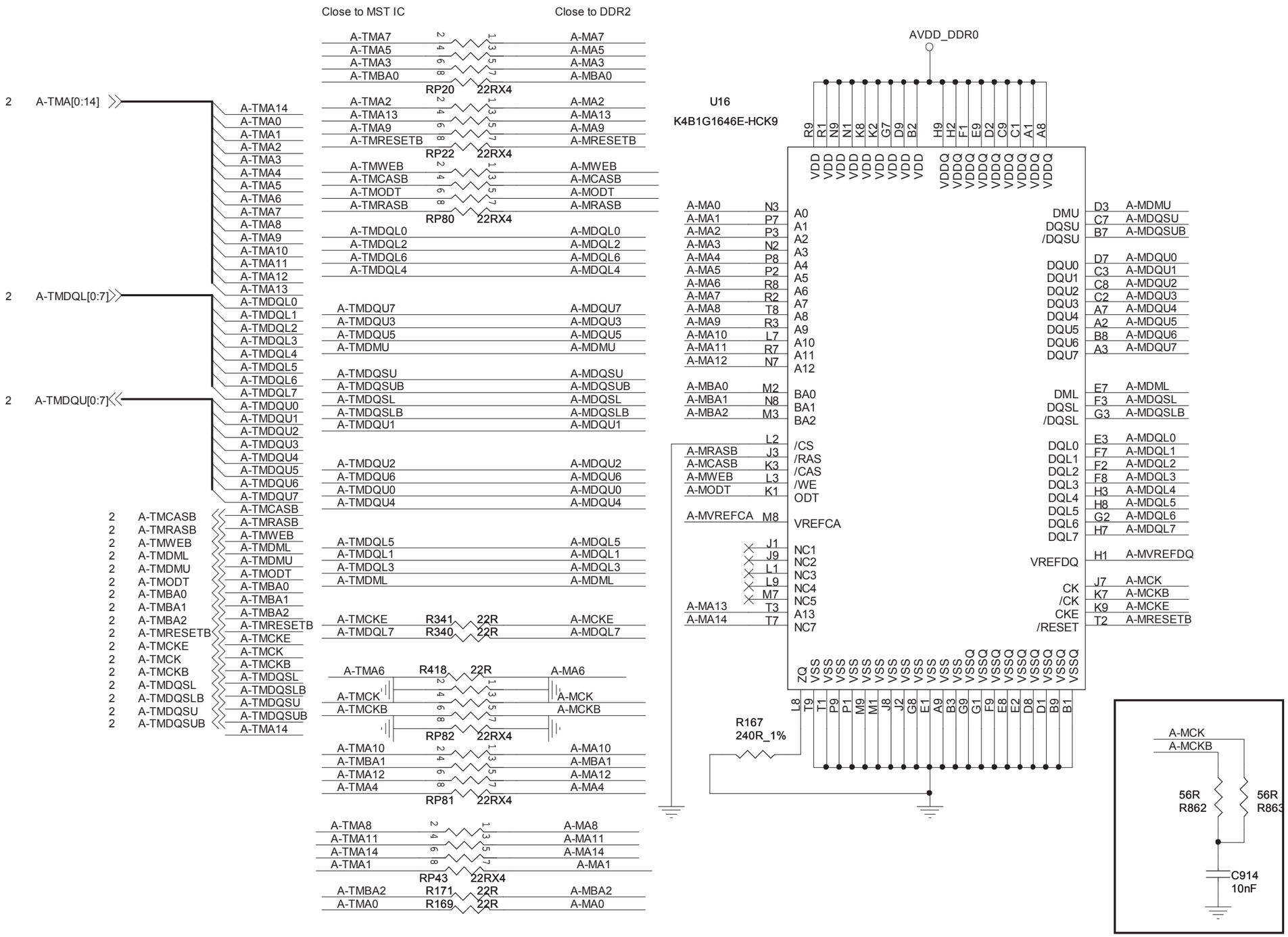

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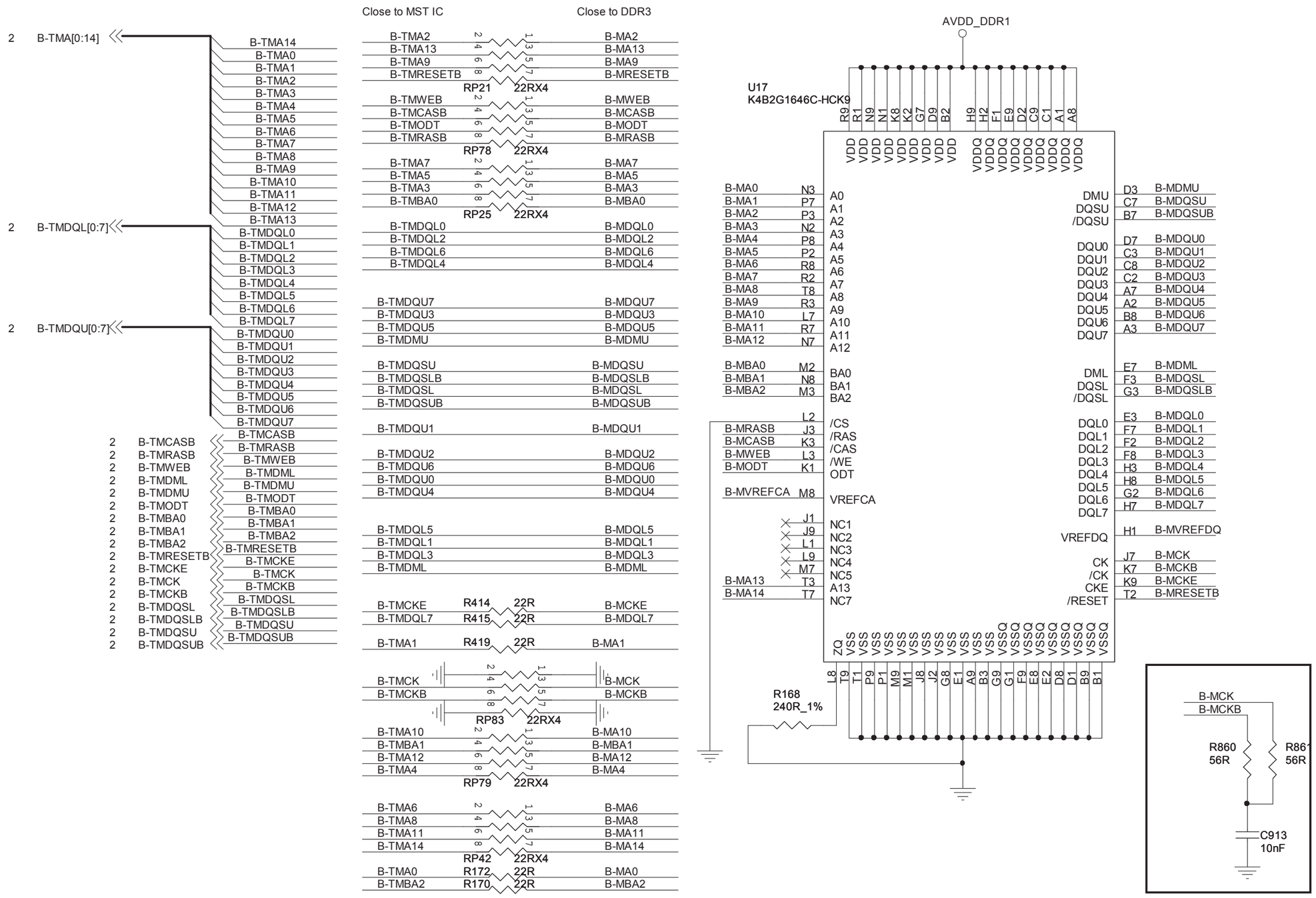

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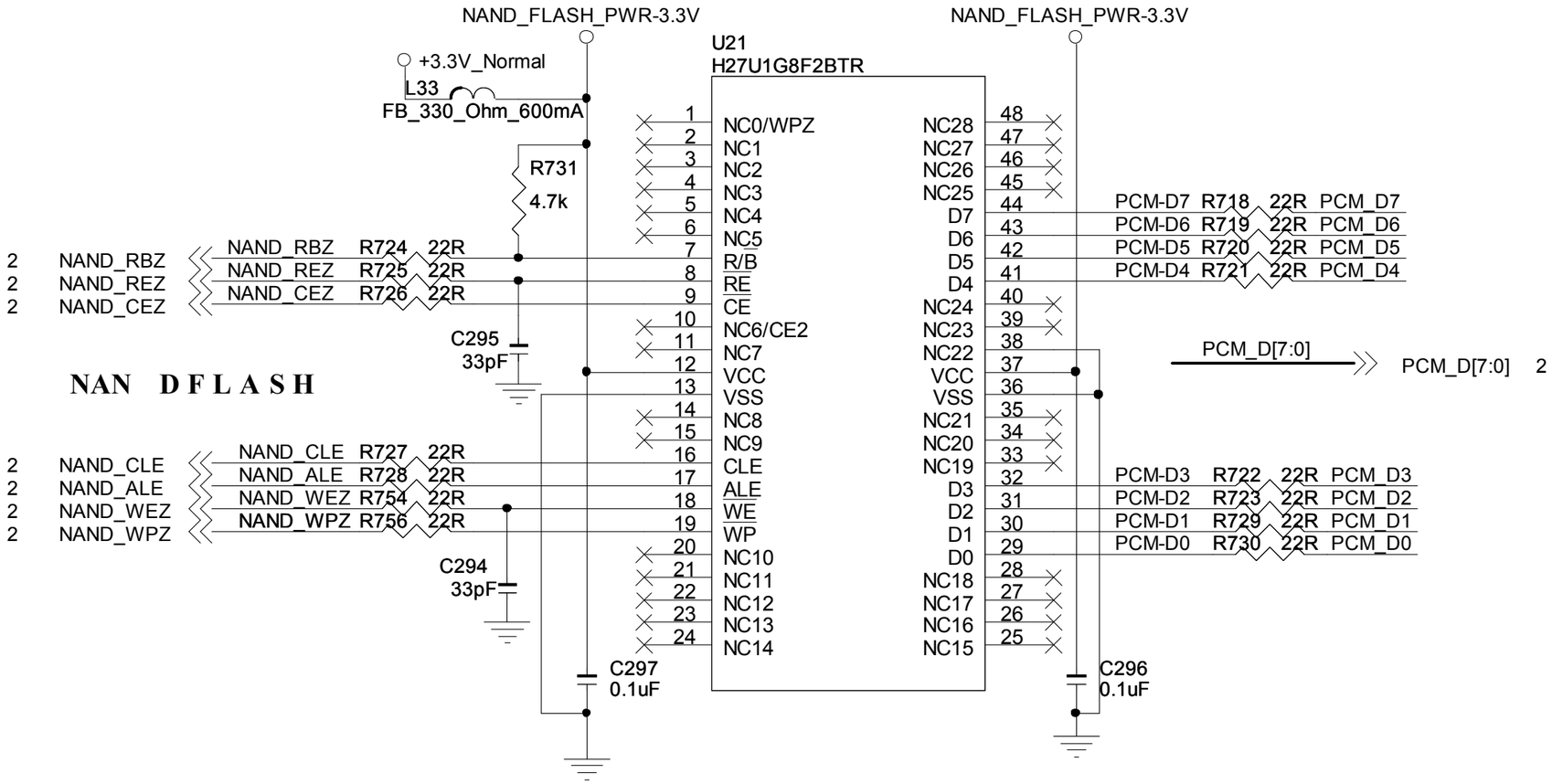

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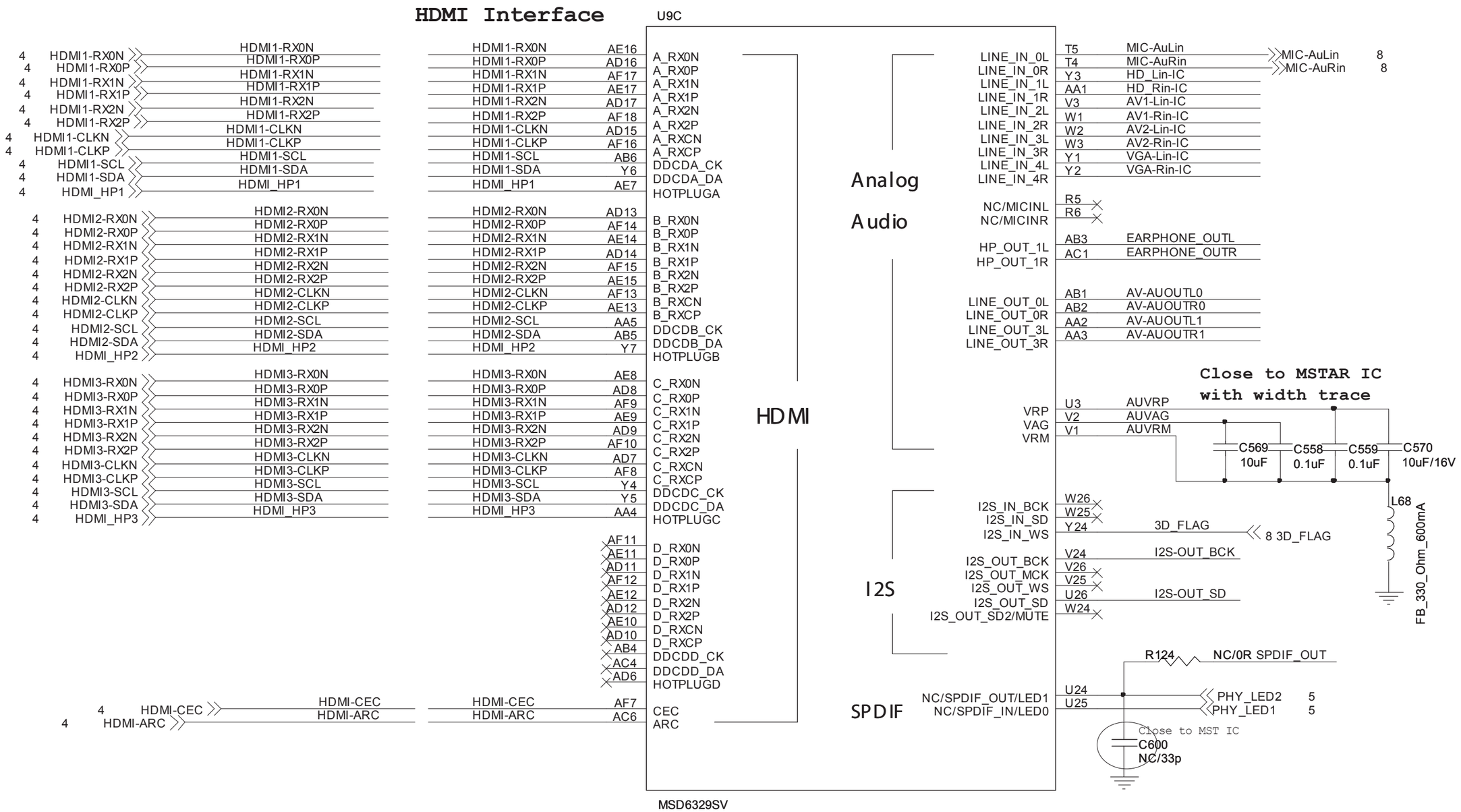

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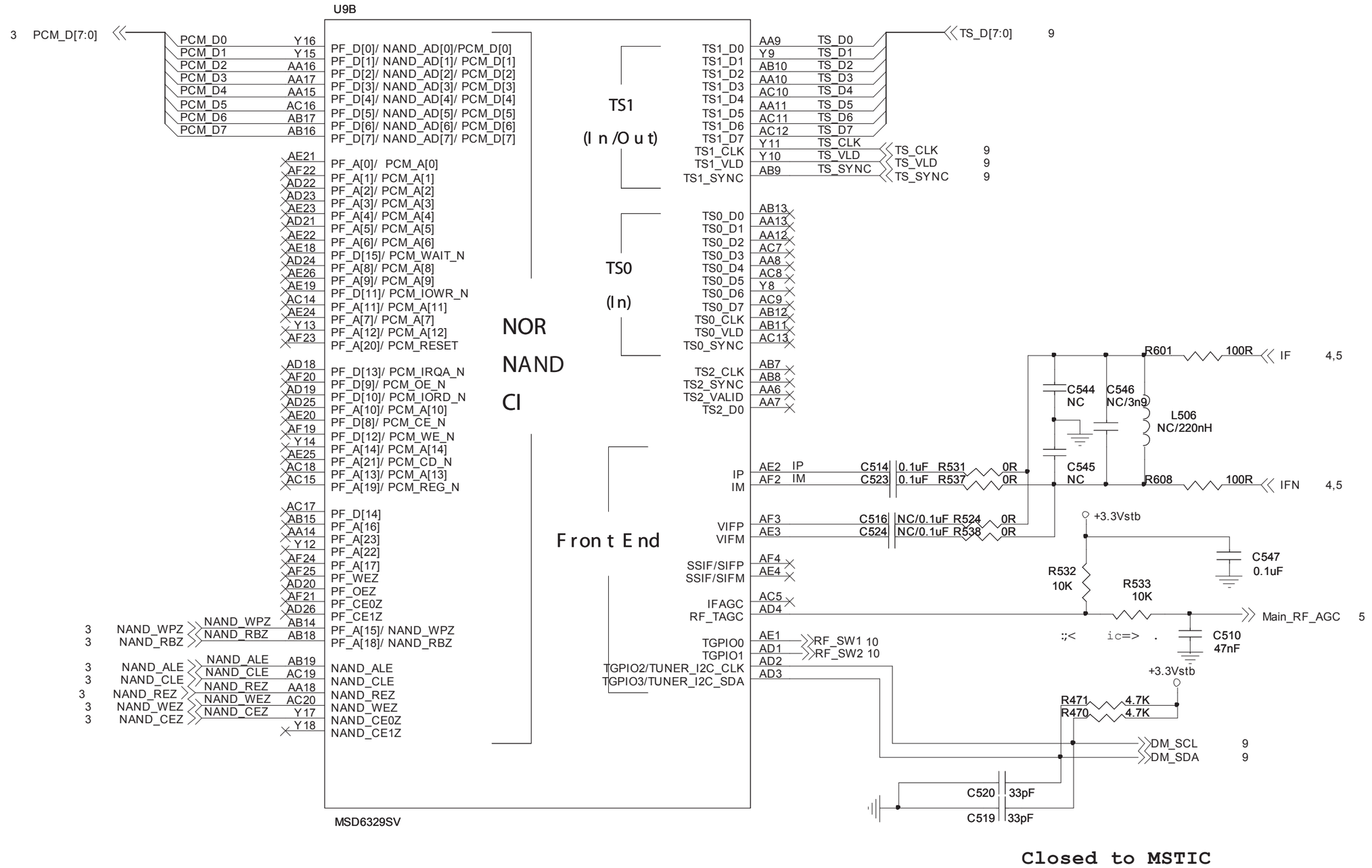

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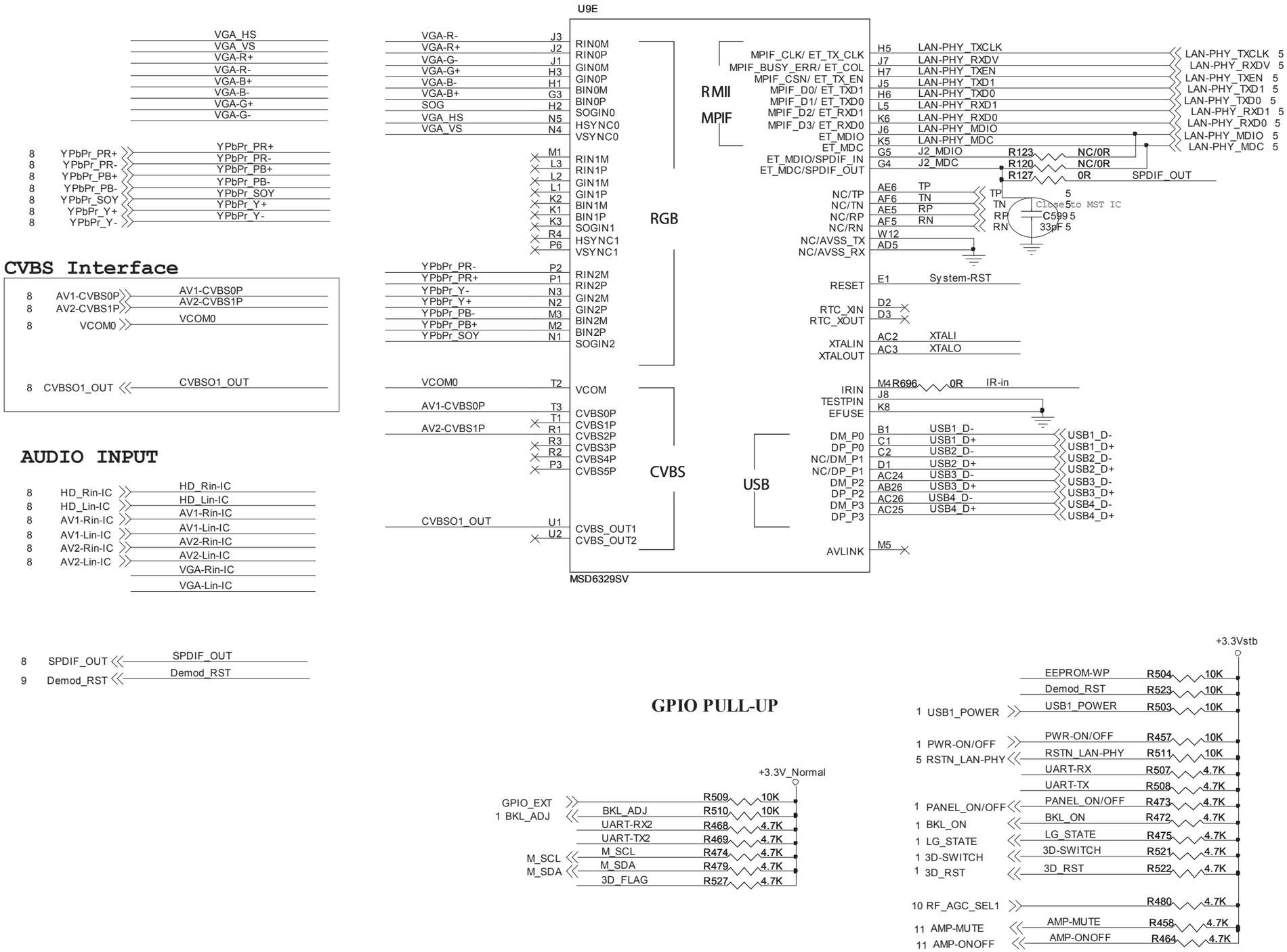

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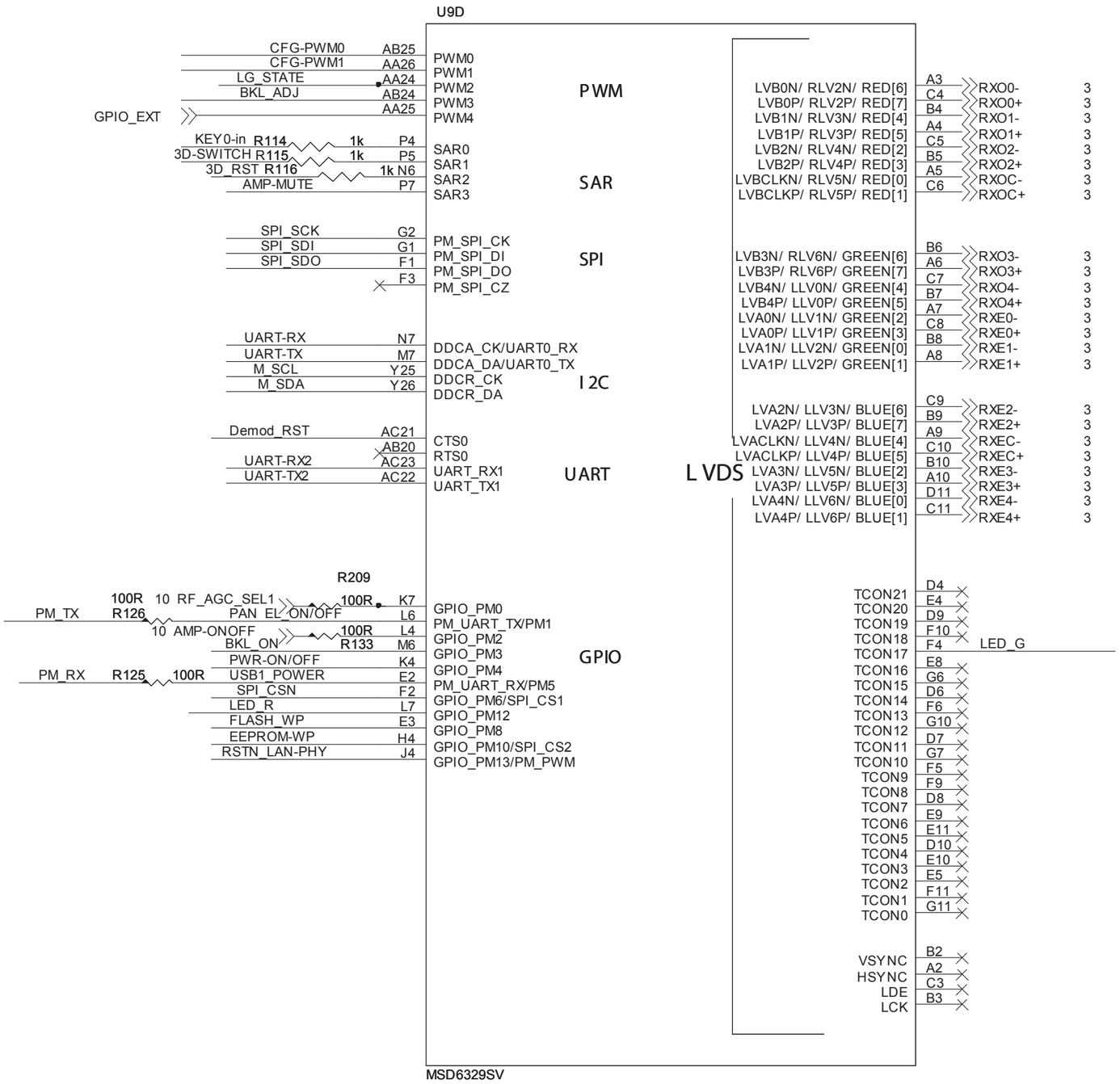

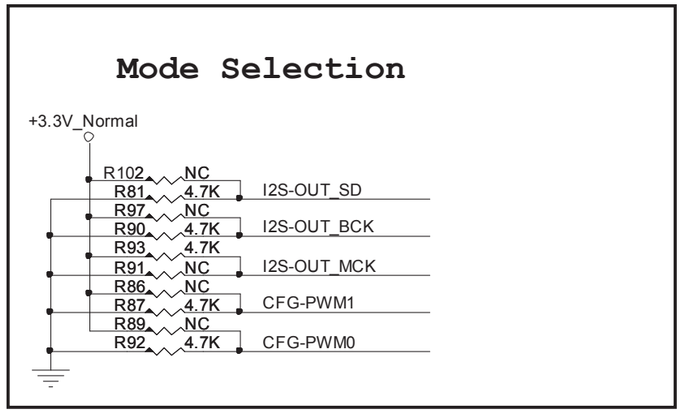

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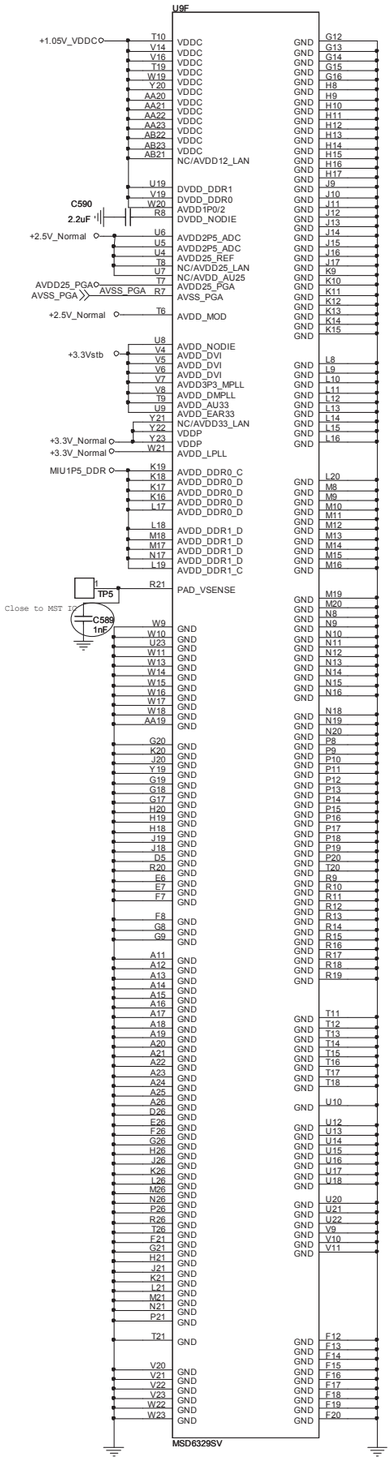
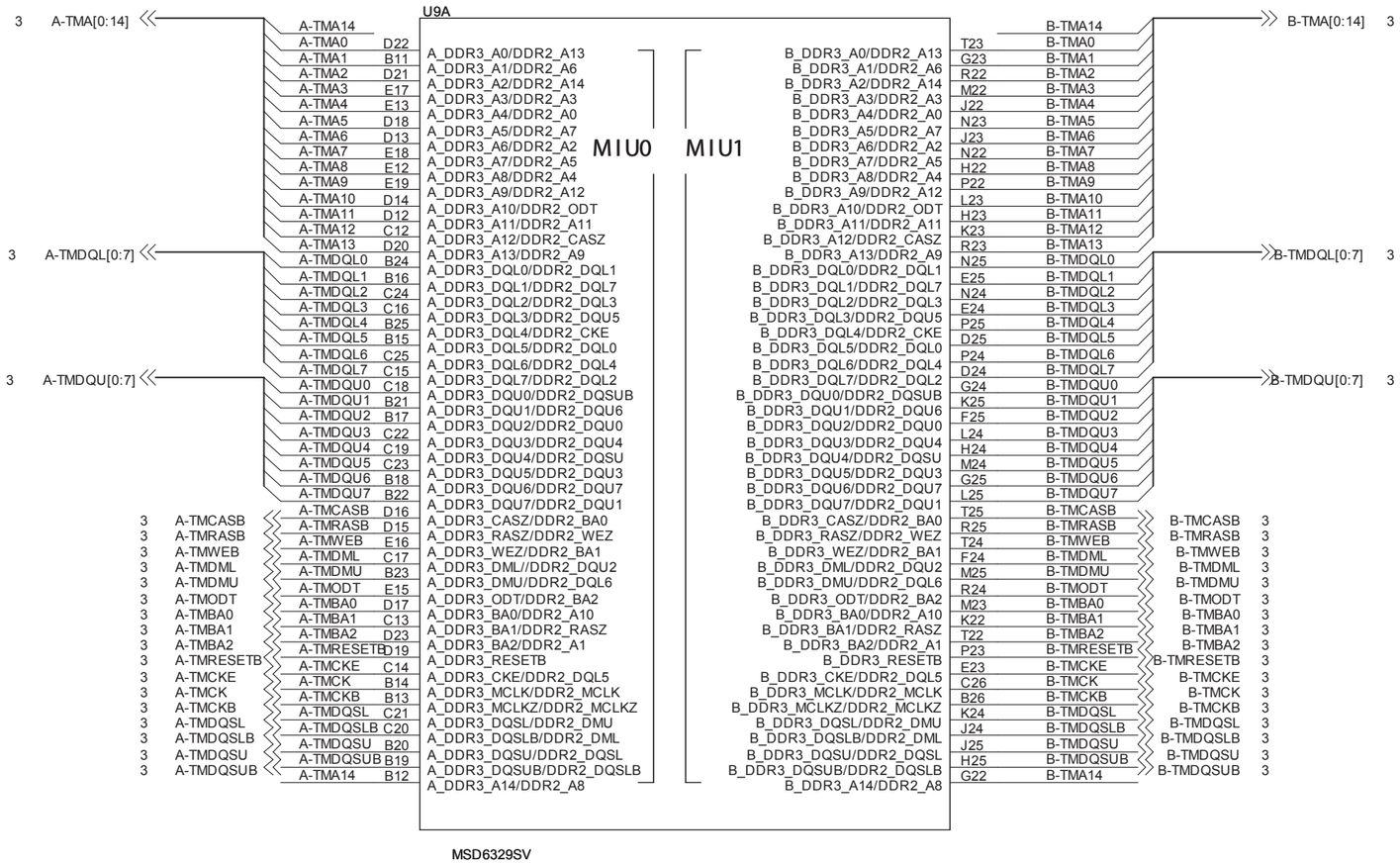
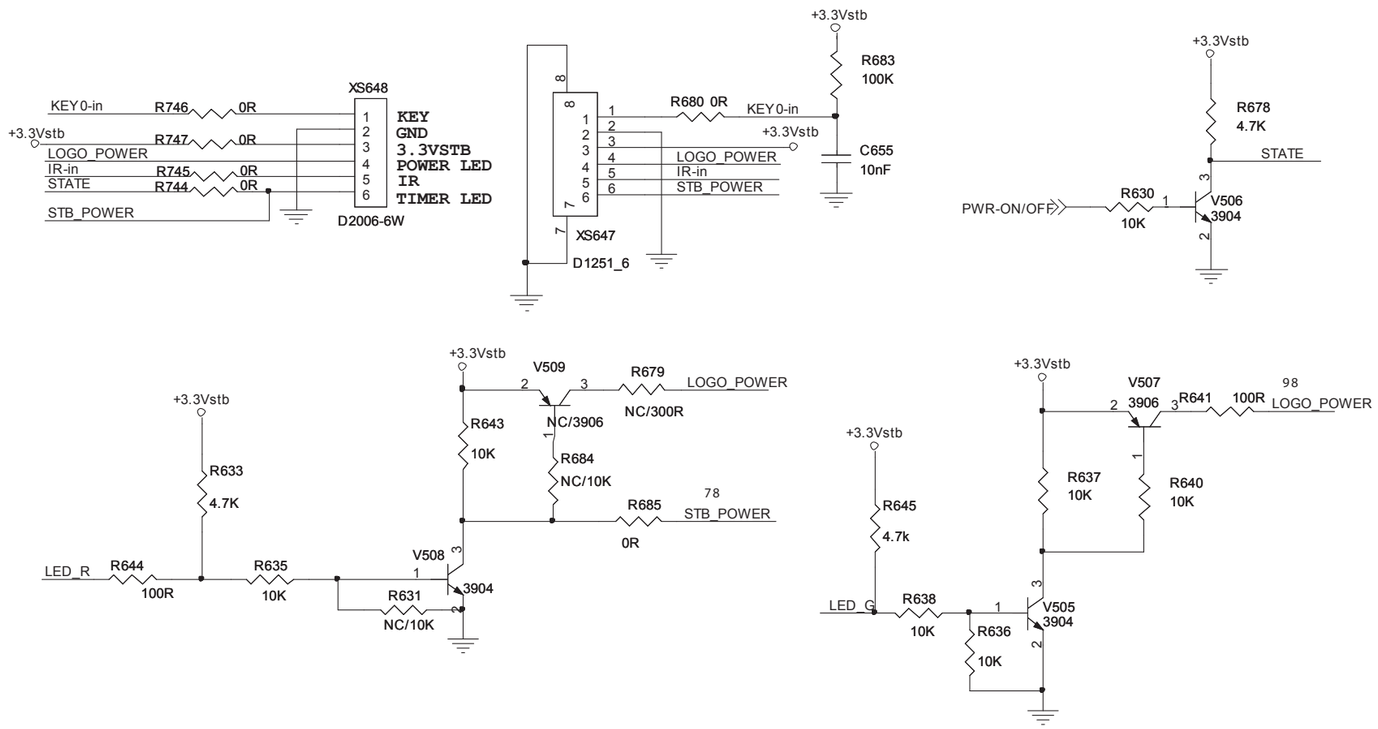


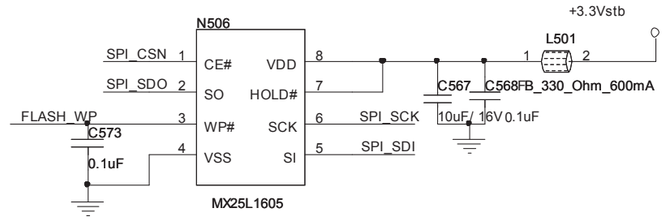


PCI Principal 32" e 40"

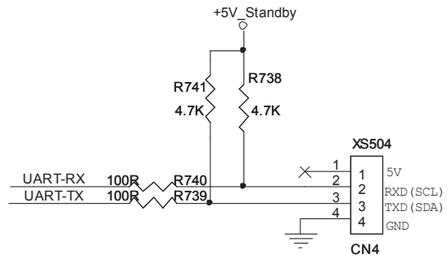
LED_IR_KEY



Boot Loader SPI Flash



Debug port



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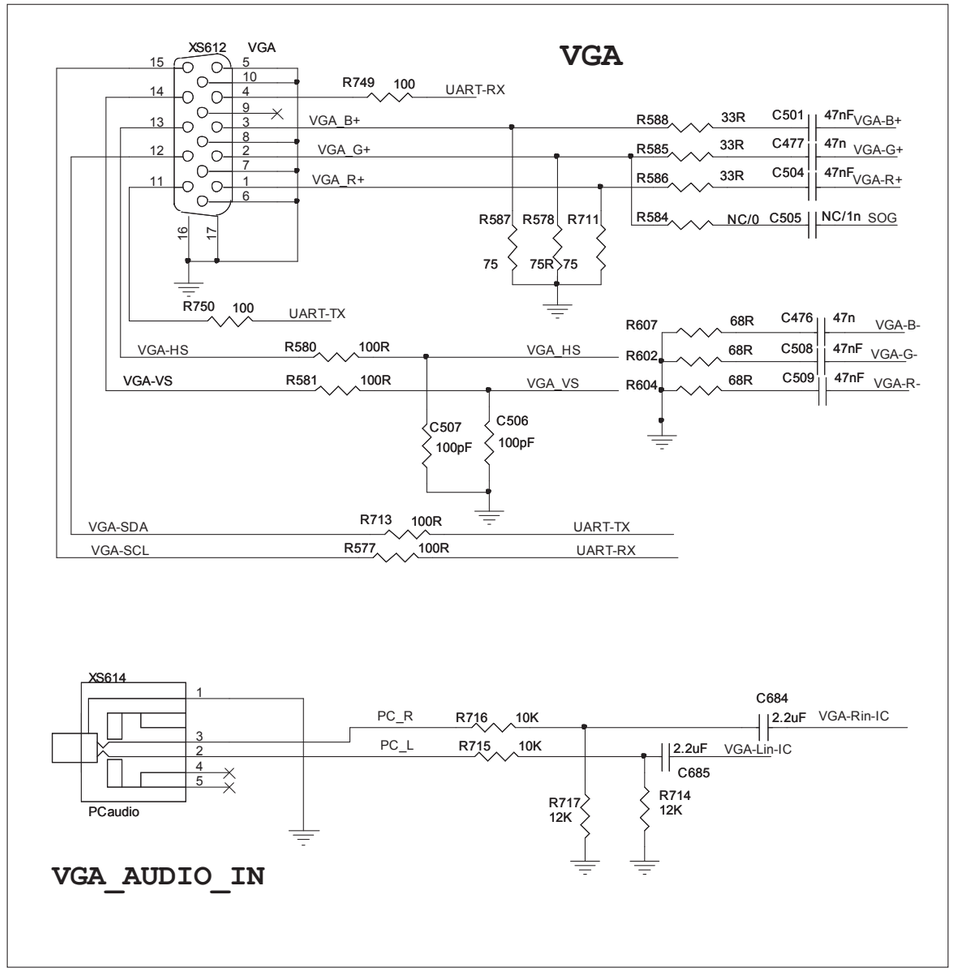

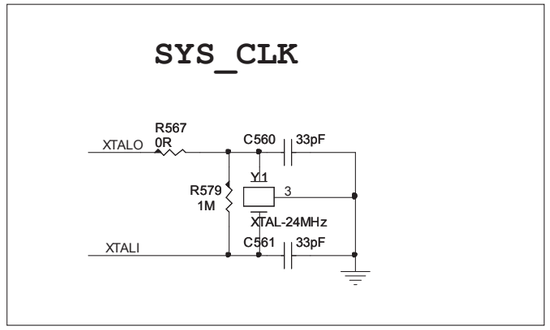

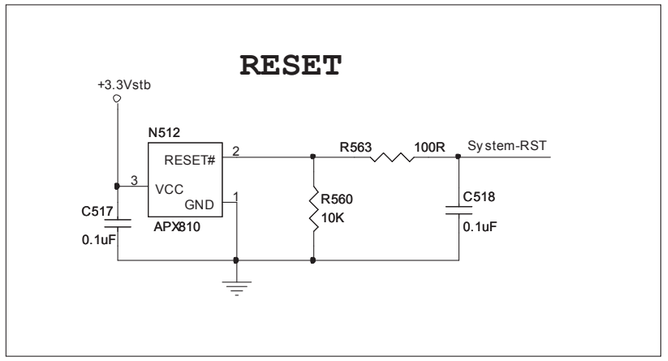

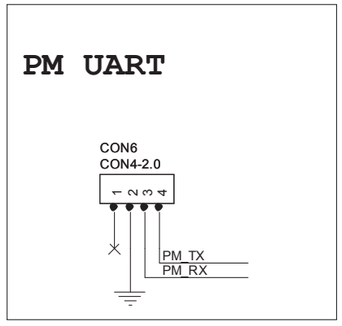

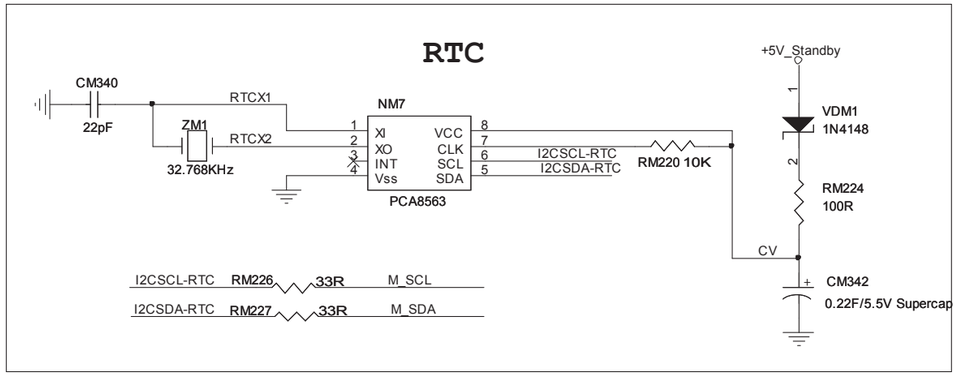

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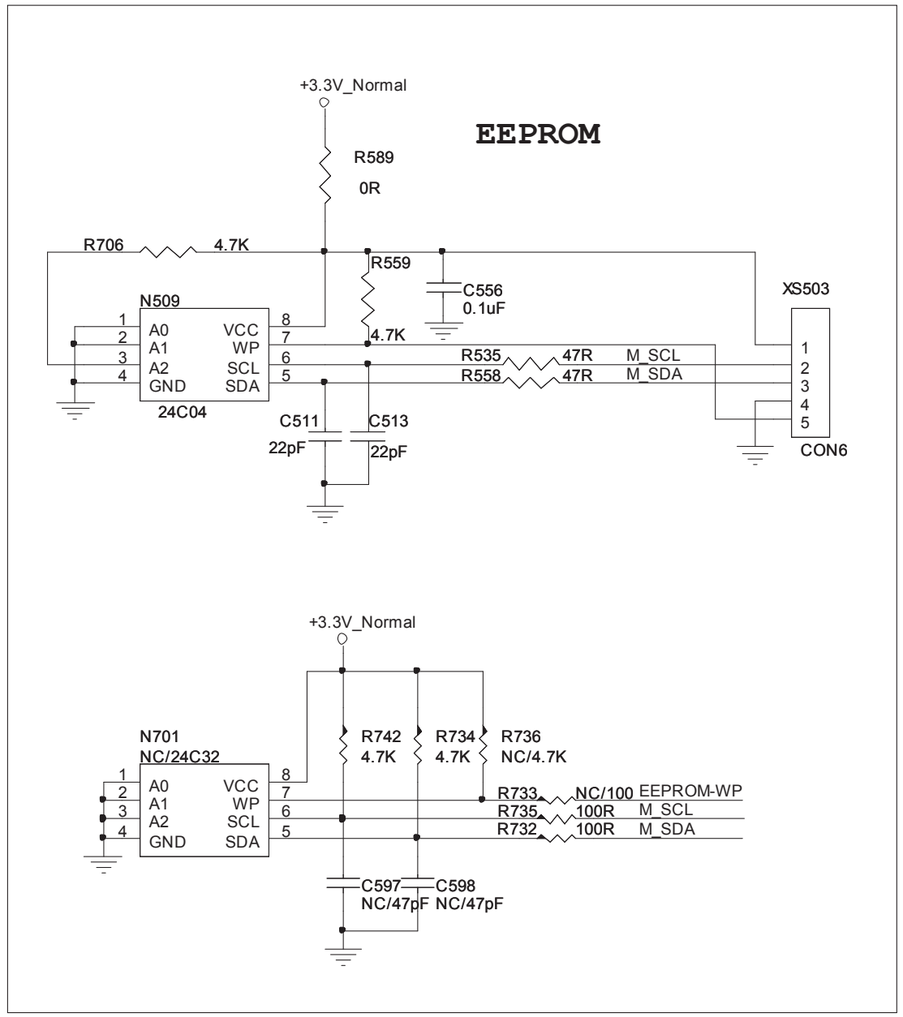
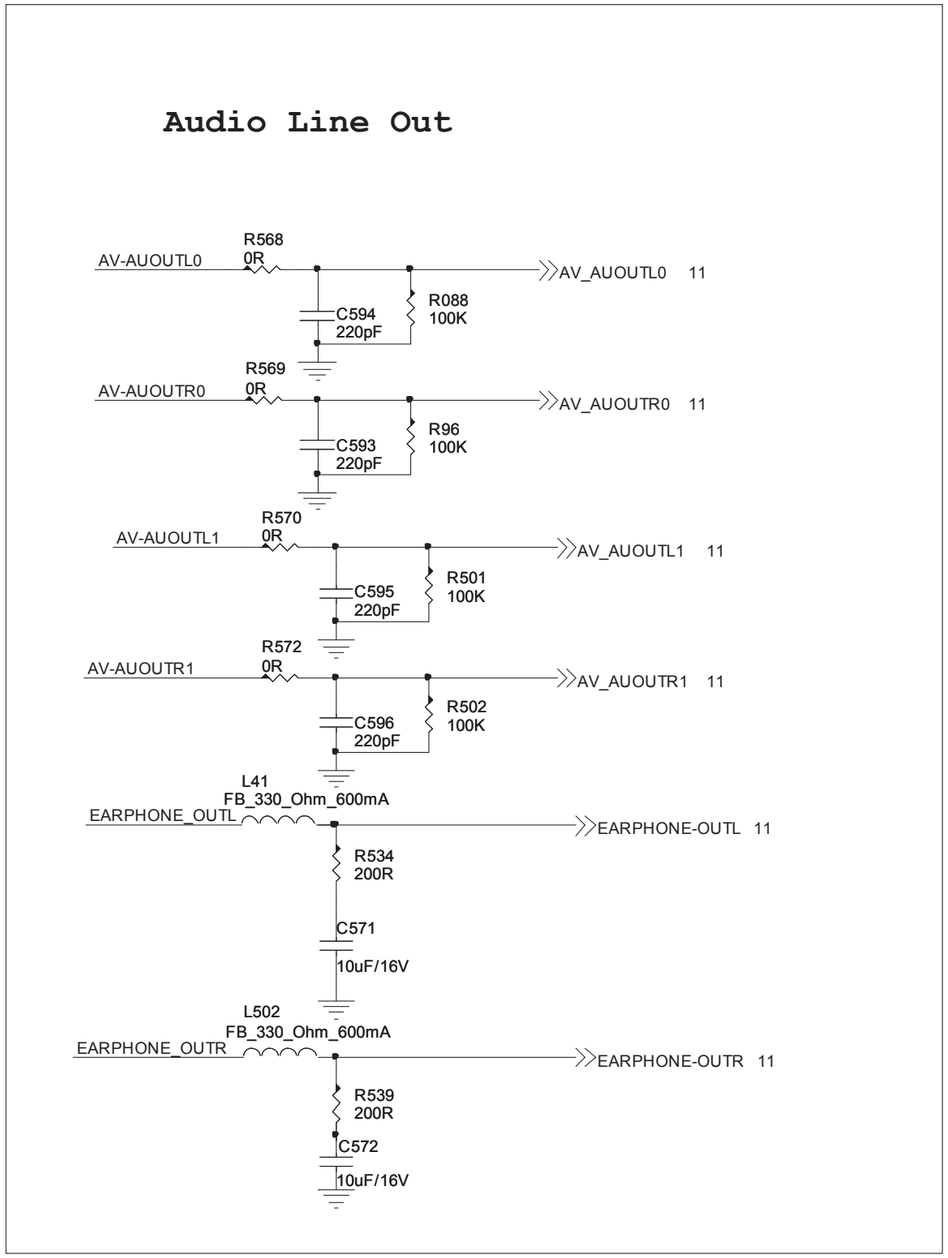
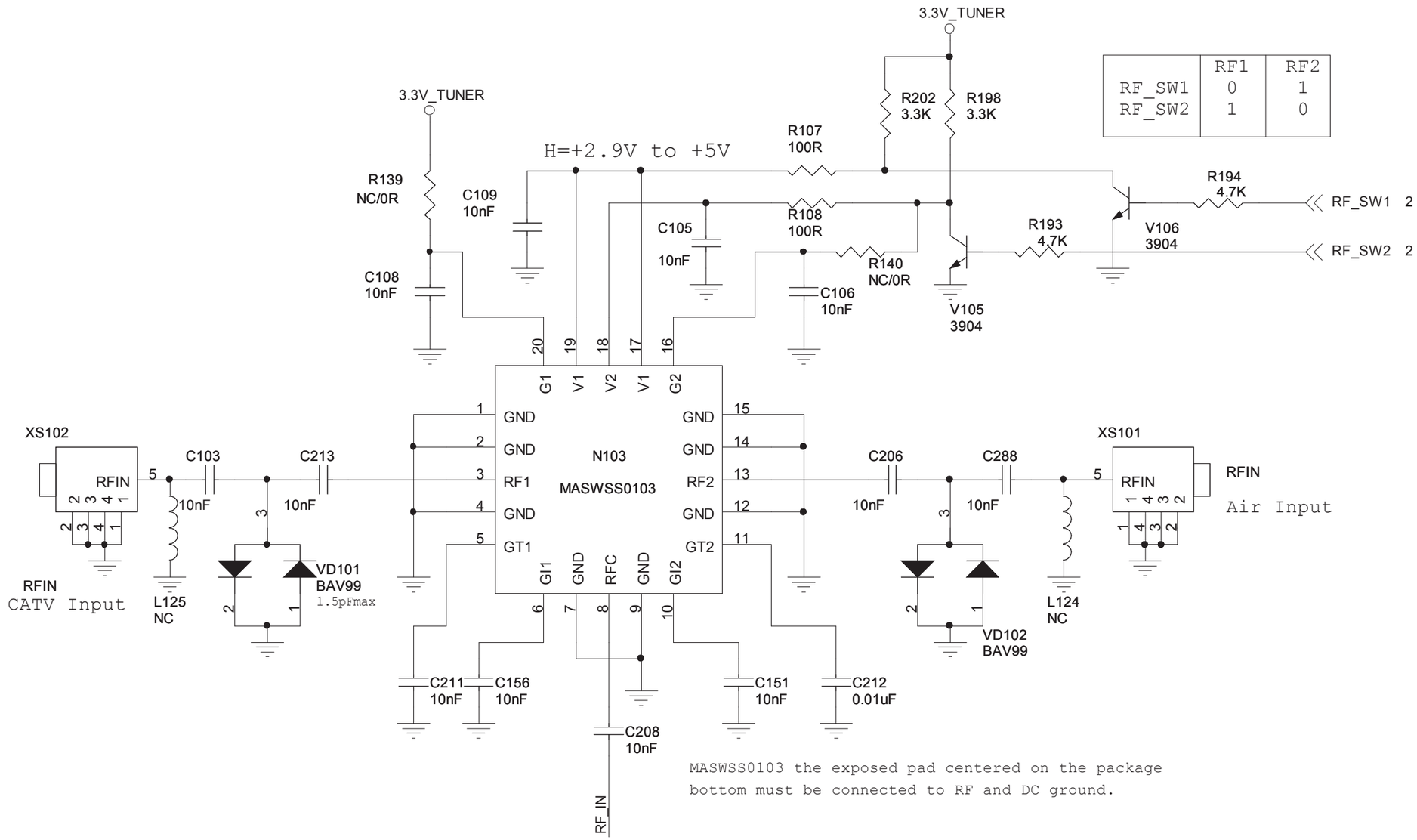




