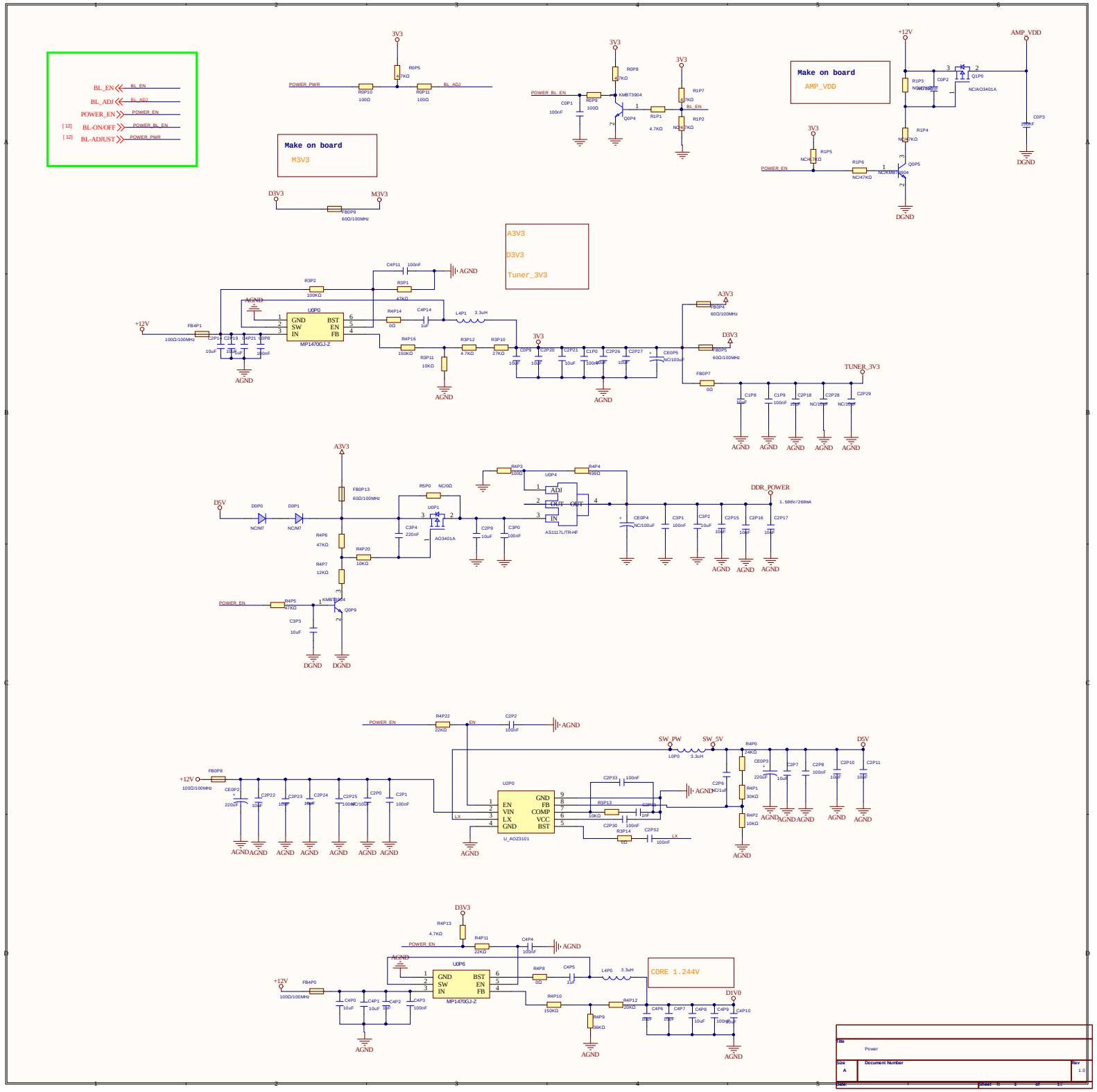
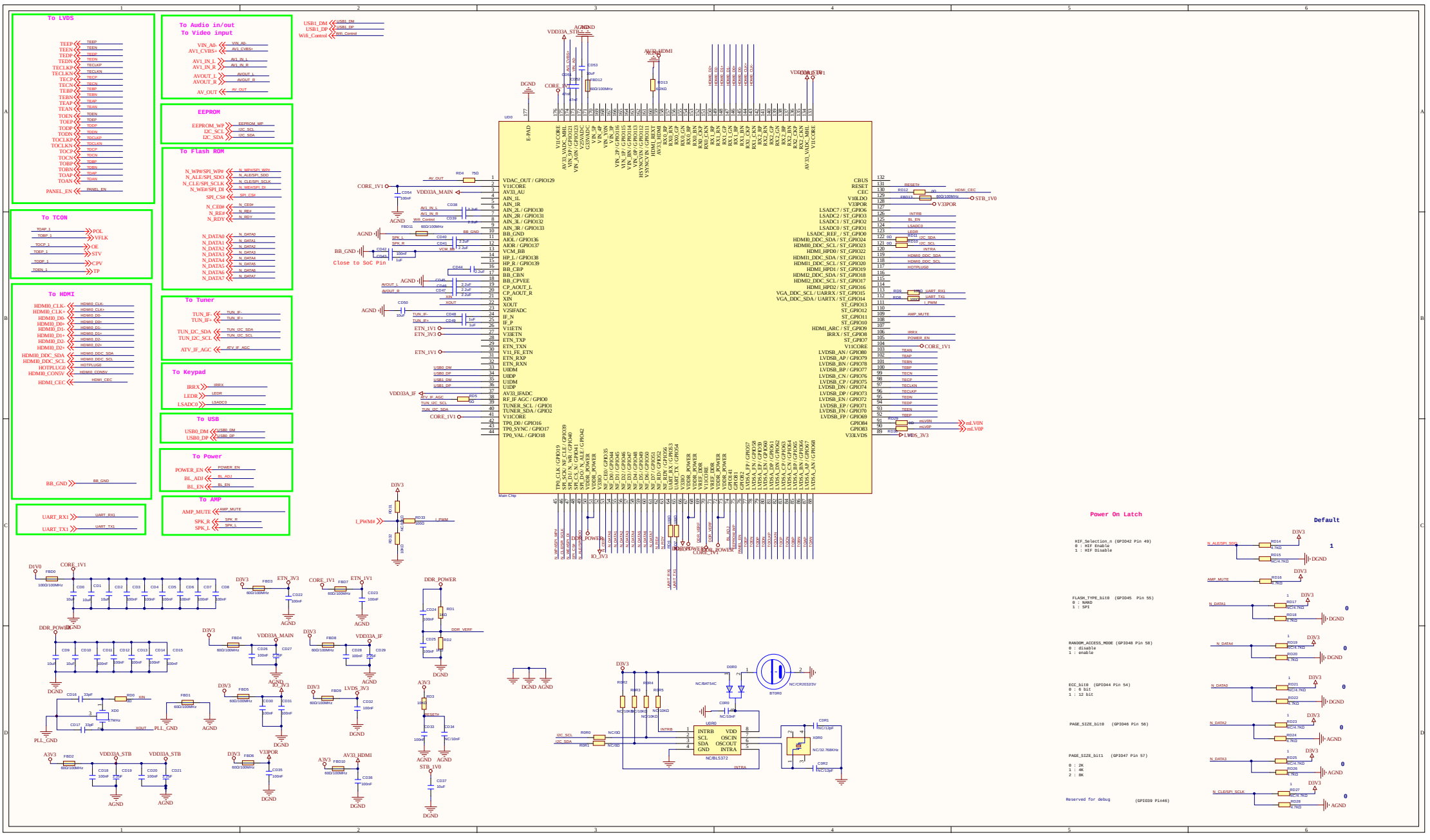
