KONKA DTV SCH Design

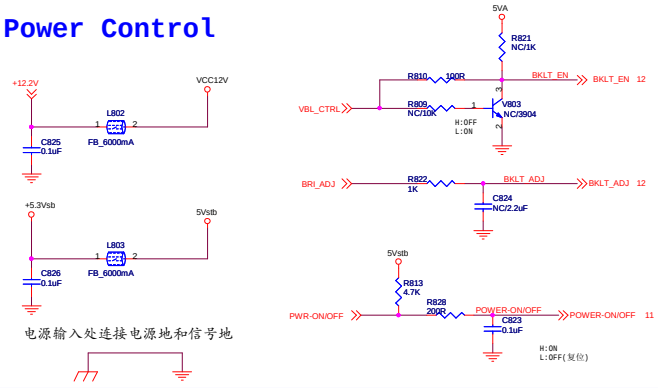
KDL48JT618A

拟制：

标准化：

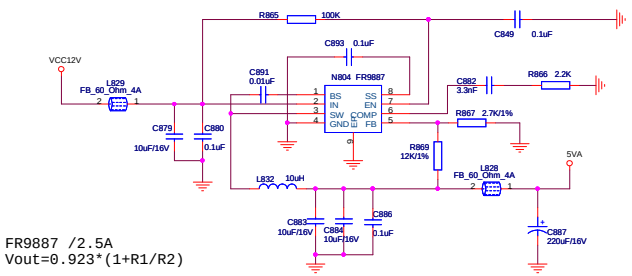
批准：

Power Control



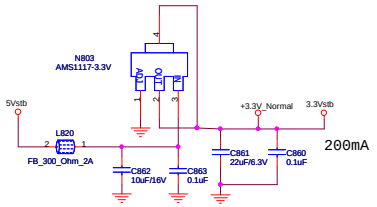
电源输入处连接电源地和信号地

12V to 5VA



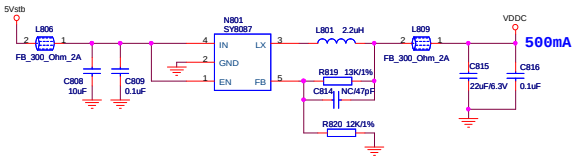
FR9887 /2.5A
Vout=0.923*(1+R1/R2)

3.3V Power



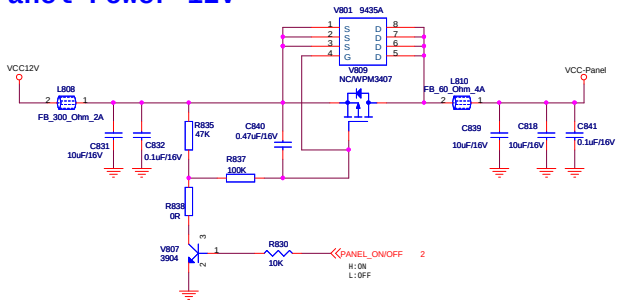
+1.2V For Mstar core

待机时要有1.2V



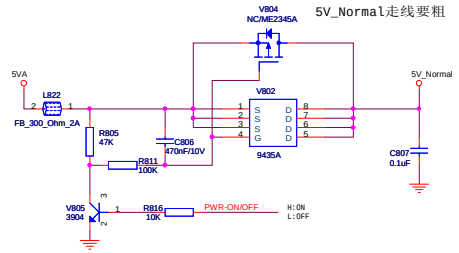
Vout=0.6*(1+R1/R2)