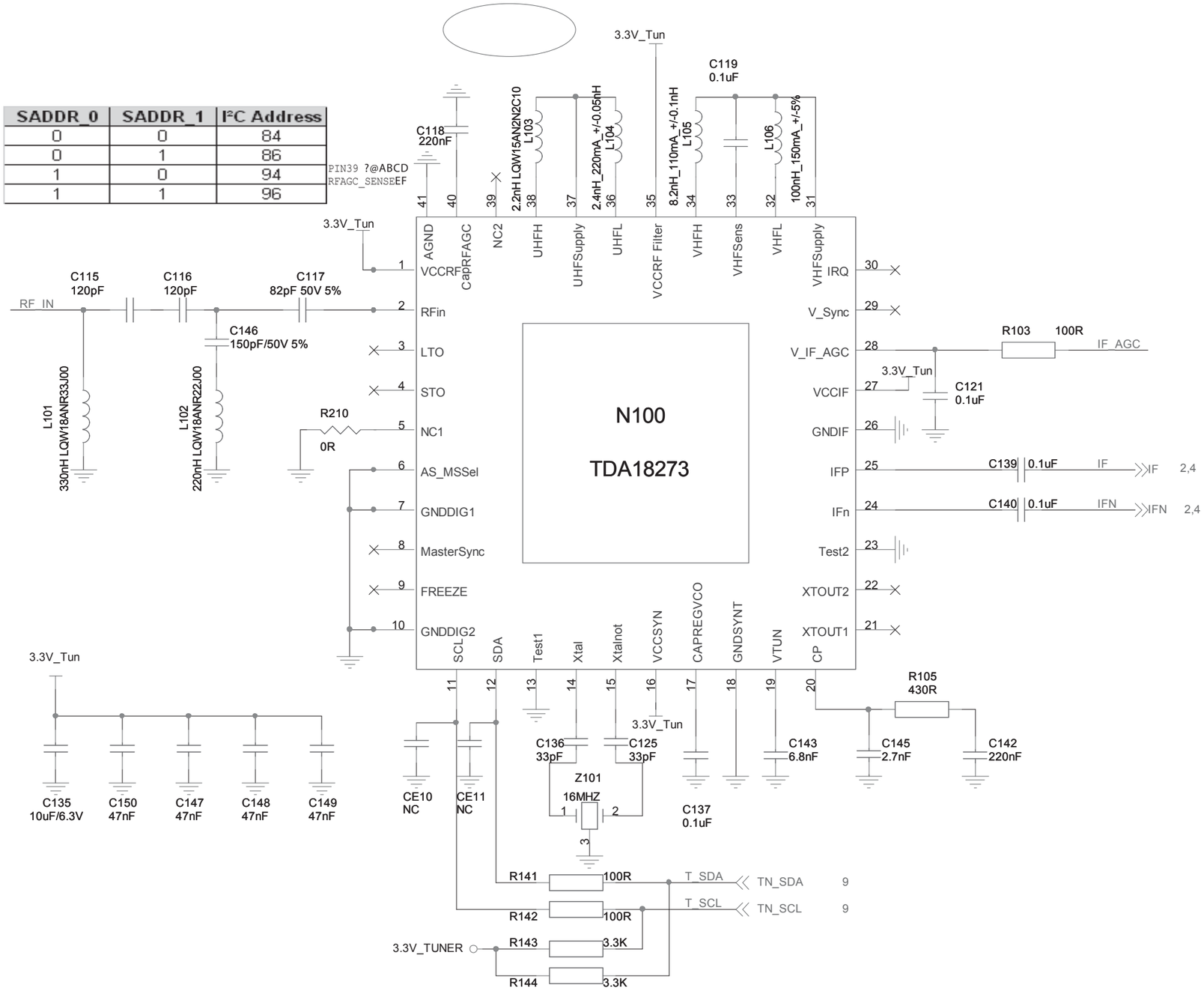
PCI Principal 32" e 40"



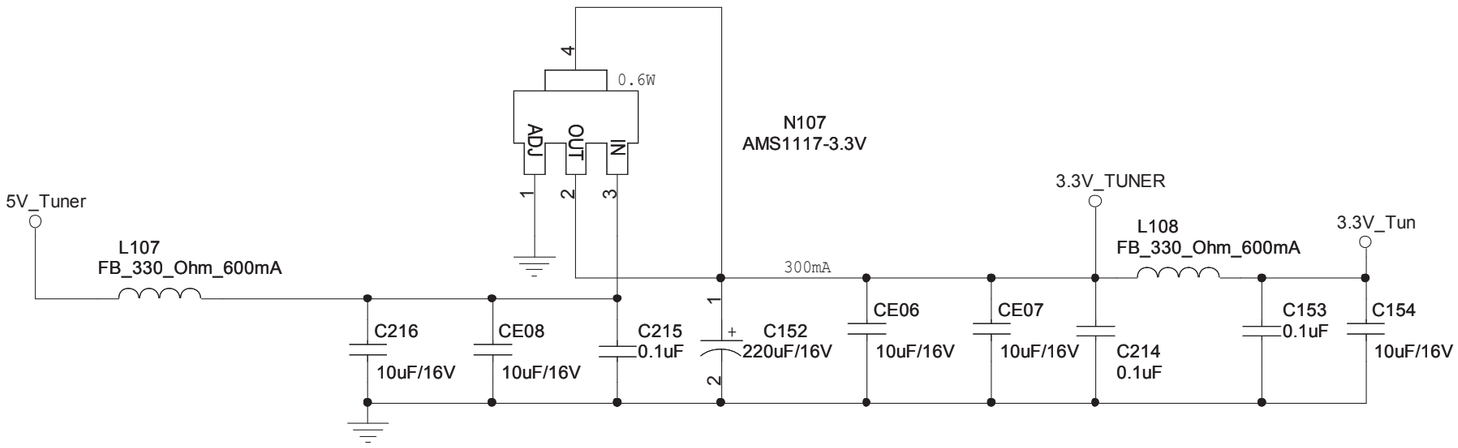
MASWSS0103 the exposed pad centered on the package bottom must be connected to RF and DC ground.

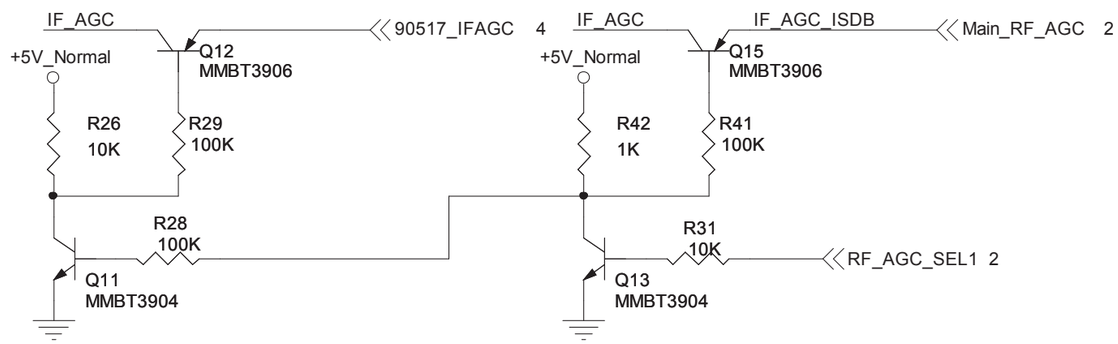
PCI Principal 32" e 40"

SADDR_0	SADDR_1	I²C Address
0	0	84
0	1	86
1	0	94
1	1	96



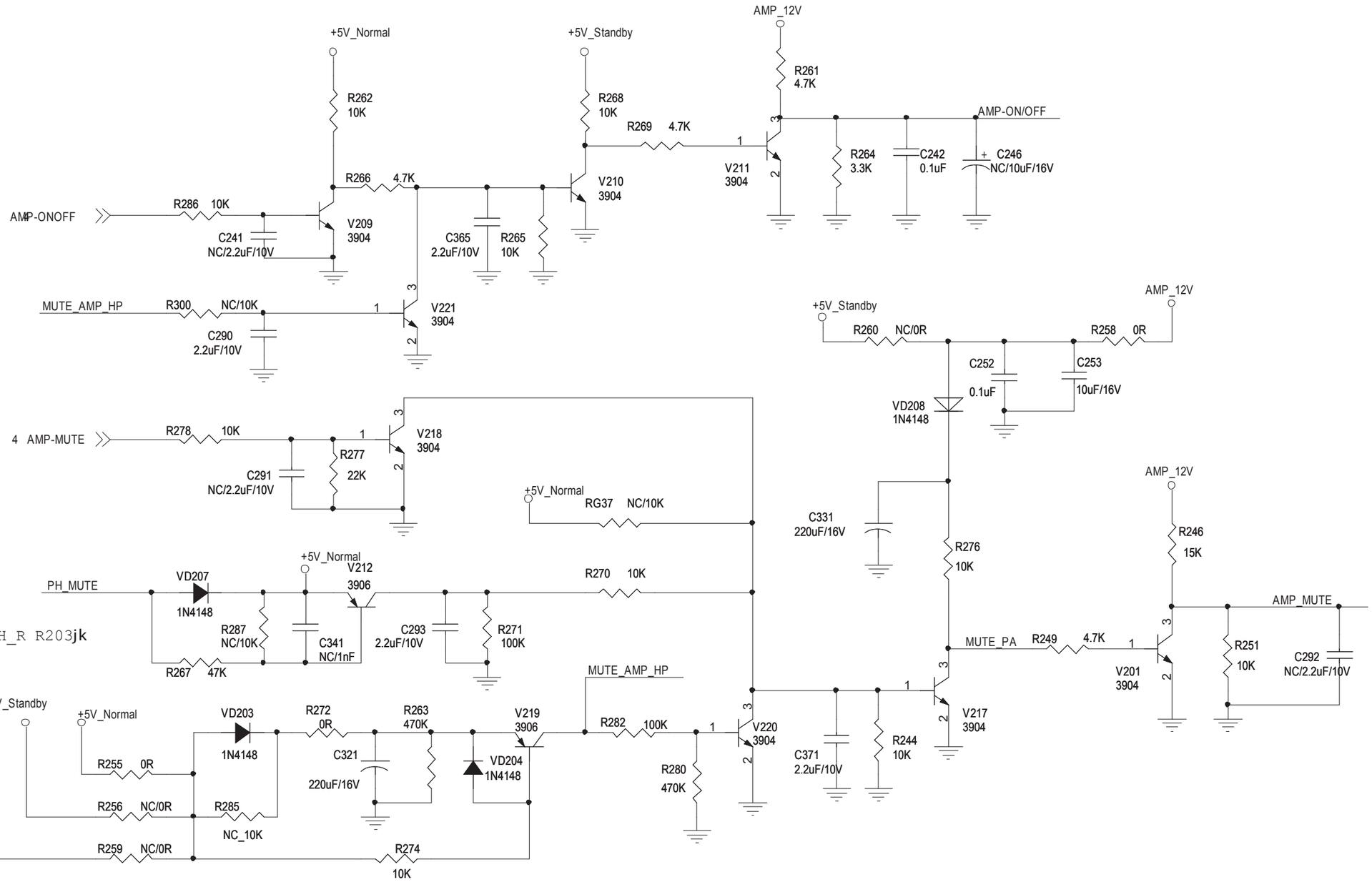
PCI Principal 32" e 40"





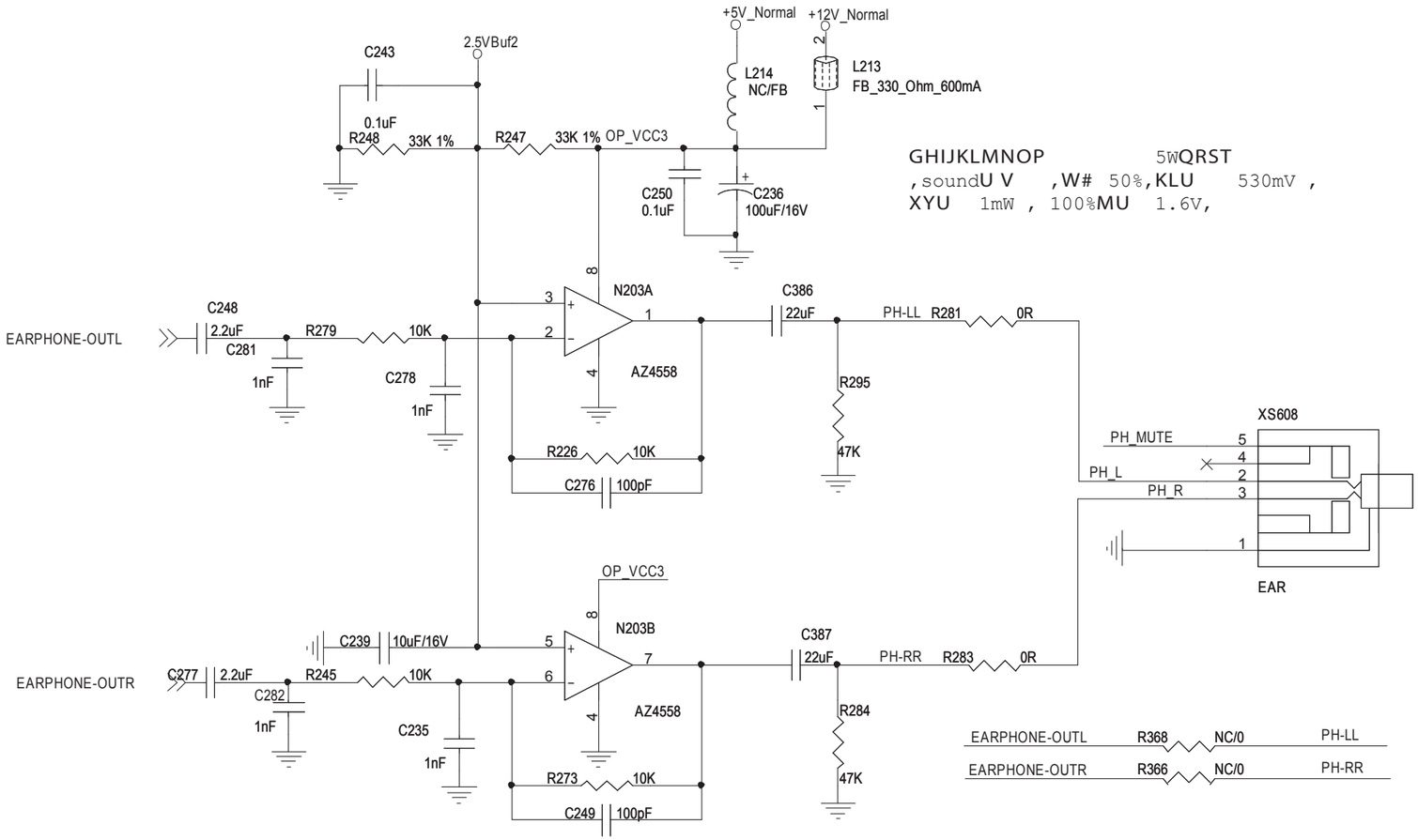
90517 AGC Switch **main ic AGC Switch**

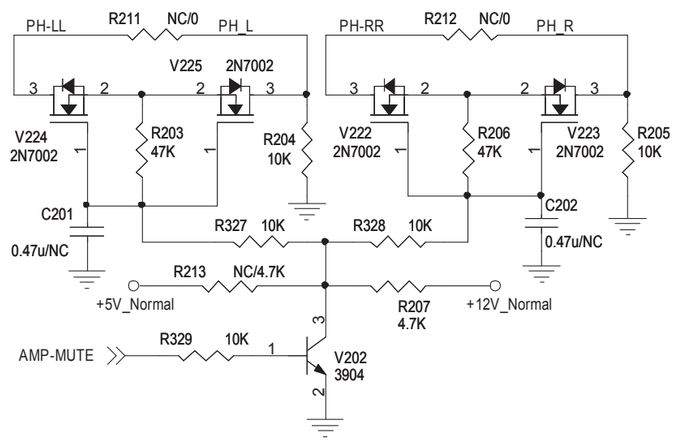
PCI Principal 32" e 40"



eGHfg
heGHi XS606.3 PH_R R203jk

PCI Principal 32¨ e 40¨





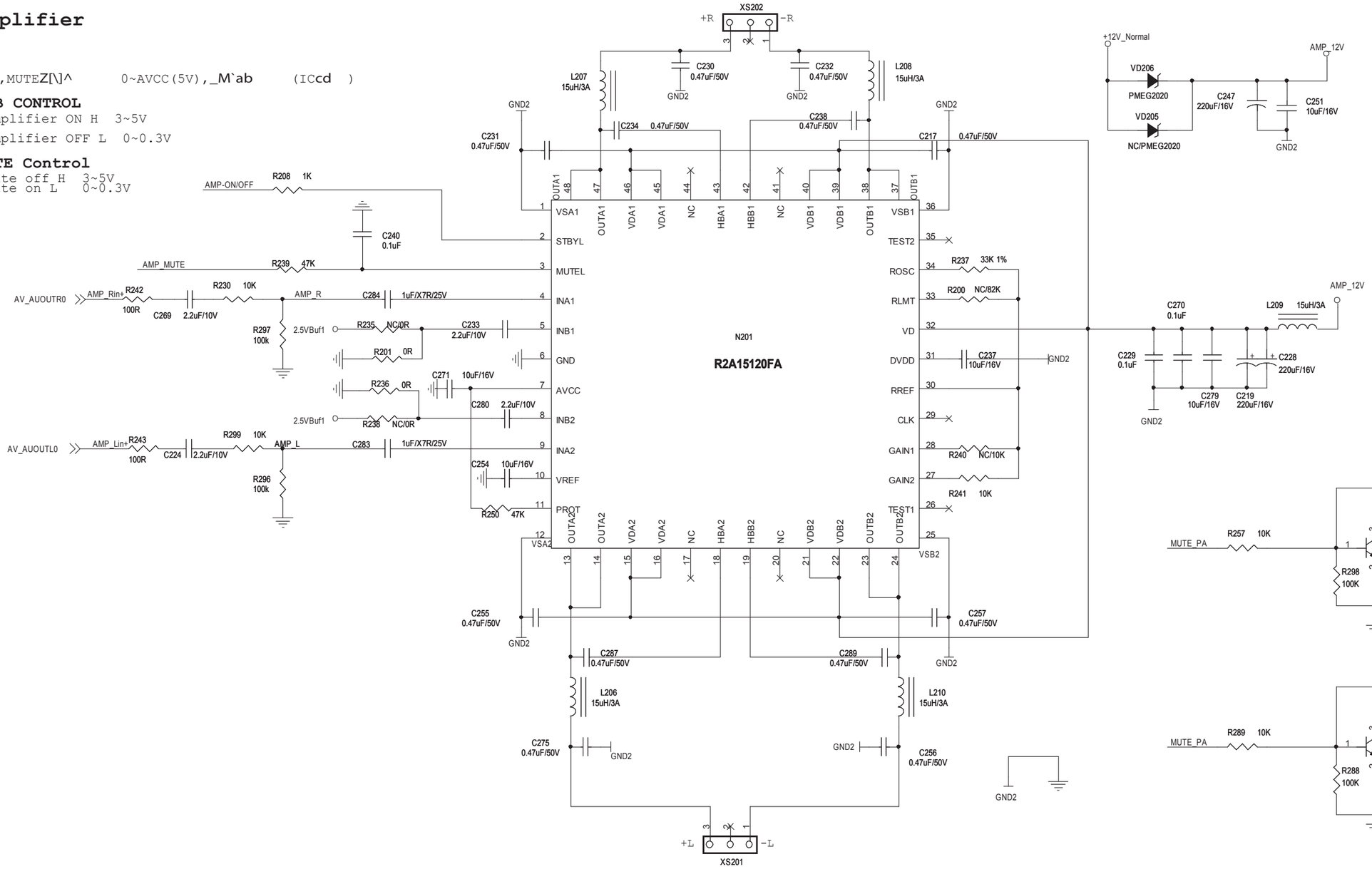
PCI Principal 32¨ e 40¨

Amplifier

STB,MUTEZ[\]^ 0~AVCC(5V),_M`ab (ICcd)

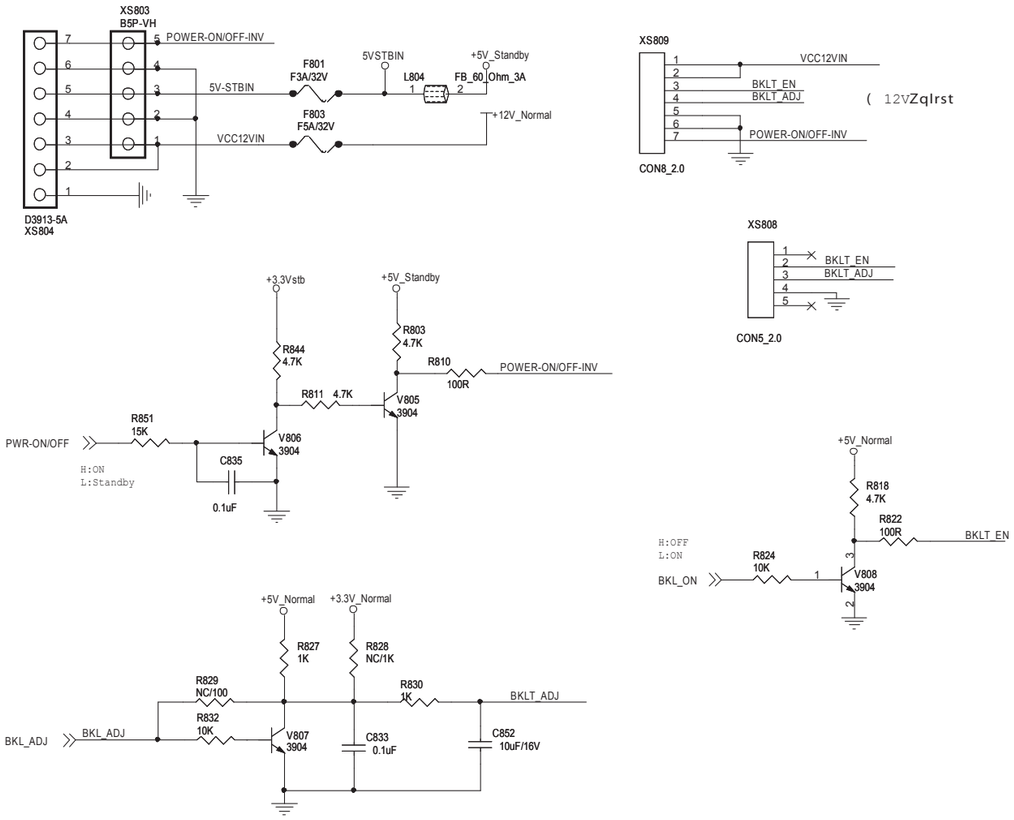
STB CONTROL
amplifier ON H 3~5V
amplifier OFF L 0~0.3V

MUTE Control
Mute off H 3~5V
Mute on L 0~0.3V

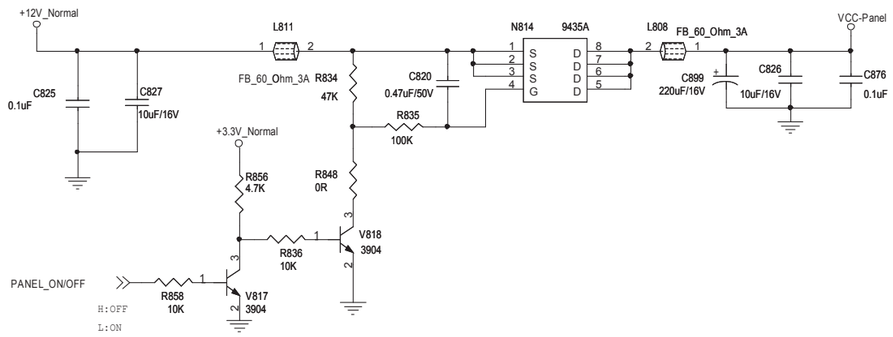


PCI Principal 32" e 40"

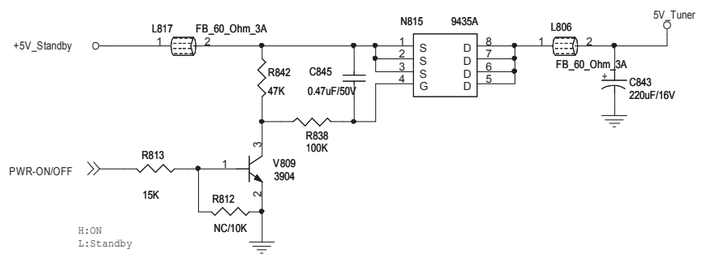
POWER INPUT



VCC-Panel

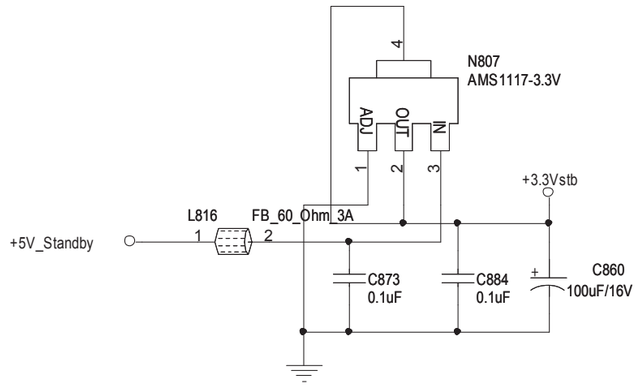


5V_Tuner

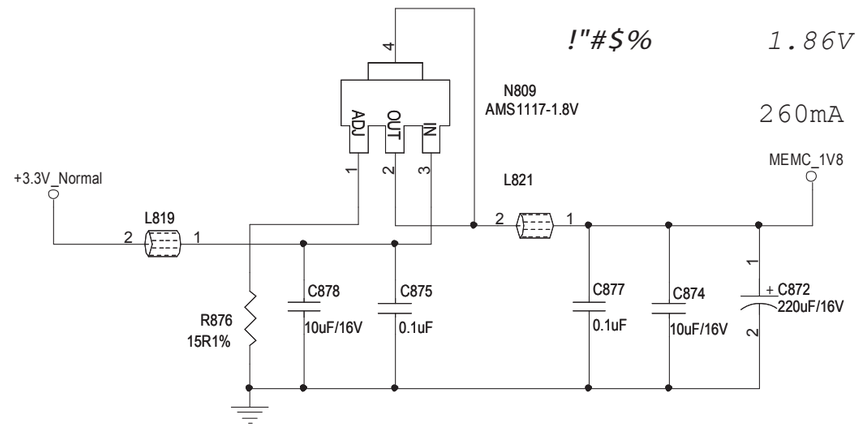


PCI Principal 32" e 40"

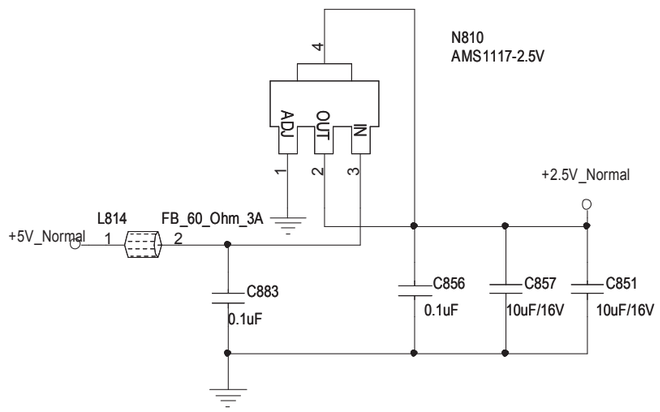
3.3Vstb



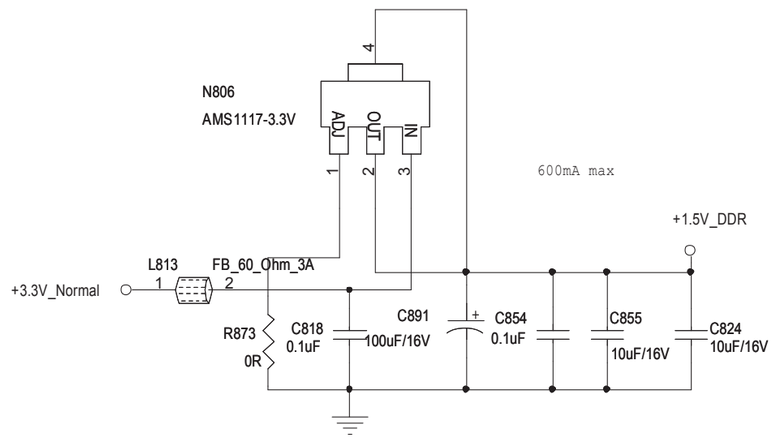
1.86V 6M30 & DDR Power



2.5V_Normal

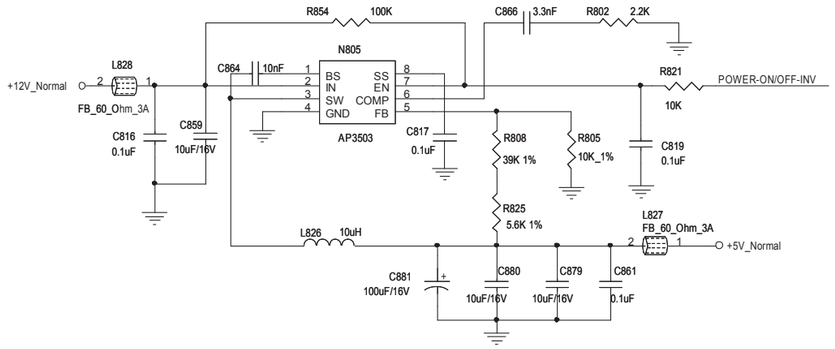


1.5V_DDR

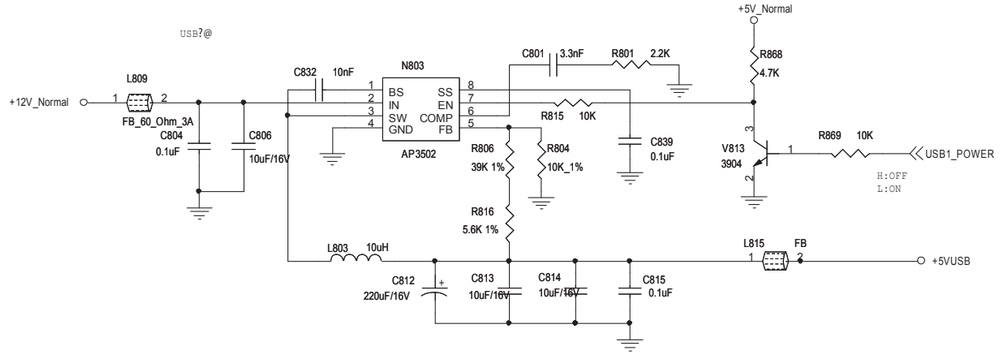


PCI Principal 32" e 40"

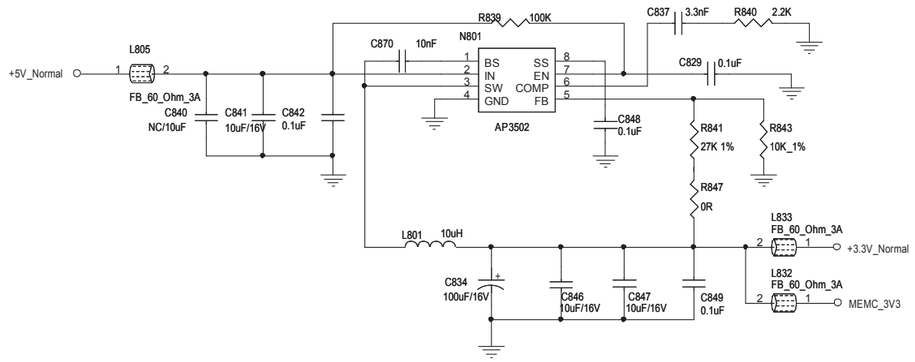
5V_Normal



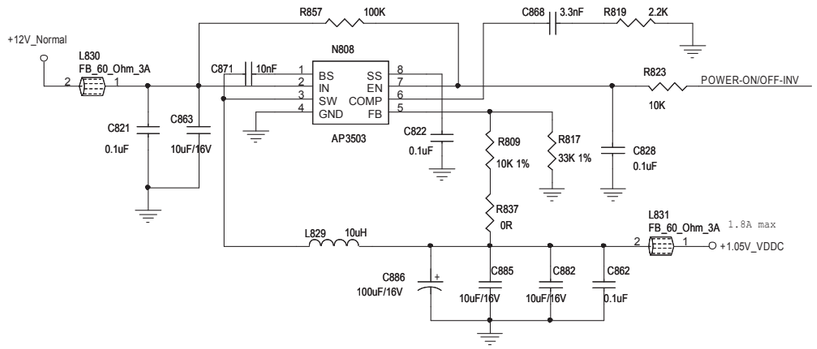
5V USB



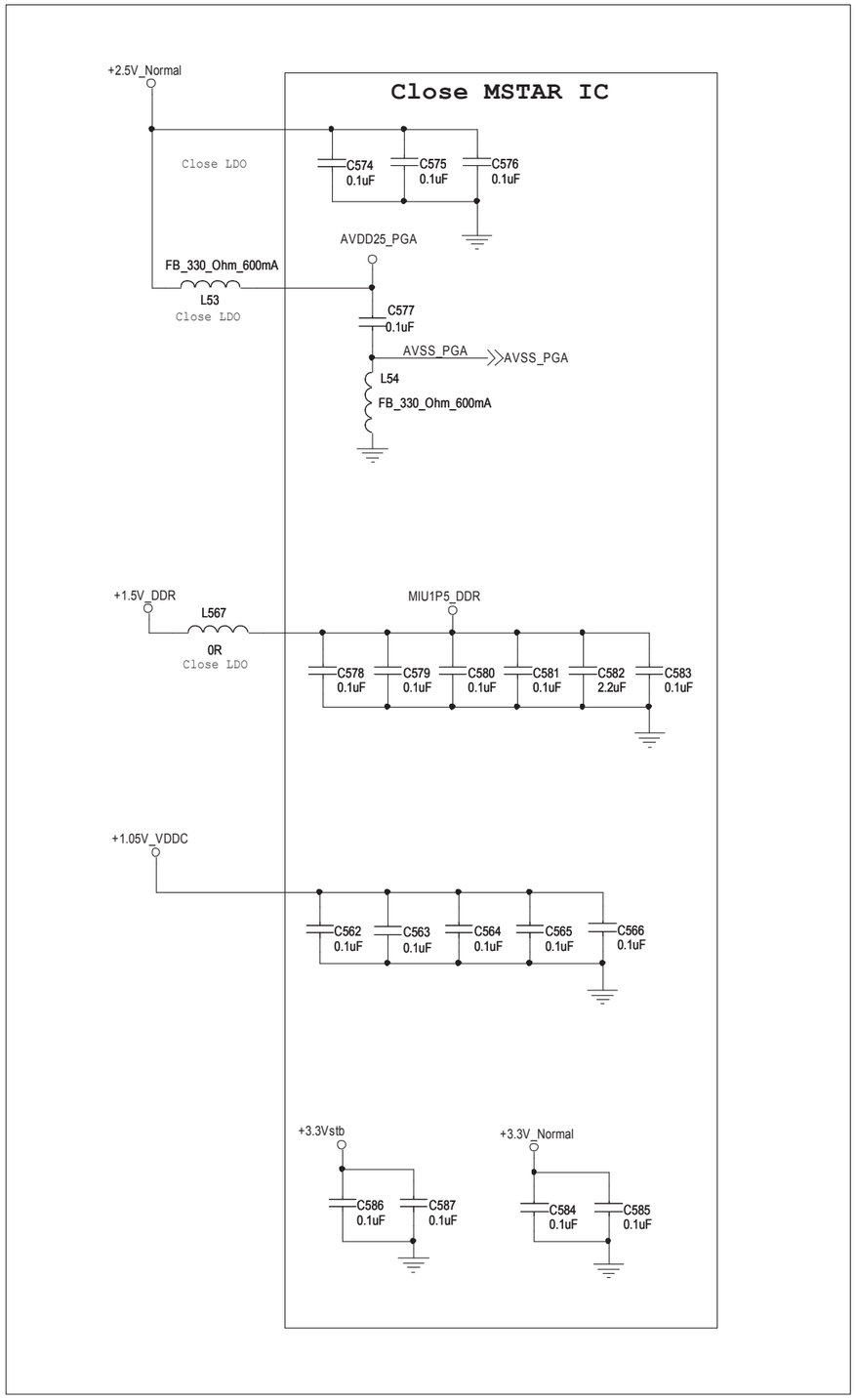
3.3V_Normal

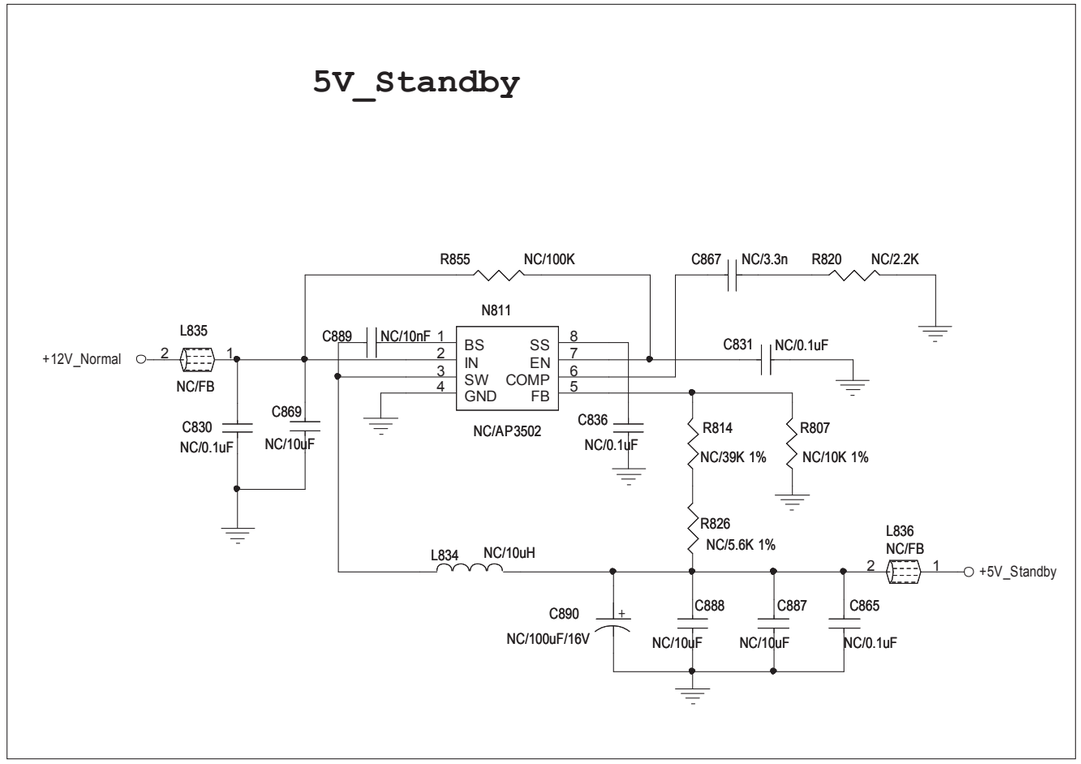


1.05V_VDDC



PCI Principal 32" e 40"