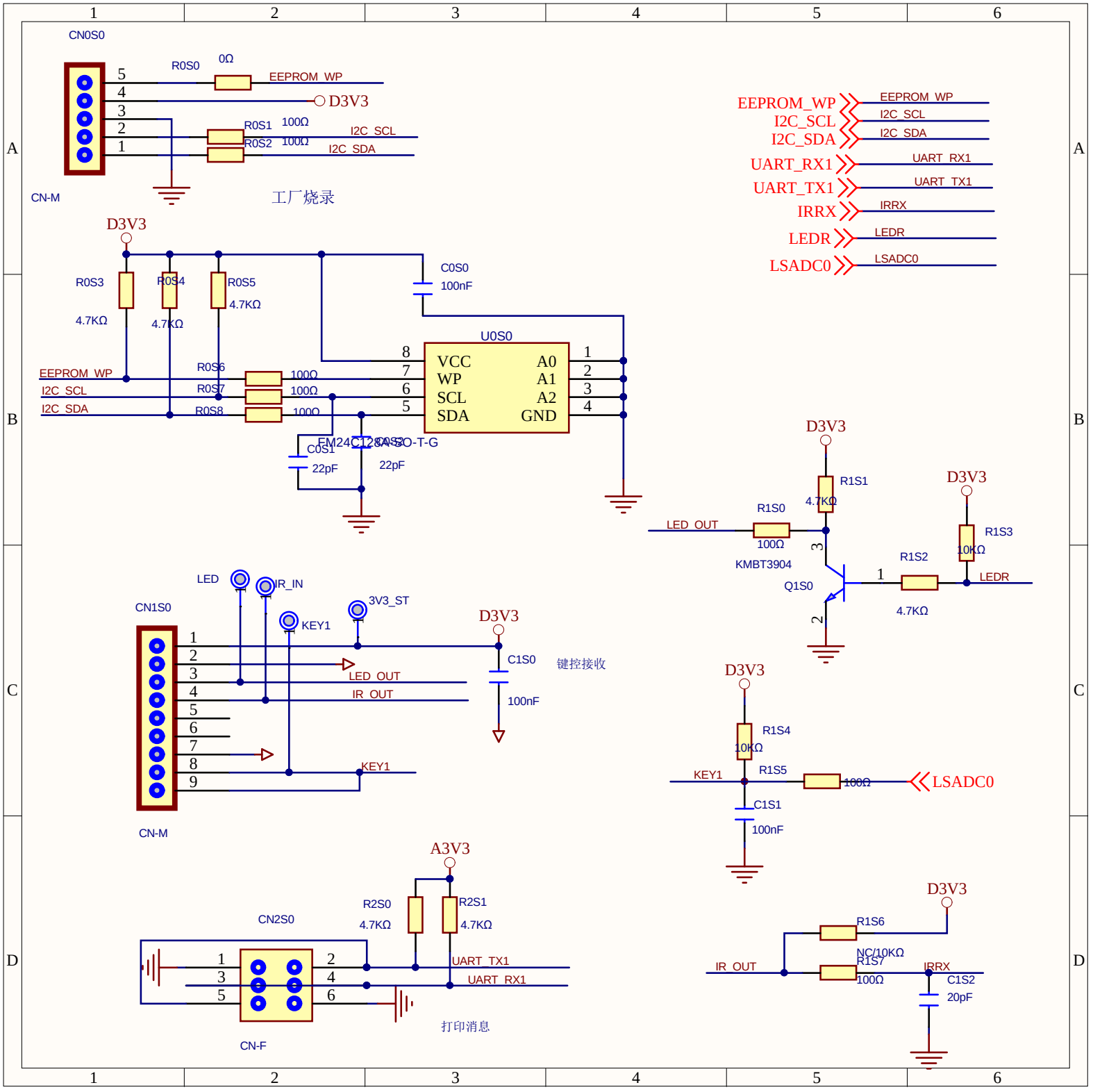
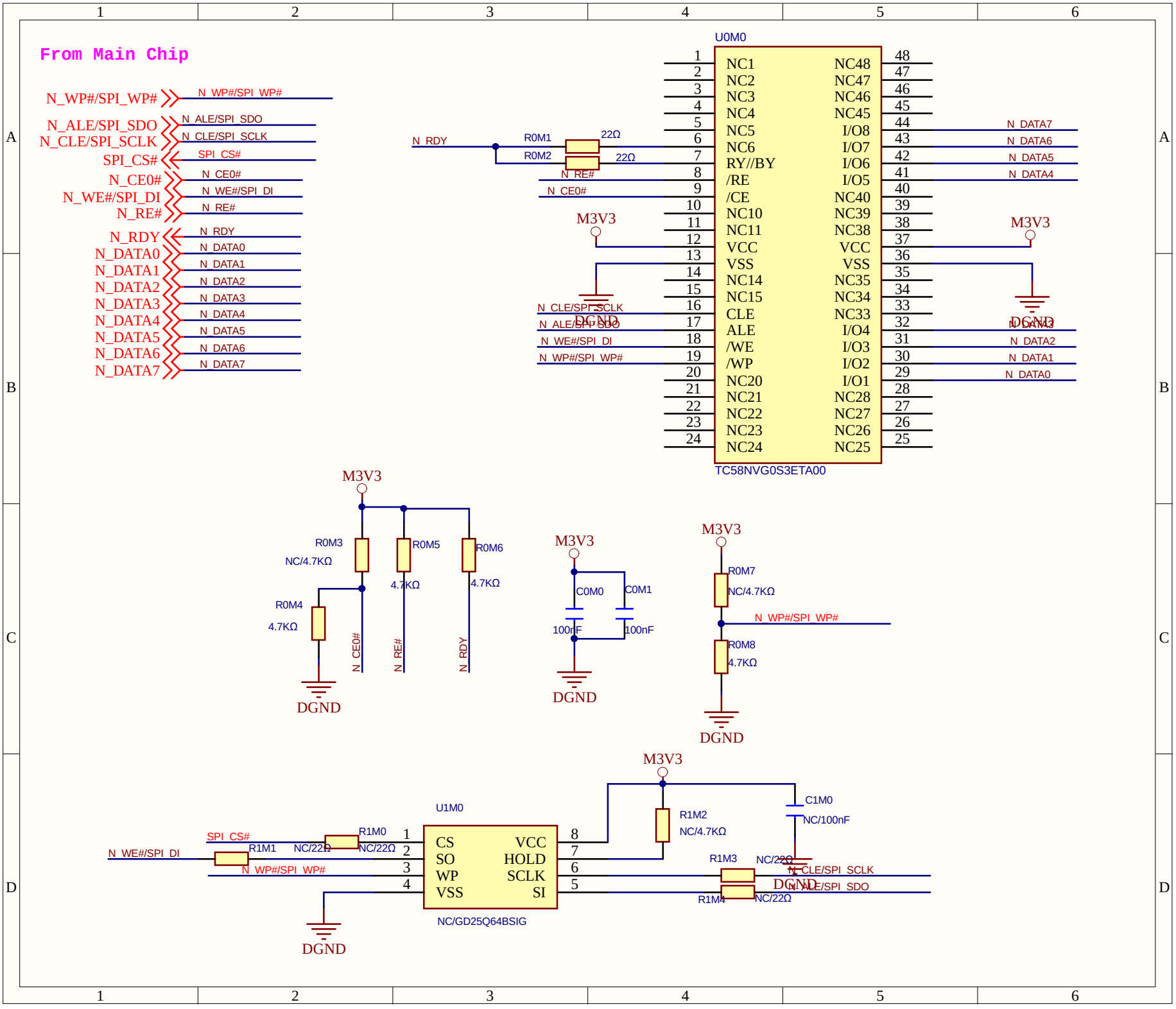