Panel Power 12V

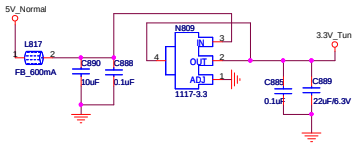


5V_Normal Power

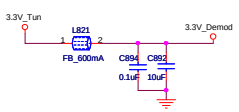
5V_Normal走线要粗



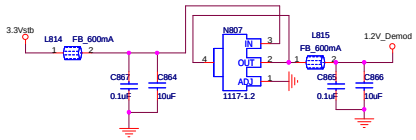
TUNER POWER



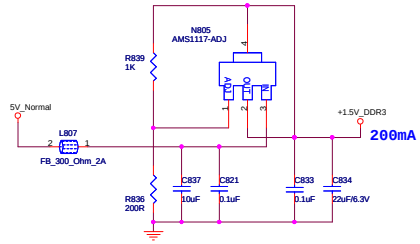
DEMO 3.3V POWER

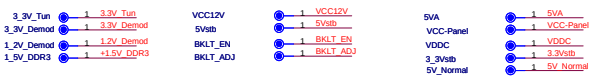


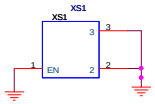
DEMO 1.2V POWER



1.5V DDR Power







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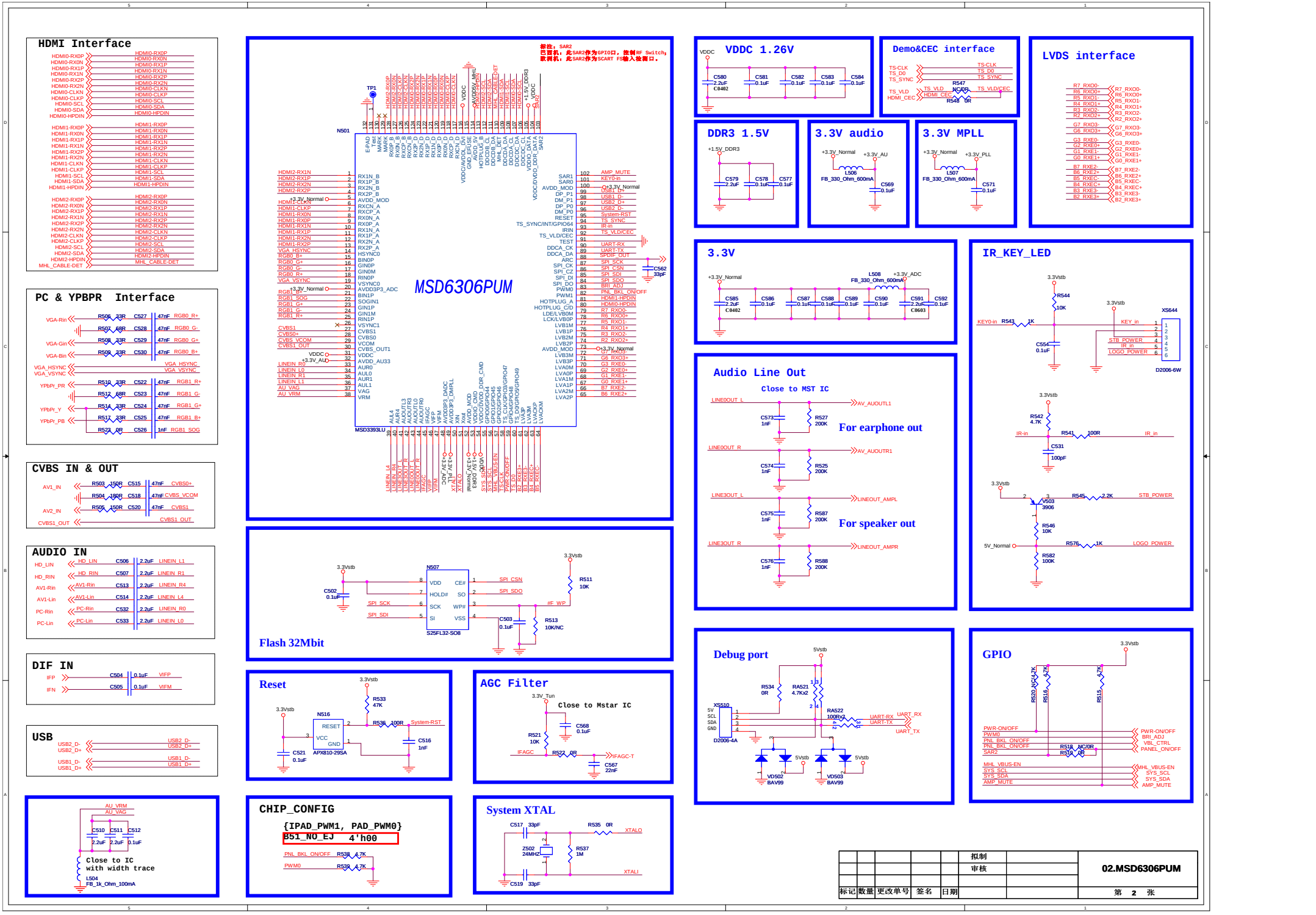
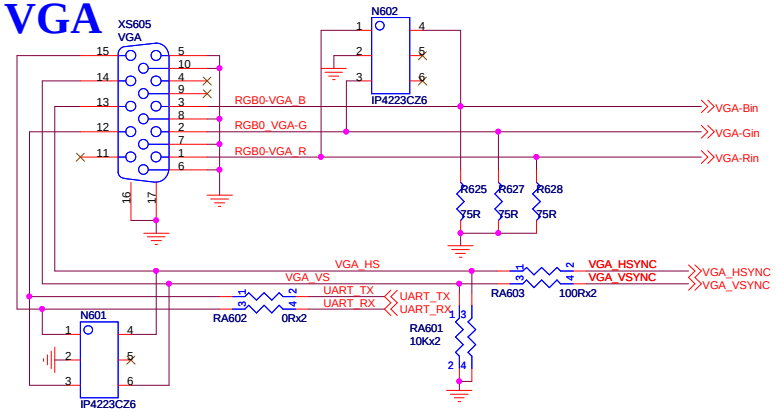
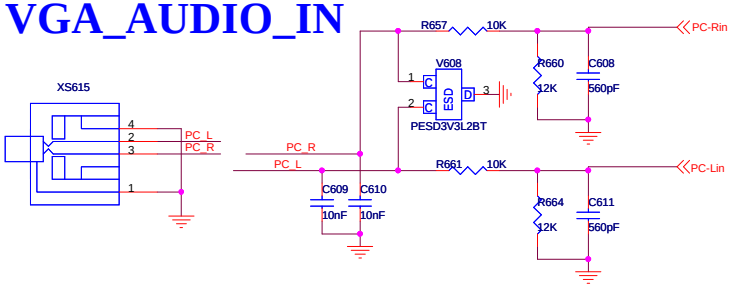
标记	数量	更改单号	签名	日期			第 1 张