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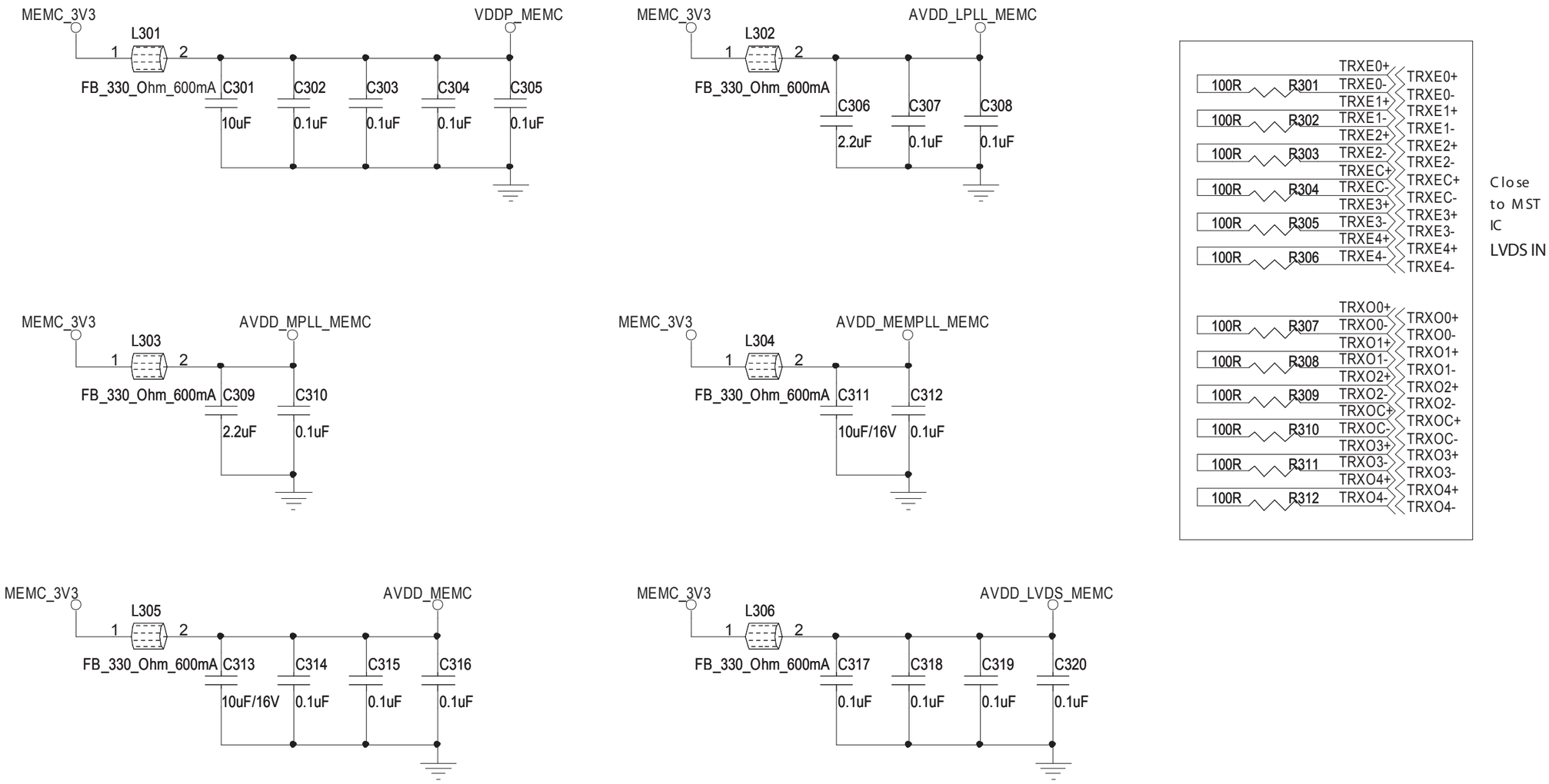
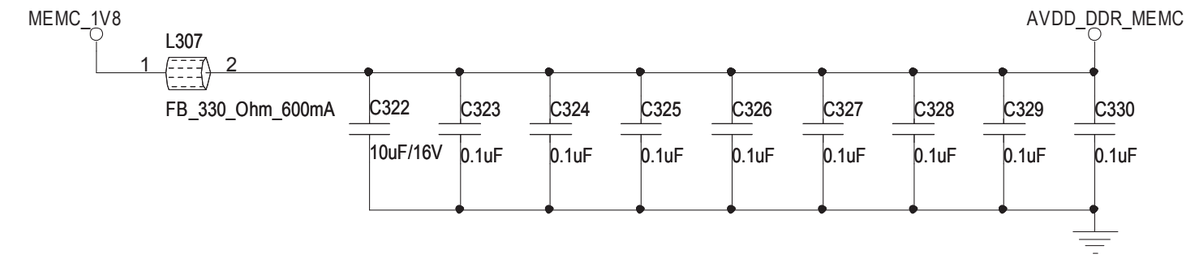
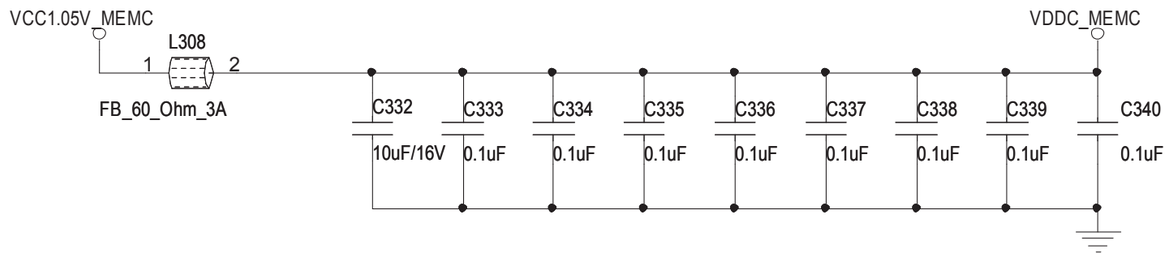
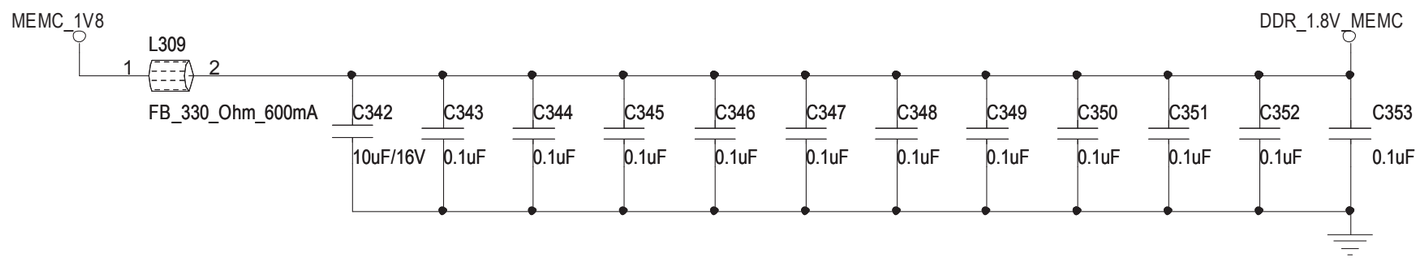
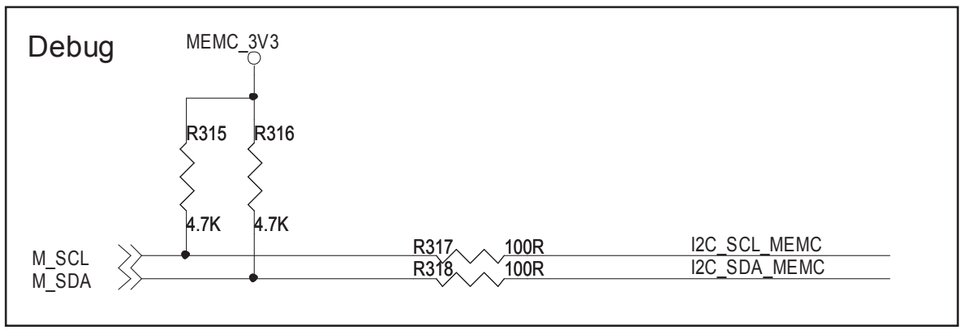


PCI Principal 32" e 40"

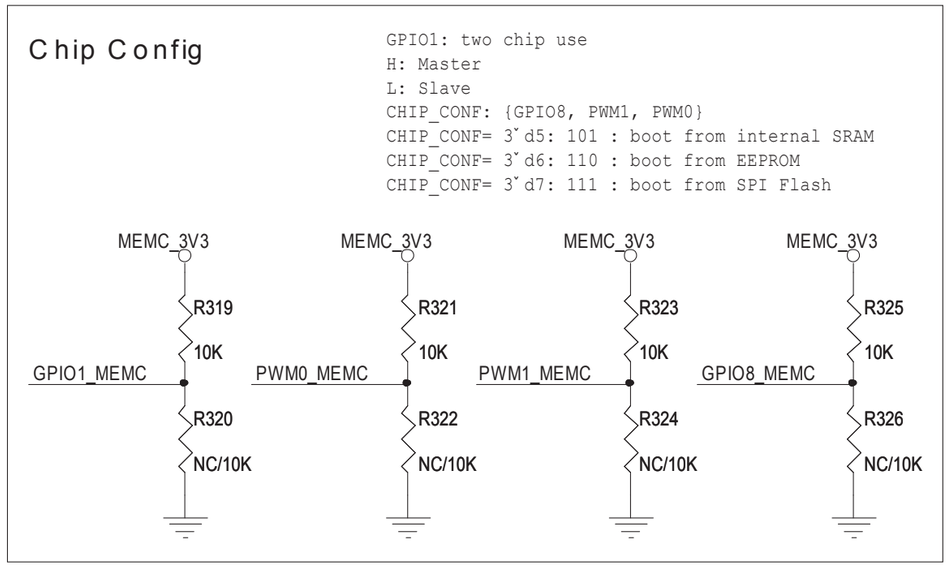


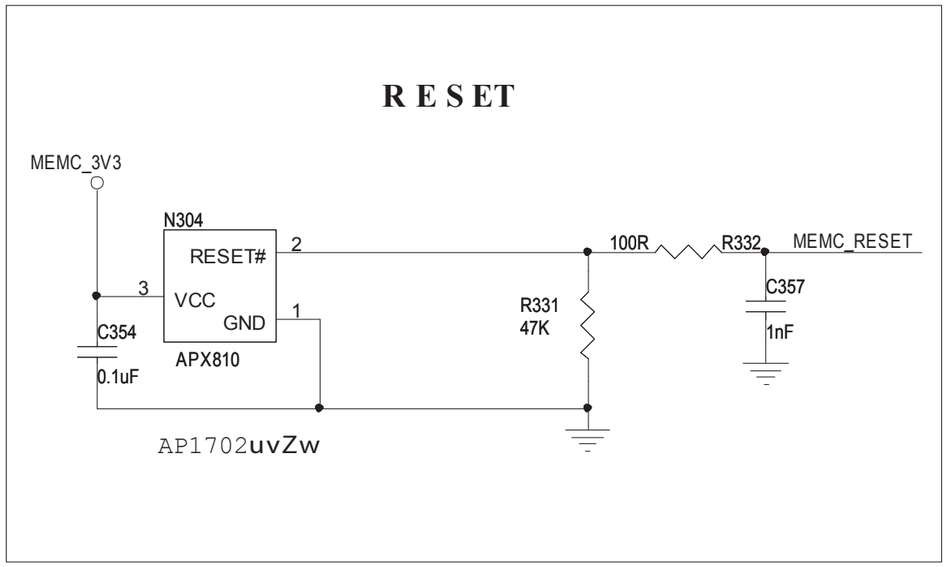


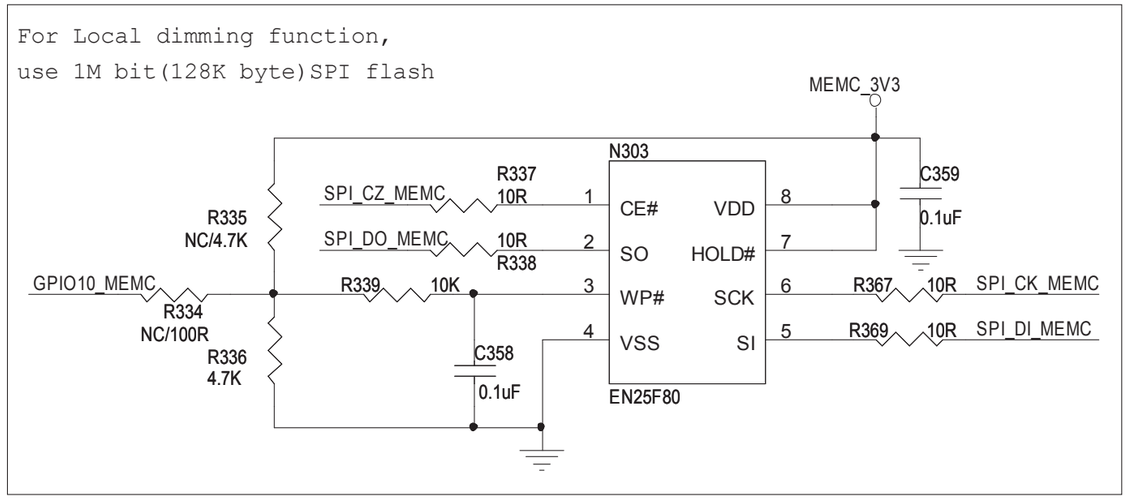


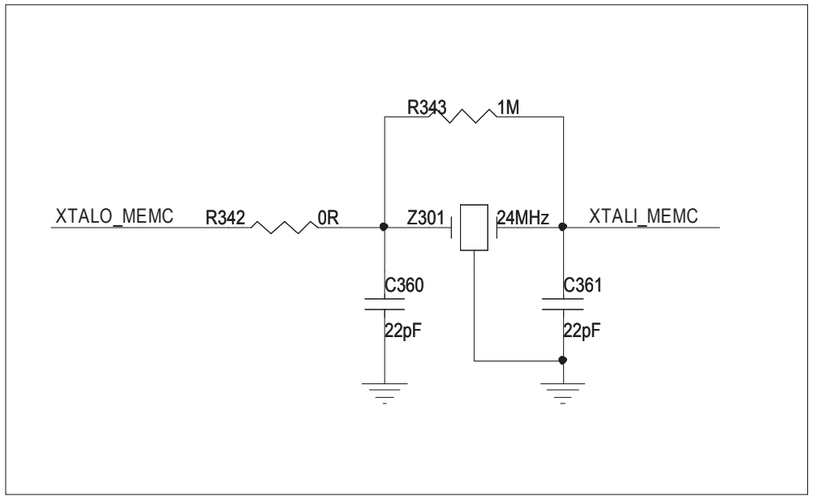


PCI Principal 32" e 40"









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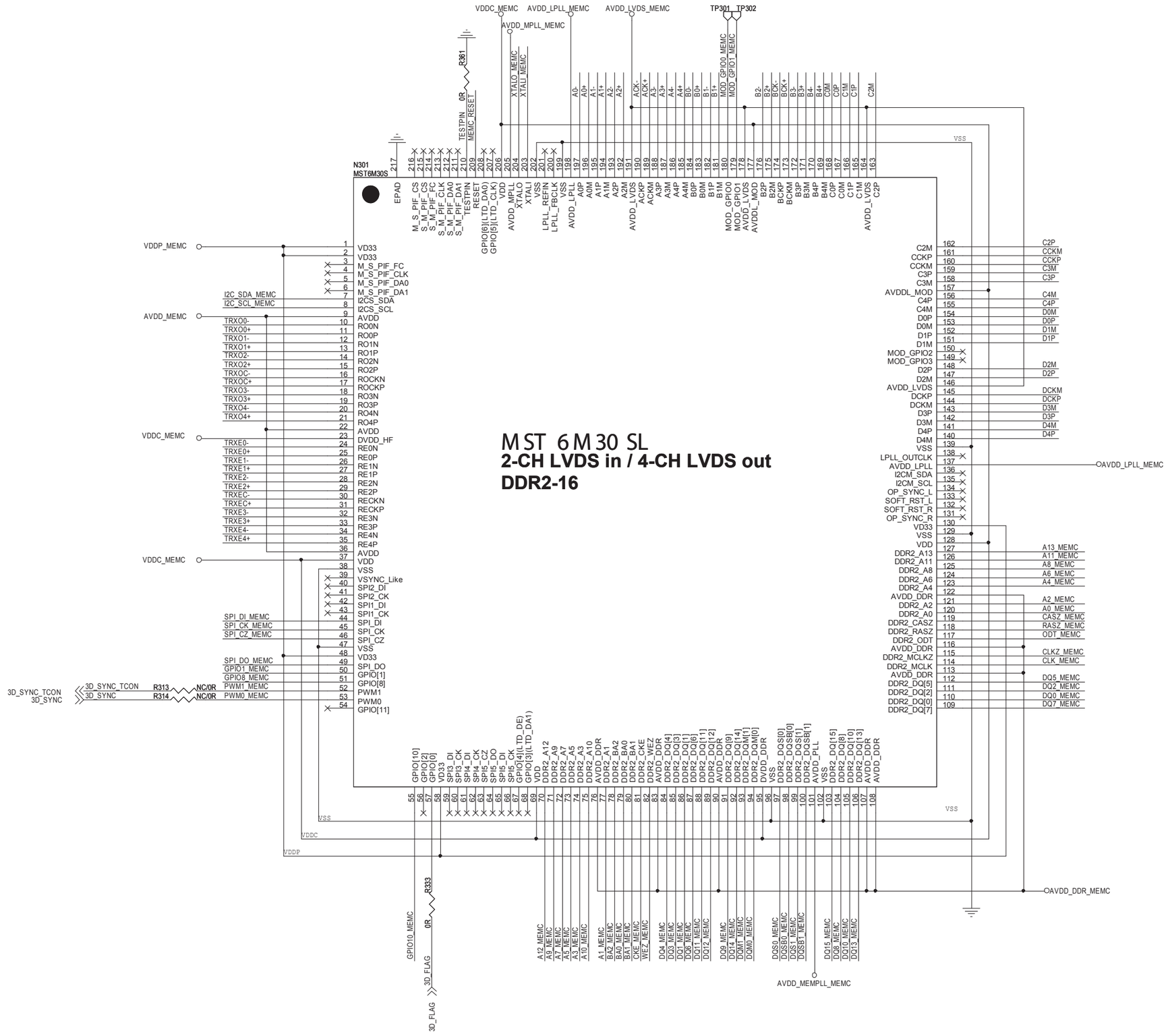

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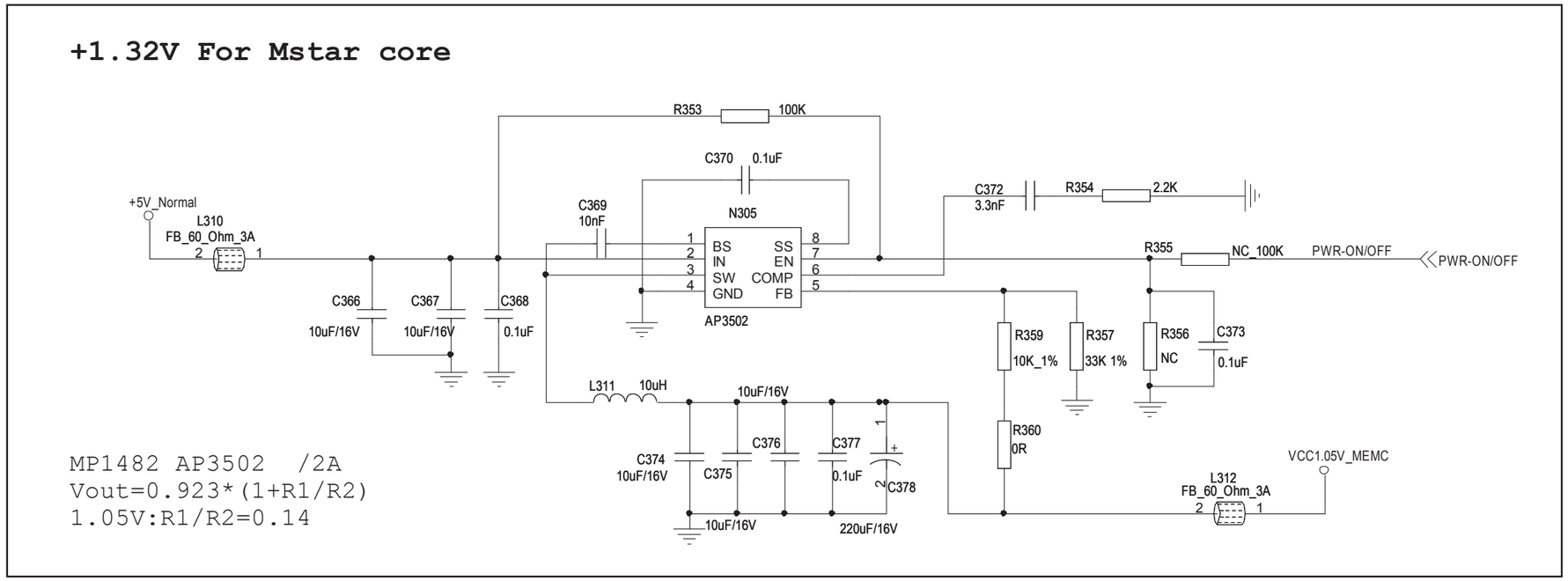
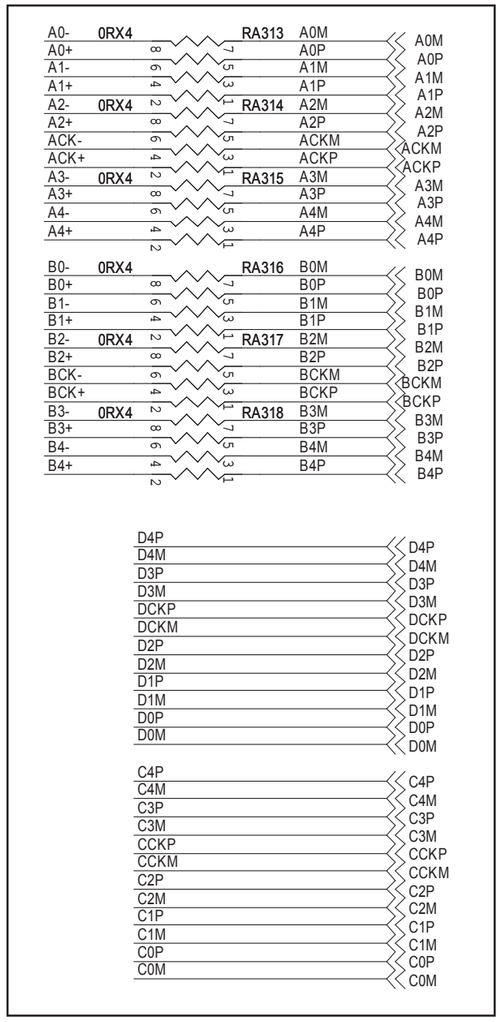


LVDS OUT



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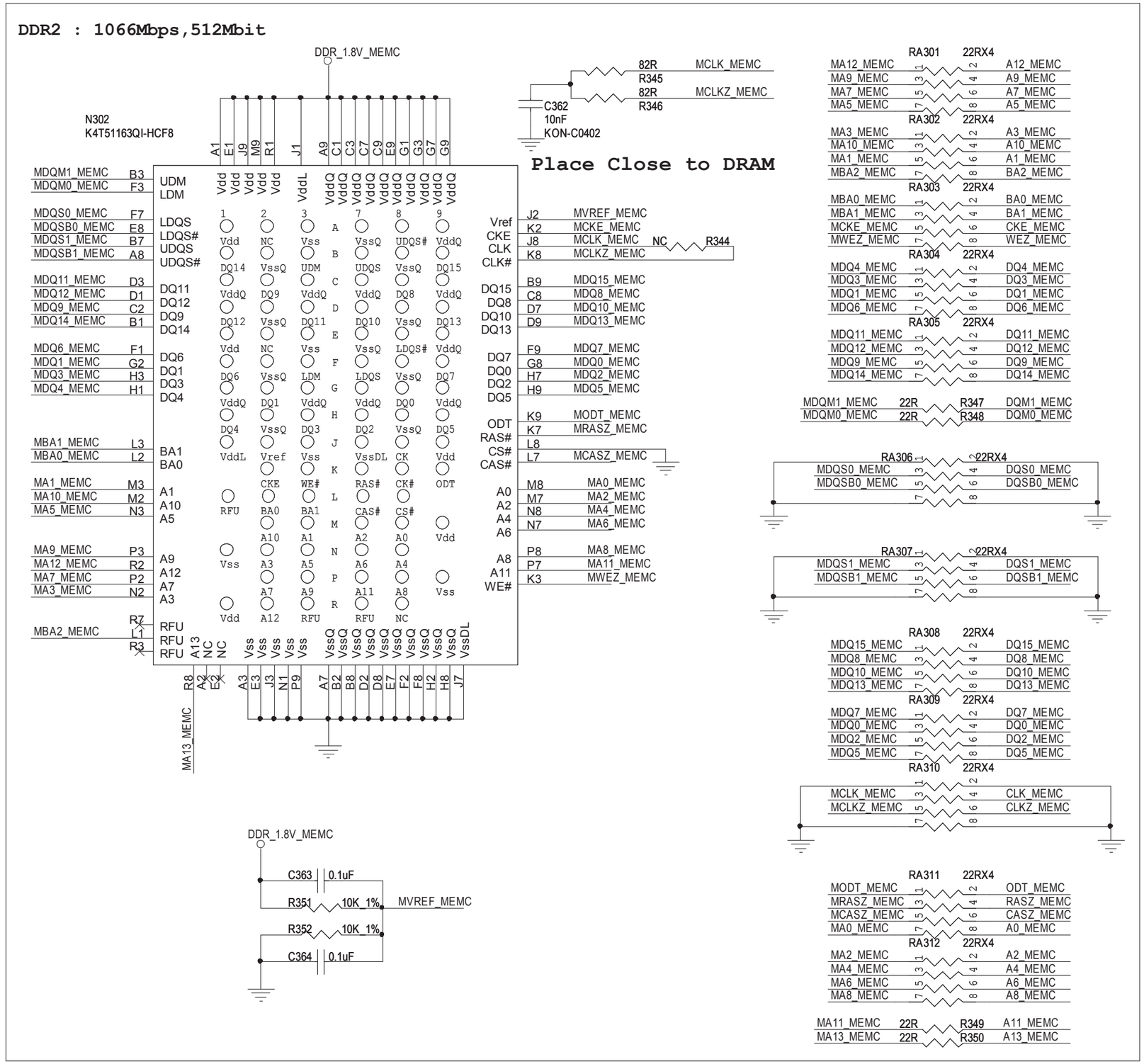
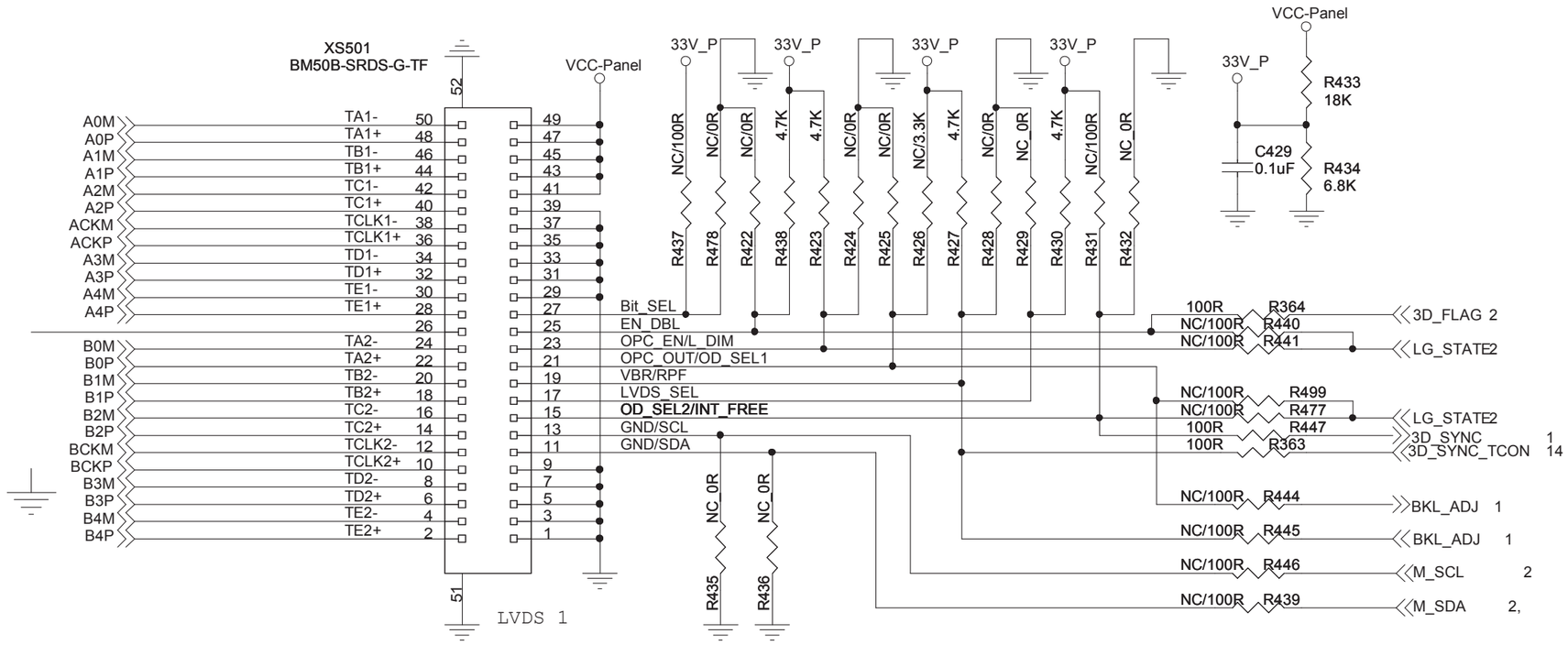
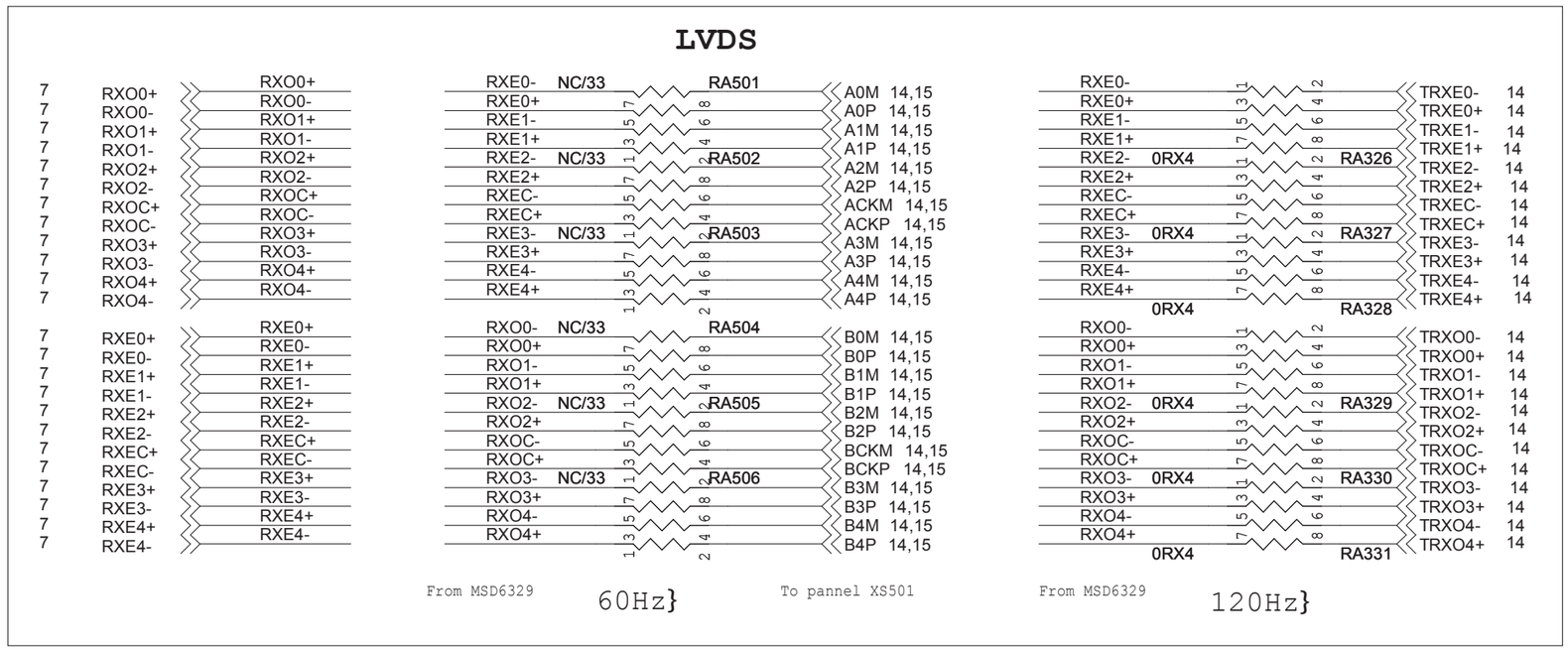
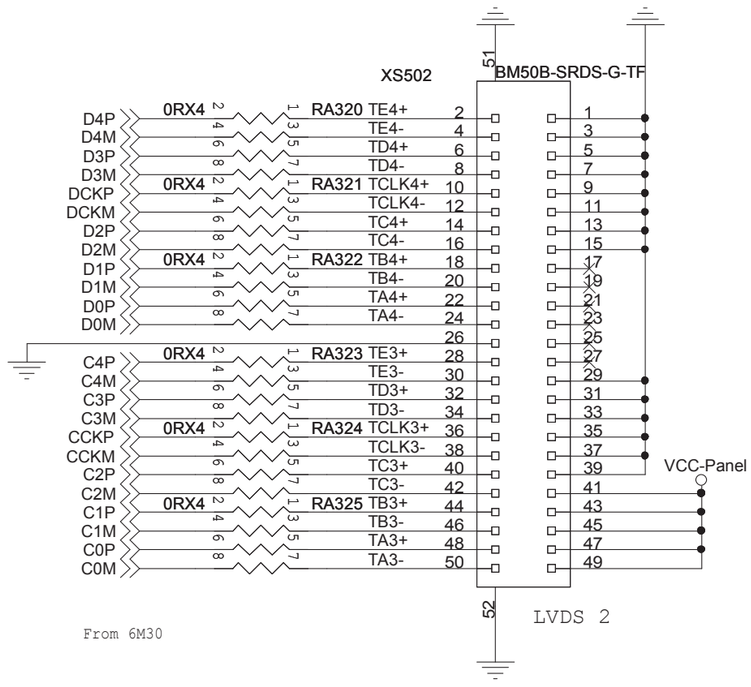


PCI Principal 32" e 40"

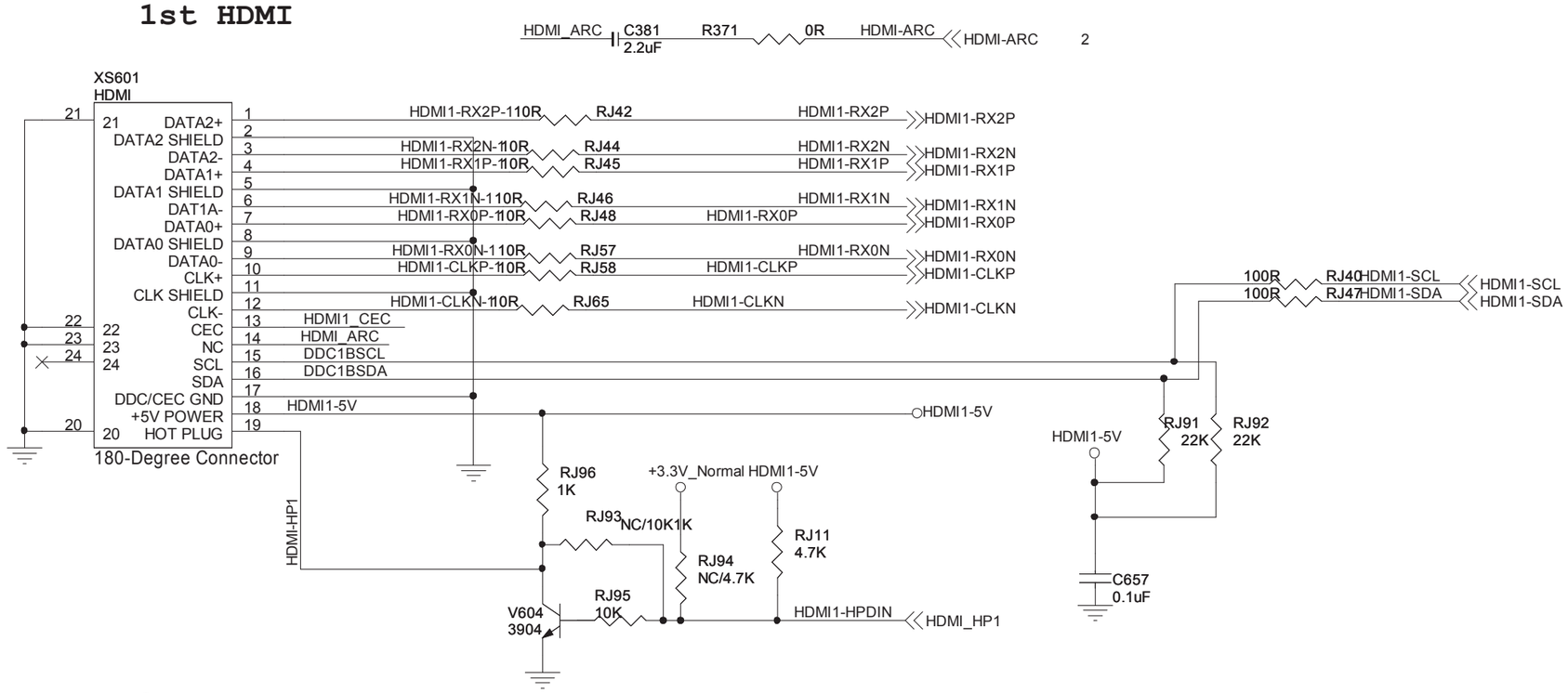




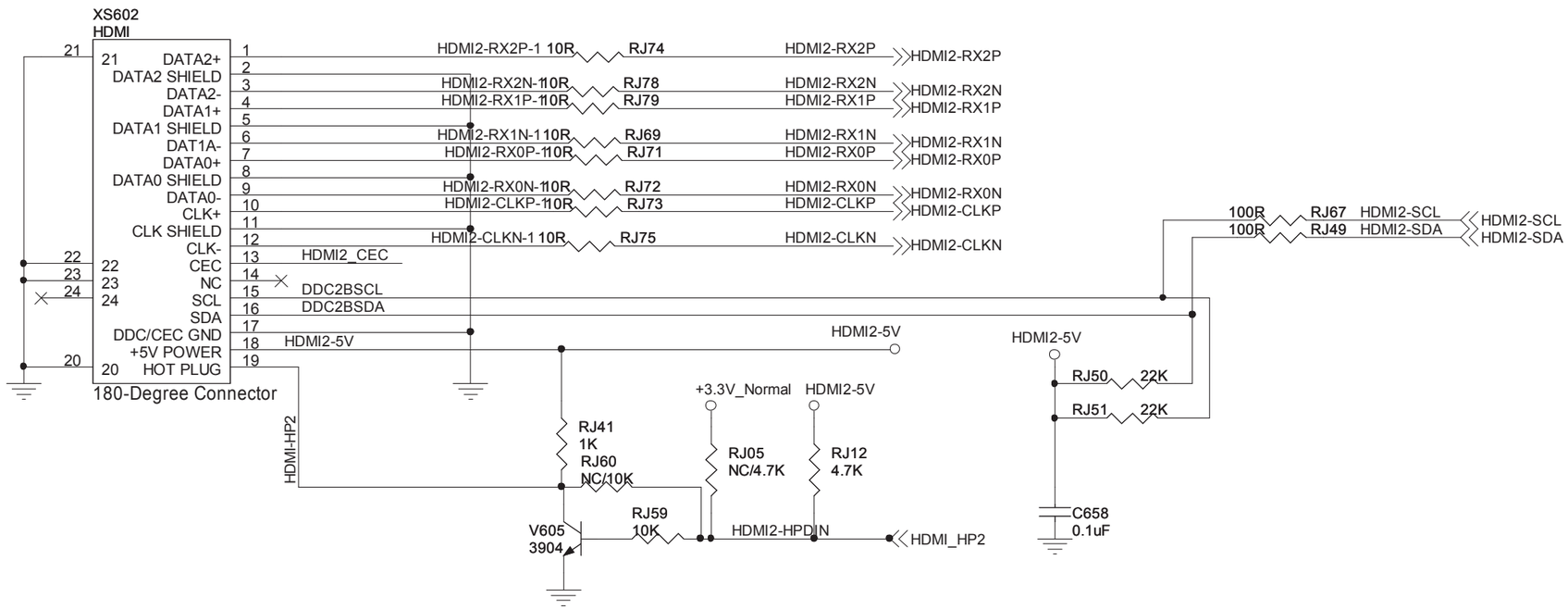


PCI Principal 32" e 40"

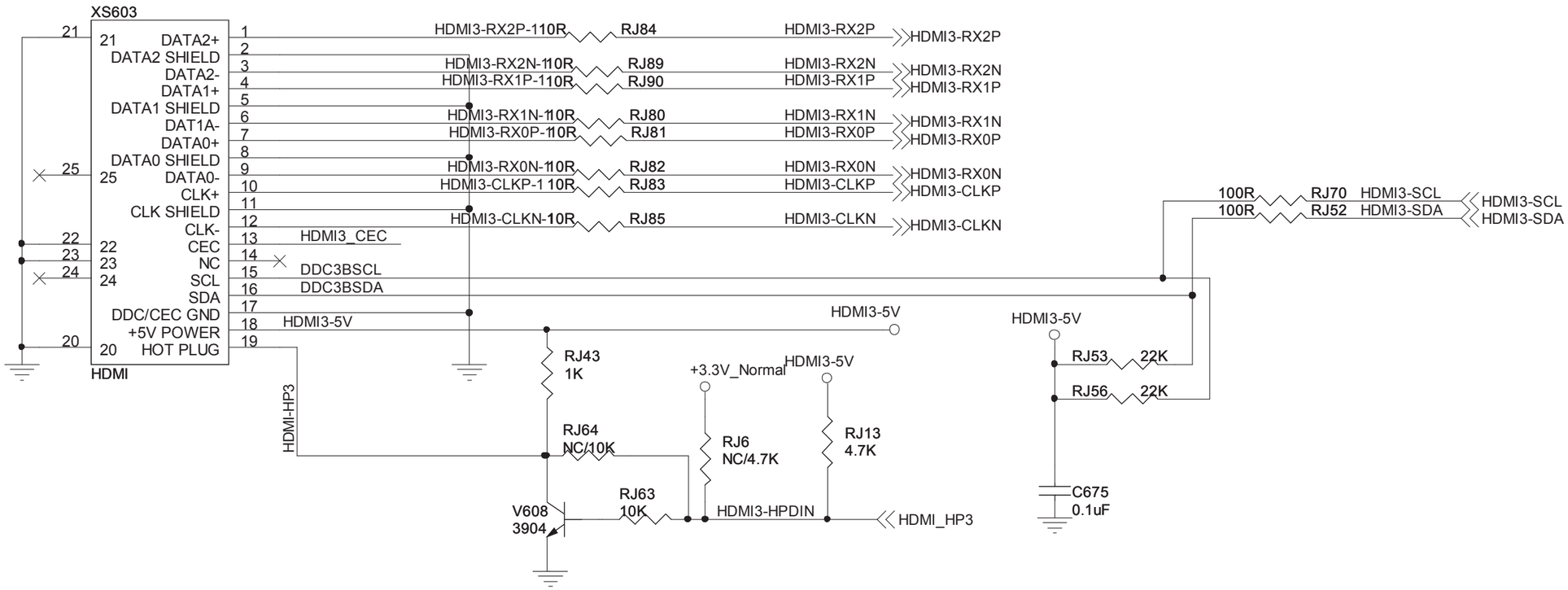
1st HDMI



2nd HDMI

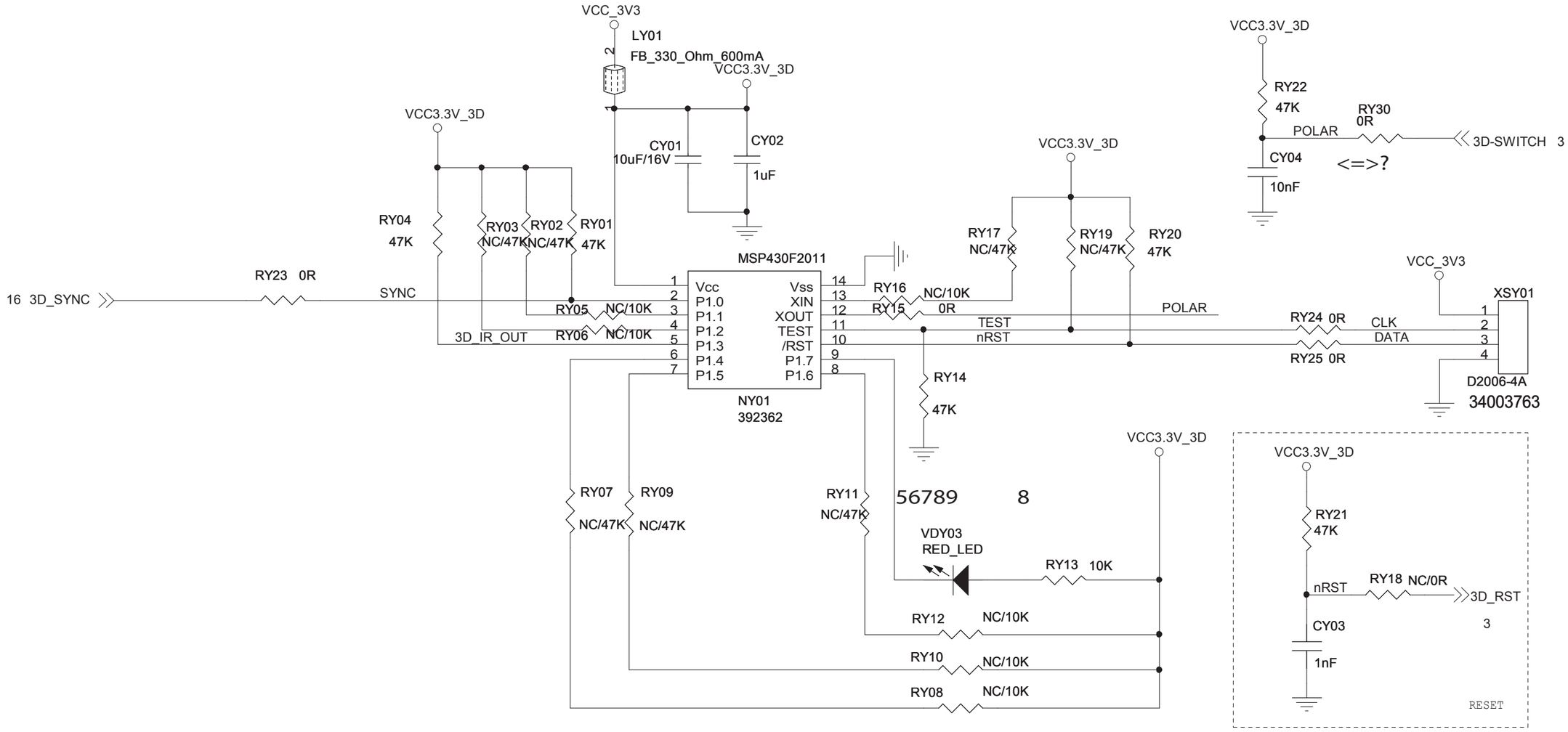


SIDE HDMI

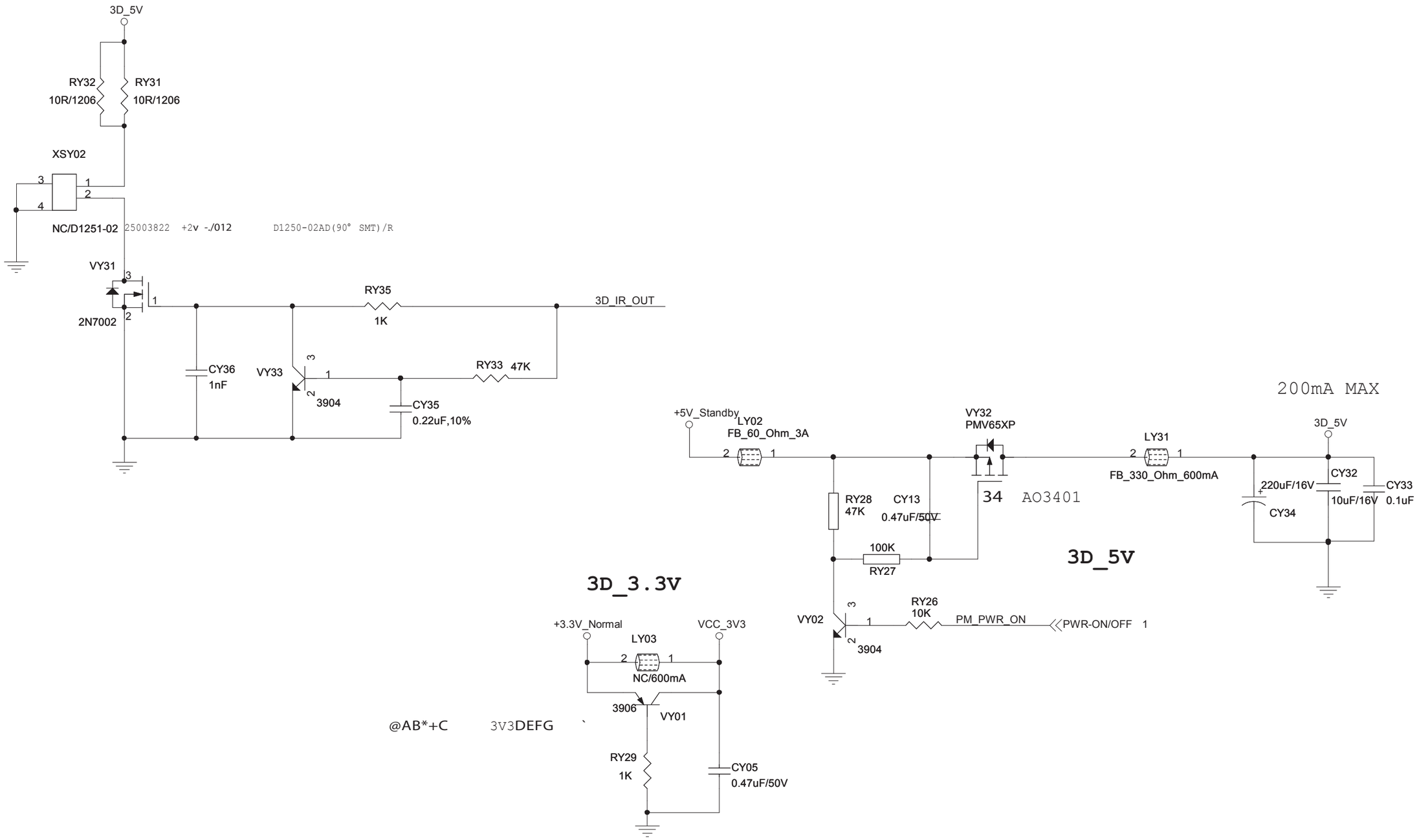


For CEC Leakage Protect

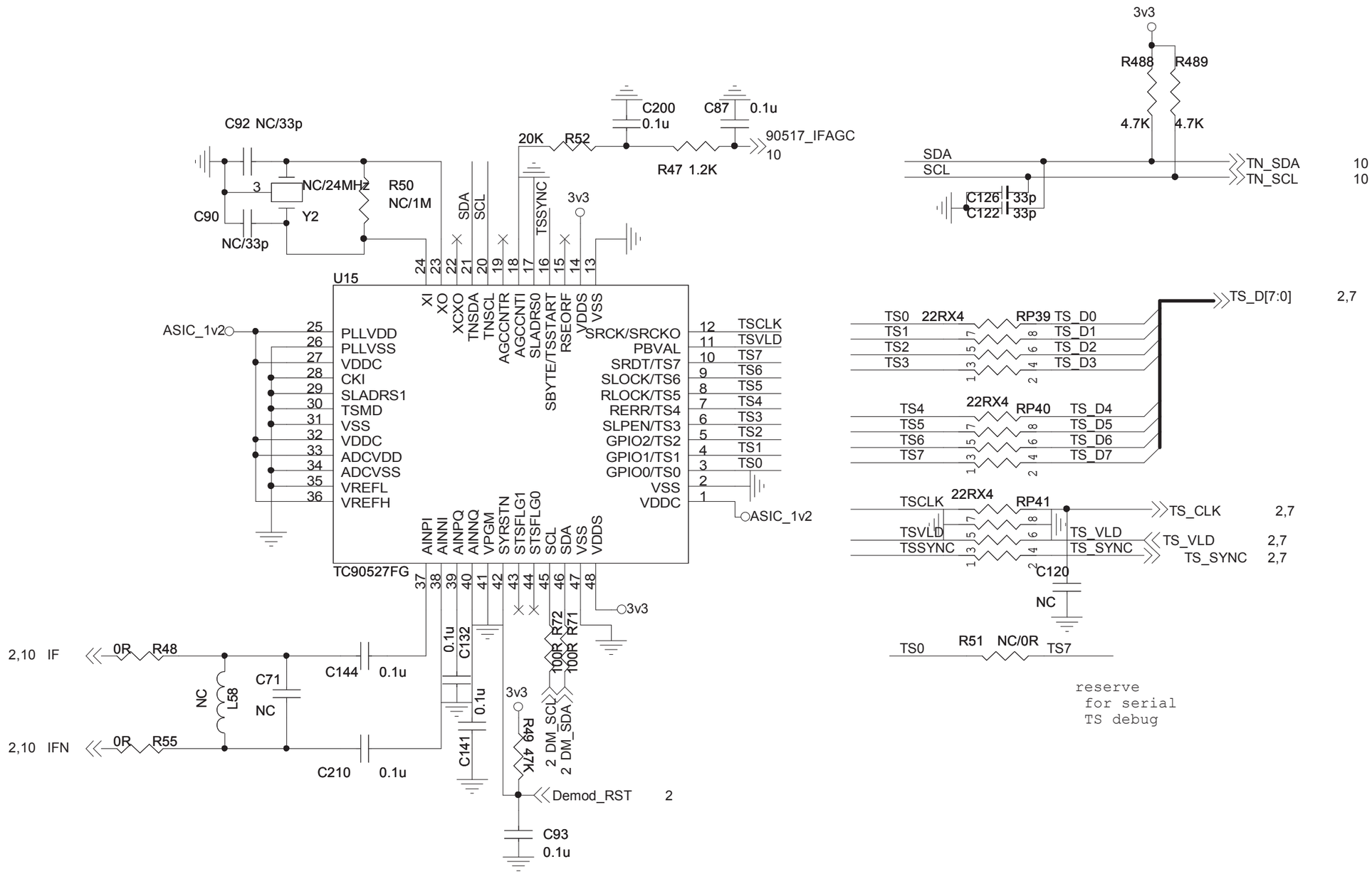
PCI Principal 32" e 40"