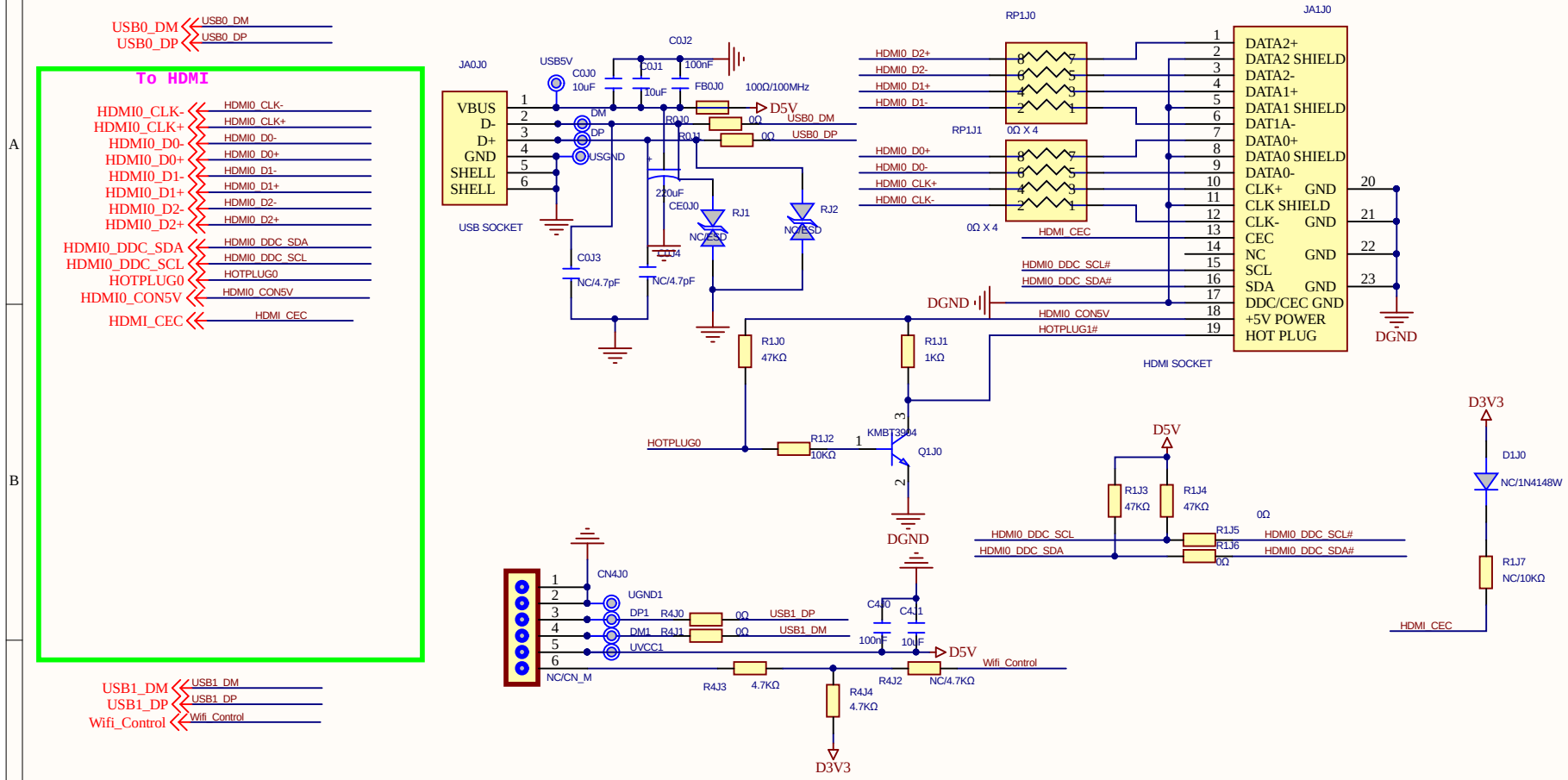
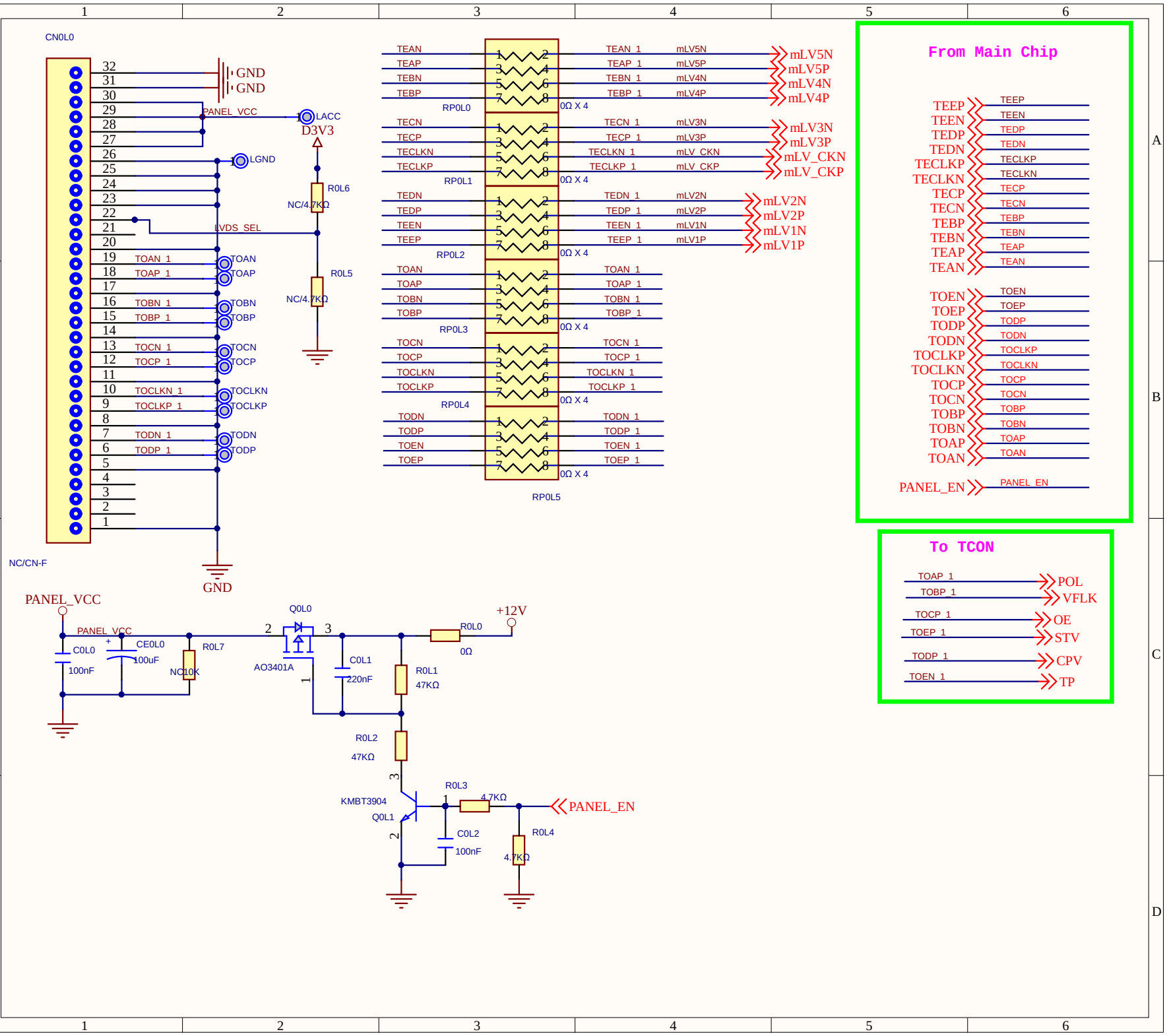