HDMI Interface
PC & YPBPR Interface
CVBS IN & OUT
AUDIO IN
DIF IN
USB
标注：SAR2
已置机，此SAR2作为GPIO口，控制RF Switch,
取调机，此SAR2作为SCART FS输入检测口。
MSD6306PUM
MSD3393LU
N501
Flash 32Mbit
S25FL32-SO8
N507
Reset
APX810-29SA
N516
AGC Filter
Close to Mstar IC
CHIP_CONFIG
{IPAD_PWM1, PAD_PWM0}
B51_NO_EJ 4'h00
System XTAL
VDDC 1.26V
DDR3 1.5V
3.3V audio
3.3V MPLL
Demo&CEC interface
LVDS interface
3.3V
Audio Line Out
Close to MST IC
For earphone out
For speaker out
IR_KEY_LED
Debug port
GPIO
Close to IC
with width trace
拟制
审核
02.MSD6306PUM
标记 数量 更改单号 签名 日期
第 2 张

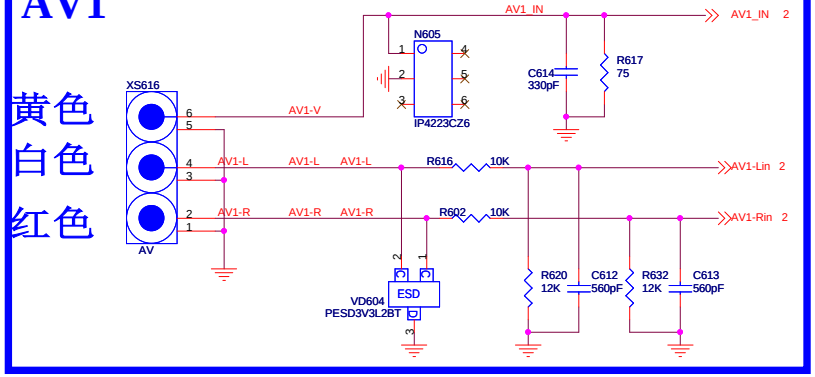
VGA



VGA_AUDIO_IN

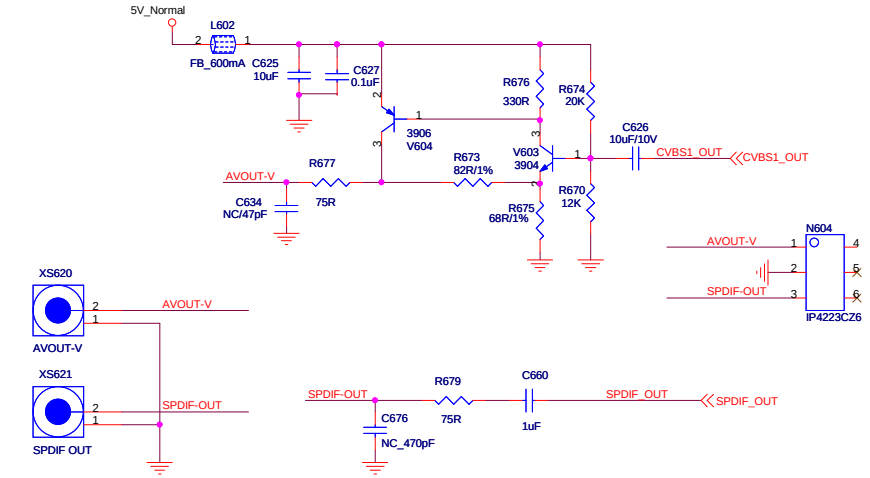


AV1

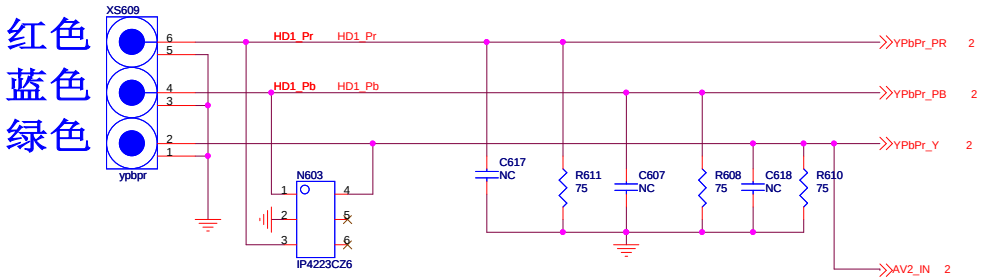


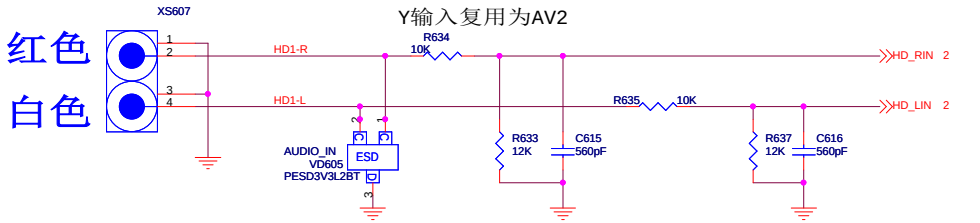
UART_TX 1 UART_TX
UART_RX 1 UART_RX

VIDEO OUT



YPbPr & AV2





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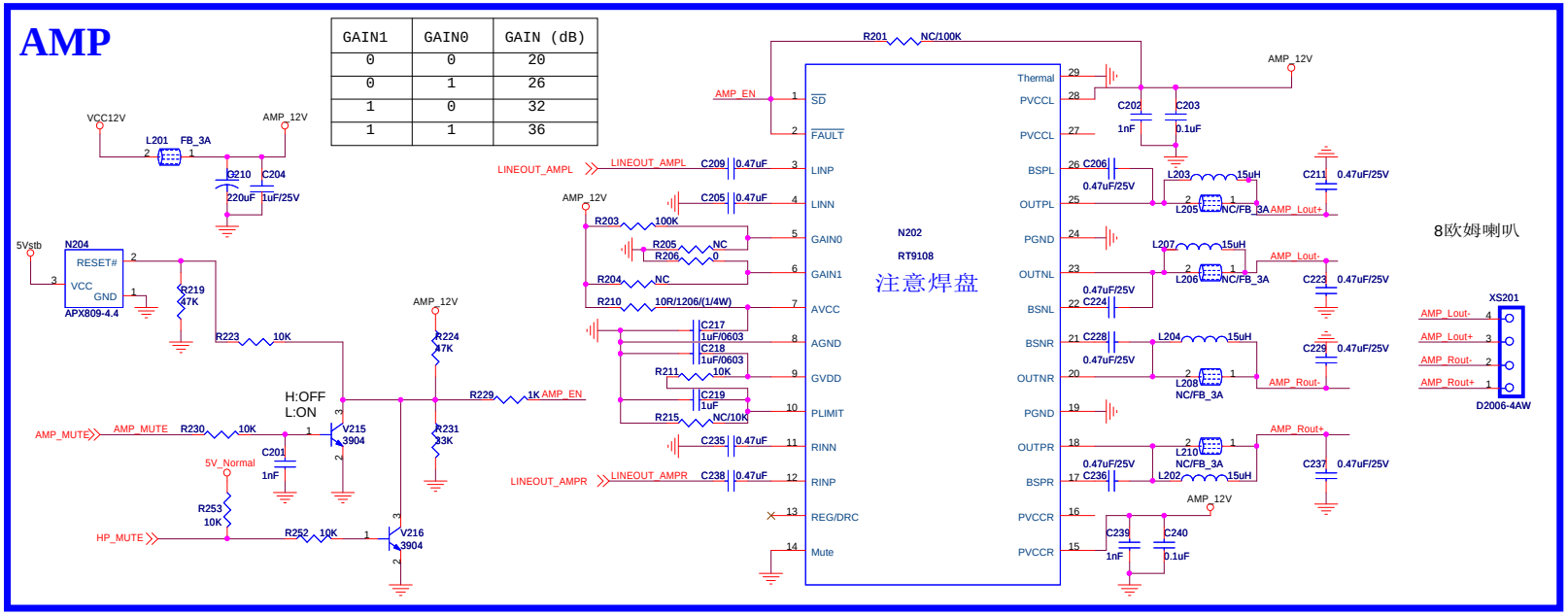
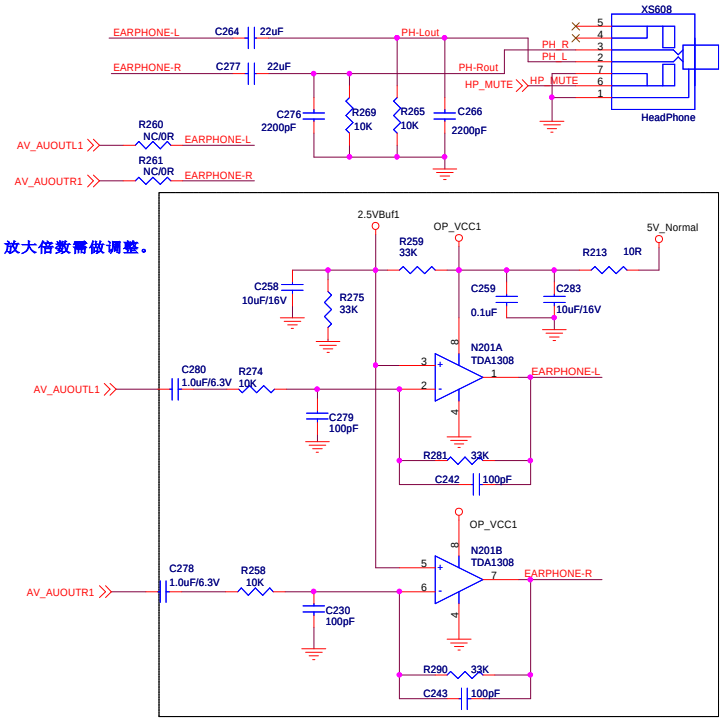
					审核		
标记	数量	更改单号	签名	日期			第 3 张