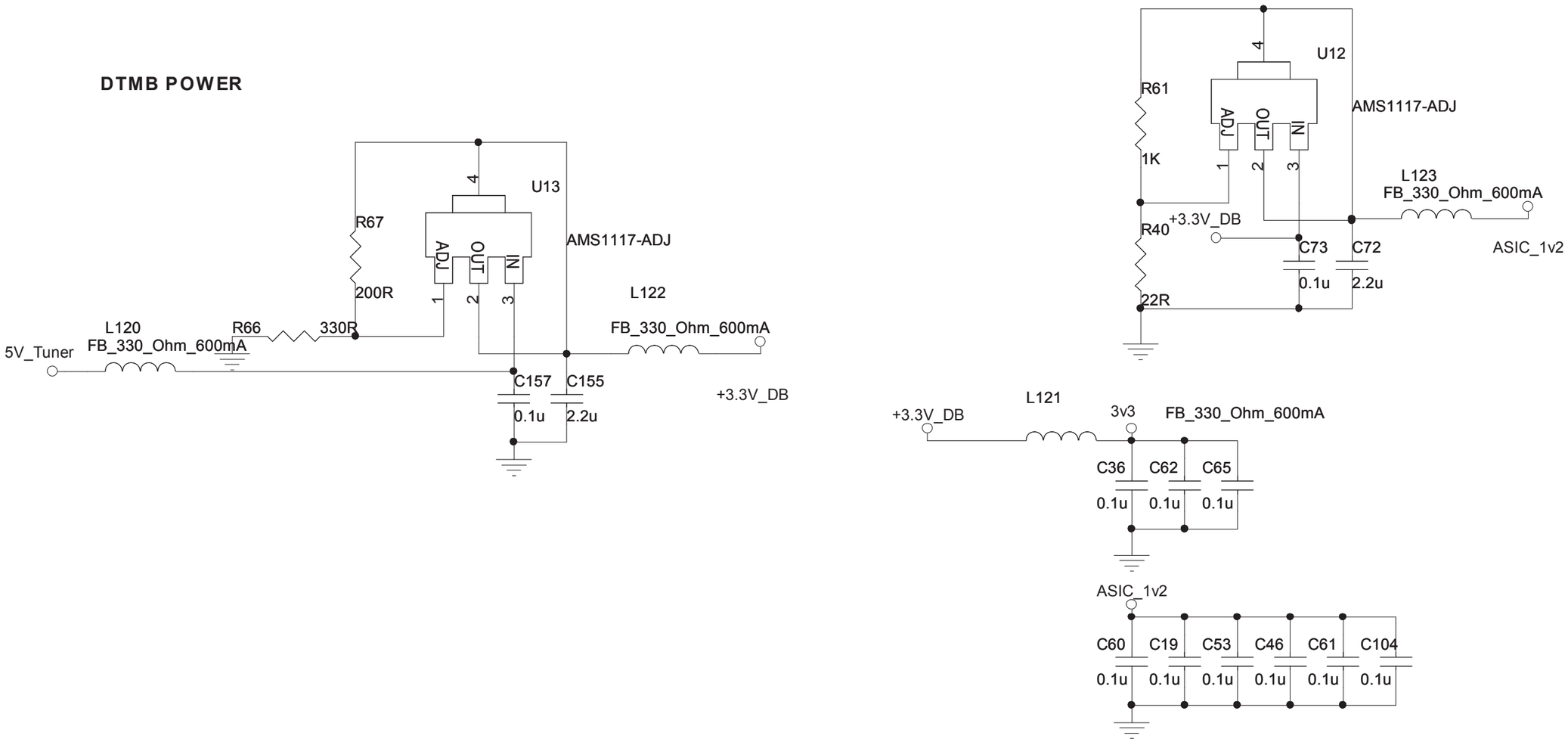
PCI Principal 32" e 40"



PCI Principal 32" e 40"

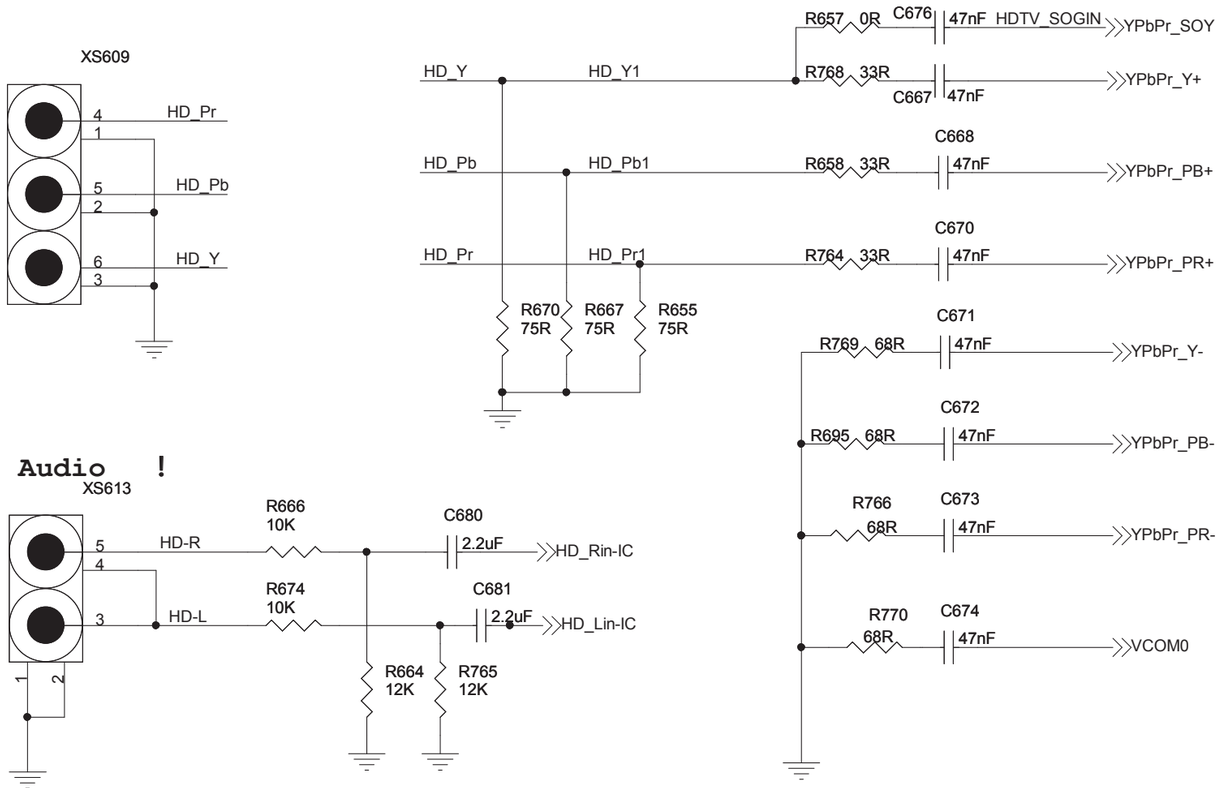


PCI Principal 32" e 40"

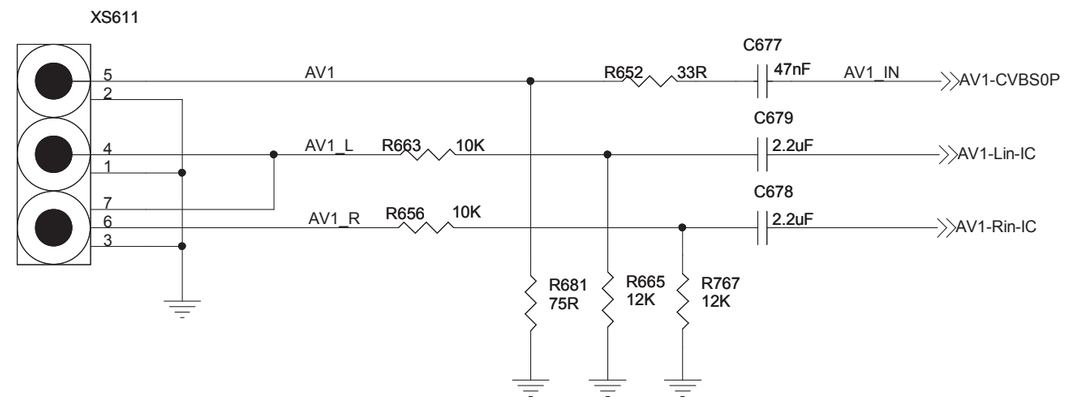


PCI Principal 46" e 55"

YPbPr/AV2 in

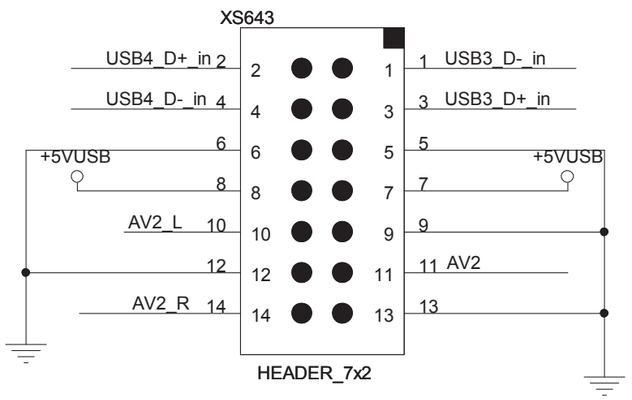


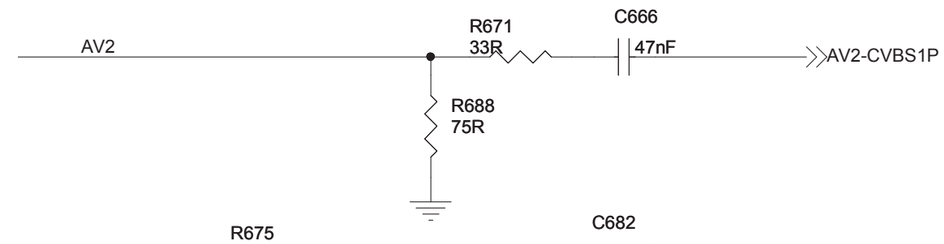
AV1

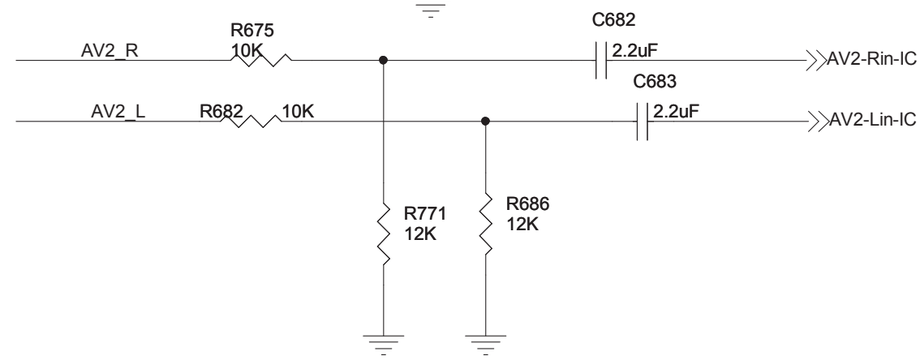


Audio !

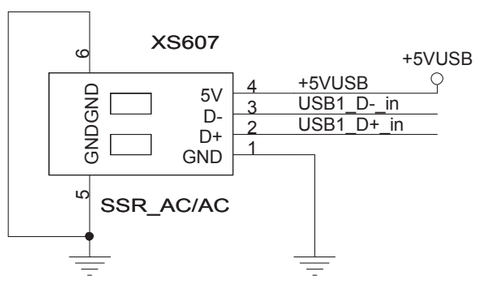
PCI Principal 46" e 55"

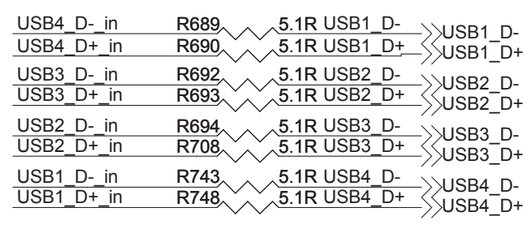




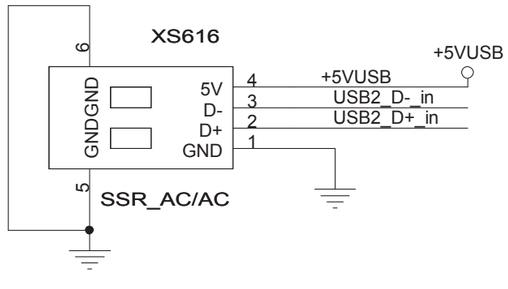


USB Input



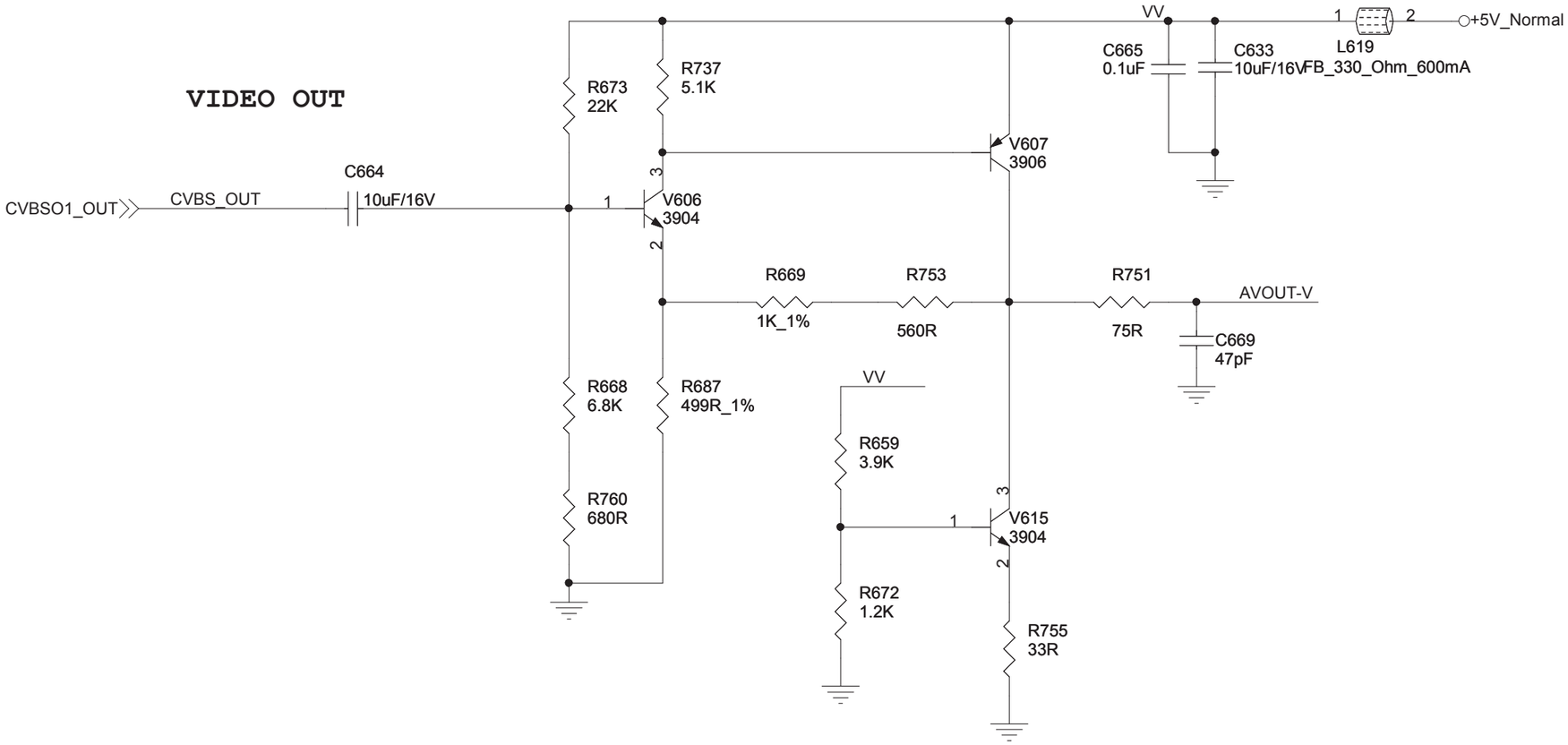


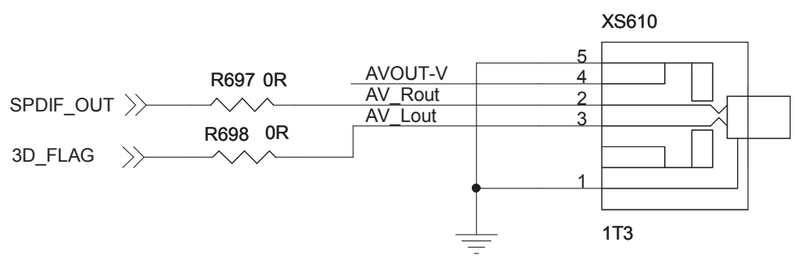
USB1



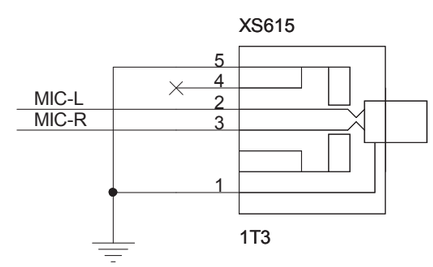
USB2

PCI Principal 46" e 55"

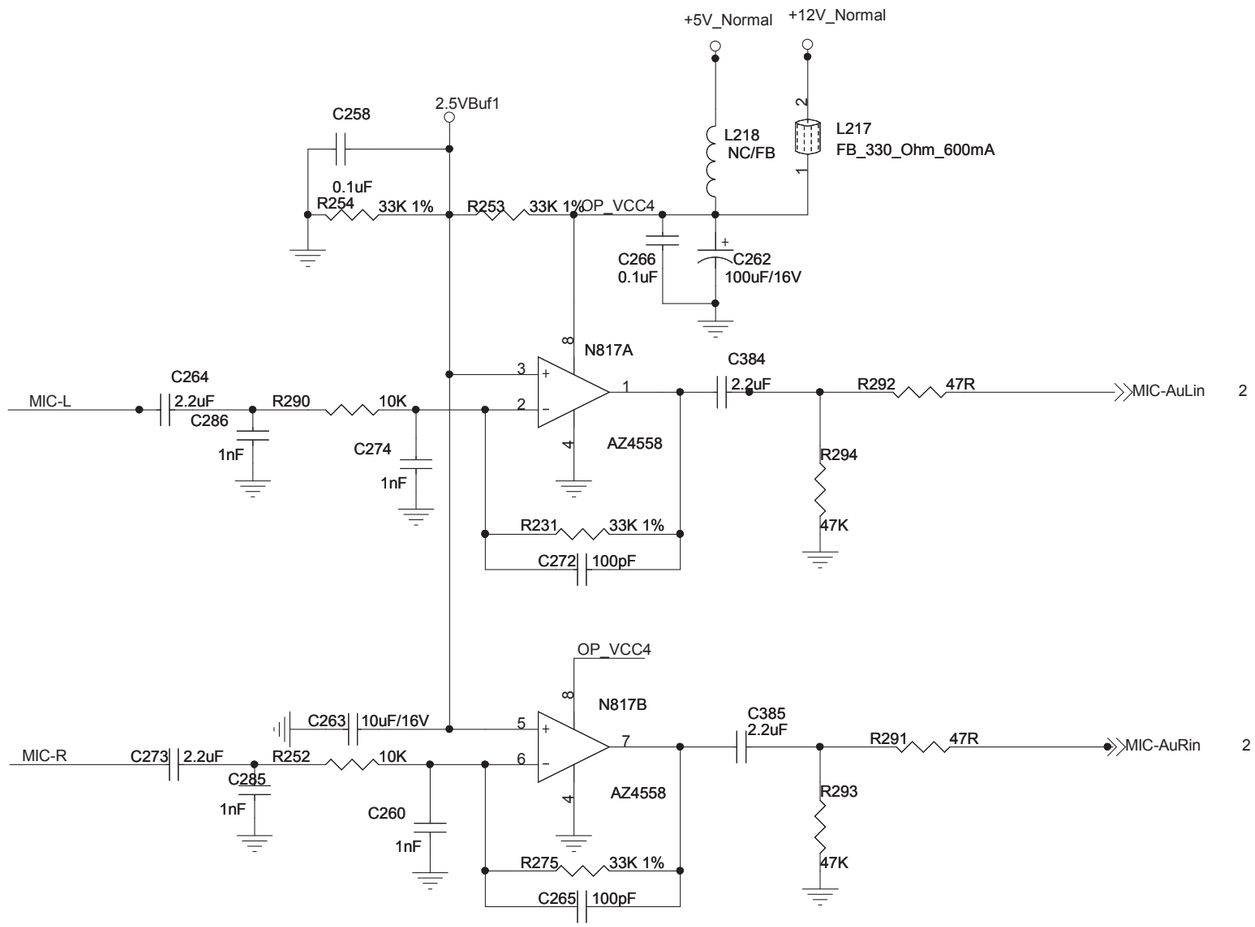


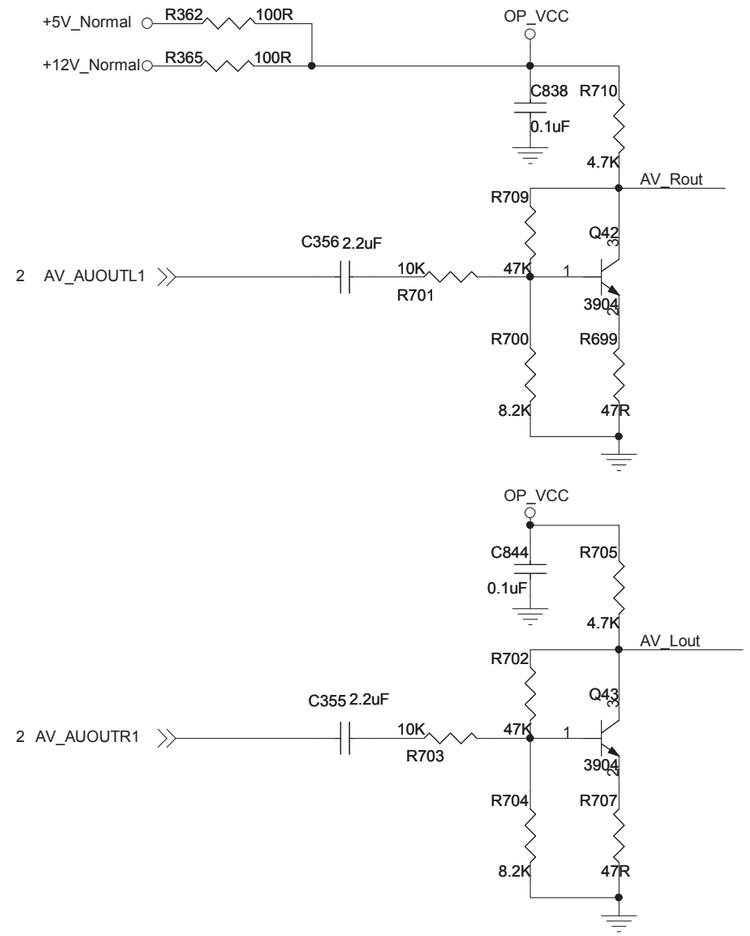


AV_OUT/ SPDIF/3D_FLAG

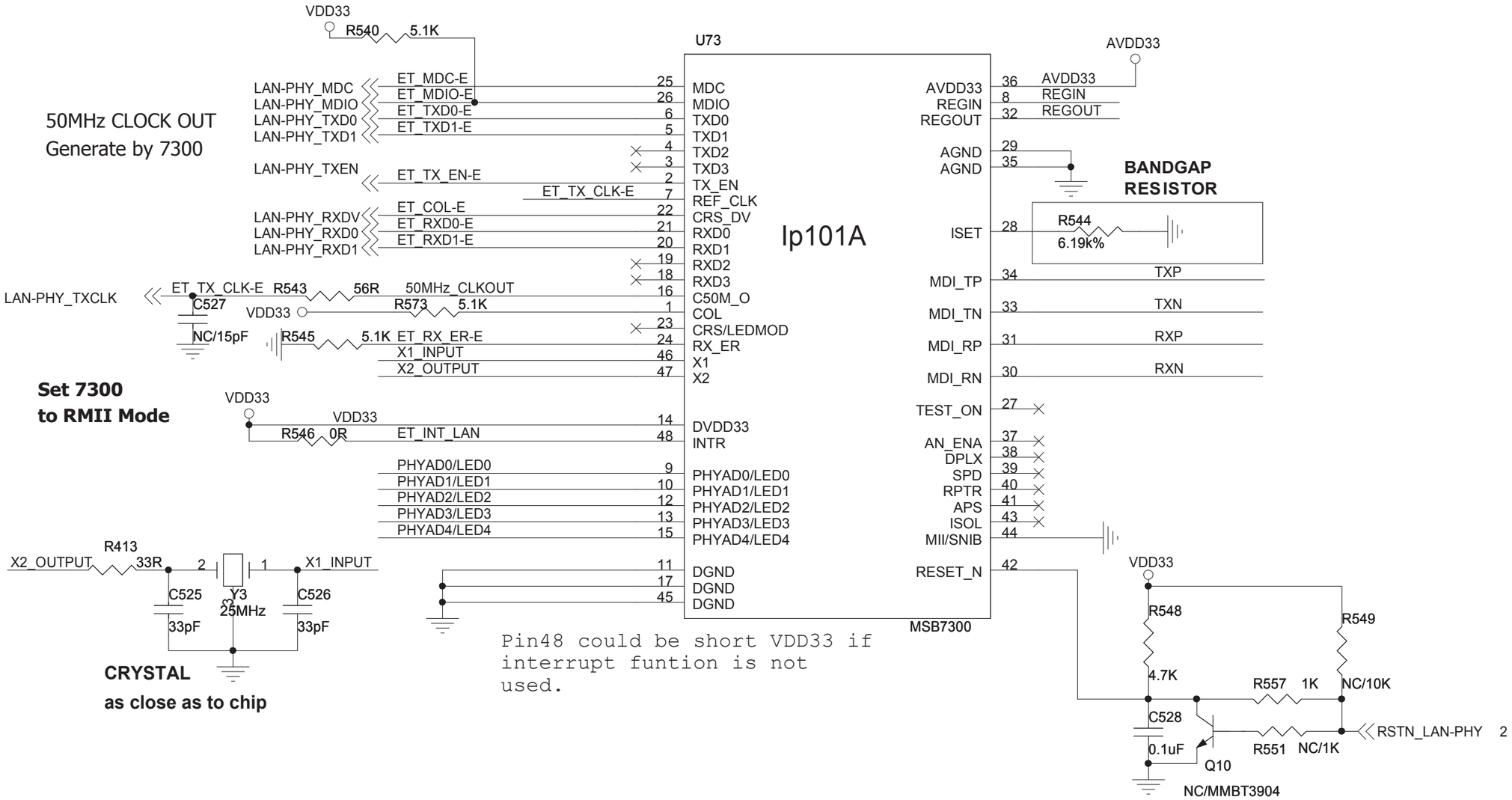


PCI Principal 46¨ e 55¨

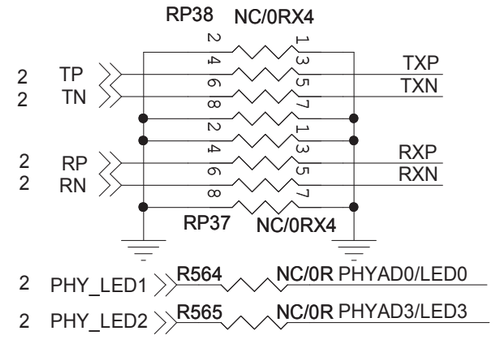




PCI Principal 46" e 55"

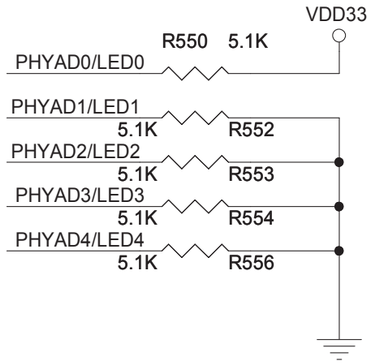


PCI Principal 46¨ e 55¨

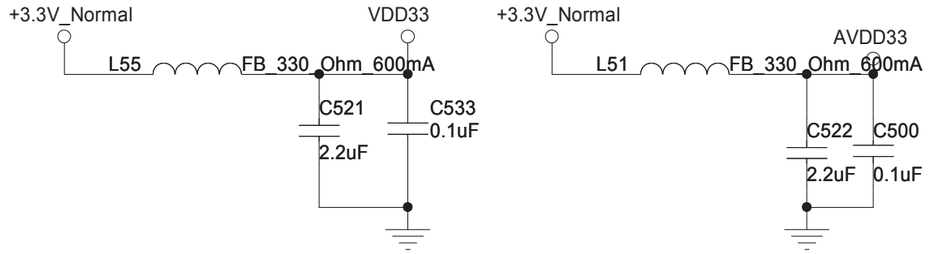


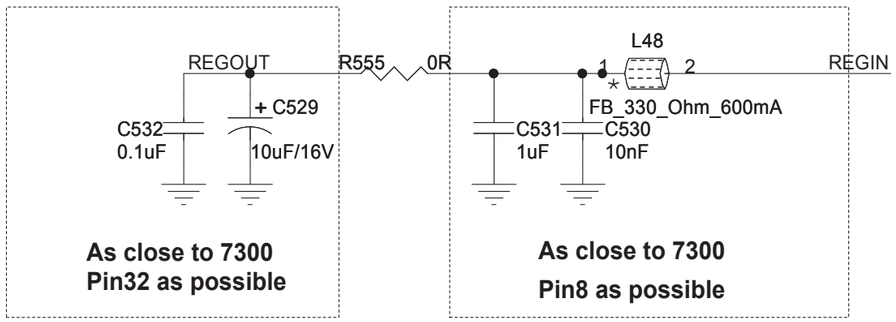
LED and PHY address Configuration

This schematic sets PHY address to 00001b.



LED0	LED1	LED2	LED3	LED4
Link	Dupx	10Act	100Act	COL

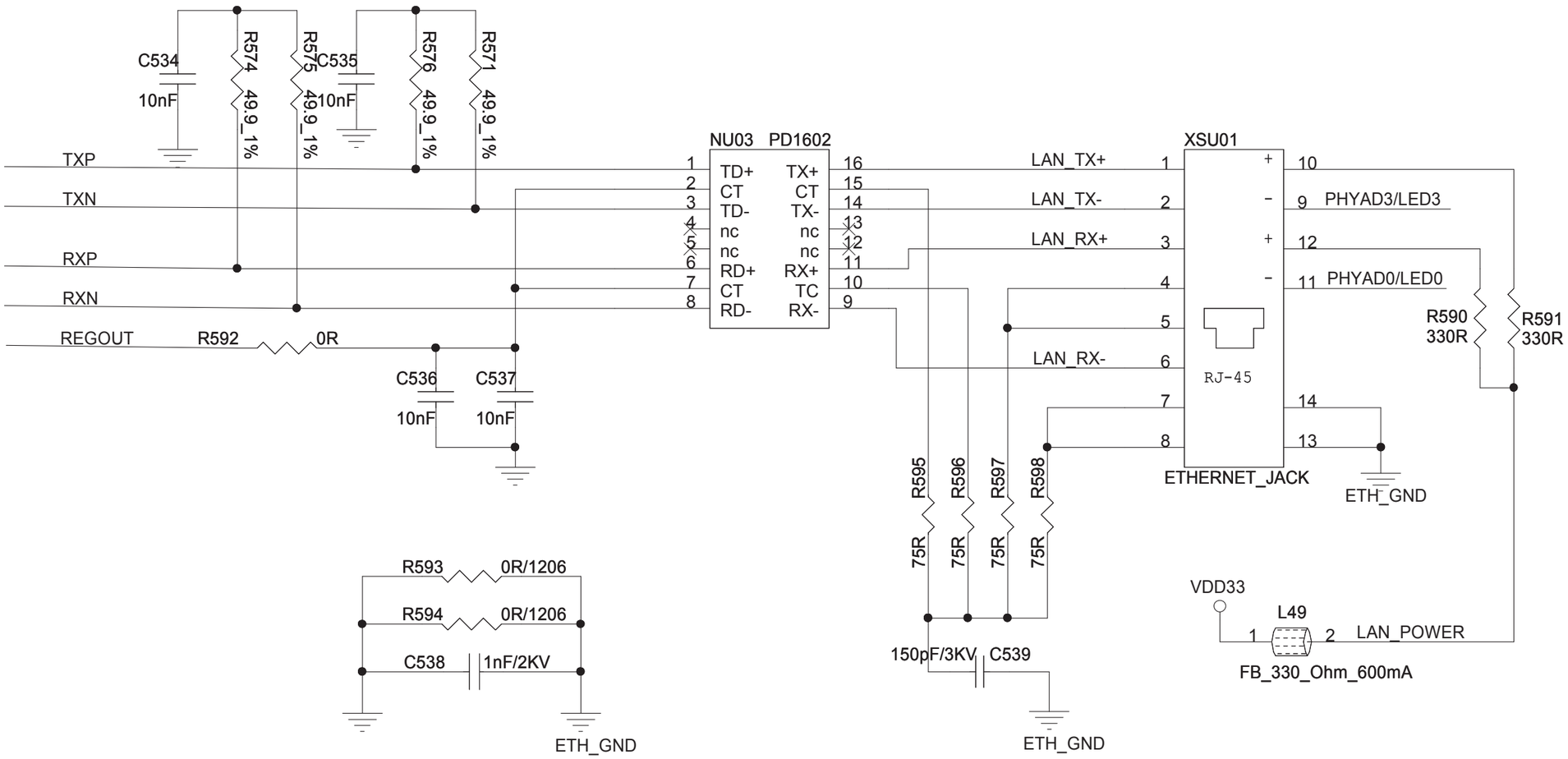




**** Bead should be placed as close to 7300 as possible**
and in the same side as 7300.

* : Optional ,but recommended

PCI Principal 46" e 55"



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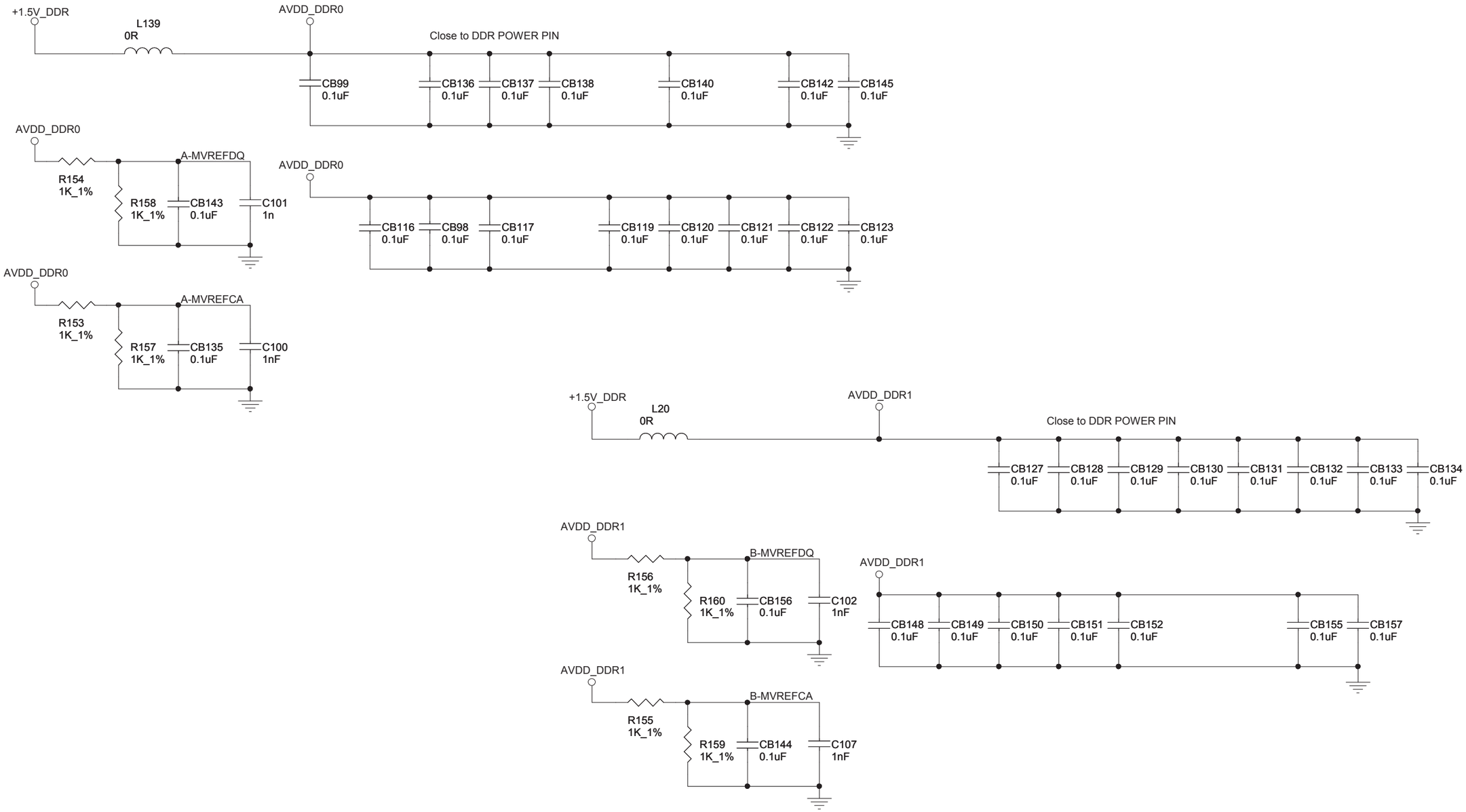
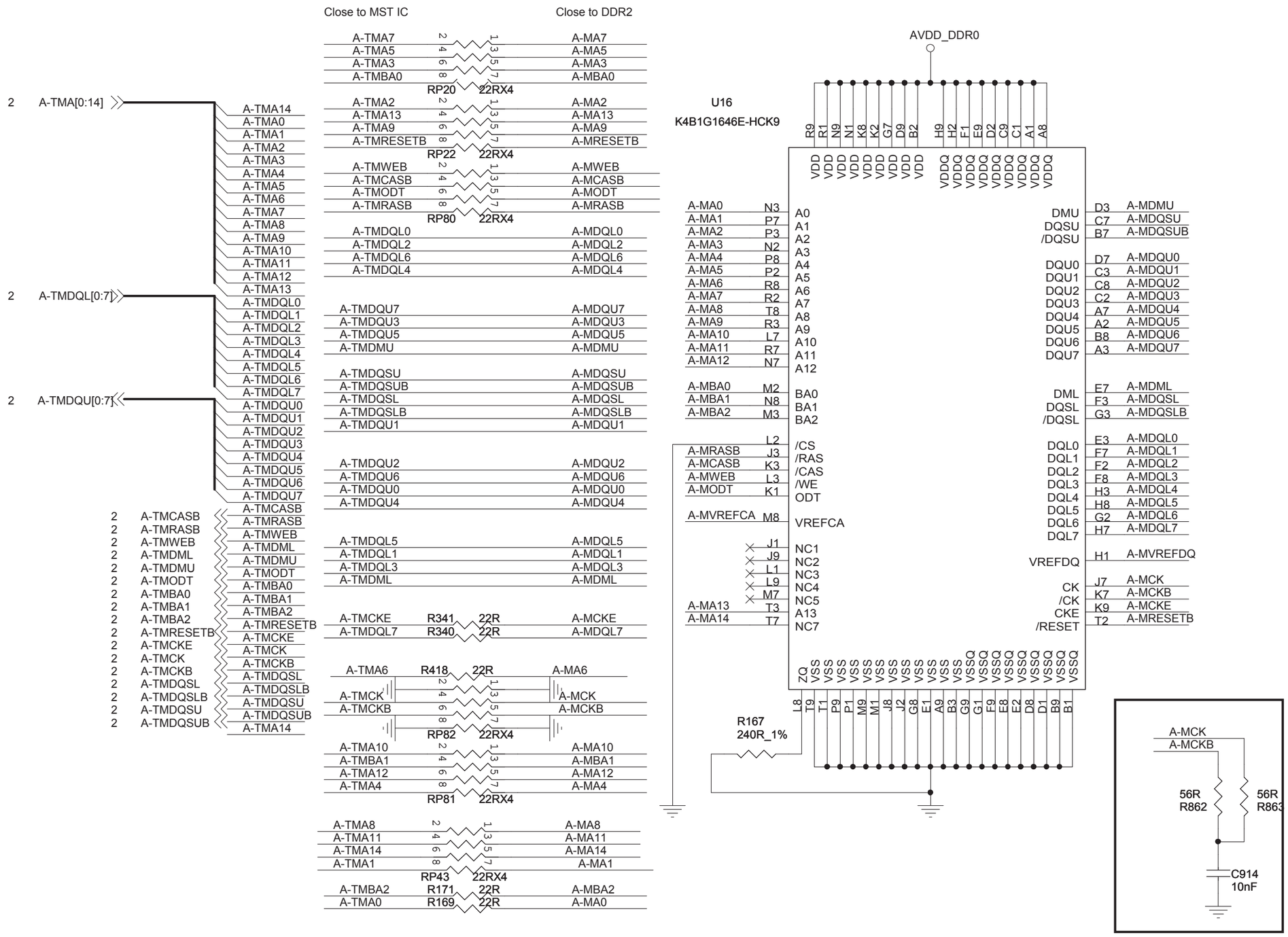
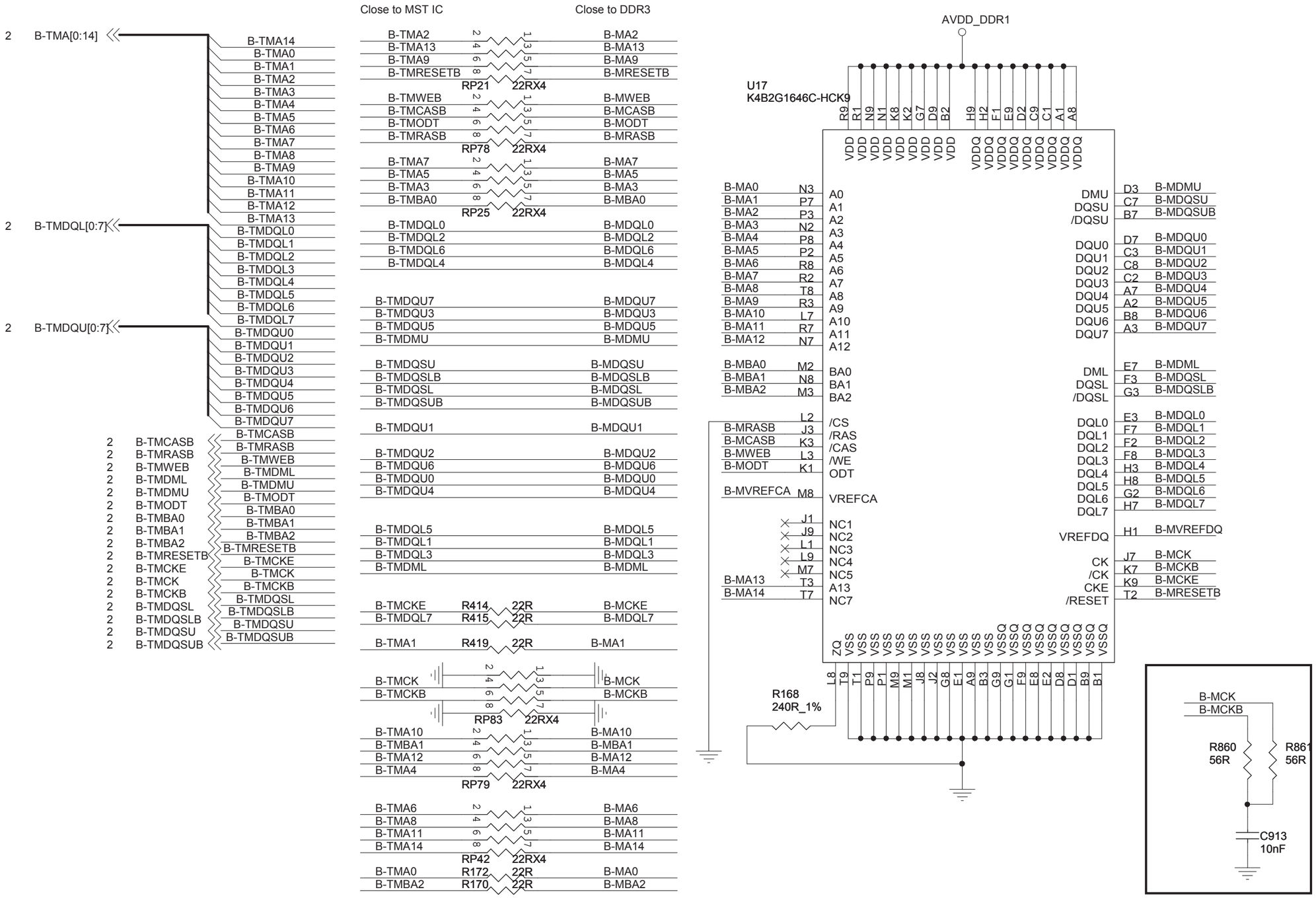
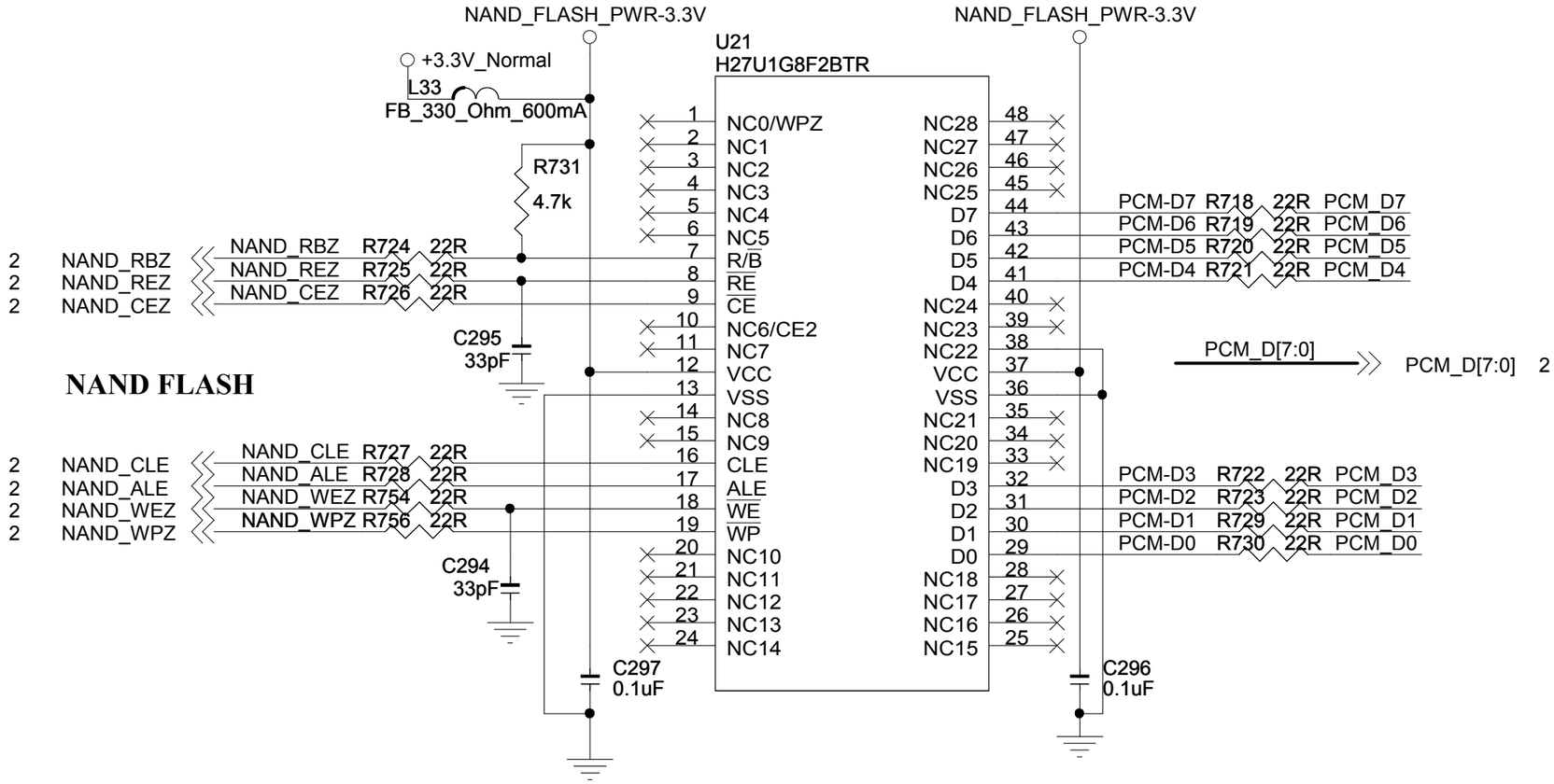