BL_EN
BL_ADJ
POWER_EN
BL-ON/OFF
BL-ADJUST
Make on board
M3V3
Make on board
AMP_VDD
A3V3
D3V3
Tuner_3V3
MP1470GJ-Z
AO3401A
AS1117L/TR-HF
U_AOZ3101
MP1470GJ-Z
CORE 1.244V
Power
Document Number

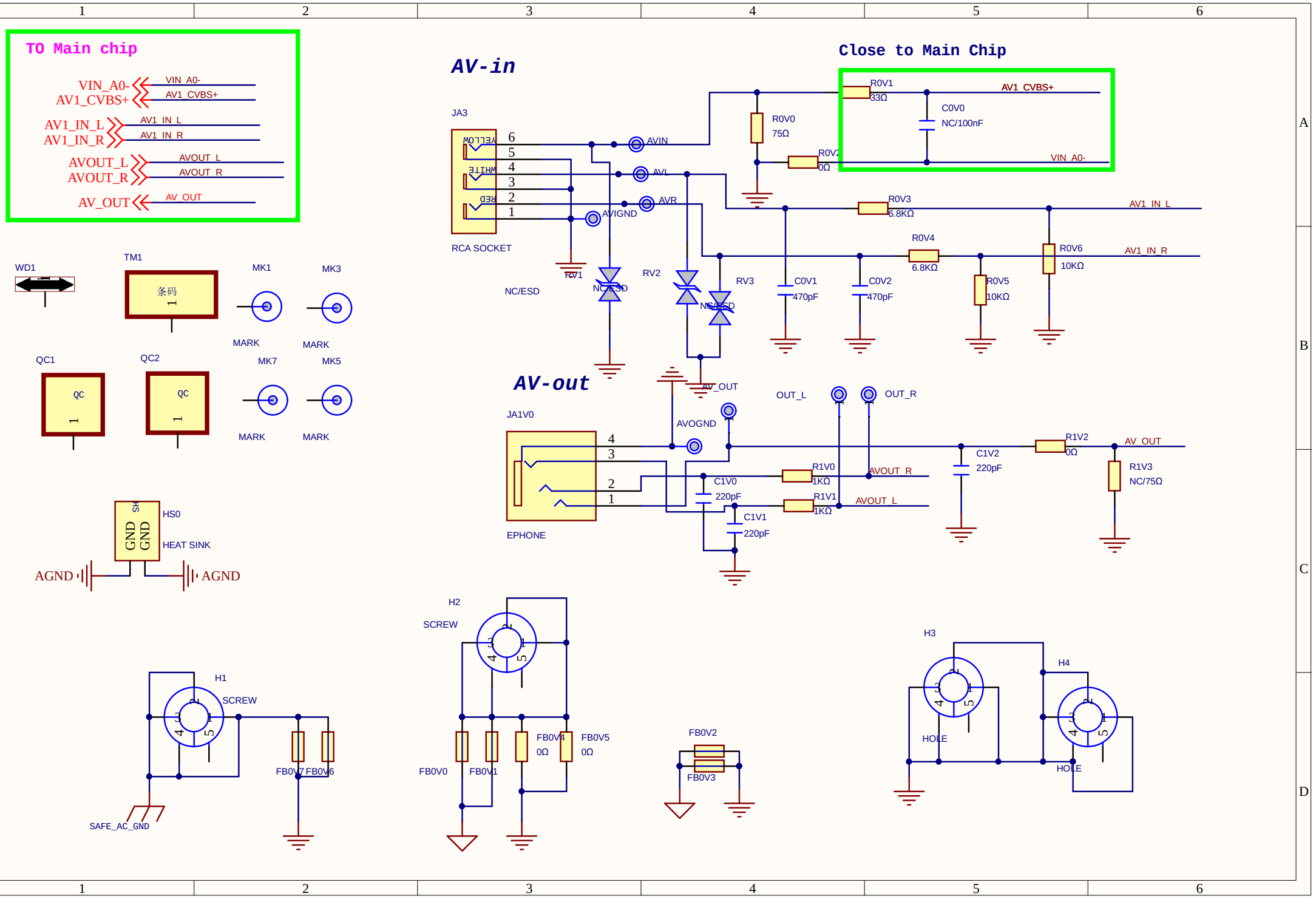

To LVDS
To Audio in/out
To Video input
EEPROM
To Flash ROM
To TCON
To HDMI
To Tuner
To Keypad
To USB
To Power
To AMP
Main Chip
Power On Latch
Default