AMP

GAIN1	GAIN0	GAIN (dB)
0	0	20
0	1	26
1	0	32
1	1	36



EAR PHONE



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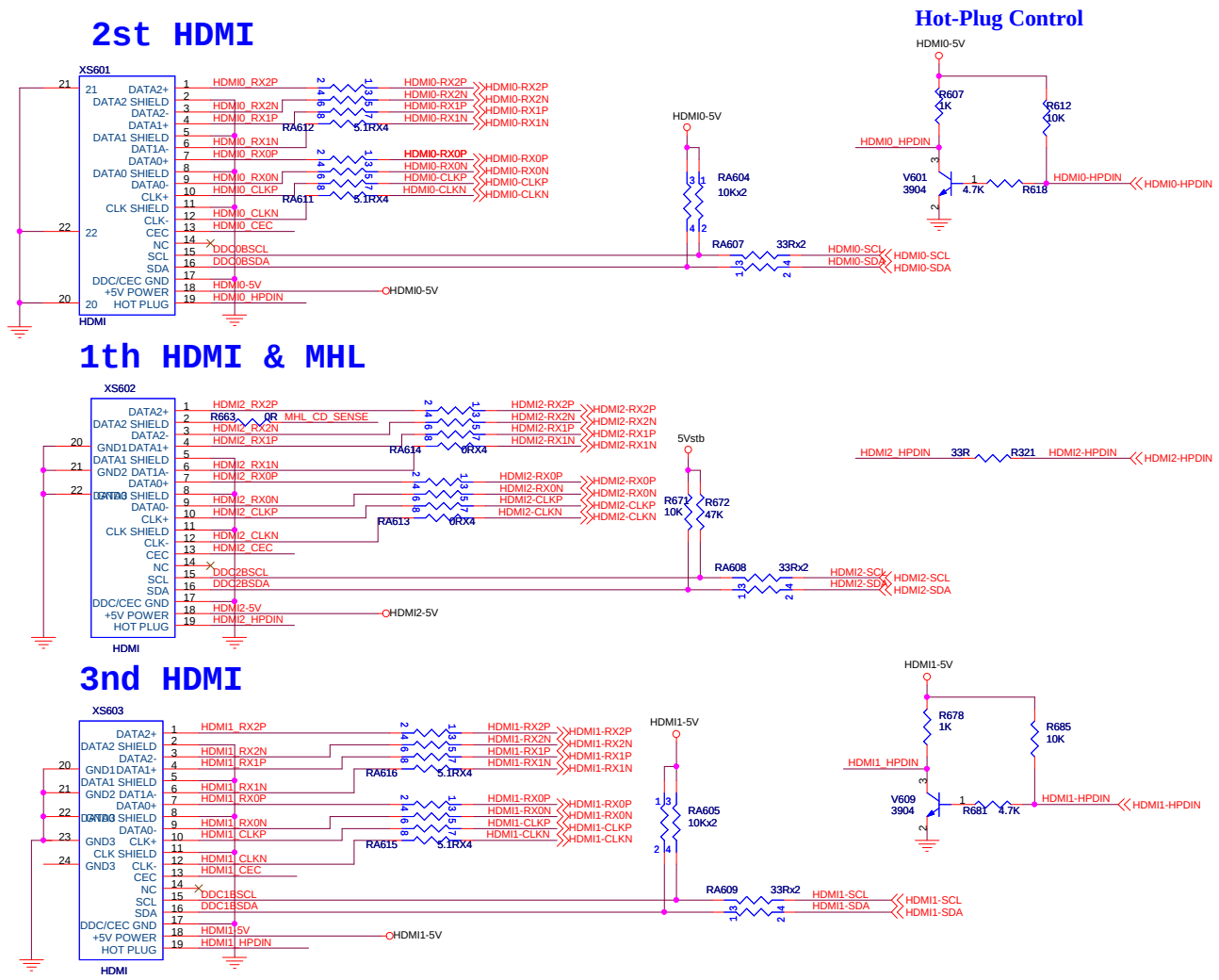