PCI Principal 46" e 55"

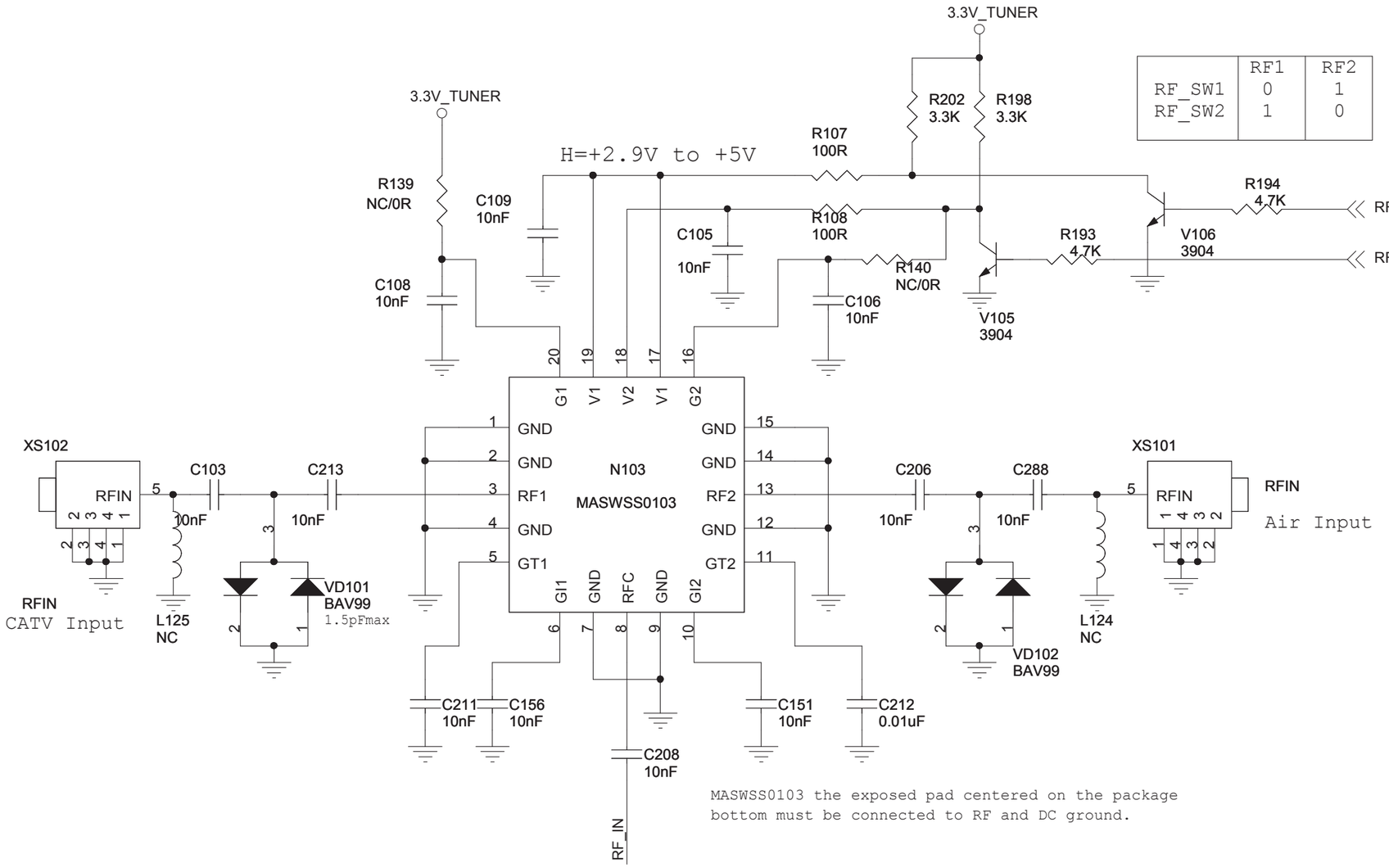


PCI Principal 46" e 55"



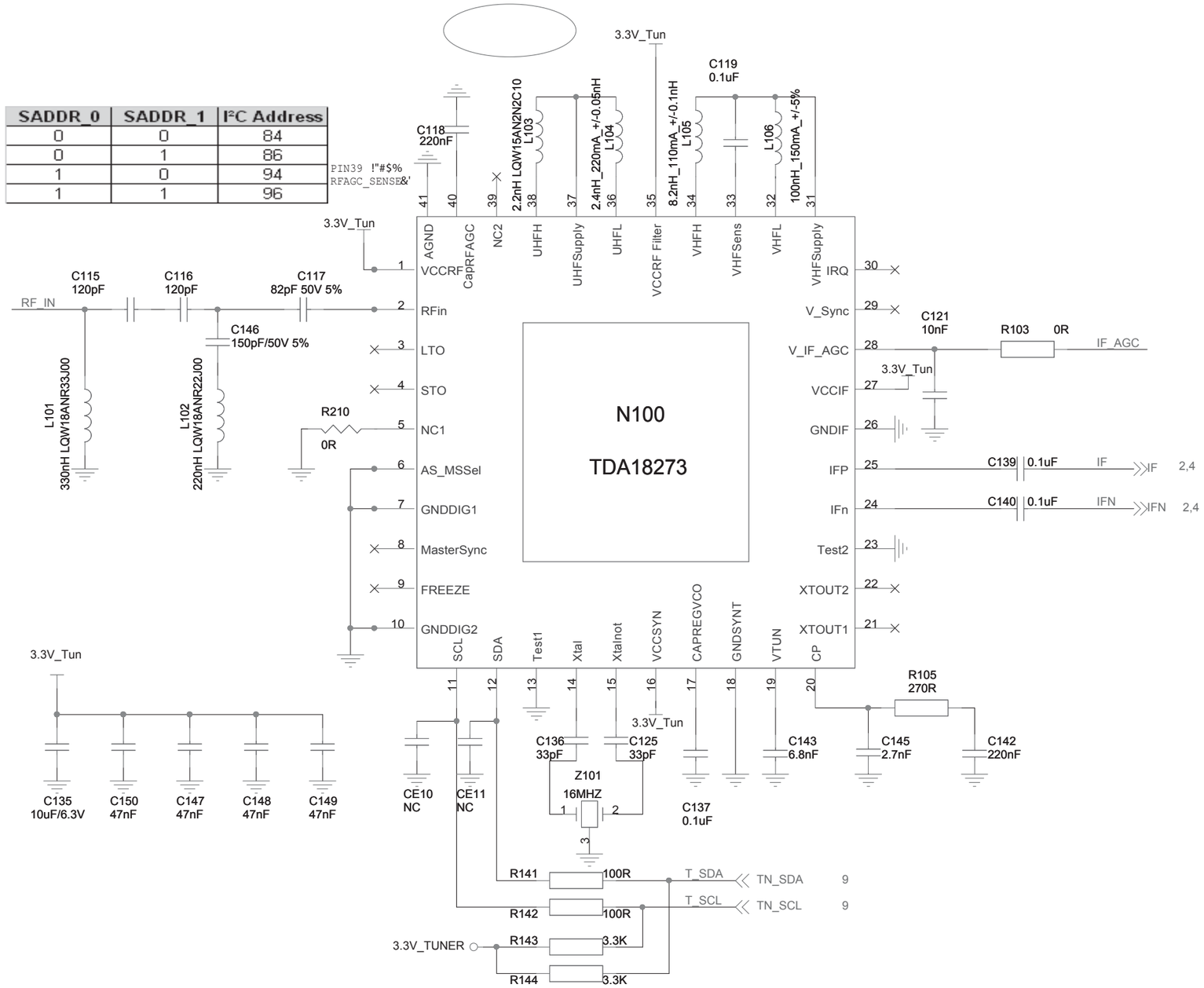

NAND FLASH
NAND_FLASH_PWR-3.3V
NAND_FLASH_PWR-3.3V
+3.3V_Normal
L33
FB_330_Ohm_600mA
R731
4.7k
U21
H27U1G8F2BTR
2 NAND_RBZ
2 NAND_REZ
2 NAND_CEZ
NAND_RBZ R724 22R
NAND_REZ R725 22R
NAND_CEZ R726 22R
C295
33pF
2 NAND_CLE
2 NAND_ALE
2 NAND_WEZ
2 NAND_WPZ
NAND_CLE R727 22R
NAND_ALE R728 22R
NAND_WEZ R754 22R
NAND_WPZ R756 22R
C294
33pF
C297
0.1uF
C296
0.1uF
1 NC0/WPZ
2 NC1
3 NC2
4 NC3
5 NC4
6 NC5
7 R/B
8 RE
9 CE
10 NC6/CE2
11 NC7
12 VCC
13 VSS
14 NC8
15 NC9
16 CLE
17 ALE
18 WE
19 WP
20 NC10
21 NC11
22 NC12
23 NC13
24 NC14
NC28 48
NC27 47
NC26 46
NC25 45
D7 44
D6 43
D5 42
D4 41
NC24 40
NC23 39
NC22 38
VCC 37
VSS 36
NC21 35
NC20 34
NC19 33
D3 32
D2 31
D1 30
D0 29
NC18 28
NC17 27
NC16 26
NC15 25
PCM-D7 R718 22R PCM_D7
PCM-D6 R719 22R PCM_D6
PCM-D5 R720 22R PCM_D5
PCM-D4 R721 22R PCM_D4
PCM_D[7:0]
PCM_D[7:0] 2
PCM-D3 R722 22R PCM_D3
PCM-D2 R723 22R PCM_D2
PCM-D1 R729 22R PCM_D1
PCM-D0 R730 22R PCM_D0

PCI Principal 46¨ e 55¨

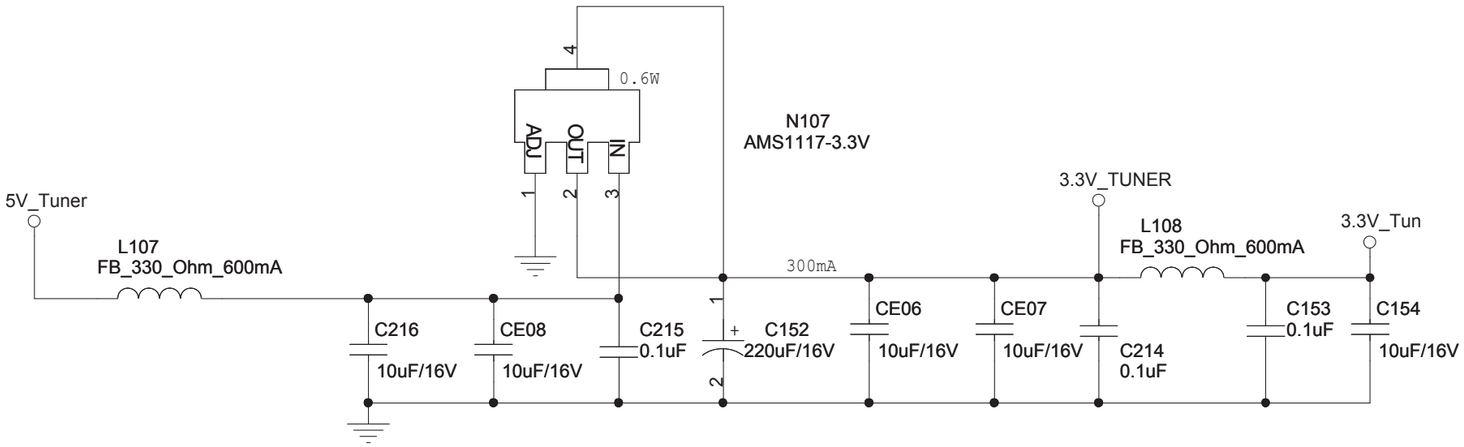


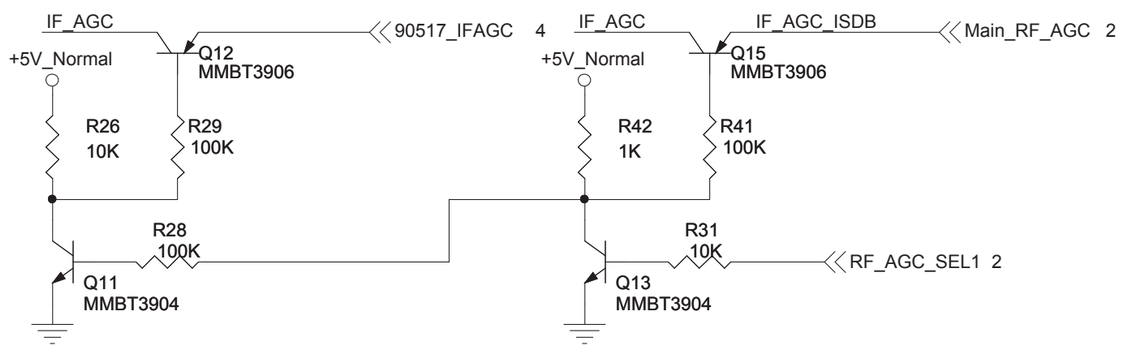
PCI Principal 46" e 55"

SADDR_0	SADDR_1	I²C Address
0	0	84
0	1	86
1	0	94
1	1	96



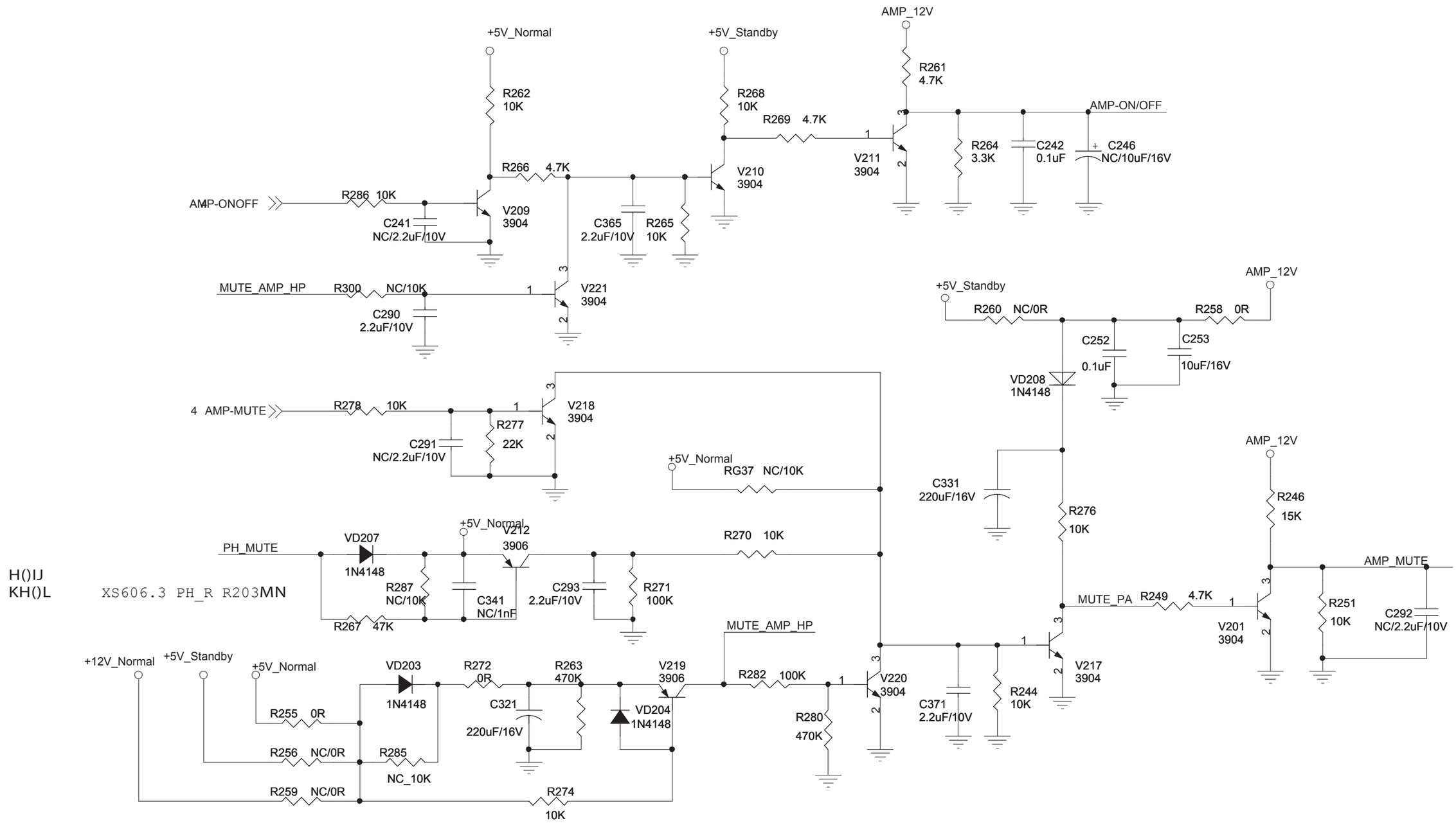
PCI Principal 46¨ e 55¨





90517 AGC Switch **main ic AGC Switch**

PCI Principal 46¨ e 55¨



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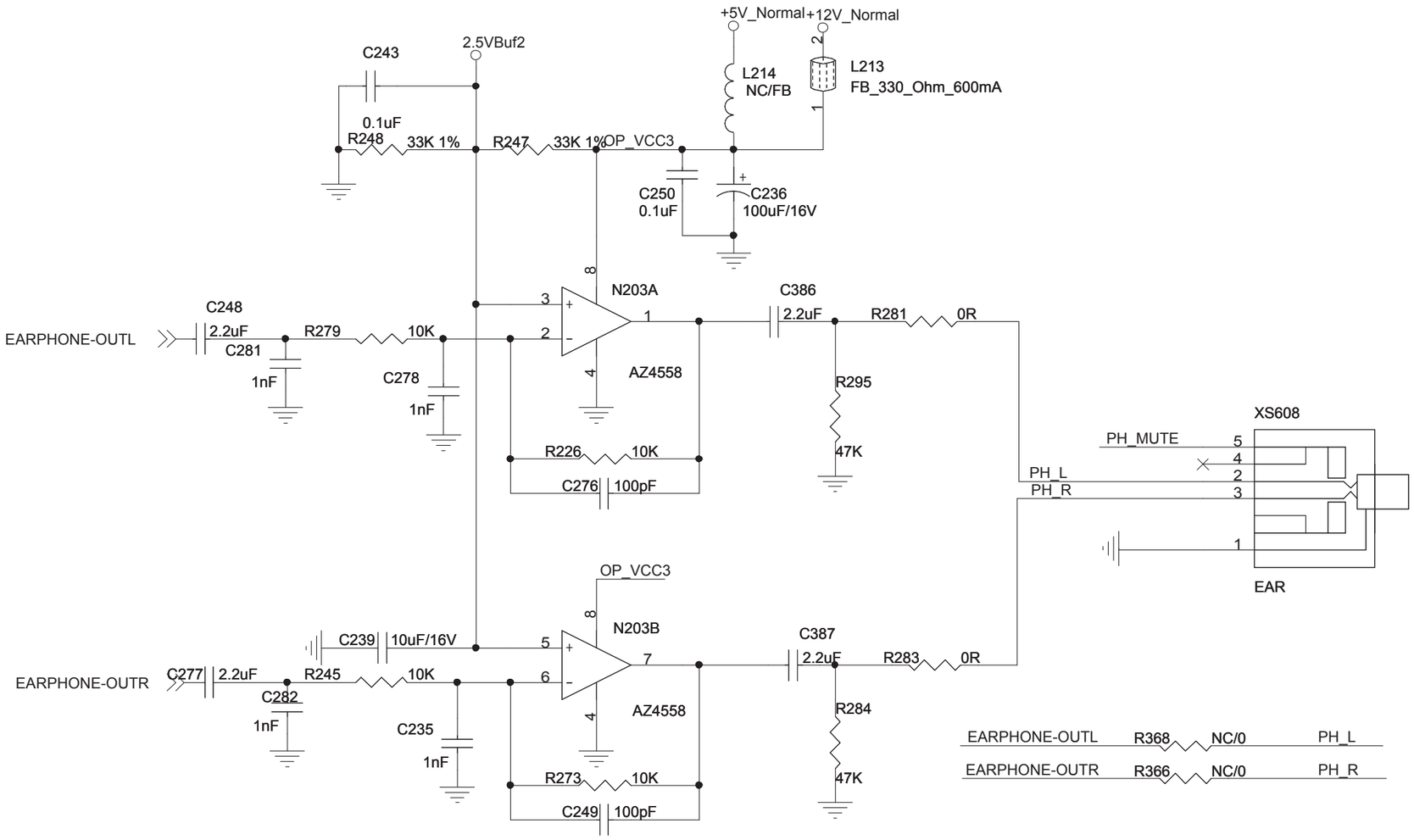
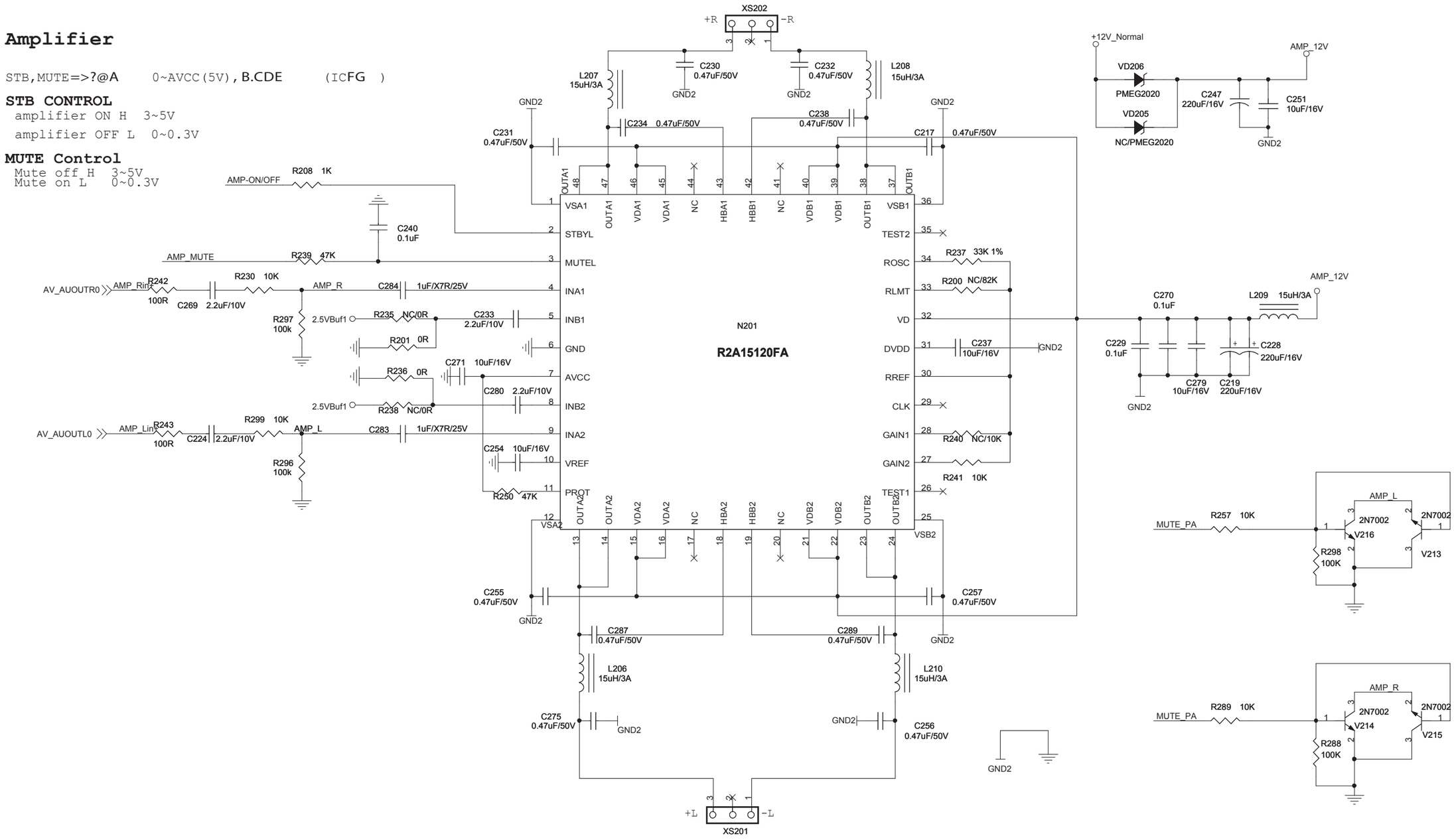
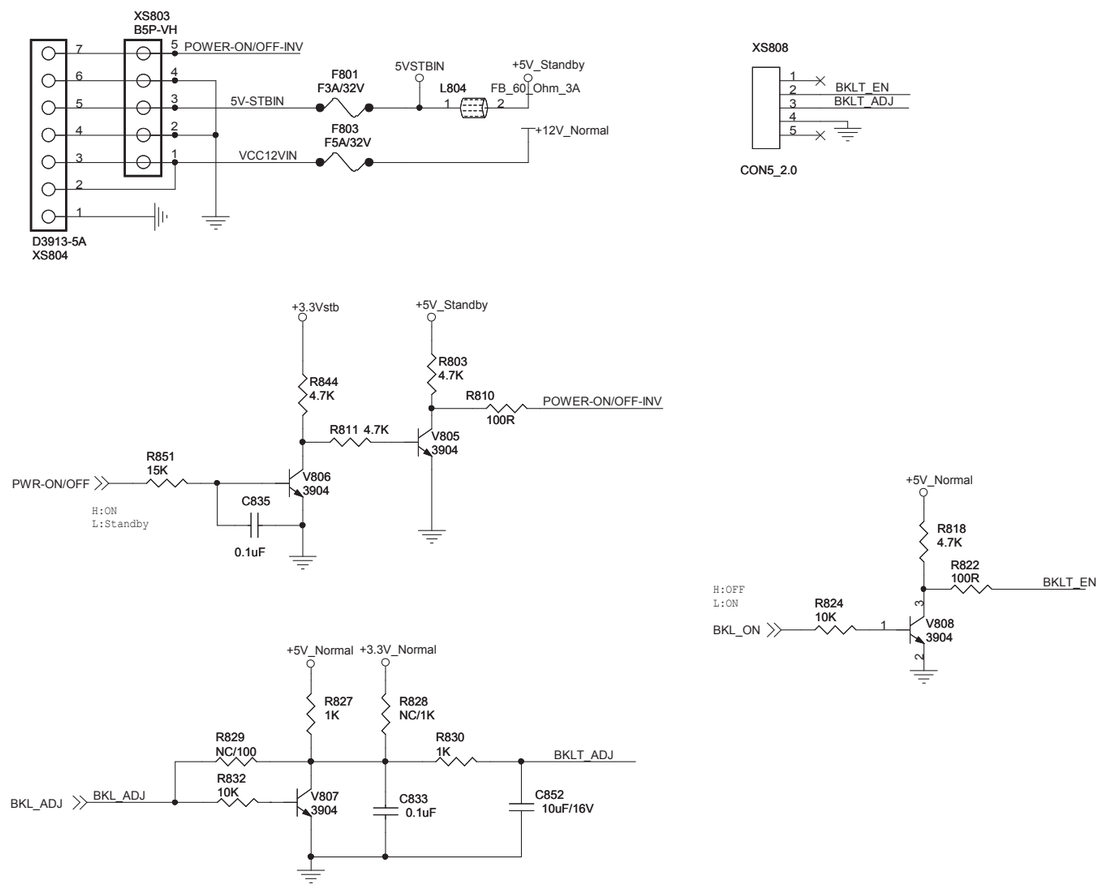


PCI Principal 46¨ e 55¨

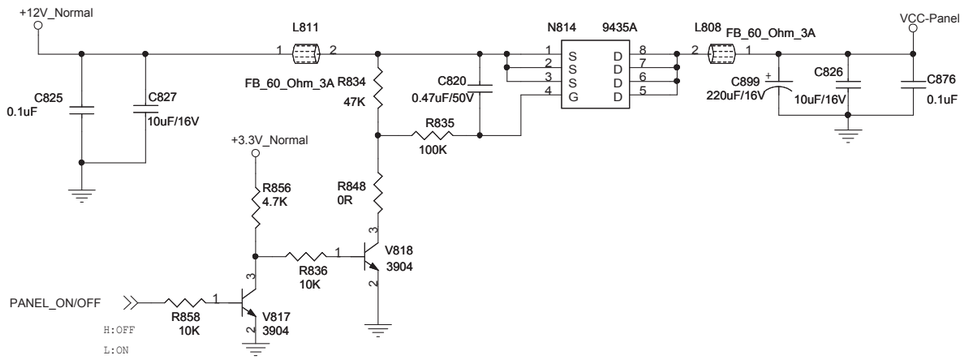


PCI Principal 46¨ e 55¨

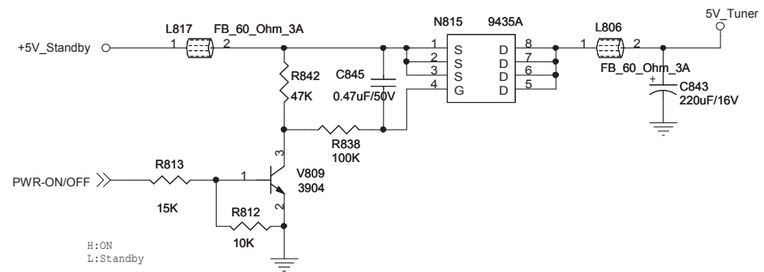
POWER INPUT



VCC-Panel



5V_Tuner



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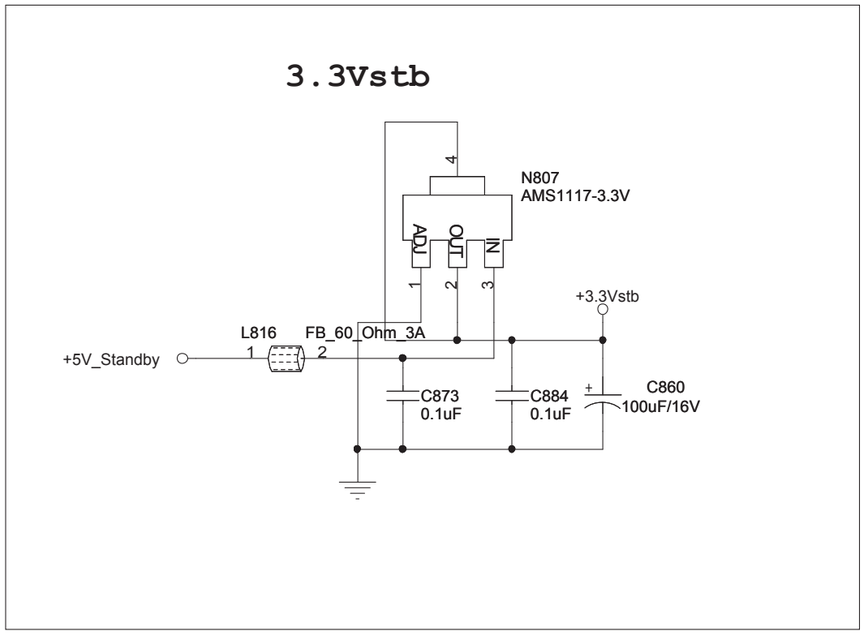
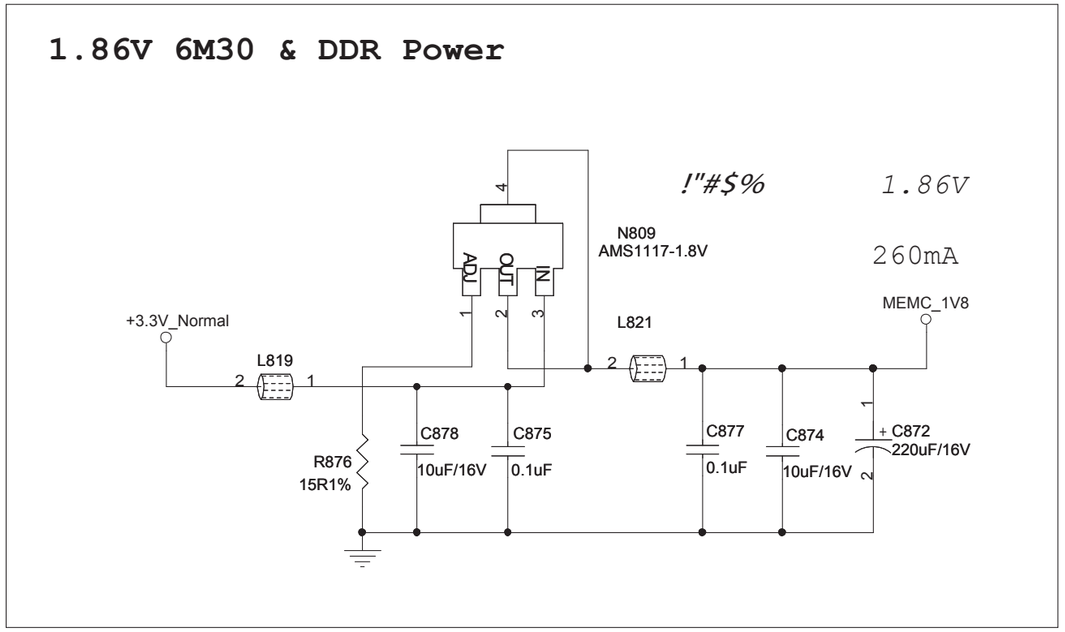
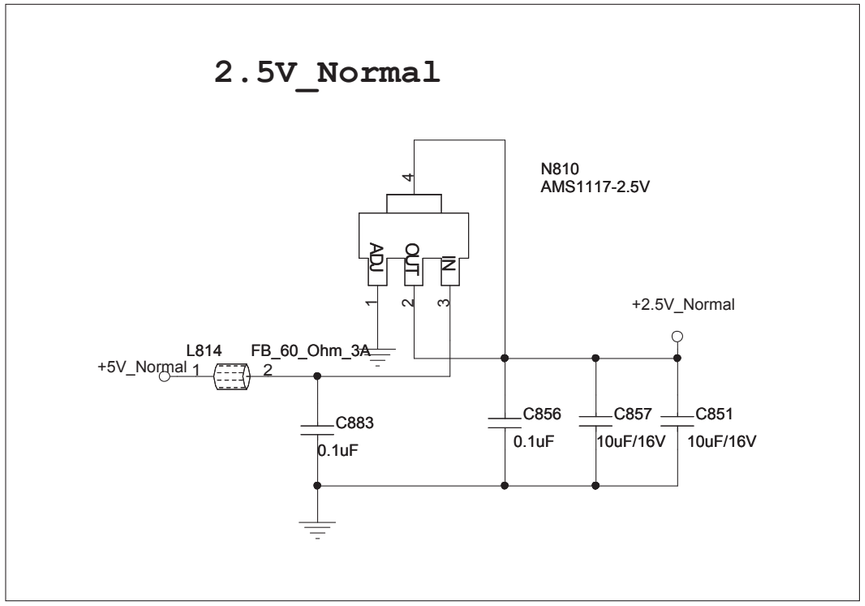
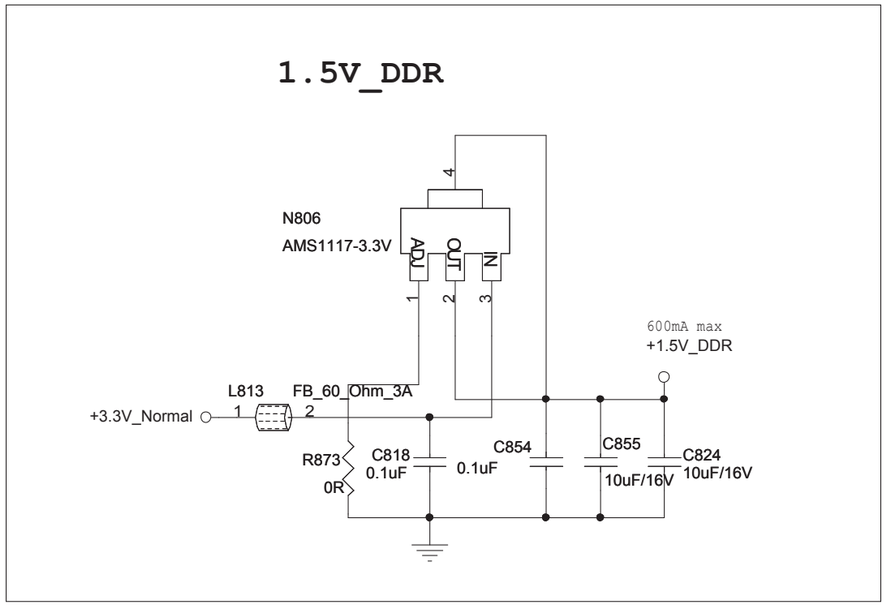