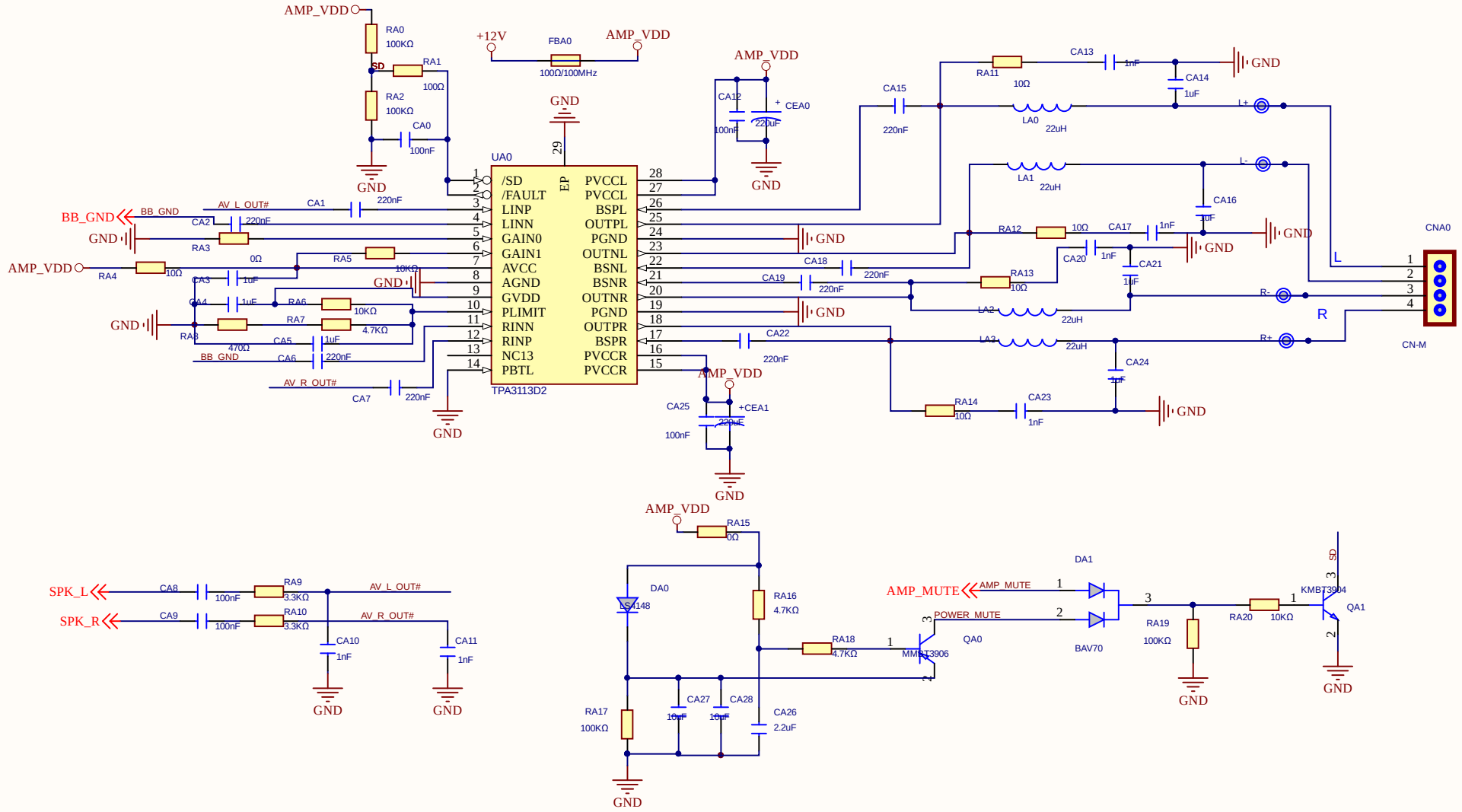

CN0S0
R0S0
0Ω
EEPROM_WP
D3V3
R0S1
100Ω
I2C_SCL
R0S2
100Ω
I2C_SDA
CN-M
工厂烧录
EEPROM_WP
I2C_SCL
I2C_SDA
UART_RX1
UART_TX1
IRRX
LEDR
LSADC0
D3V3
R0S3
4.7KΩ
R0S4
4.7KΩ
R0S5
4.7KΩ
C0S0
100nF
U0S0
VCC
WP
SCL
SDA
A0
A1
A2
GND
R0S6
R0S7
R0S8
100Ω
C0S1
22pF
D3V3
R1S1
4.7KΩ
R1S0
100Ω
LED_OUT
KMBT3904
Q1S0
R1S2
4.7KΩ
R1S3
10KΩ
LEDR
LED
IR_IN
KEY1
3V3_ST
CN1S0
C1S0
100nF
键控接收
LED_OUT
IR_OUT
KEY1
CN-M
D3V3
R1S4
10KΩ
R1S5
100Ω
KEY1
LSADC0
C1S1
100nF
A3V3
CN2S0
R2S0
4.7KΩ
R2S1
4.7KΩ
UART_TX1
UART_RX1
CN-F
打印消息
D3V3
R1S6
NC/10KΩ
R1S7
100Ω
IR_OUT
IRRX
C1S2
20pF