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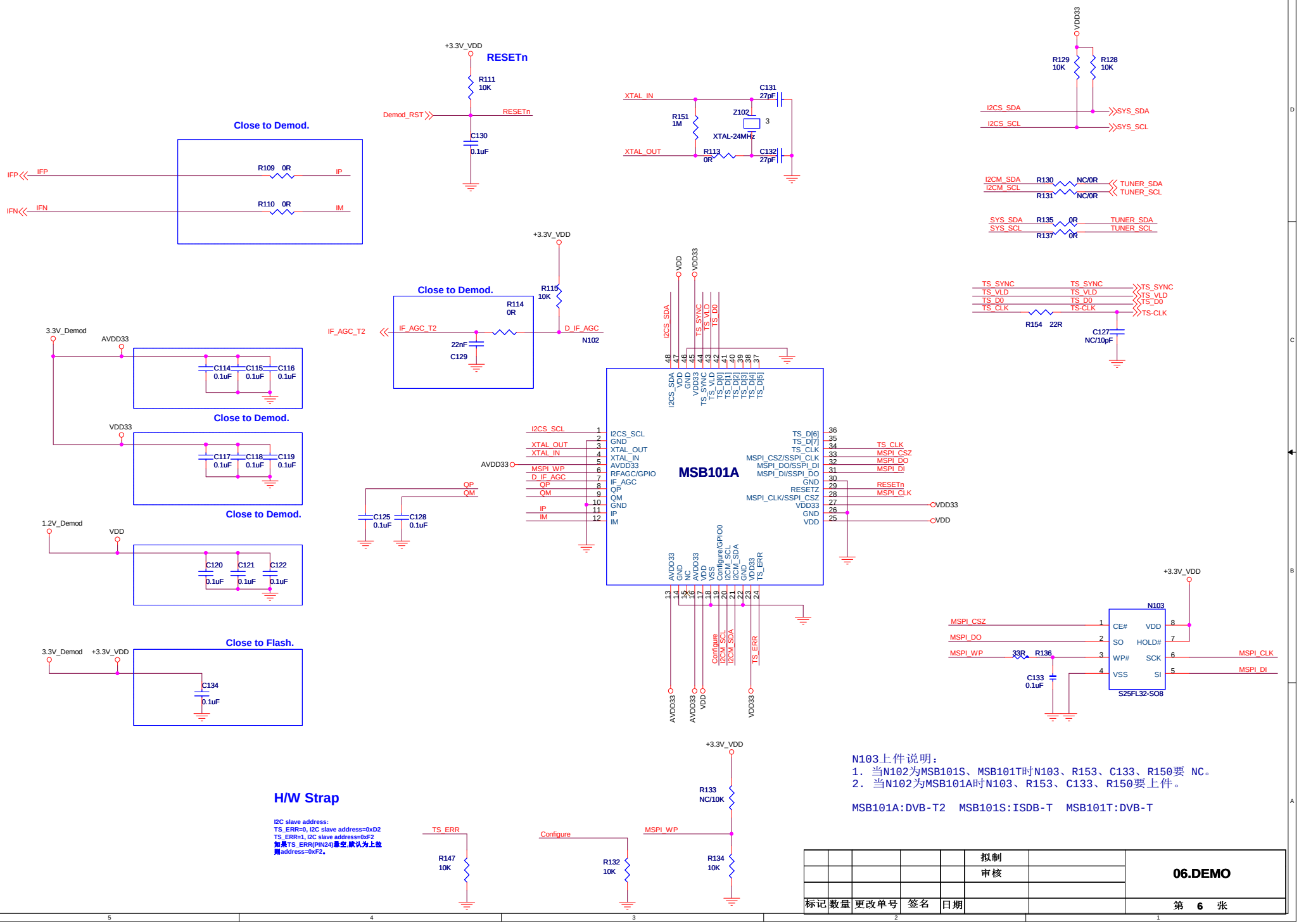