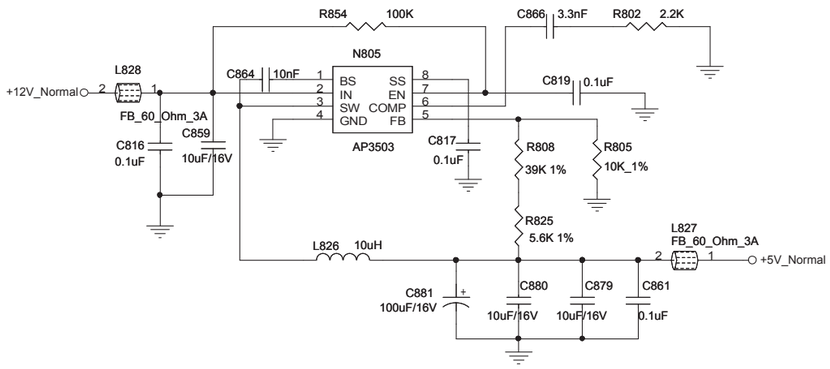




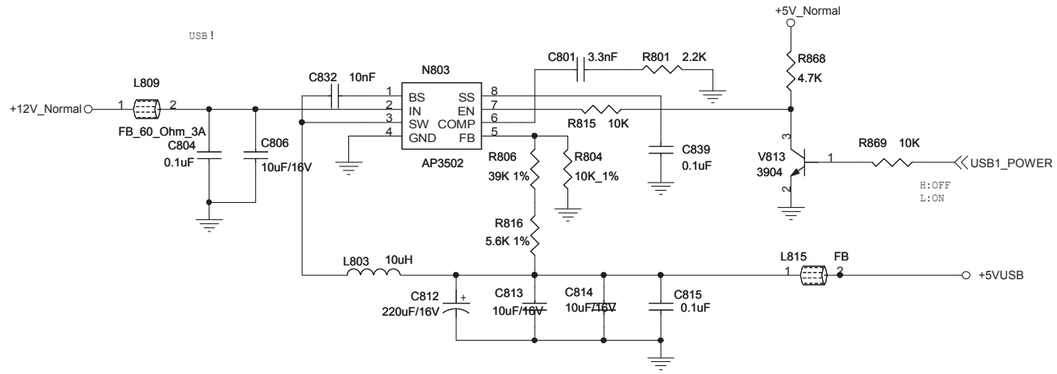


PCI Principal 46¨ e 55¨

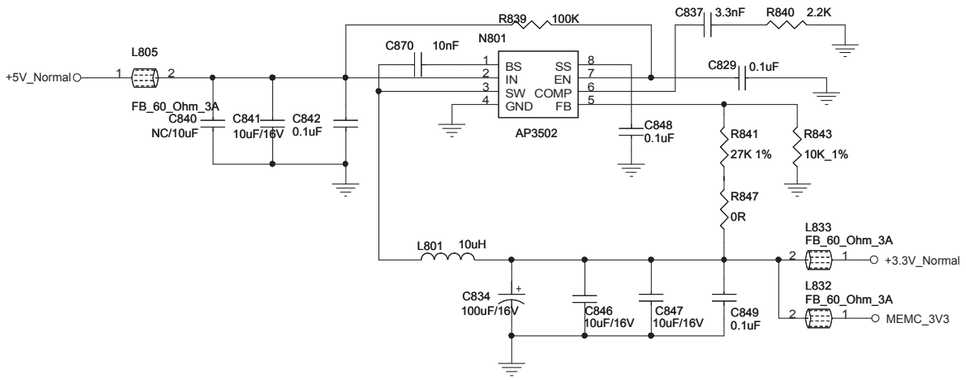
5V_Normal



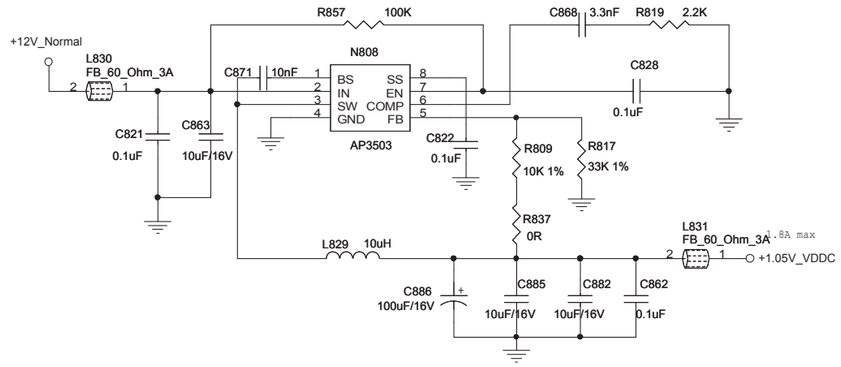
5V USB



3.3V_Normal



1.05V_VDDC



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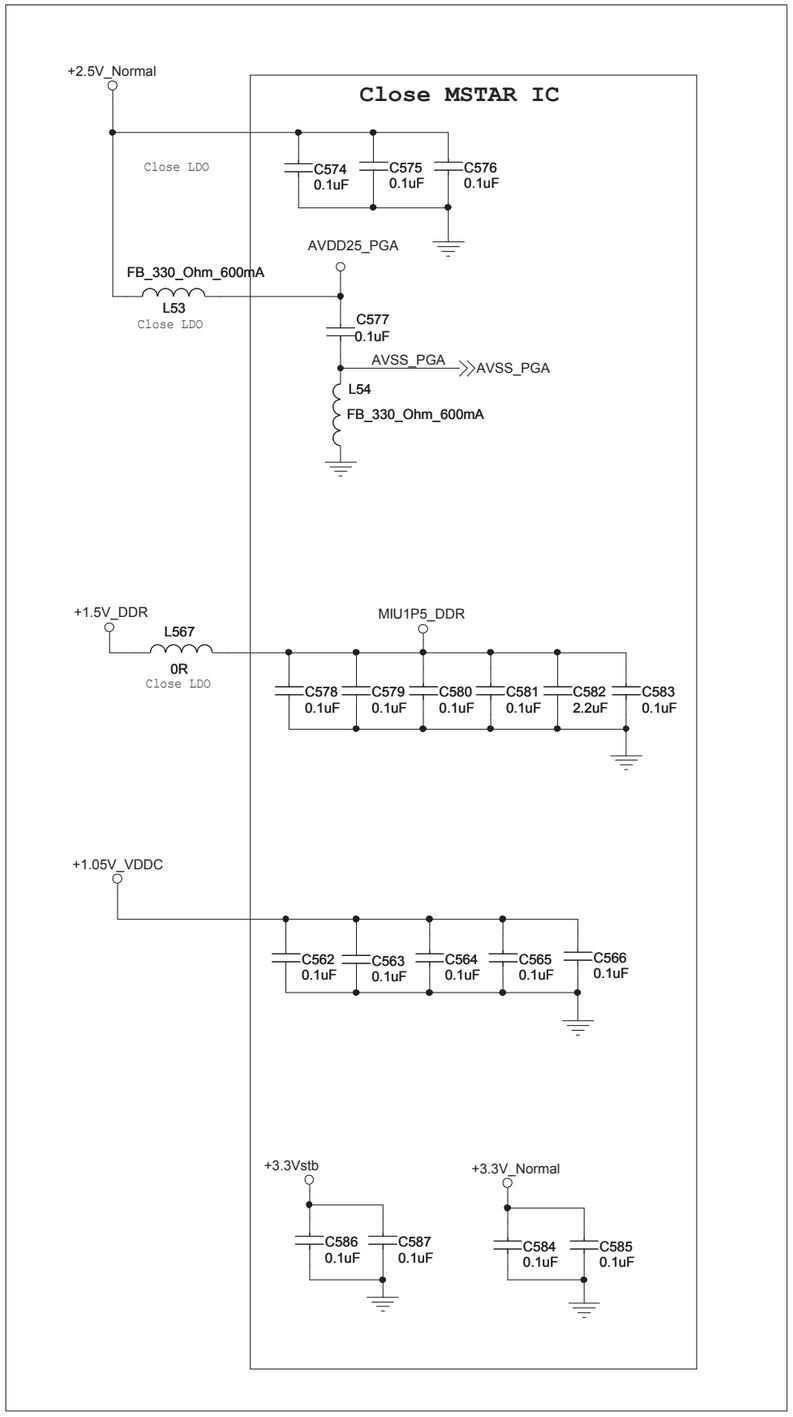
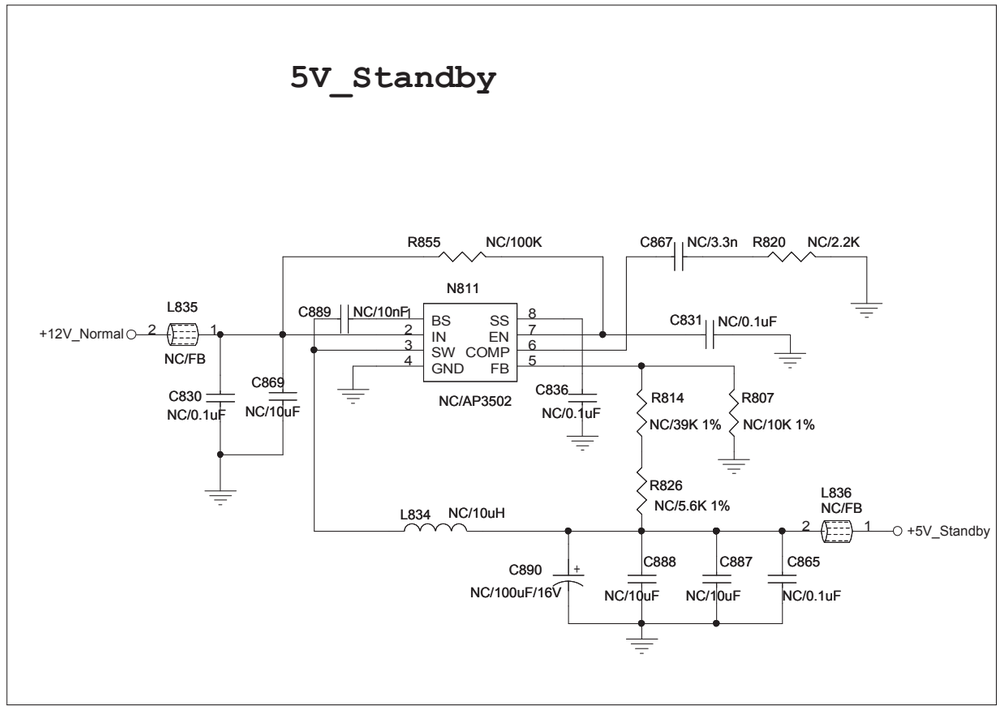
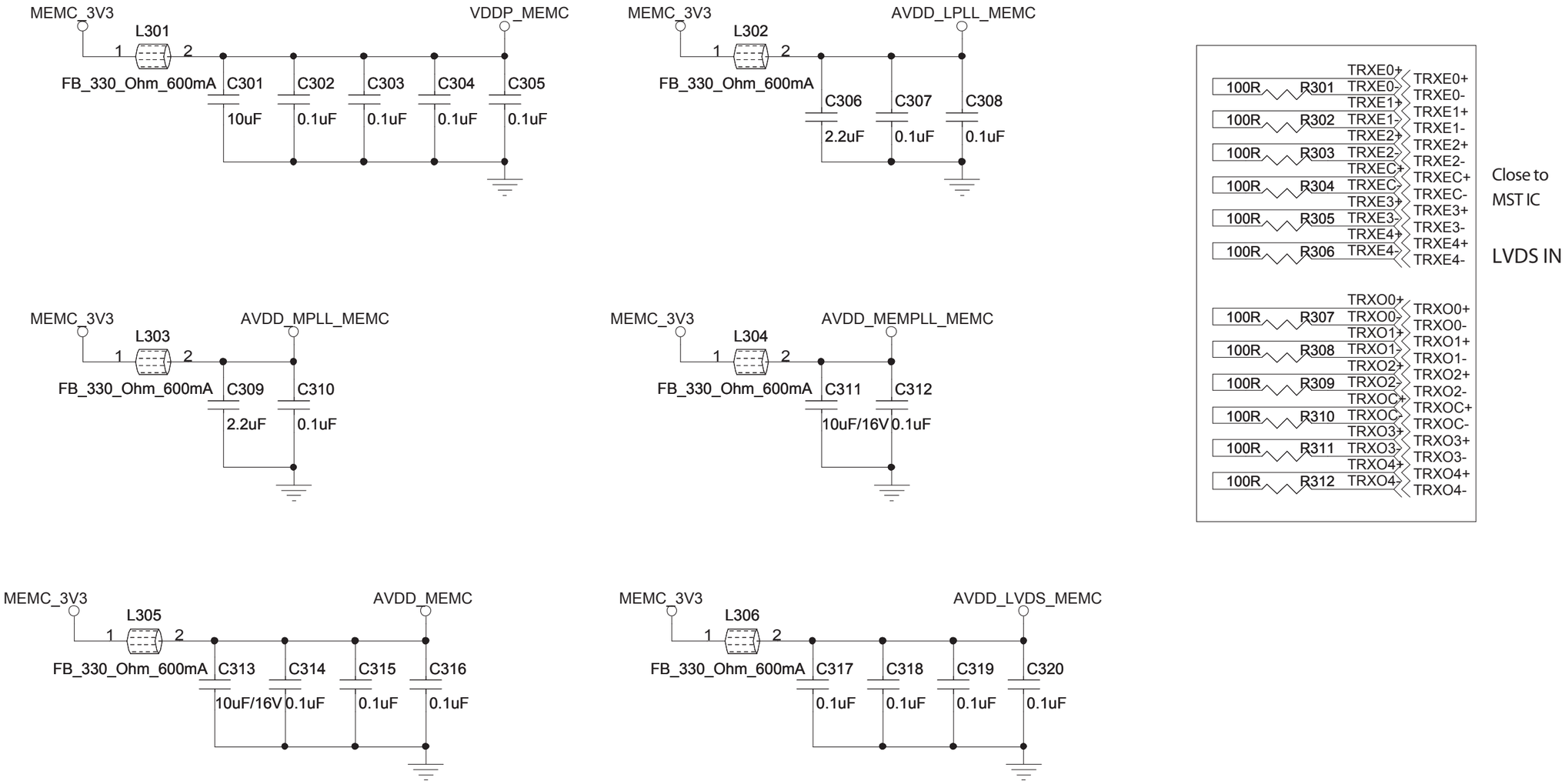




PCI Principal 46" e 55"



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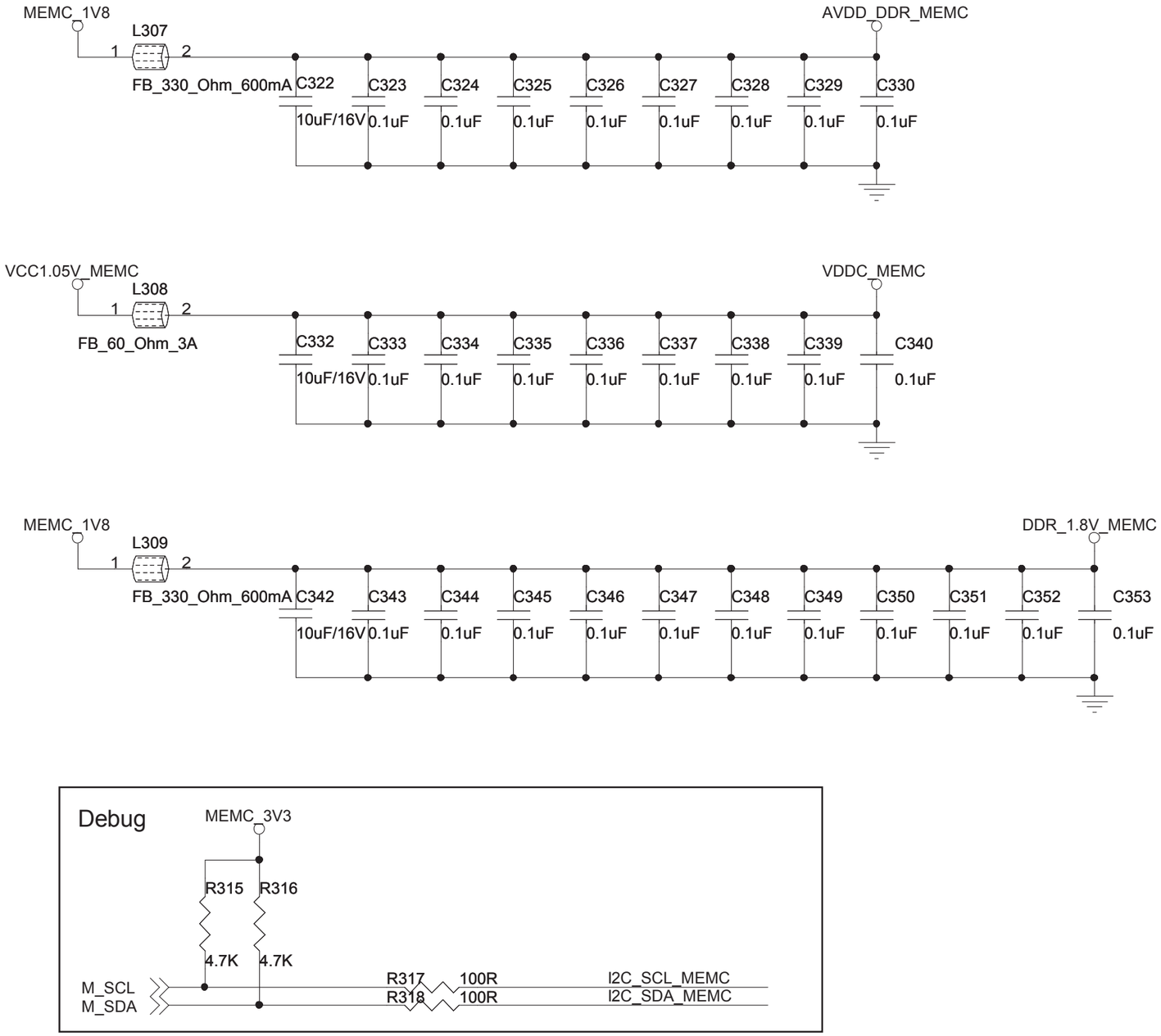

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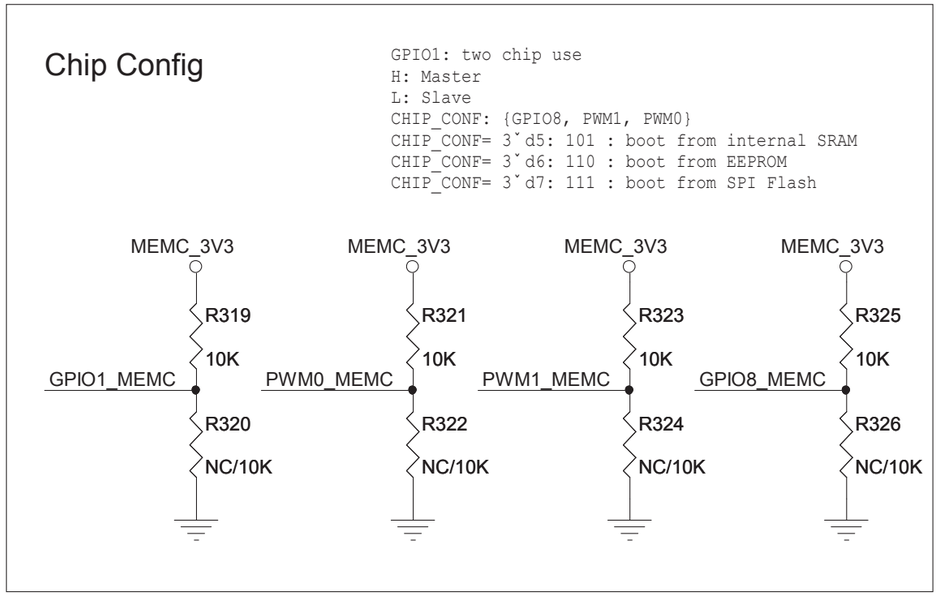

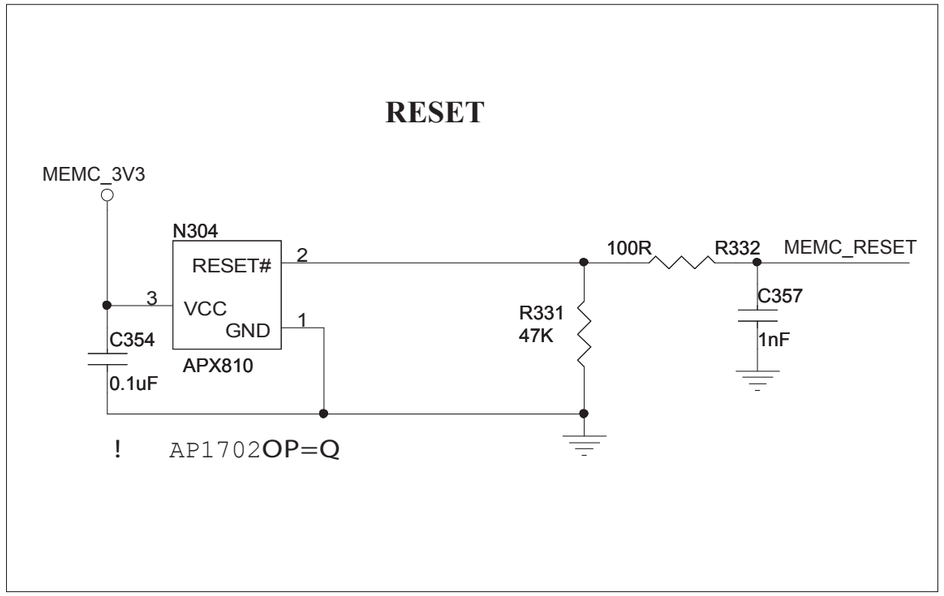

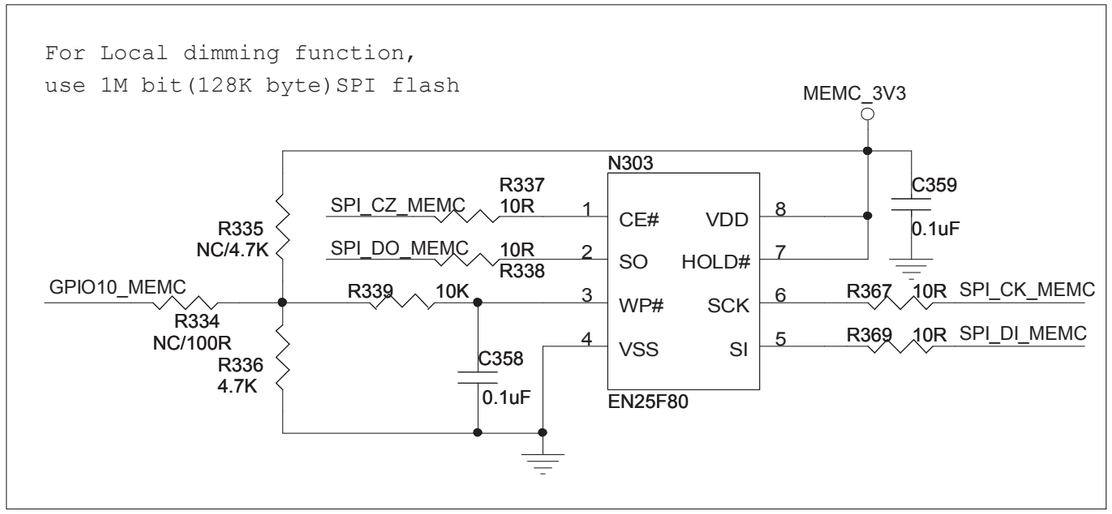

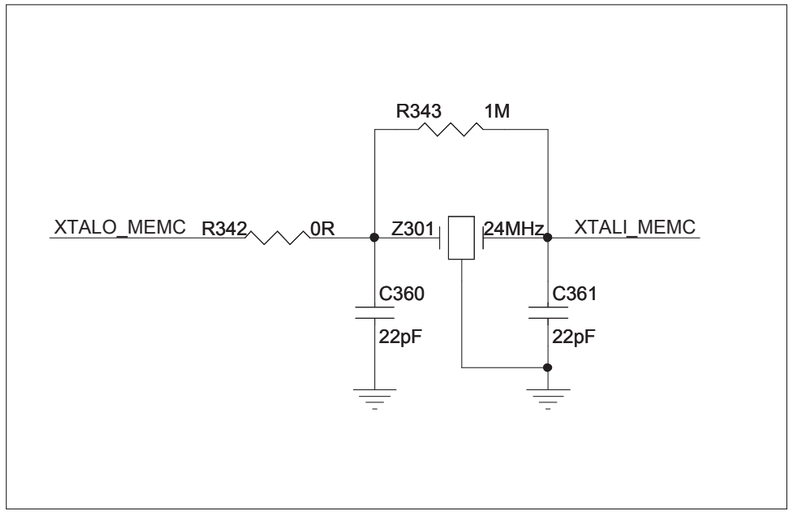

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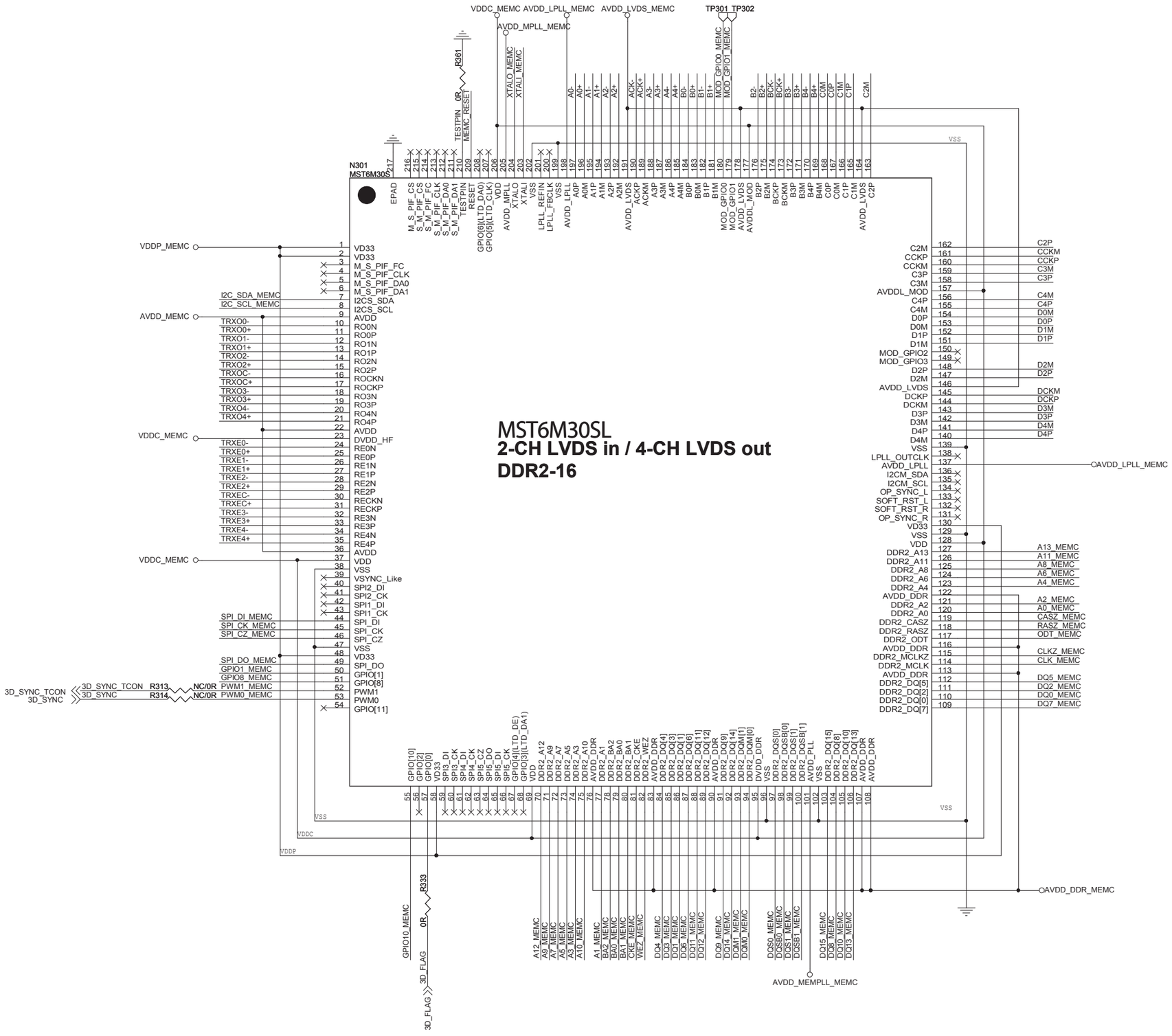

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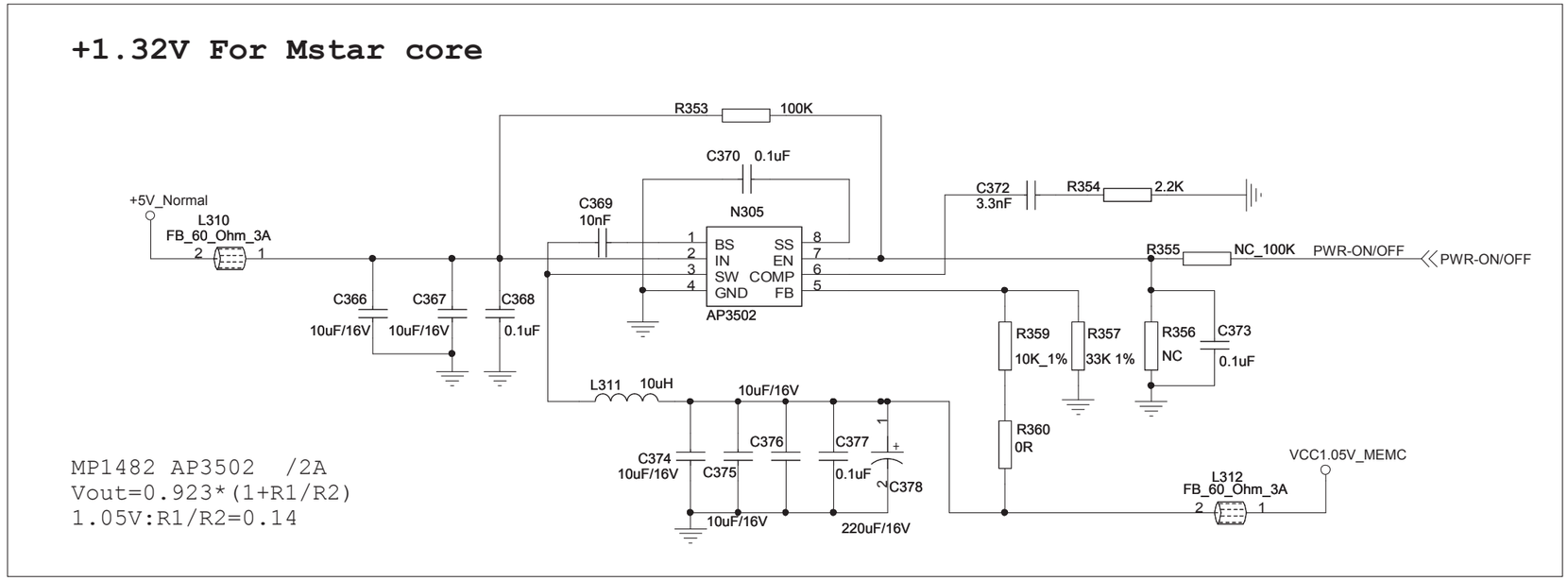
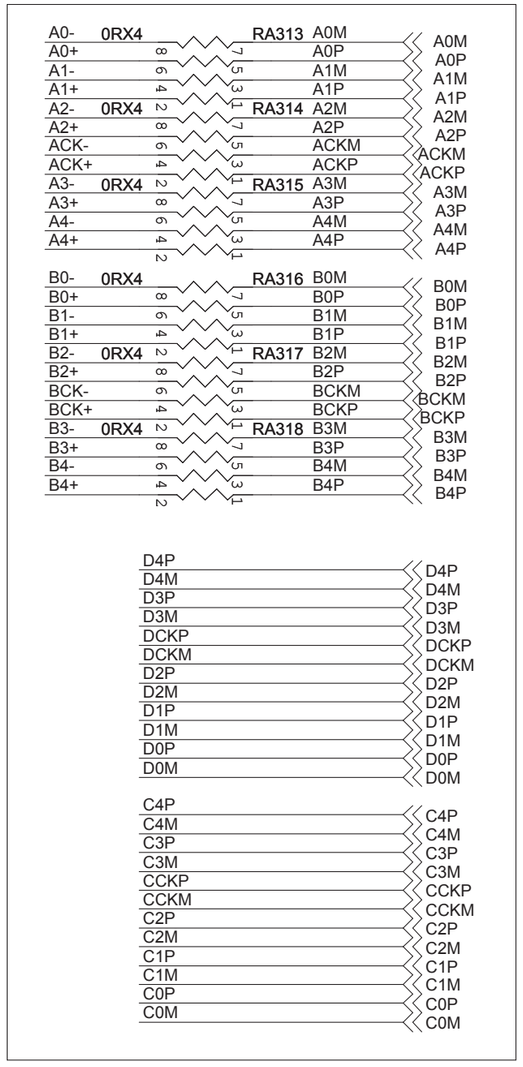
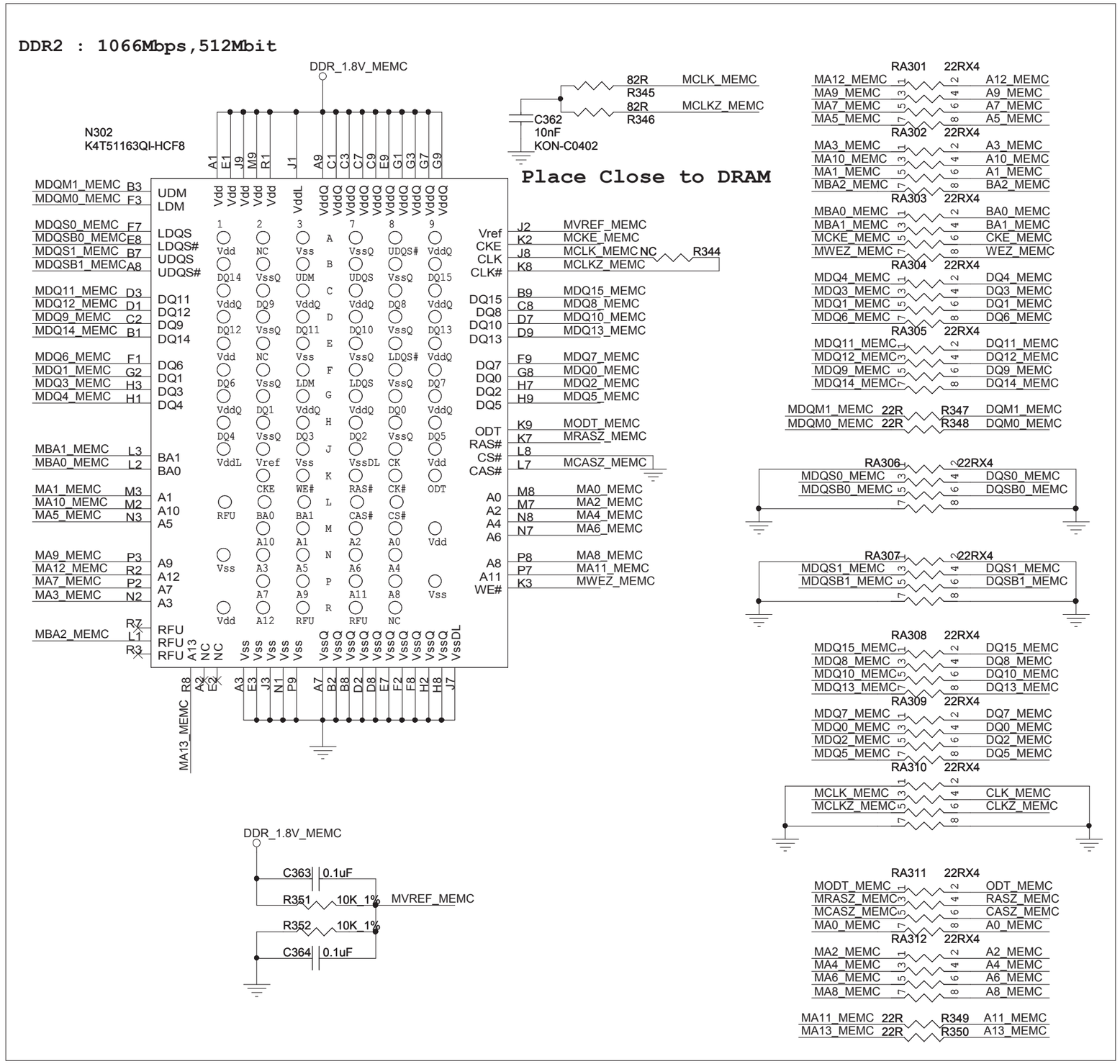


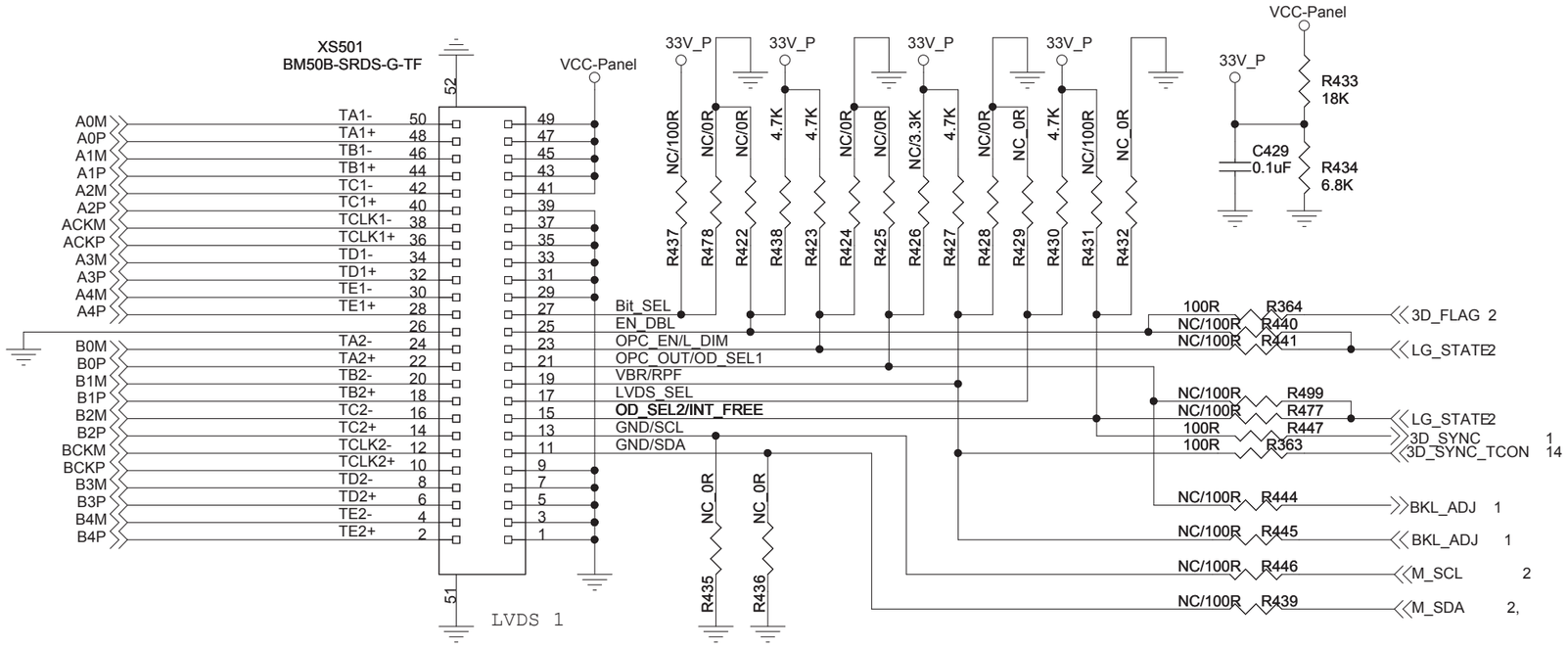
LVDS OUT



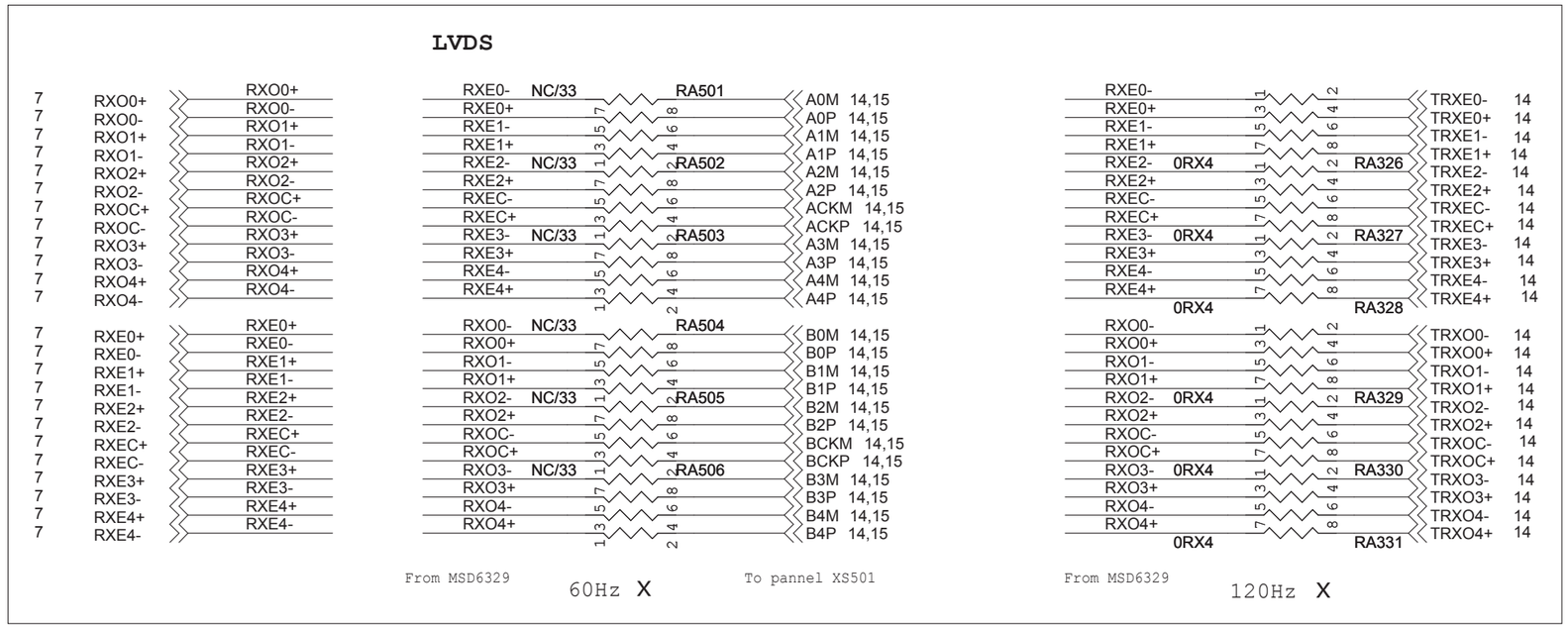
PCI Principal 46¨ e 55¨

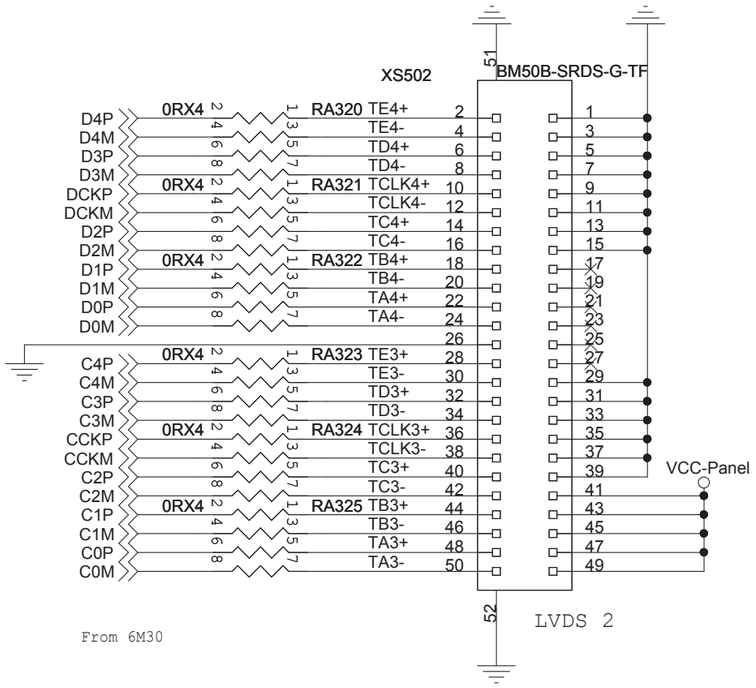


PCI Principal 46¨ e 55¨

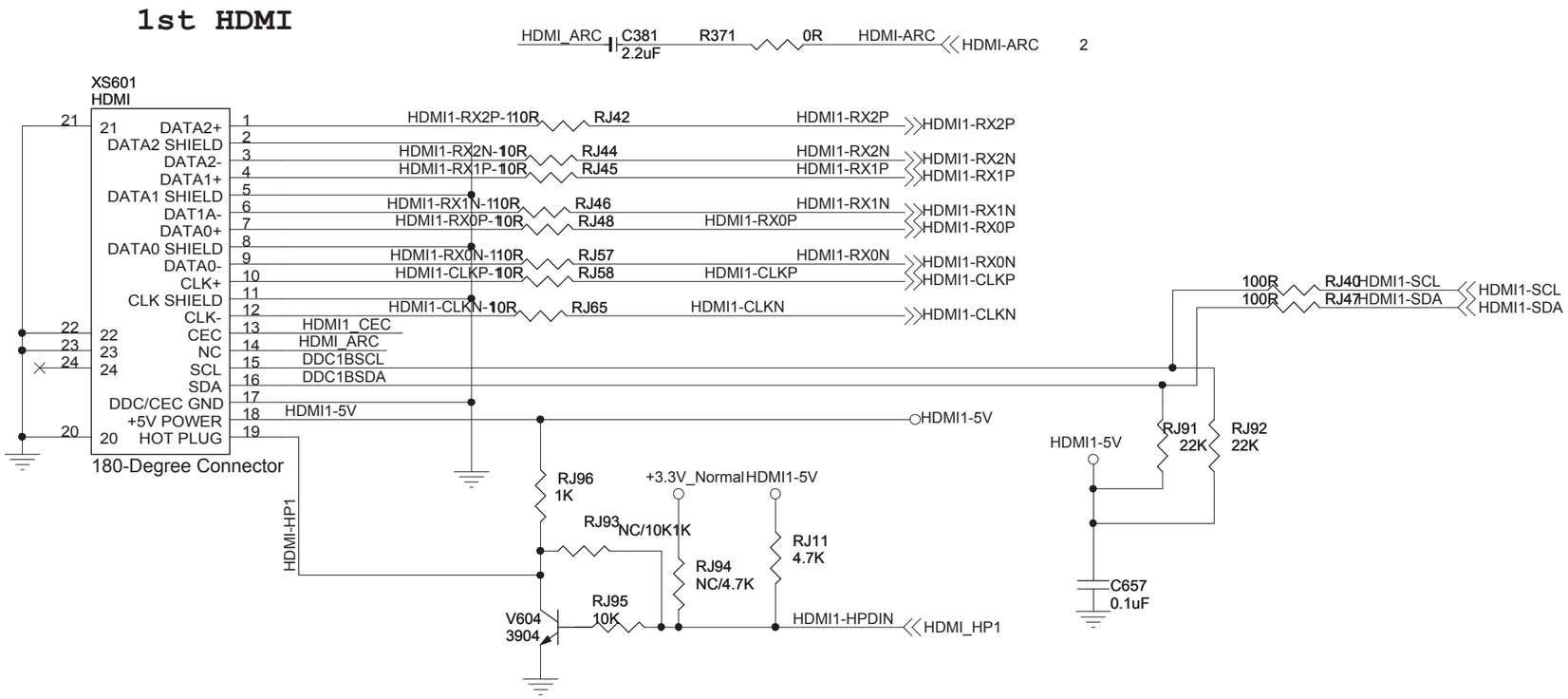


RNSRTUV

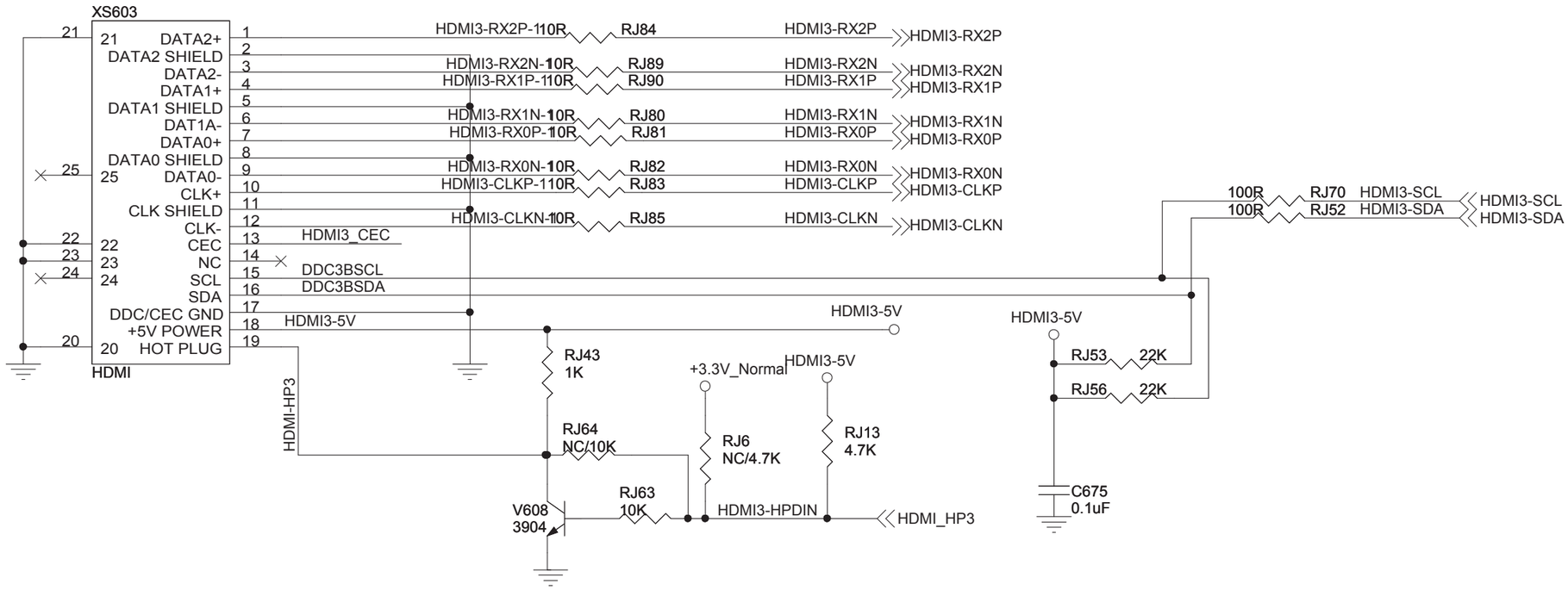




PCI Principal 46" e 55"