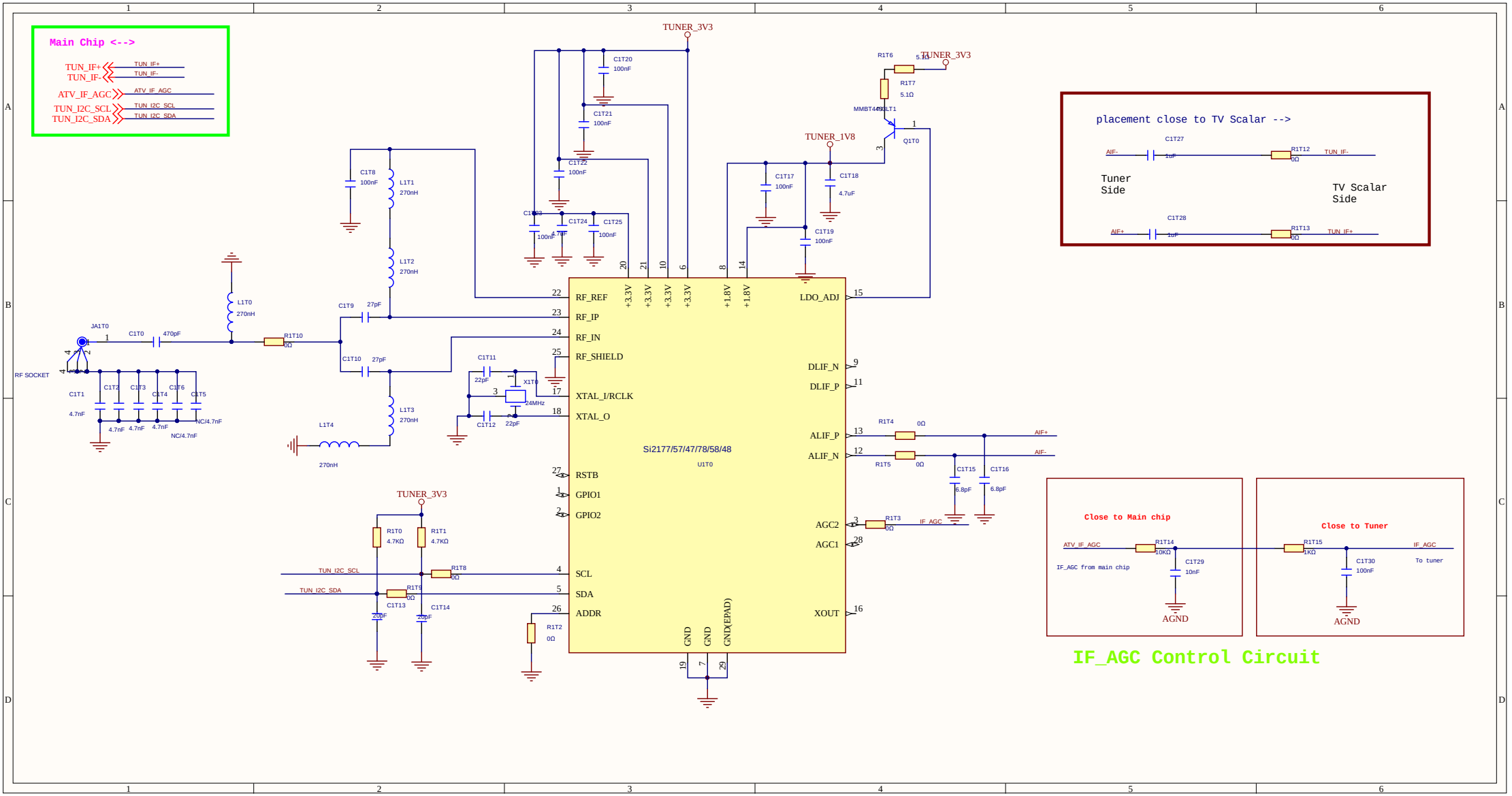

From Main Chip
N_WP#/SPI_WP#
N_ALE/SPI_SDO
N_CLE/SPI_SCLK
SPI_CS#
N_CE0#
N_WE#/SPI_DI
N_RE#
N_RDY
N_DATA0
N_DATA1
N_DATA2
N_DATA3
N_DATA4
N_DATA5
N_DATA6
N_DATA7
U0M0
NC1
NC2
NC3
NC4
NC5
NC6
RY//BY
/RE
/CE
NC10
NC11
VCC
VSS
NC14
NC15
CLE
ALE
/WE
/WP
NC20
NC21
NC22
NC23
NC24
NC48
NC47
NC46
NC45
I/O8
I/O7
I/O6
I/O5
NC40
NC39
NC38
VCC
VSS
NC35
NC34
NC33
I/O4
I/O3
I/O2
I/O1
NC28
NC27
NC26
NC25
TC58NVG0S3ETA00
R0M1
R0M2
22Ω
M3V3
DGND
R0M3
R0M4
R0M5
R0M6
NC/4.7KΩ
4.7KΩ
C0M0
C0M1
100nF
R0M7
R0M8
U1M0
CS
SO
WP
VSS
VCC
HOLD
SCLK
SI
R1M0
R1M1
R1M2
R1M3
R1M4
NC/22Ω
NC/4.7KΩ
C1M0
NC/100nF
NC/GD25Q64BSIG

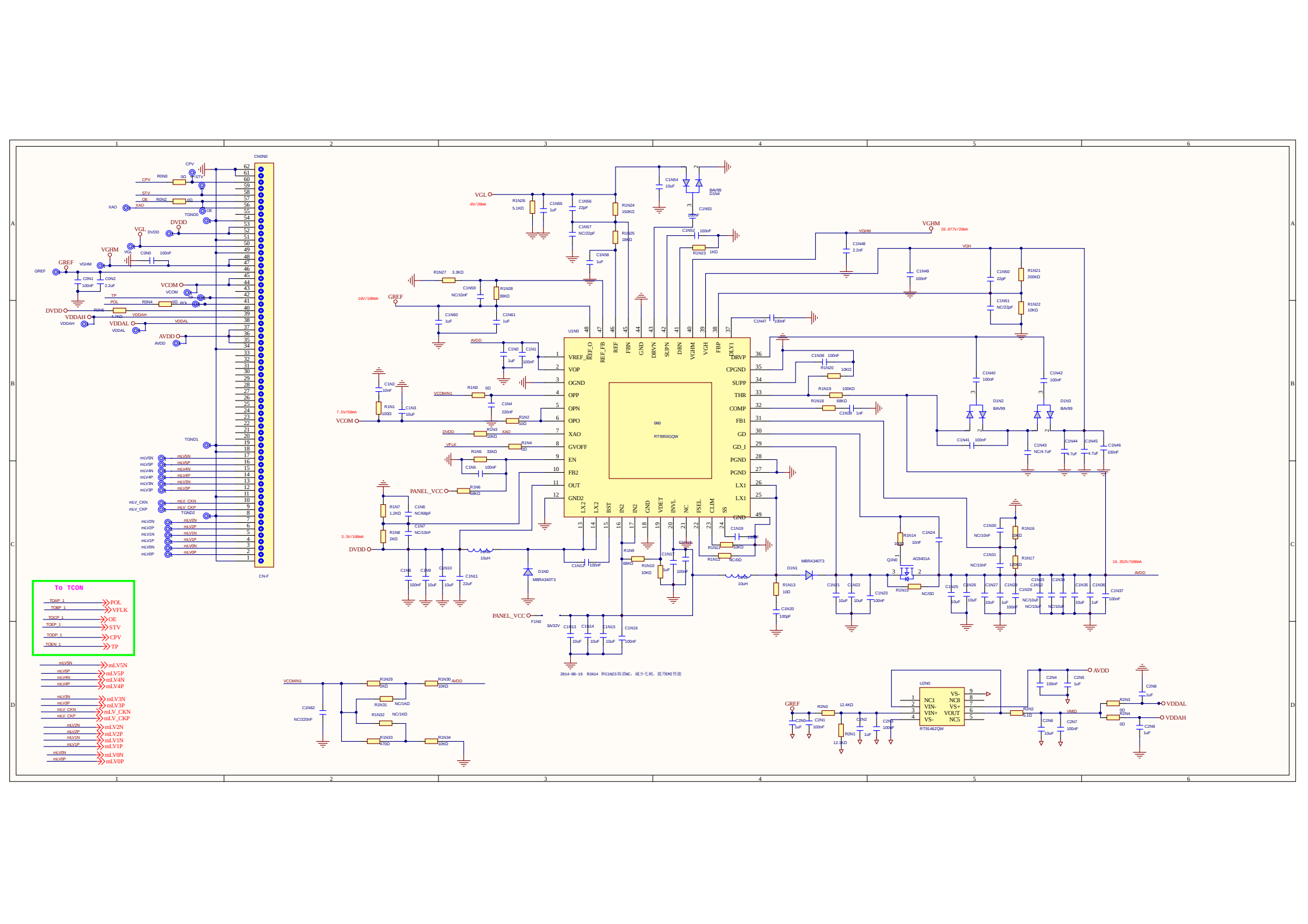

To HDMI
USB0_DM
USB0_DP
HDMI0_CLK-
HDMI0_CLK+
HDMI0_D0-
HDMI0_D0+
HDMI0_D1-
HDMI0_D1+
HDMI0_D2-
HDMI0_D2+
HDMI0_DDC_SDA
HDMI0_DDC_SCL
HOTPLUG0
HDMI0_CON5V
HDMI_CEC
USB1_DM
USB1_DP
Wifi_Control
JA0J0
VBUS
D-
D+
GND
SHELL
SHELL
USB SOCKET
USB5V
C0J0
10uF
C0J1
10uF
C0J2
100nF
FB0J0
100Ω/100MHz
D5V
R0J0
0Ω
R0J1
0Ω
DM
DP
USGND
220uF
CE0J0
C0J3
NC/4.7pF
C0J4
NC/4.7pF
RJ1
NC/ESD
RJ2
NC/ESD
DGND
RP1J0
RP1J1
0Ω X 4
0Ω X 4
HDMI0_D2+
HDMI0_D2-
HDMI0_D1+
HDMI0_D1-
HDMI0_D0+
HDMI0_D0-
HDMI0_CLK+
HDMI0_CLK-
HDMI_CEC
HDMI0_DDC_SCL#
HDMI0_DDC_SDA#
HDMI0_CON5V
HOTPLUG1#
JA1J0
DATA2+
DATA2 SHIELD
DATA2-
DATA1+
DATA1 SHIELD
DAT1A-
DATA0+
DATA0 SHIELD
DATA0-
CLK+ GND
CLK SHIELD
CLK- GND
CEC
NC GND
SCL
SDA GND
DDC/CEC GND
+5V POWER
HOT PLUG
HDMI SOCKET
DGND
R1J0
47KΩ
R1J1
1KΩ
HOTPLUG0
R1J2
10KΩ
KMBT3904
Q1J0
DGND
D5V
R1J3
47KΩ
R1J4
47KΩ
0Ω
HDMI0_DDC_SCL
HDMI0_DDC_SDA
R1J5
R1J6
HDMI0_DDC_SCL#
HDMI0_DDC_SDA#
D3V3
D1J0
NC/1N4148W
R1J7
NC/10KΩ
HDMI_CEC
CN4J0
UGND1
DP1
DM1
UVCC1
R4J0
R4J1
0Ω
0Ω
USB1_DP
USB1_DM
C4J0
100nF
C4J1
10uF
D5V
Wifi_Control
NC/CN_M
R4J3
4.7KΩ
R4J2
NC/4.7KΩ
R4J4
4.7KΩ
D3V3

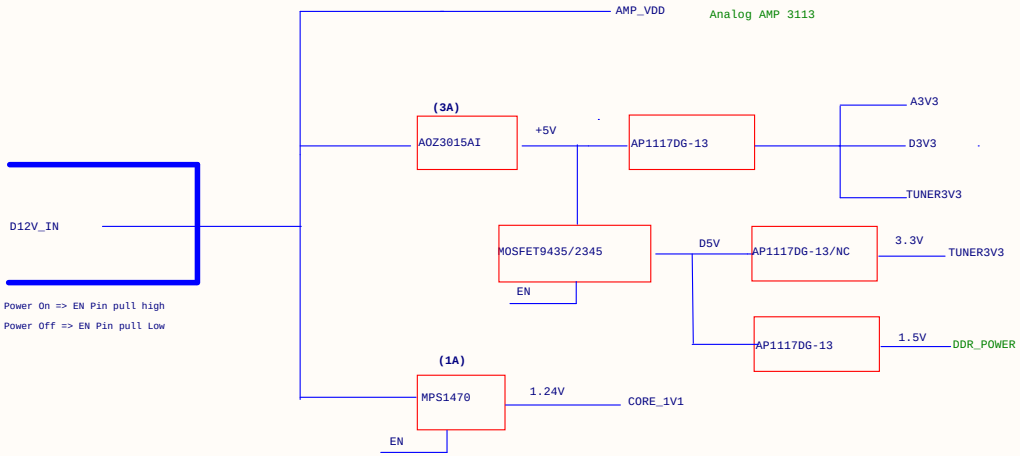

CN0L0
GND
GND
PANEL_VCC
LACC
D3V3
LGND
R0L6
NC/4.7KΩ
LVDS_SEL
R0L5
NC/4.7KΩ
TOAN_1
TOAP_1
TOBN_1
TOBP_1
TOCN_1
TOCP_1
TOCLKN_1
TOCLKP_1
TODN_1
TODP_1
TOAN
TOAP
TOBN
TOBP
TOCN
TOCP
TOCLKN
TOCLKP
TODN
TODP
NC/CN-F
GND
TEAN
TEAP
TEBN
TEBP
RP0L0
TEAN_1
TEAP_1
TEBN_1
TEBP_1
mLV5N
mLV5P
mLV4N
mLV4P
0Ω X 4
TECN
TECP
TECLKN
TECLKP
RP0L1
TECN_1
TECP_1
TECLKN_1
TECLKP_1
mLV3N
mLV3P
mLV_CKN
mLV_CKP
TEDN
TEDP
TEEN
TEEP
RP0L2
TEDN_1
TEDP_1
TEEN_1
TEEP_1
mLV2N
mLV2P
mLV1N
mLV1P
TOAN
TOAP
TOBN
TOBP
RP0L3
TOCN
TOCP
TOCLKN
TOCLKP
RP0L4
TODN
TODP
TOEN
TOEP
RP0L5
From Main Chip
TEEP
TEEN
TEDP
TEDN
TECLKP
TECLKN
TECP
TECN
TEBP
TEBN
TEAP
TEAN
TOEN
TOEP
TODP
TODN
TOCLKP
TOCLKN
TOCP
TOCN
TOBP
TOBN
TOAP
TOAN
PANEL_EN
To TCON
POL
VFLK
OE
STV
CPV
TP
PANEL_VCC
PANEL_VCC
C0L0
100nF
CE0L0
100uF
R0L7
NC/10K
Q0L0
AO3401A
C0L1
220nF
R0L0
0Ω
+12V
R0L1
47KΩ
R0L2
47KΩ
R0L3
KMBT3904
Q0L1
4.7KΩ
PANEL_EN
C0L2
100nF
R0L4
4.7KΩ


TO Main chip
VIN_A0-
AV1_CVBS+
AV1_IN_L
AV1_IN_R
AVOUT_L
AVOUT_R
AV_OUT
AV-in
Close to Main Chip
JA3
RCA SOCKET
AVIN
AVL
AVR
AVIGND
R0V0
75Ω
R0V1
33Ω
C0V0
NC/100nF
R0V2
0Ω
R0V3
6.8KΩ
R0V4
6.8KΩ
R0V5
10KΩ
R0V6
10KΩ
C0V1
470pF
C0V2
470pF
RV1
RV2
RV3
NC/ESD
AV-out
JA1V0
EPHONE
AVOGND
OUT_L
OUT_R
R1V0
1KΩ
R1V1
1KΩ
C1V0
220pF
C1V1
220pF
C1V2
220pF
R1V2
0Ω
R1V3
NC/75Ω
WD1
TM1
条码
MK1
MK3
MK5
MK7
MARK
QC1
QC2
QC
HS0
HEAT SINK
GND
AGND
H1
H2
H3
H4
SCREW
HOLE
FB0V0
FB0V1
FB0V2
FB0V3
FB0V4
FB0V5
FB0V6
FB0V7
SAFE_AC_GND