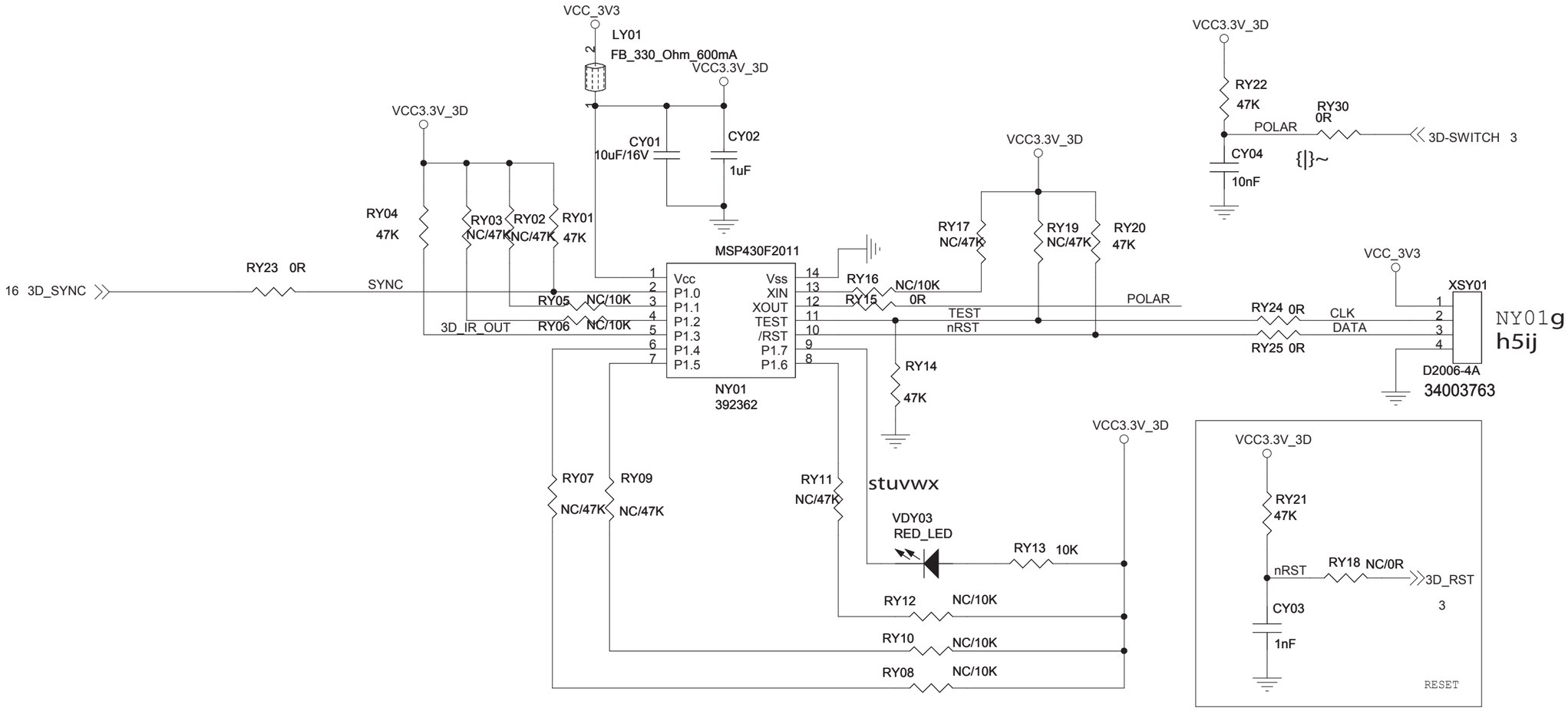


SIDE HDMI

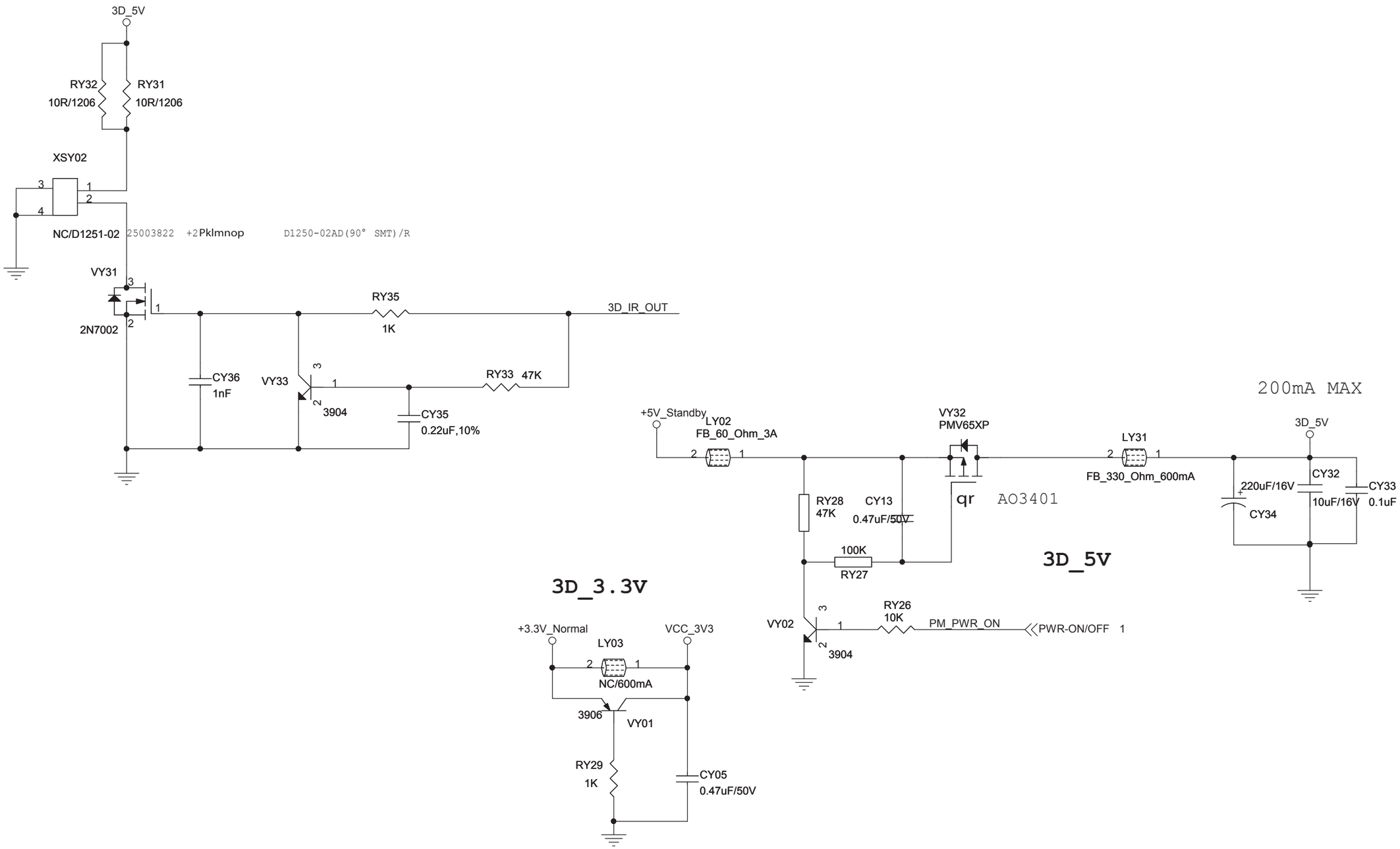


For CEC Leakage Protect

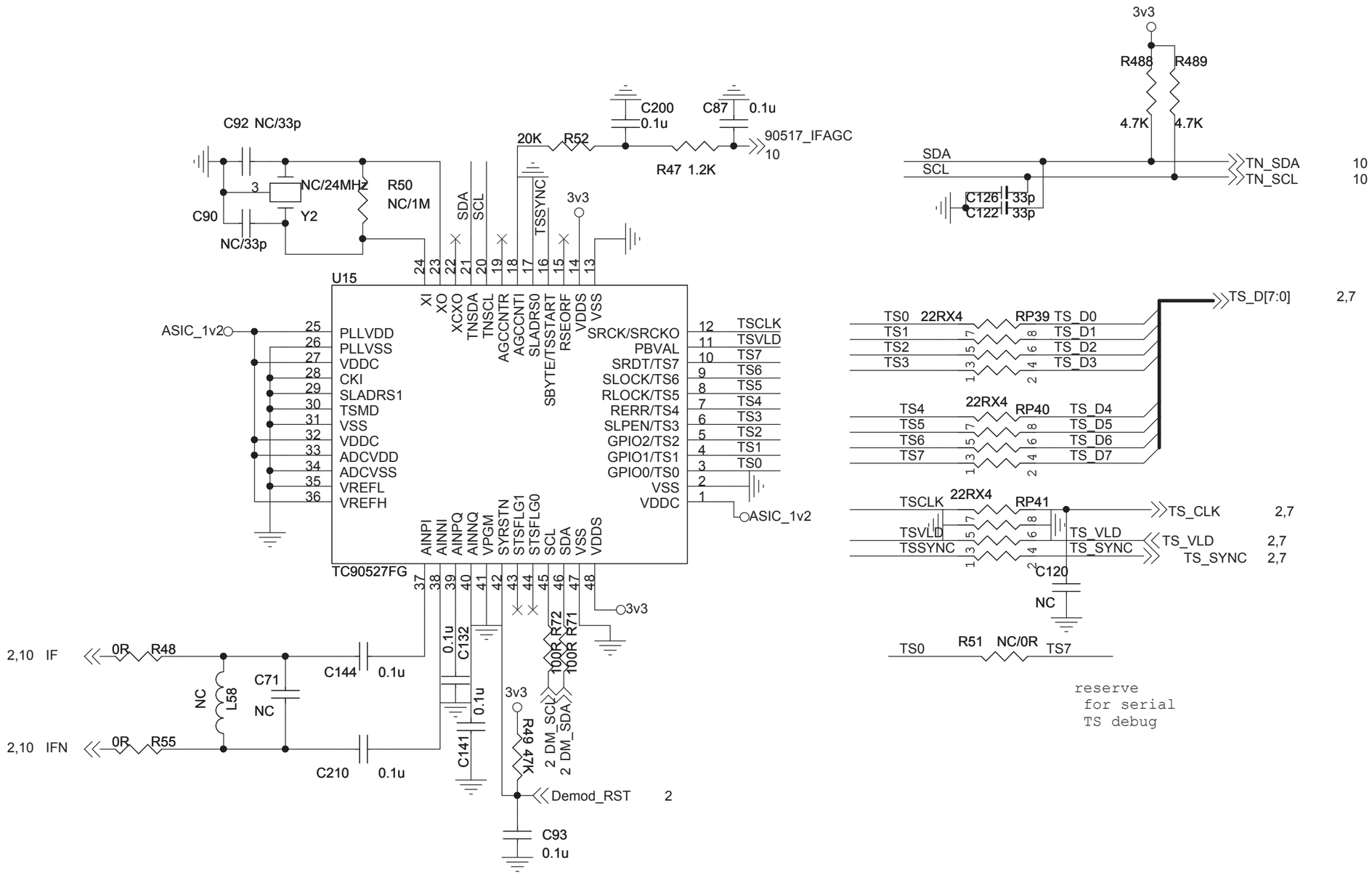
PCI Principal 46¨ e 55¨



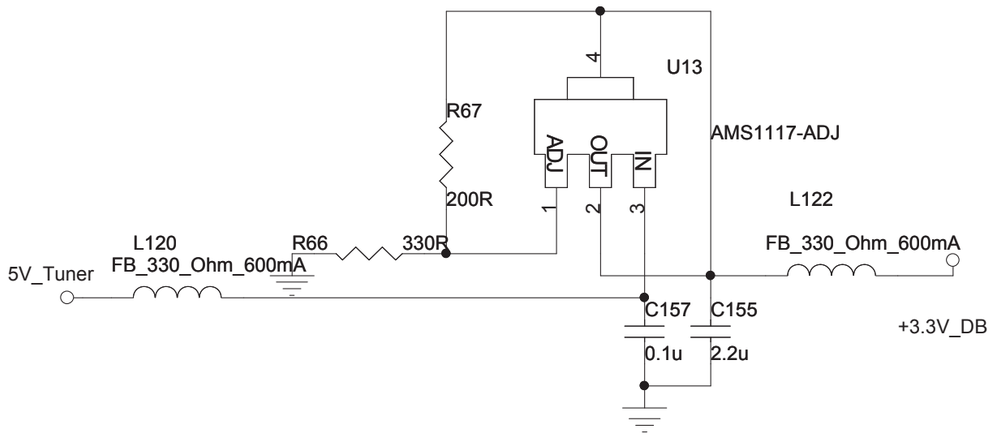
PCI Principal 46" e 55"

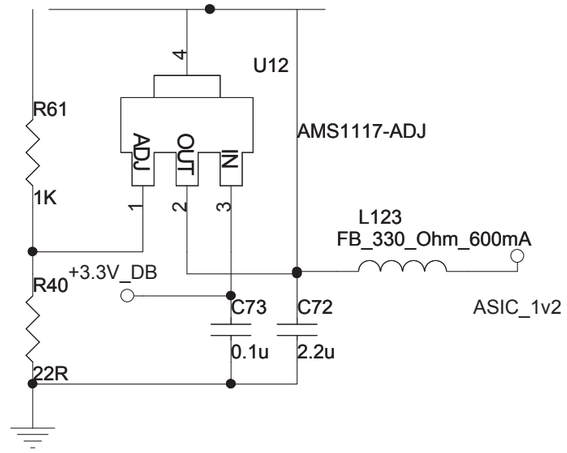


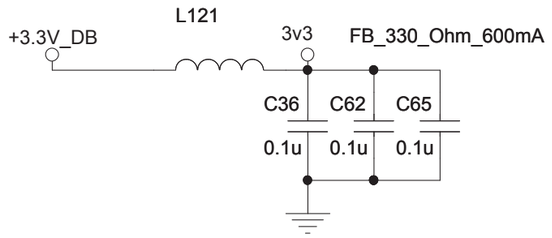
PCI Principal 46" e 55"

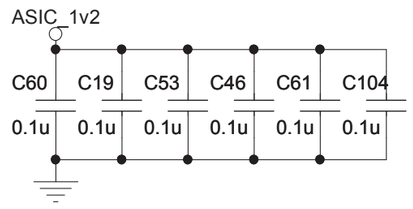


DTMB POWER

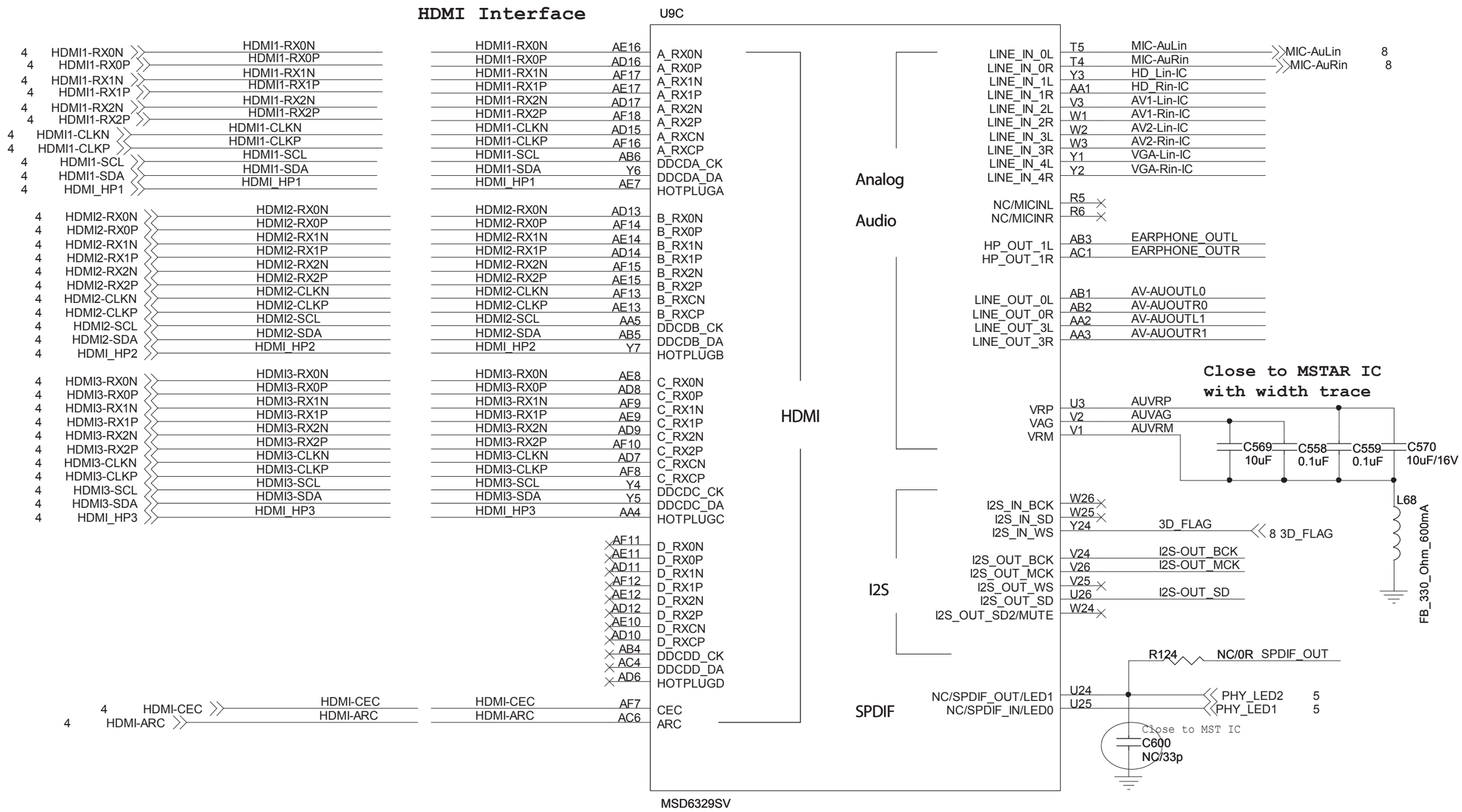

U13
AMS1117-ADJ
ADJ
OUT
IN
1
2
3
4
R67
200R
L120
FB_330_Ohm_600mA
5V_Tuner
R66
330R
L122
FB_330_Ohm_600mA
C157
0.1u
C155
2.2u
+3.3V_DB


U12
AMS1117-ADJ
ADJ
OUT
IN
1
2
3
4
R61
1K
R40
22R
+3.3V_DB
L123
FB_330_Ohm_600mA
C73
0.1u
C72
2.2u
ASIC_1v2

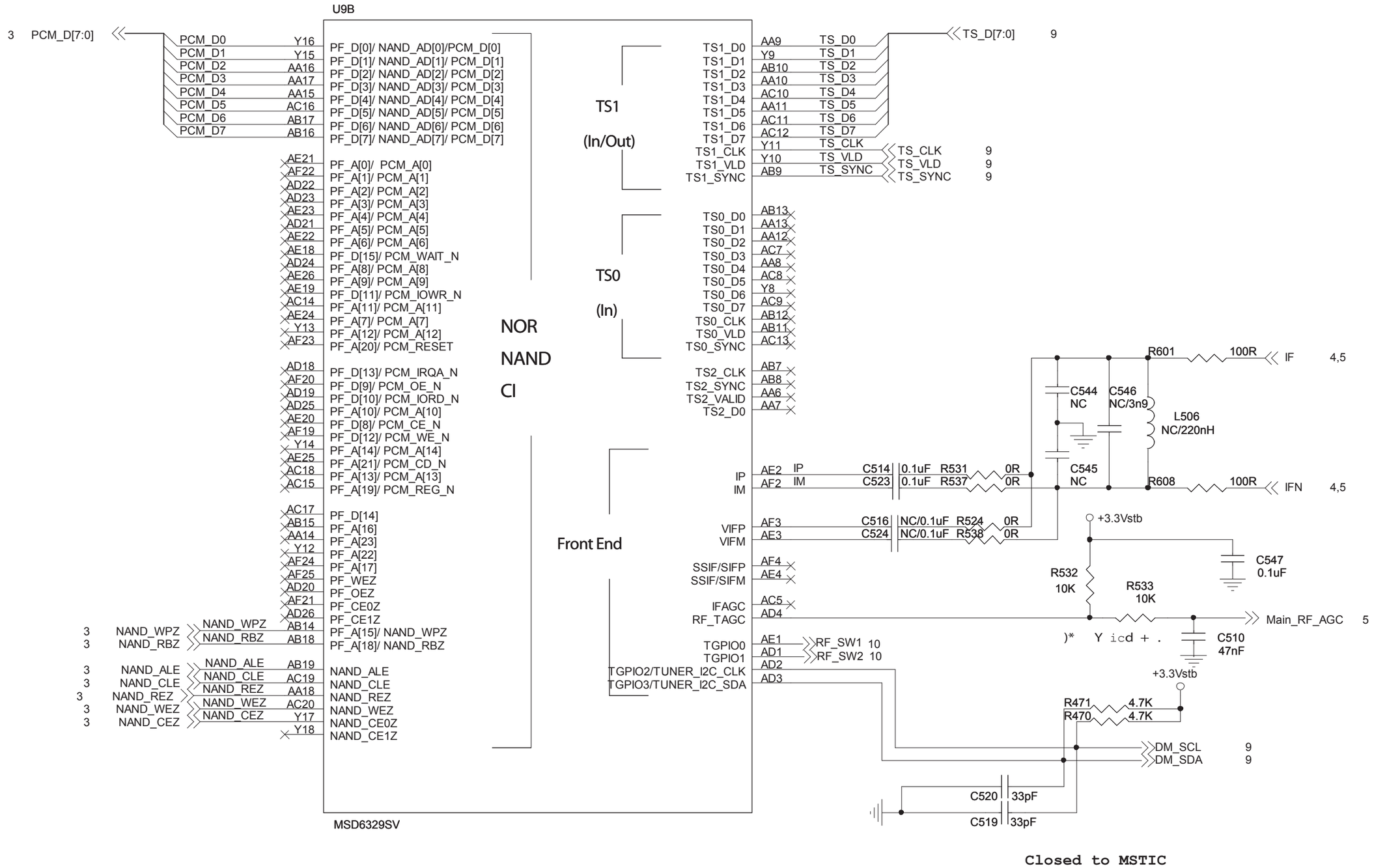

+3.3V_DB
L121
3v3
FB_330_Ohm_600mA
C36
0.1u
C62
0.1u
C65
0.1u


ASIC_1v2
C60
0.1u
C19
0.1u
C53
0.1u
C46
0.1u
C61
0.1u
C104
0.1u

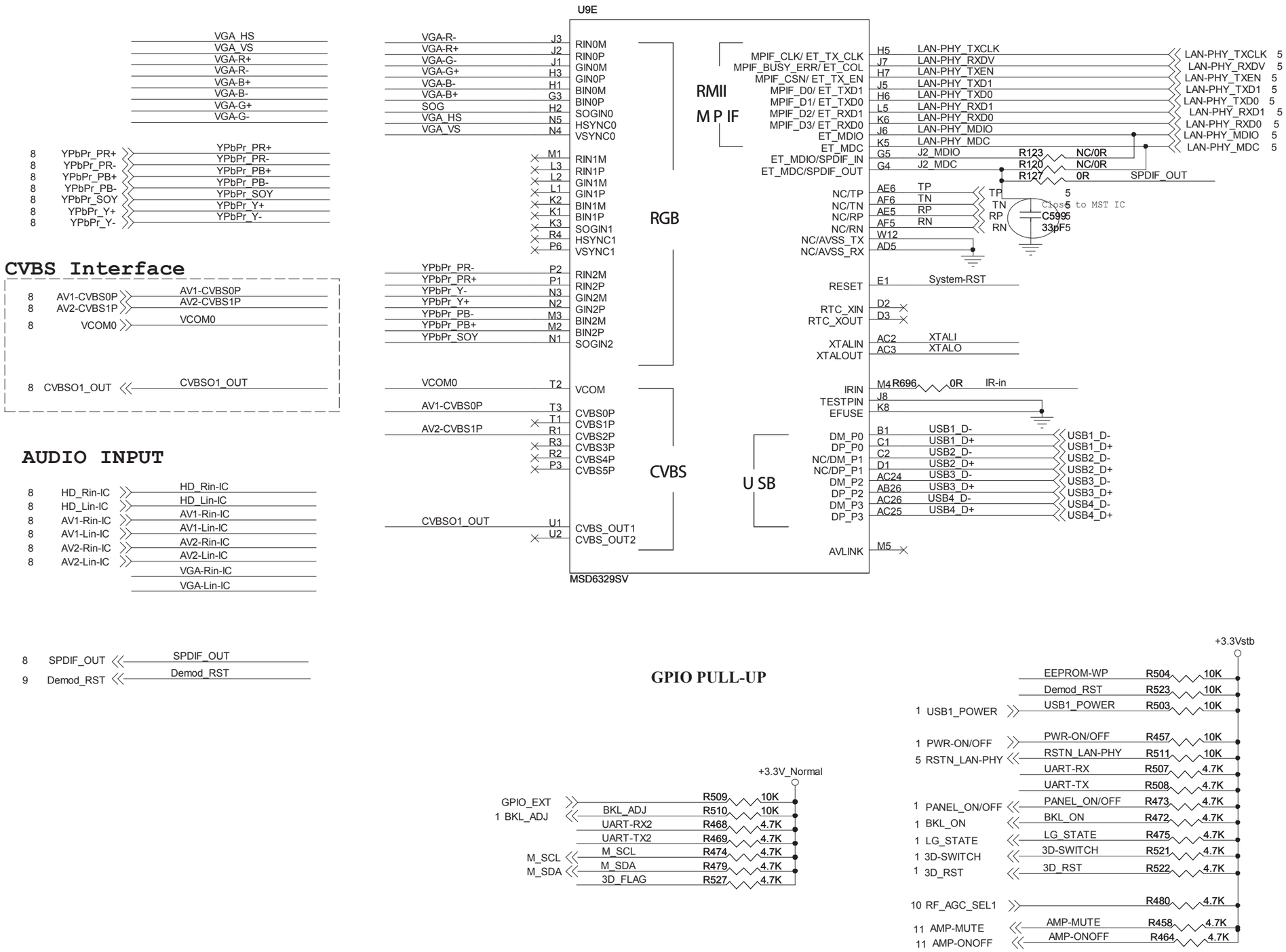
PCI Principal 46" e 55"



PCI Principal 46" e 55"

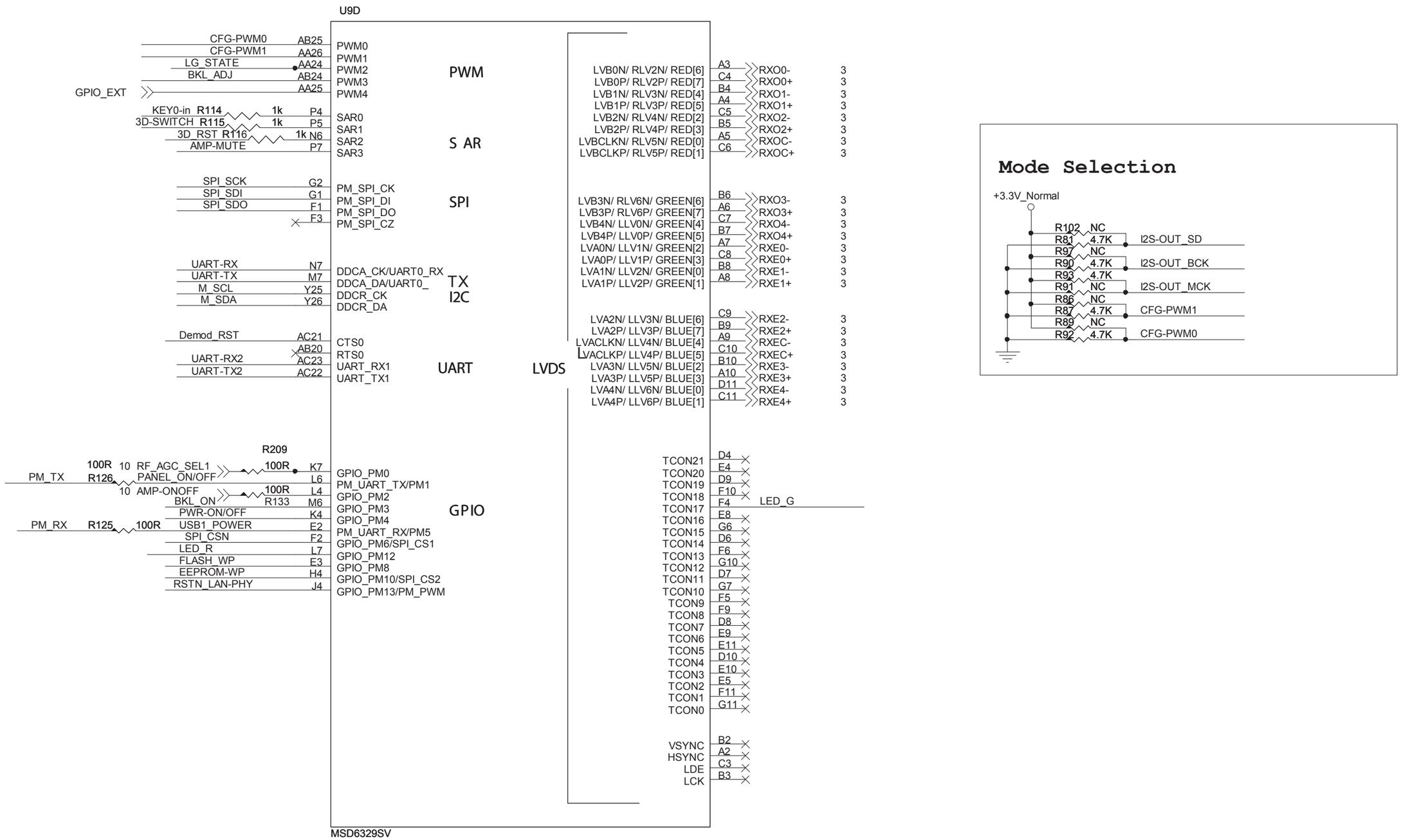


PCI Principal 46" e 55"

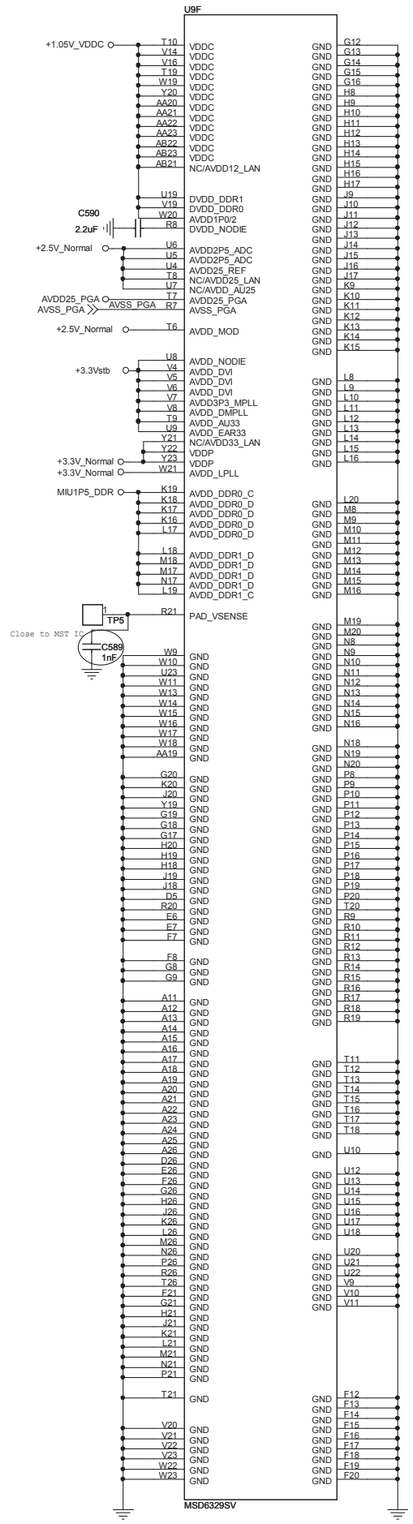


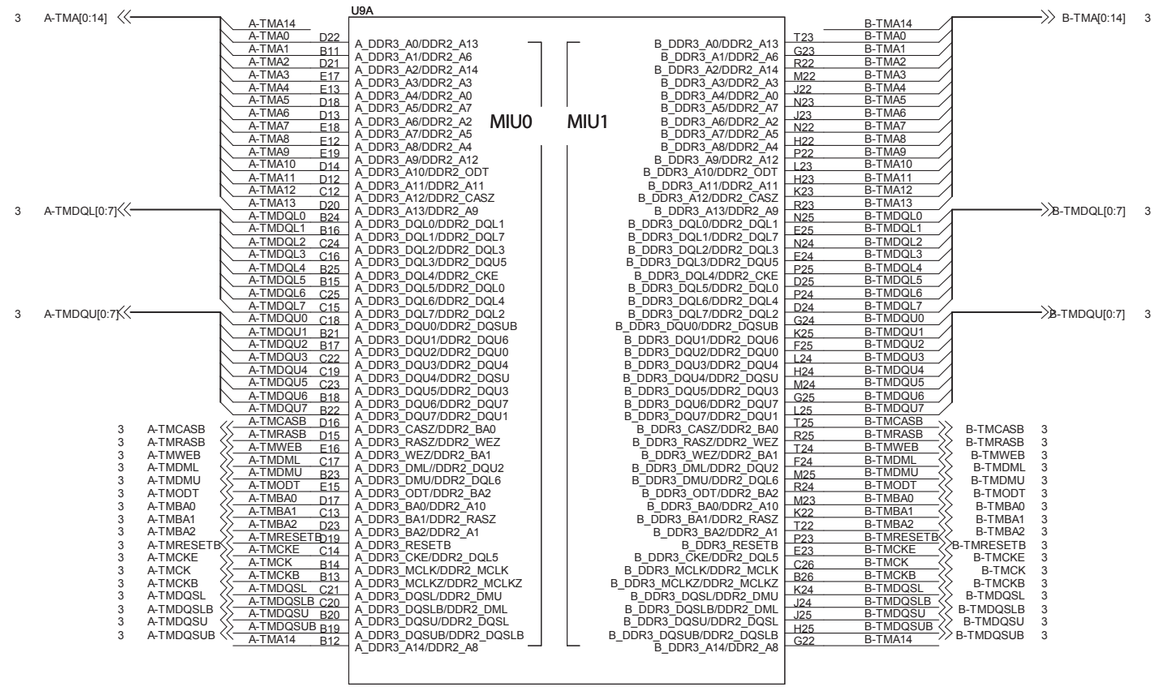
GPIO PULL-UP

PCI Principal 46¨ e 55¨



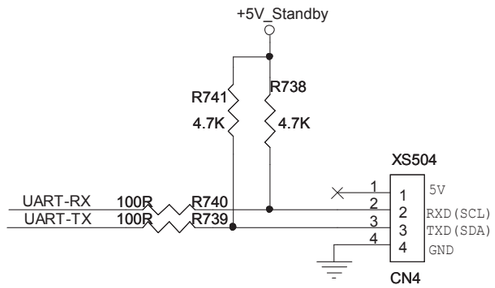
PCI Principal 46" e 55"



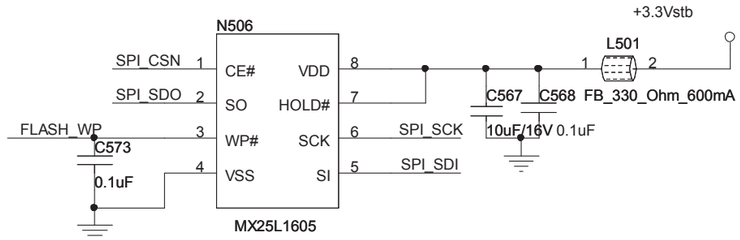


PCI Principal 46¨ e 55¨

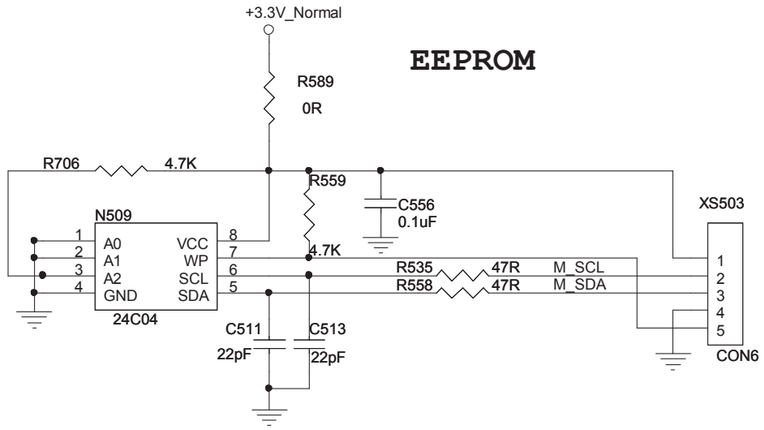
Debug port



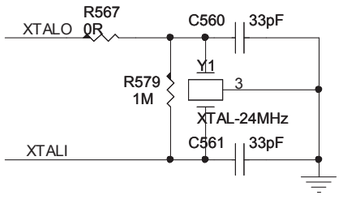
Boot Loader SPI Flash

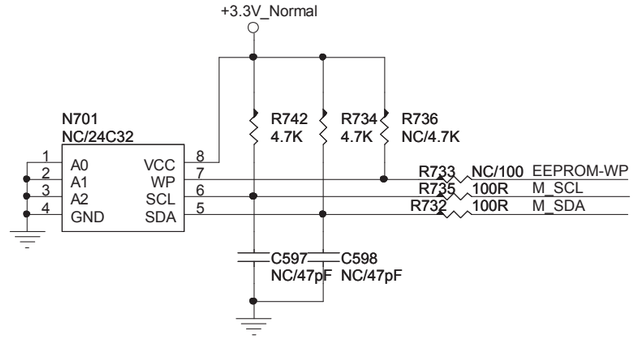


EEPROM

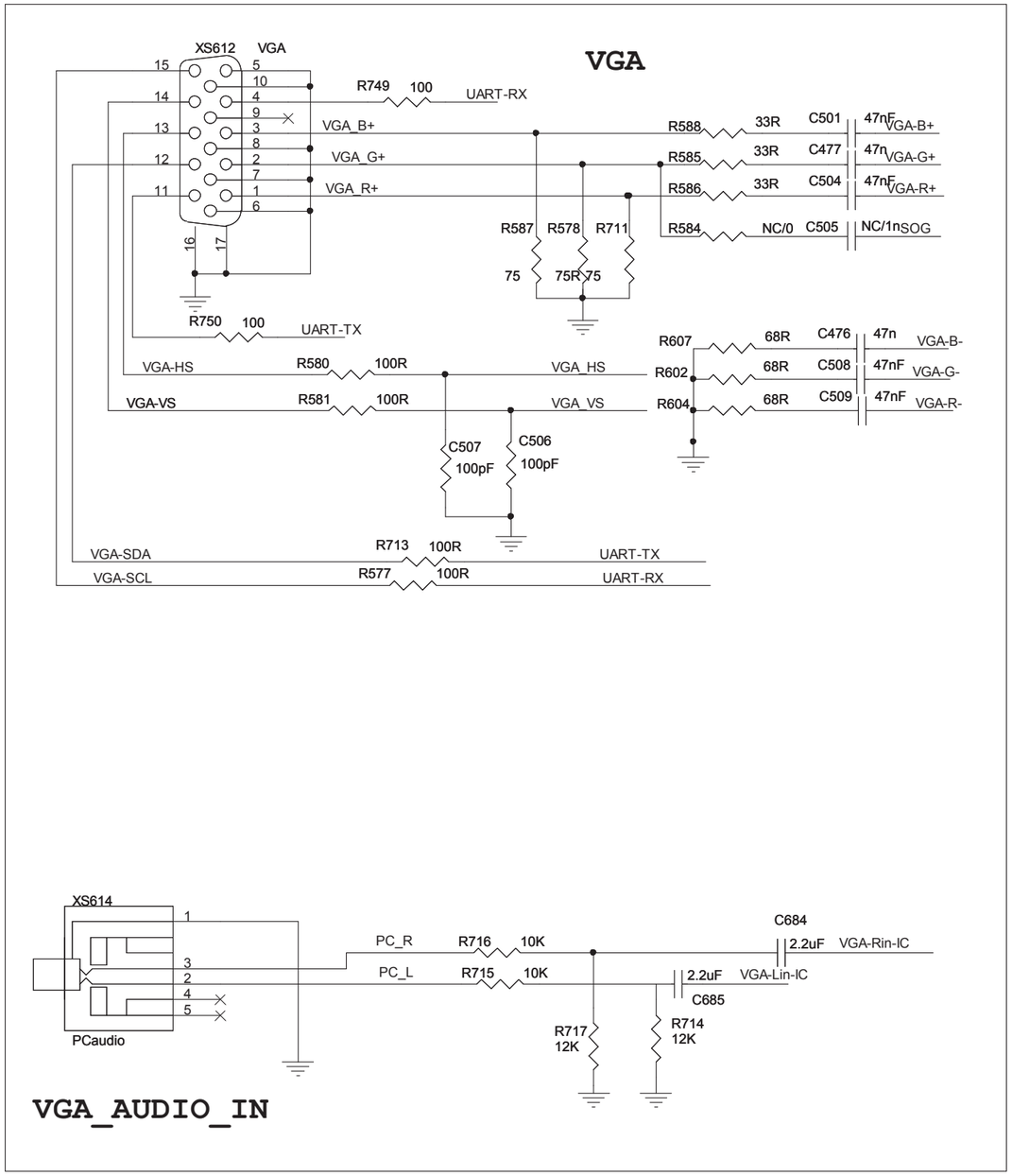


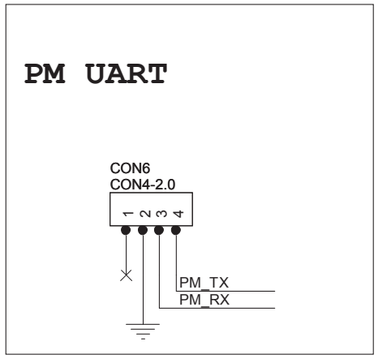
SYS_CLK

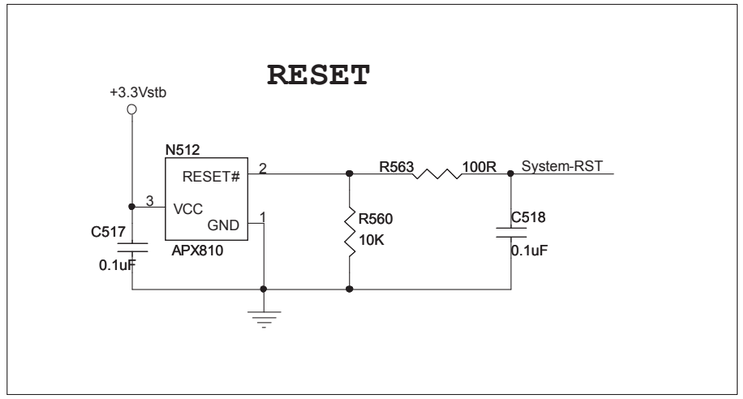


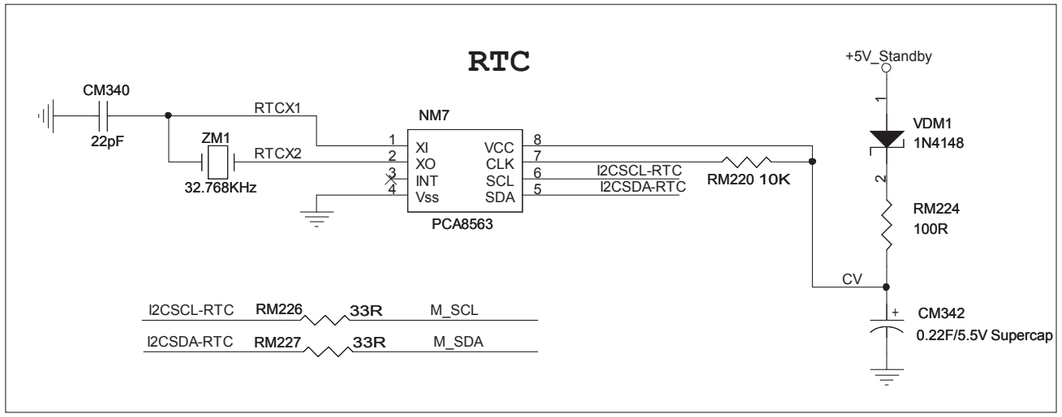


PCI Principal 46" e 55"

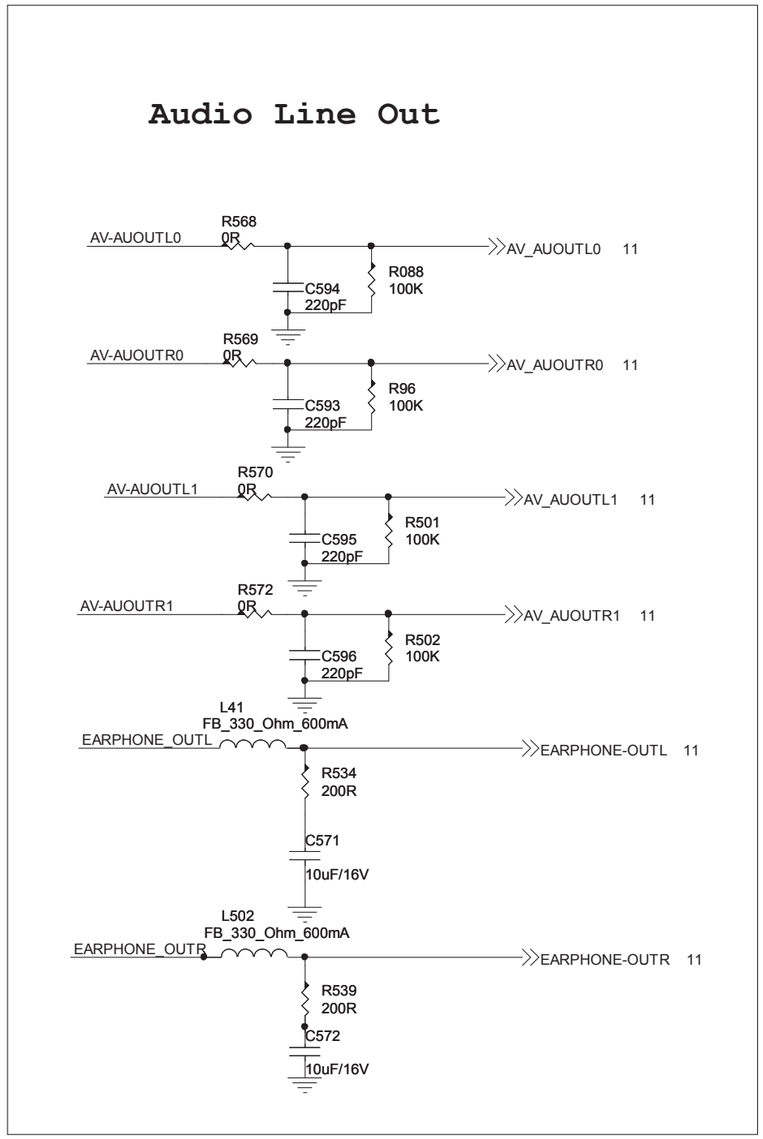


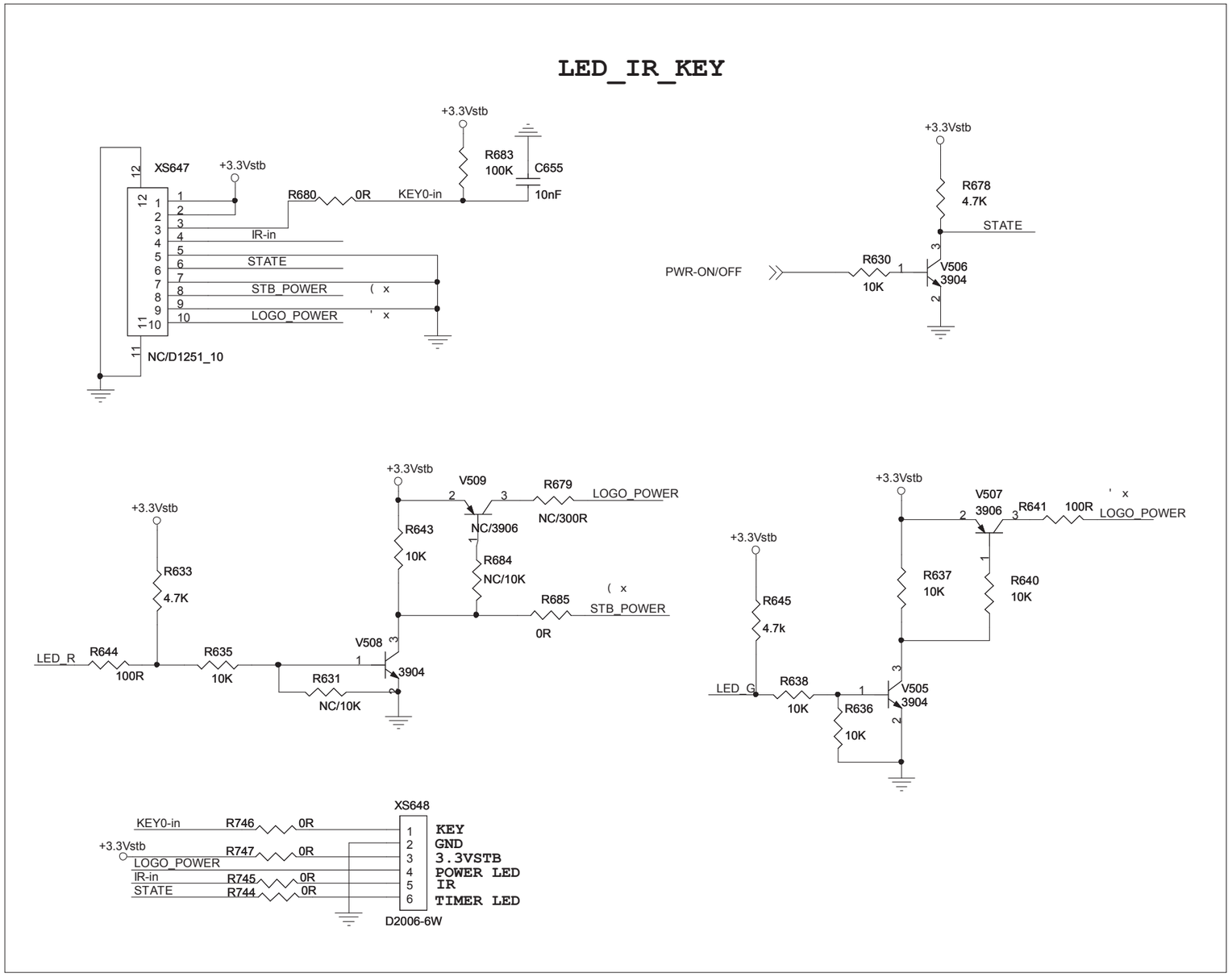




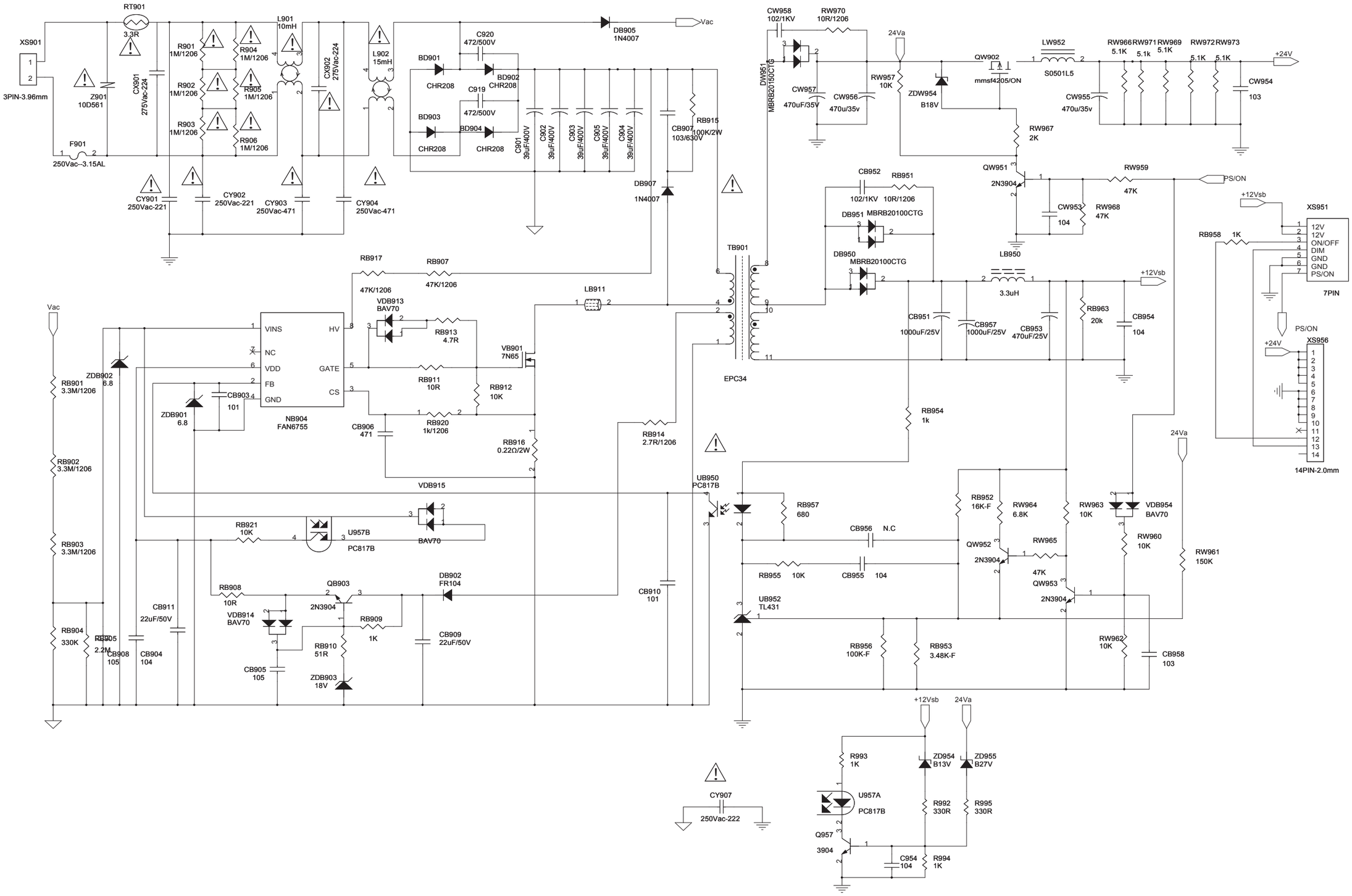


PCI Principal 46¨ e 55¨

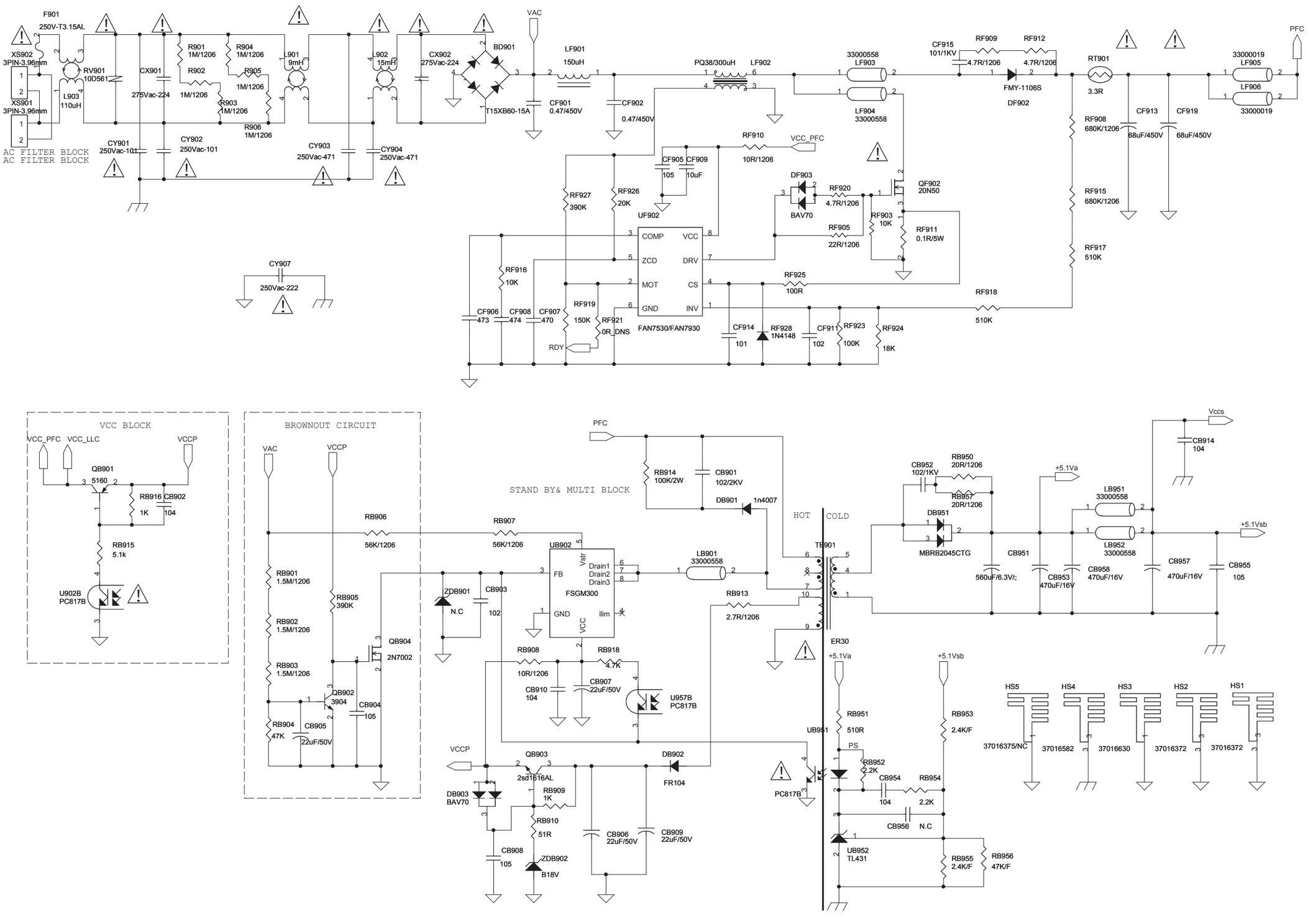




PCI Fonte (LE3252i)



PCI Fonte (LE4052i)



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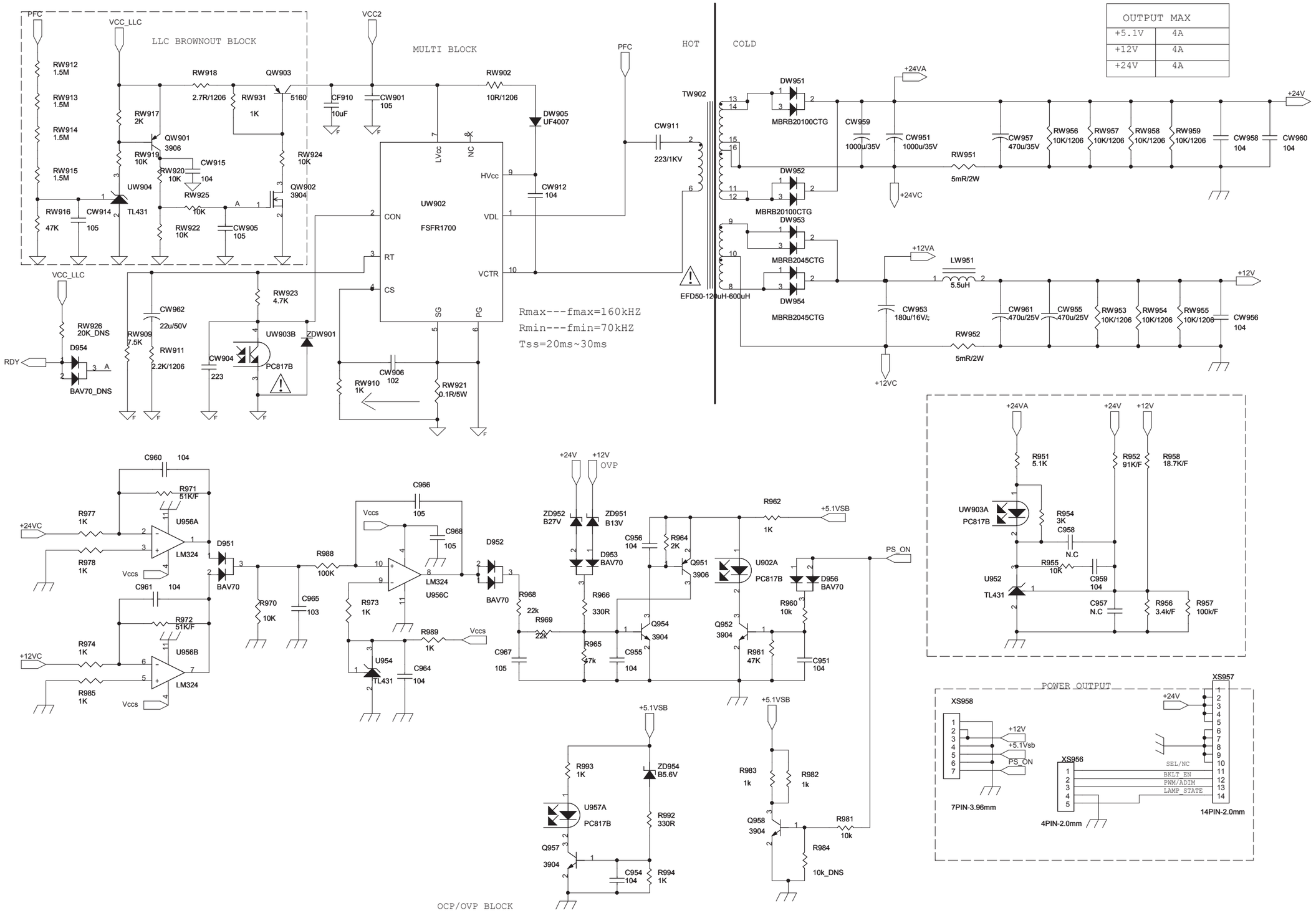
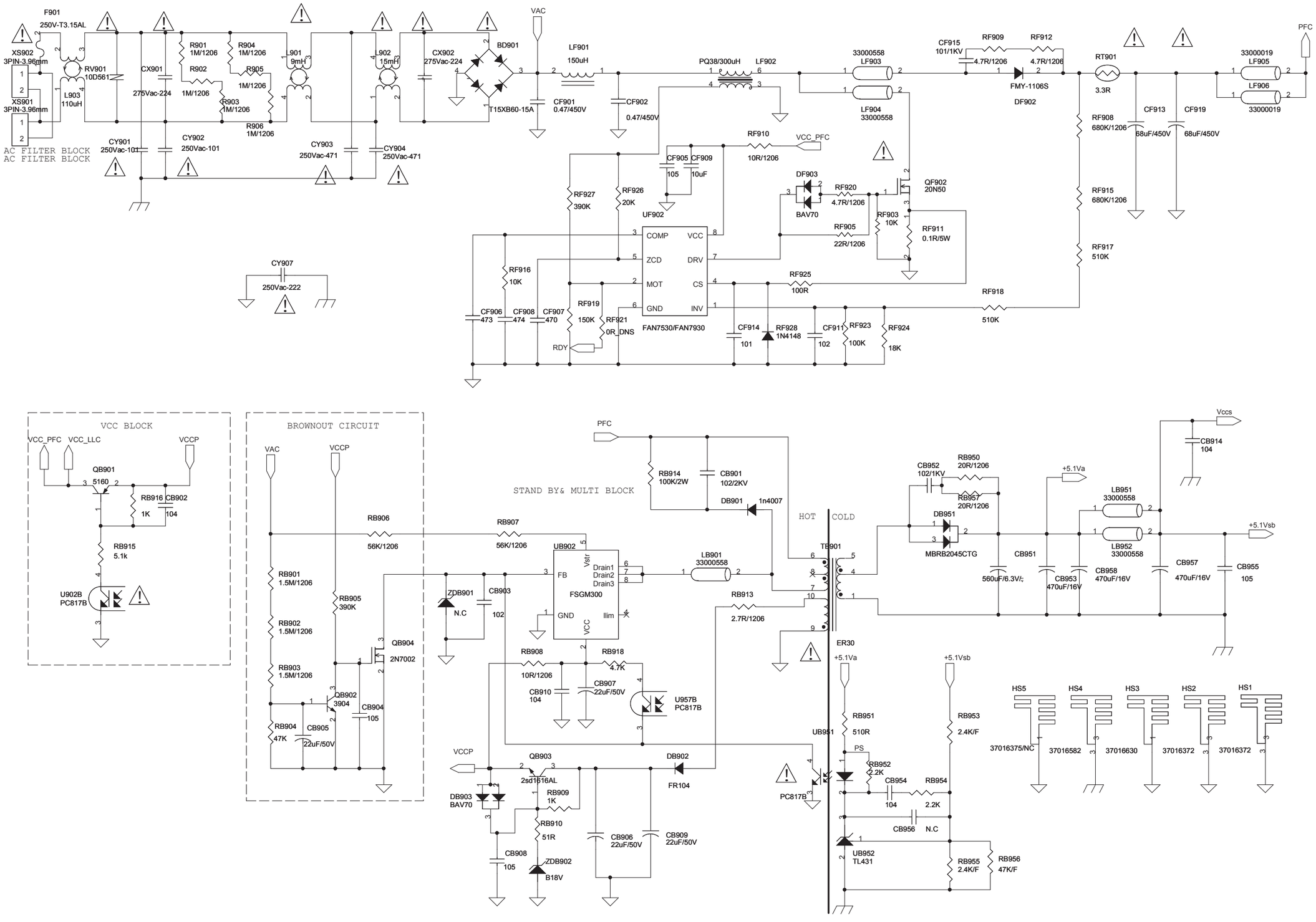
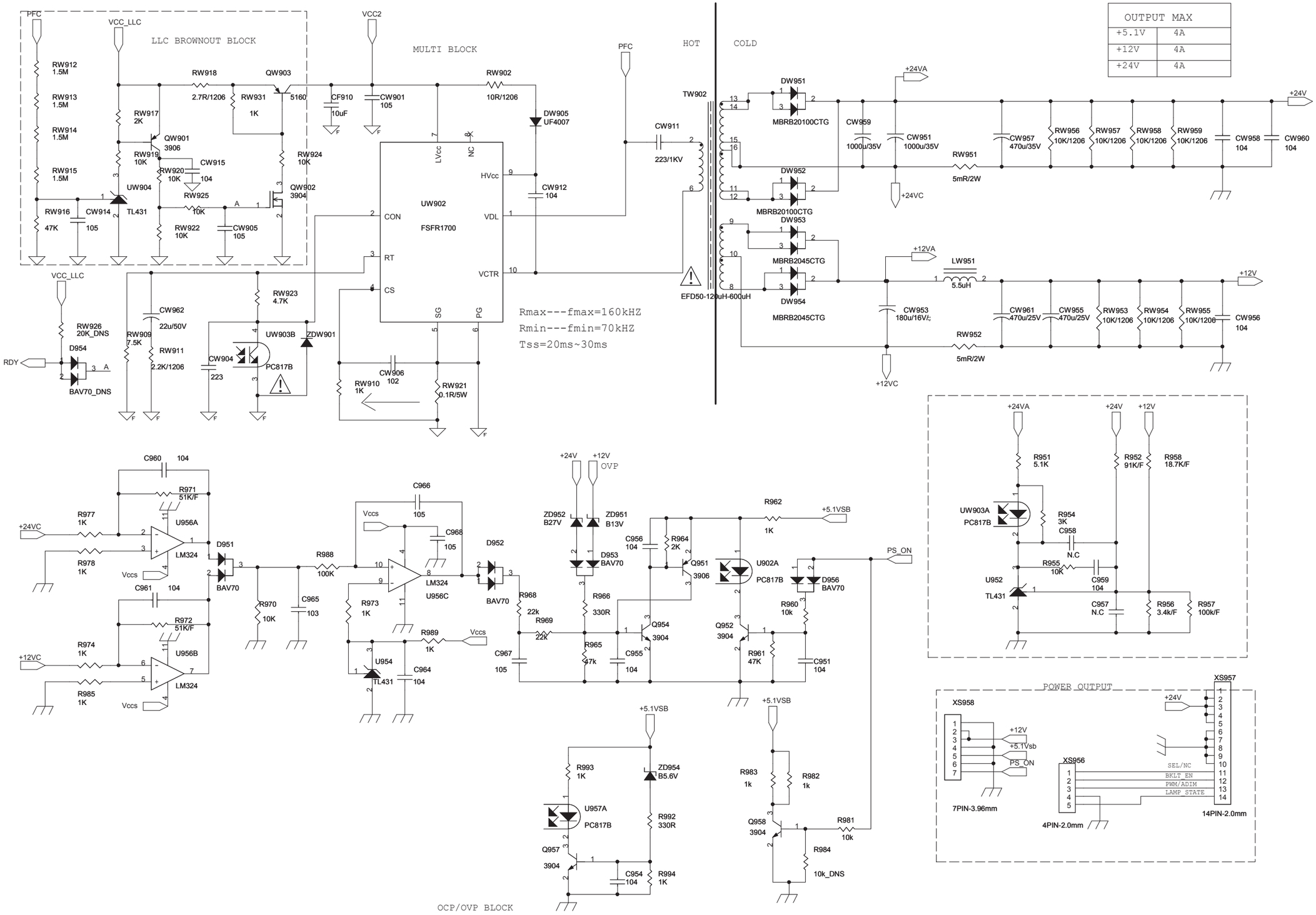


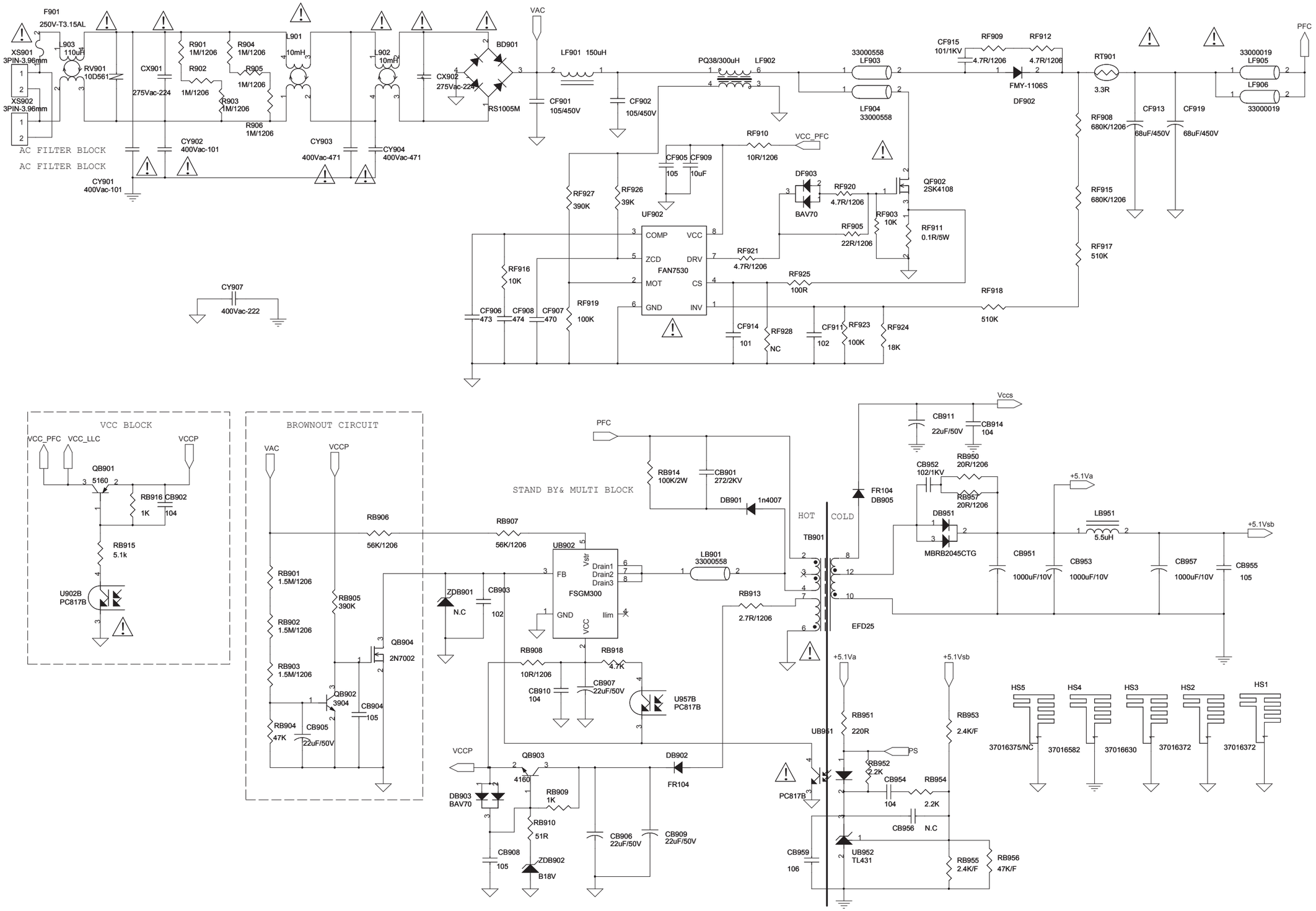
PCI Fonte (LE4652i)



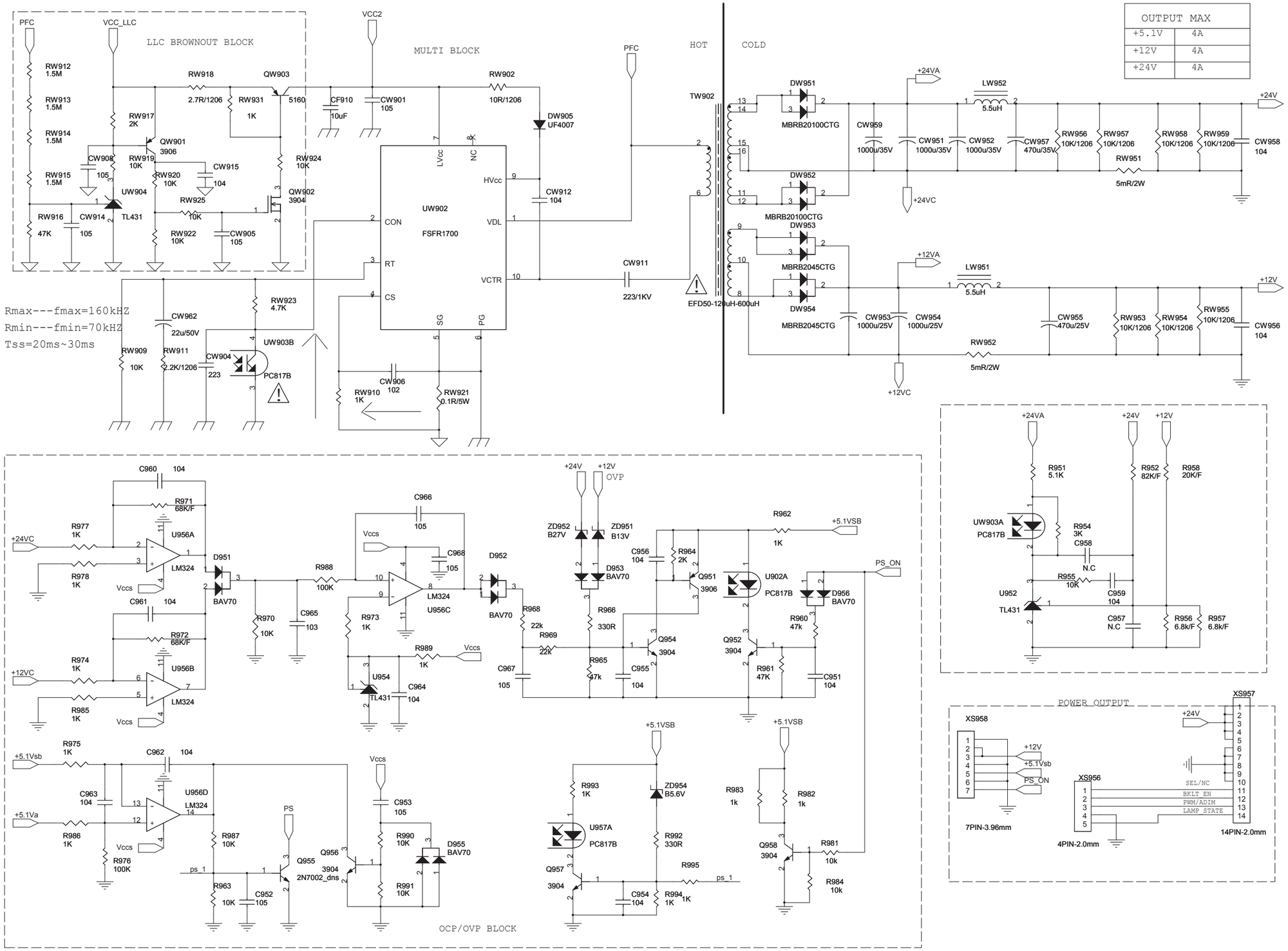
PCI Fonte (LE4652i)



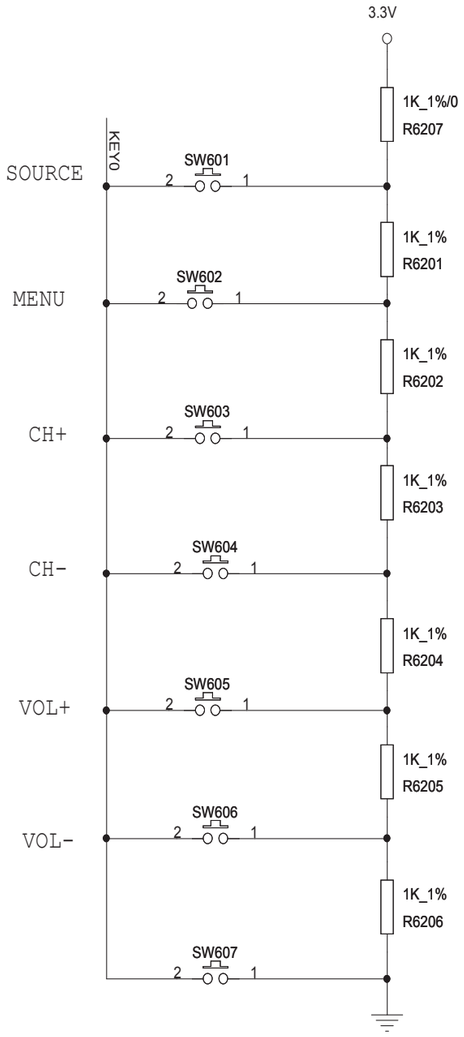
PCI Fonte (LE5552i)

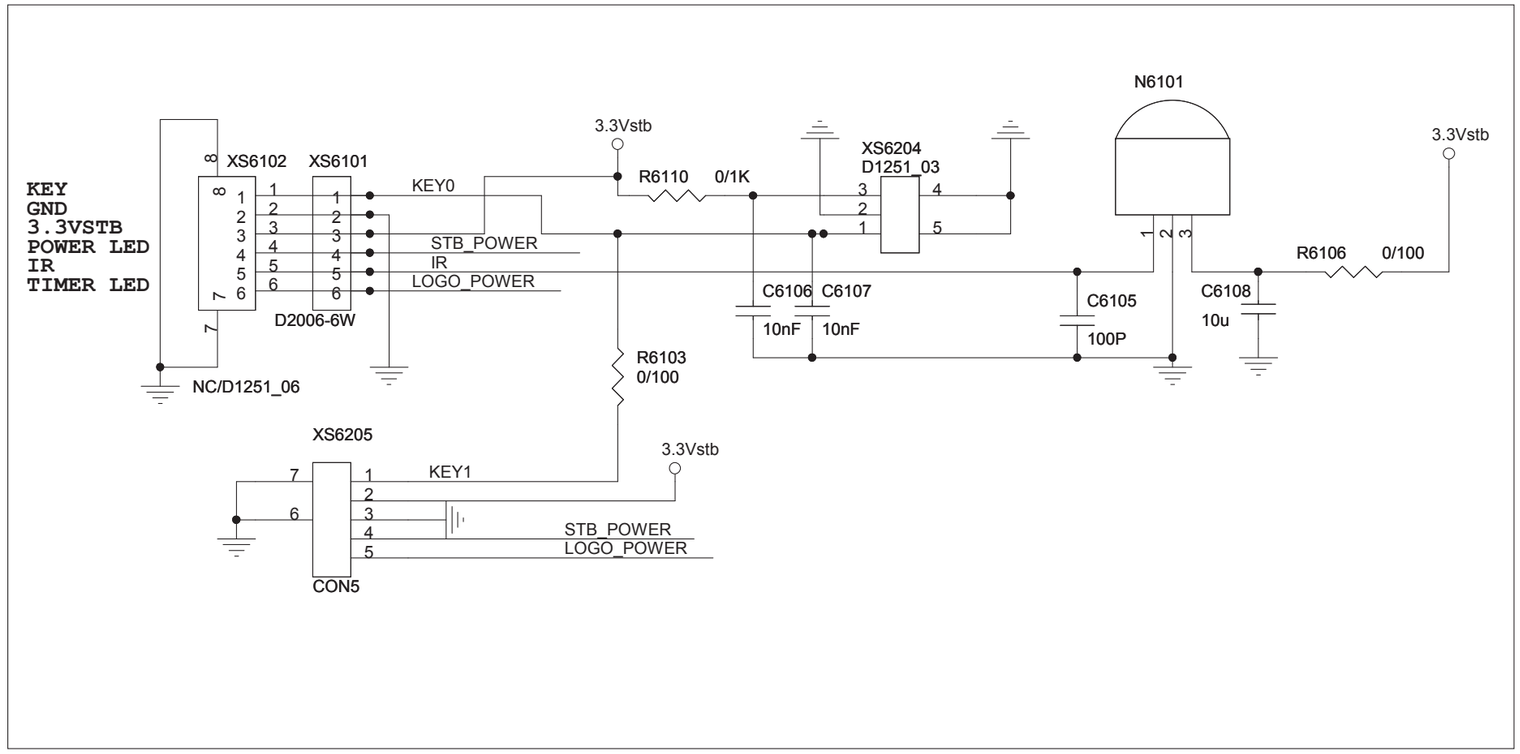


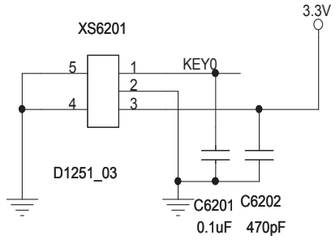
PCI Fonte (LE5552i)



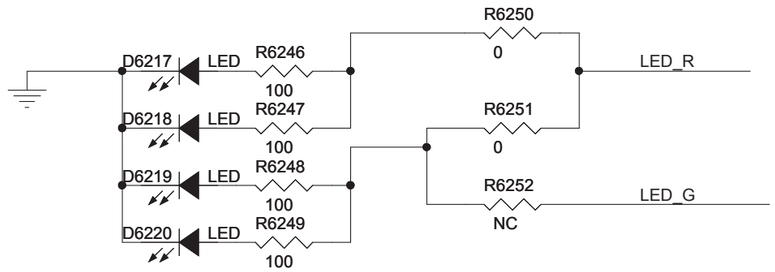
Teclas / PCI Sensor / LED (32¨e 40¨)

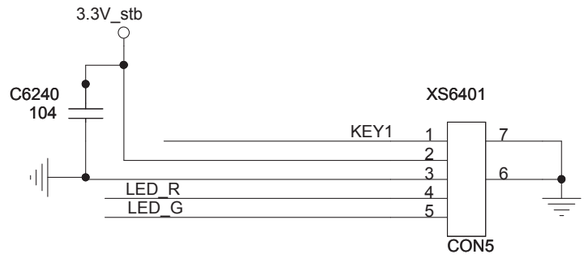


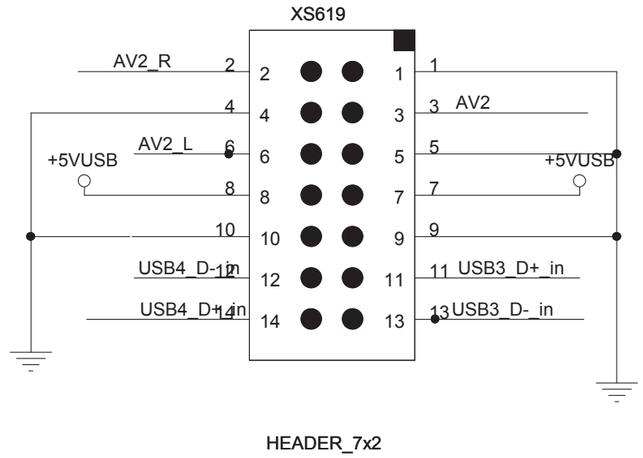


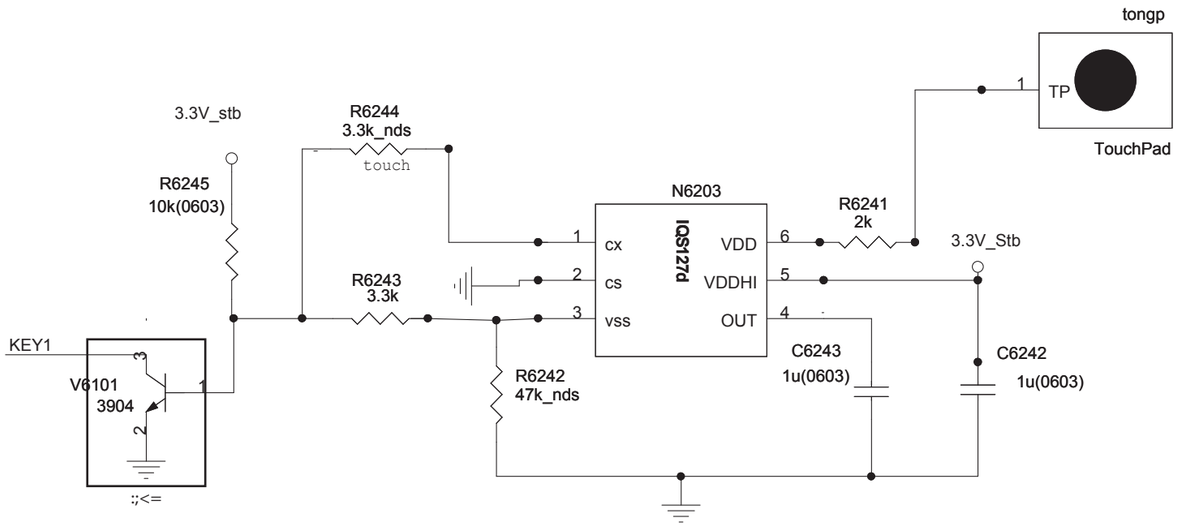


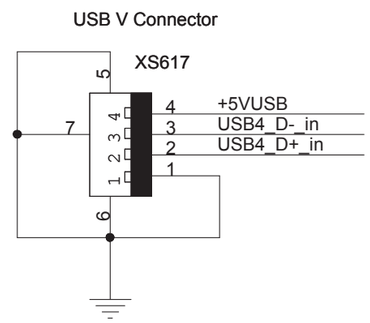
PCI POWER / WIFI (32¨ e 40¨)

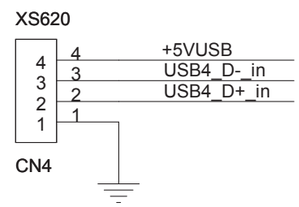




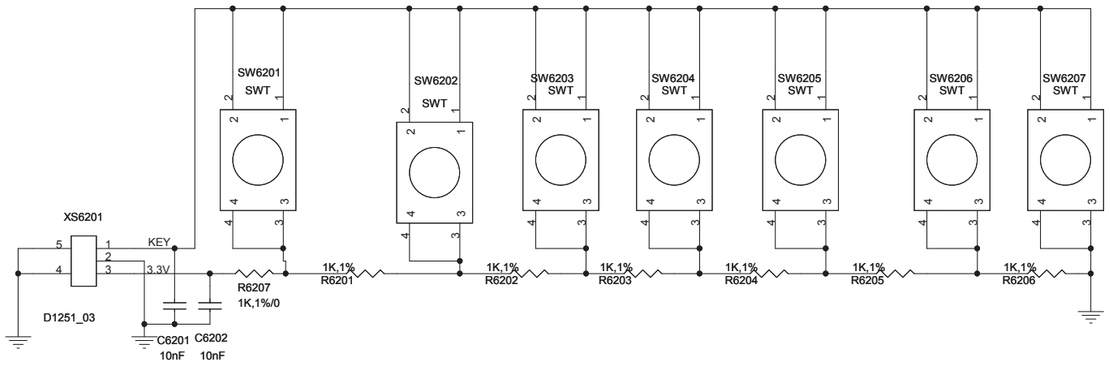


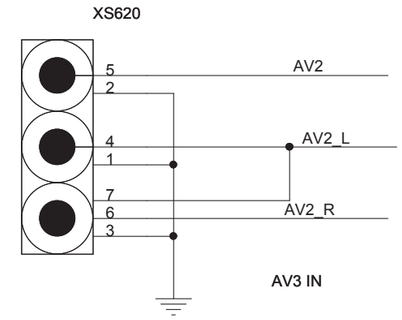


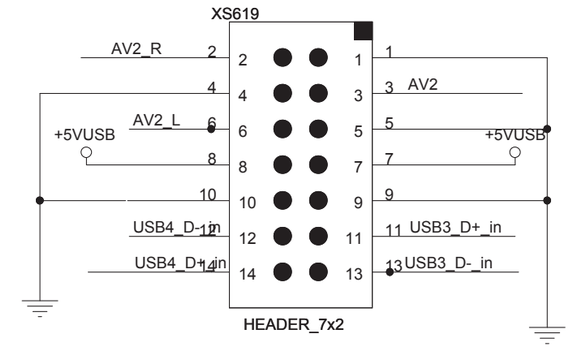


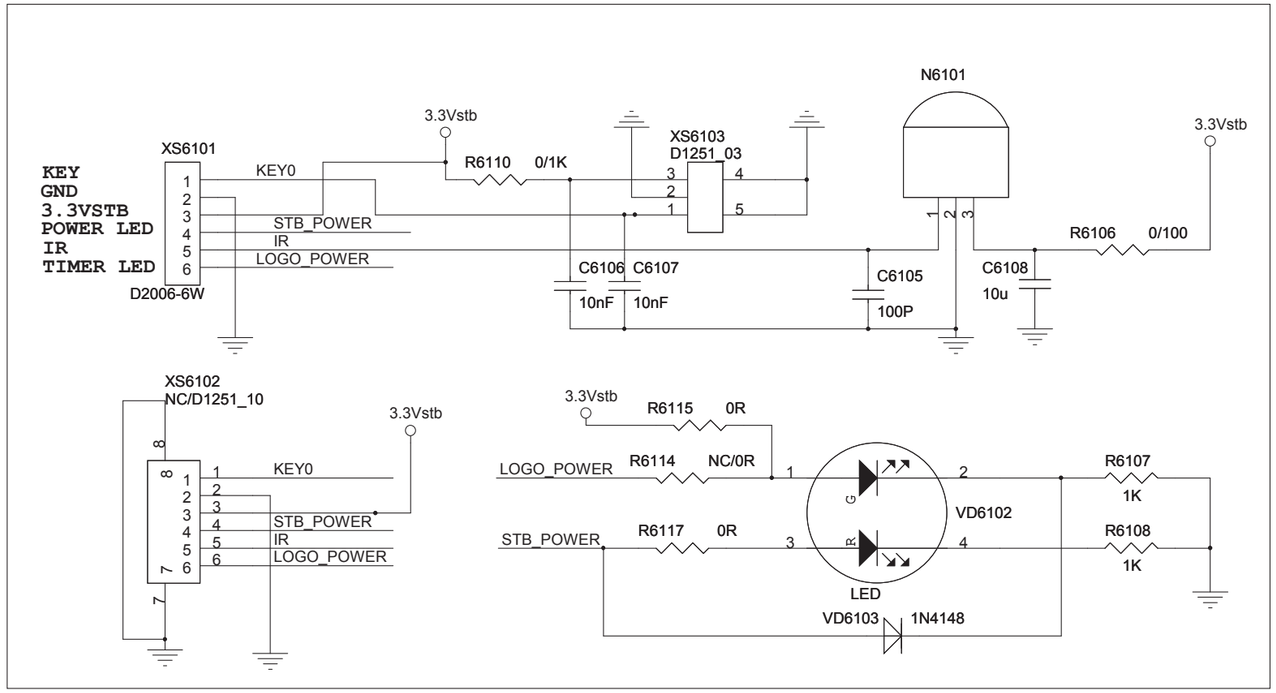


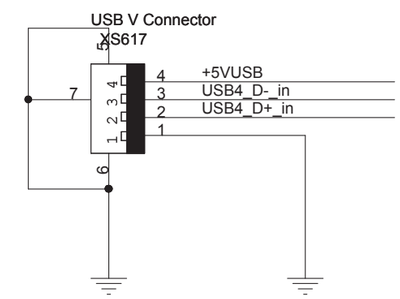
Teclas / PCI Sensor / LED / AV + WIFI (46¨e 55¨)

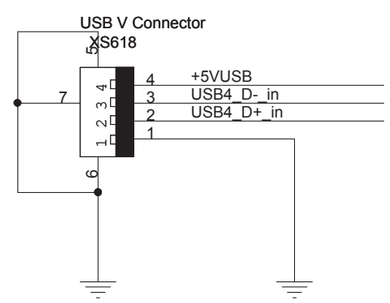




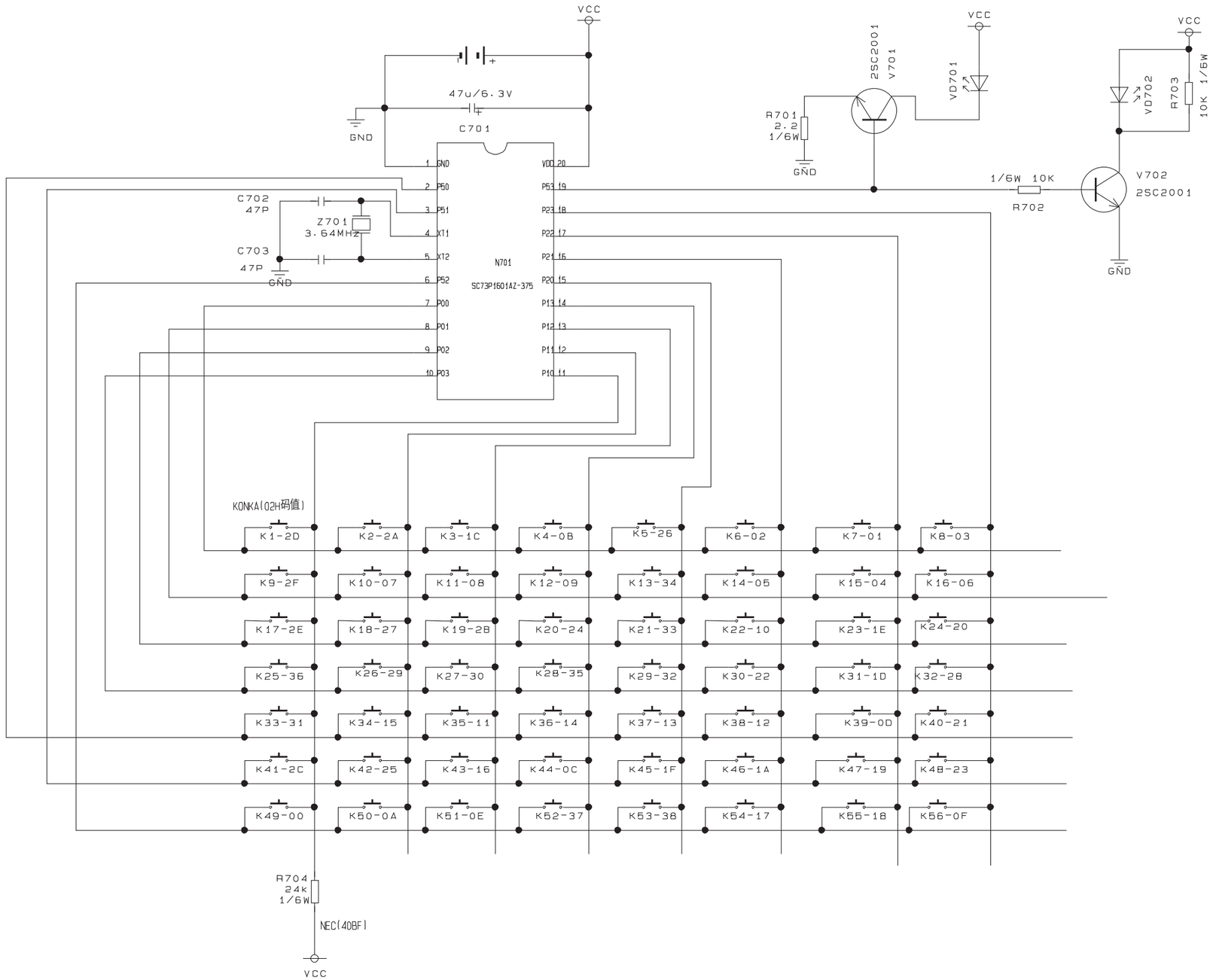








Controle Remoto (todos)



Rod. Anhanguera, Km 39,5 - Jordanésia - Cajamar - tel. pabx (11) 3232 2200

SEMP TOSHIBA