AMP_VDD
RA0
100KΩ
RA1
100Ω
RA2
100KΩ
CA0
100nF
SD
GND
+12V
FBA0
100Ω/100MHz
AMP_VDD
GND
CA12
100nF
CEA0
220uF
AMP_VDD
GND
UA0
29
/SD
/FAULT
LINP
LINN
GAIN0
GAIN1
AVCC
AGND
GVDD
PLIMIT
RINN
RINP
NC13
PBTL
EP
PVCCL
PVCCL
BSPL
OUTPL
PGND
OUTNL
BSNL
BSNR
OUTNR
PGND
OUTPR
BSPR
PVCCR
PVCCR
TPA3113D2
BB_GND
GND
AMP_VDD
AV_L_OUT#
CA1
220nF
CA2
220nF
RA3
0Ω
RA4
10Ω
CA3
1uF
RA5
10KΩ
GND
CA4
1uF
RA6
10KΩ
RA7
4.7KΩ
RA8
470Ω
CA5
1uF
BB_GND
CA6
220nF
AV_R_OUT#
CA7
220nF
GND
CA15
220nF
RA11
10Ω
CA13
1nF
CA14
1uF
GND
L+
LA0
22uH
L-
LA1
22uH
CA16
1uF
RA12
10Ω
CA17
1nF
GND
GND
CA18
220nF
CA19
220nF
RA13
10Ω
CA20
1nF
CA21
1uF
R-
LA2
22uH
GND
CA22
220nF
LA3
22uH
R+
CA24
1uF
RA14
10Ω
CA23
1nF
GND
CNA0
L
R
CN-M
AMP_VDD
CA25
100nF
+CEA1
220uF
GND
AMP_VDD
RA15
0Ω
DA0
LS4148
RA16
4.7KΩ
RA18
4.7KΩ
QA0
MMBT3906
POWER_MUTE
AMP_MUTE
DA1
BAV70
RA19
100KΩ
GND
RA20
10KΩ
KMBT3904
QA1
SD
GND
RA17
100KΩ
CA27
10nF
CA28
10nF
CA26
2.2uF
GND
SPK_L
SPK_R
CA8
100nF
CA9
100nF
RA9
3.3KΩ
RA10
3.3KΩ
AV_L_OUT#
AV_R_OUT#
CA10
1nF
CA11
1nF
GND
GND

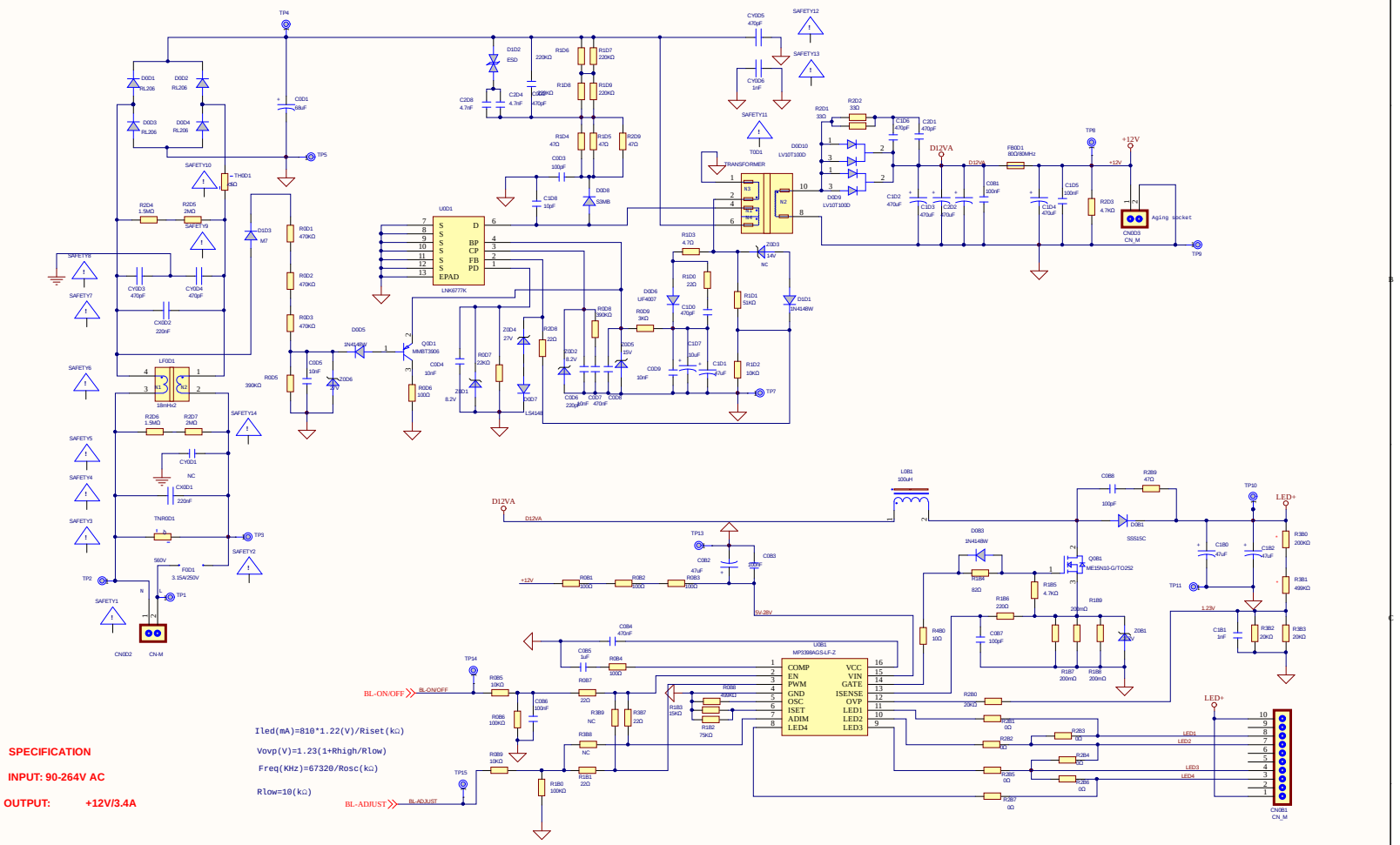

Main Chip <-->
TUN_IF+
TUN_IF-
ATV_IF_AGC
TUN_I2C_SCL
TUN_I2C_SDA
TUN_3V3
TUNER_1V8
Si2177/57/47/78/58/48
U1T0
RF_REF
RF_IP
RF_IN
RF_SHIELD
XTAL_I/RCLK
XTAL_O
RSTB
GPIO1
GPIO2
SCL
SDA
ADDR
DLIF_N
DLIF_P
ALIF_P
ALIF_N
AGC2
AGC1
XOUT
LDO_ADJ
GND
GND(EPAD)
+3.3V
+1.8V
RF SOCKET
X1T0
24MHz
Q1T0
MMBT4401LT1
placement close to TV Scalar -->
Tuner Side
TV Scalar Side
Close to Main chip
ATV_IF_AGC
IF_AGC from main chip
Close to Tuner
IF_AGC
To tuner
AGND
IF_AGC Control Circuit


CN0N0
CN-F
To TCON
POL
VFLK
OE
STV
CPV
TP
RT9955GQW
U1N0
VGL
VGHM
VCOM
DVDD
VDDAH
VDDAL
AVDD
GREF
PANEL_VCC
MBRA340T3
AO3401A
RT9146ZQW
U2N0
2014-08-19 R1N14 和C1N23取消NC，减少毛刺，提升EMI性能



1.2014-09-30 背光的PWM信号软件需改为反向,同时需将背光控制信号反向。节省电路空间。同2082方案的设计。

Title		
Size A	Document Number	Rev
Date:	Sheet 1 of 1	


SPECIFICATION
INPUT: 90-264V AC
OUTPUT: +12V/3.4A
Iled(mA)=810*1.22(V)/Riset(kΩ)
Vovp(V)=1.23(1+Rhigh/Rlow)
Freq(KHz)=67320/Rosc(kΩ)
Rlow=10(kΩ)
BL-ON/OFF
BL-ADJUST
D12VA
+12V
LED+
Aging socket
TRANSFORMER
LNK677K
MP3398AGS-LF-Z
ME15N10-G/TO252
SS515C
1N4148W
LV10T100D
Title
Size
A
Document Number
Rev
Date
Sheet