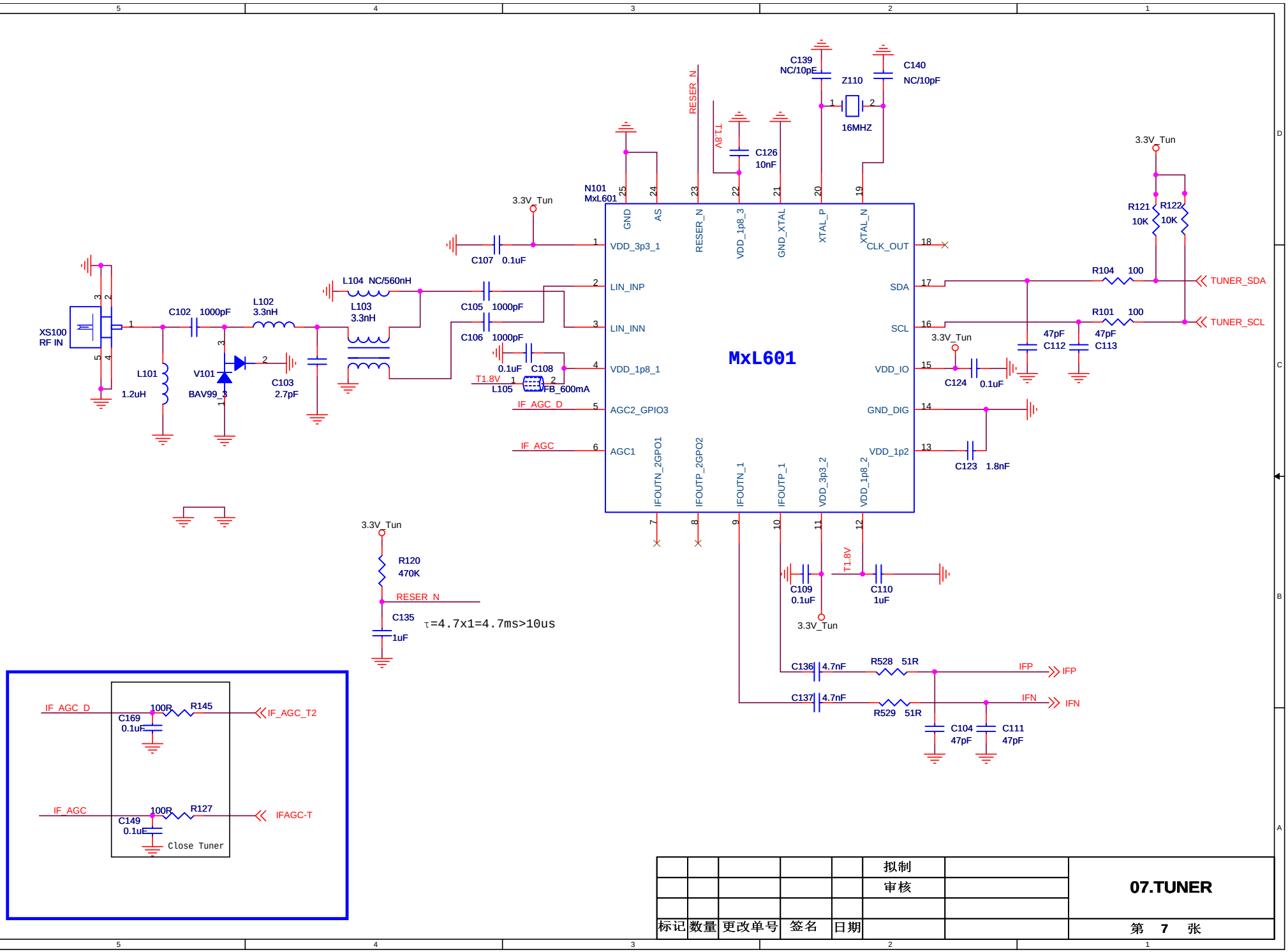

RESETn
+3.3V_VDD
R111 10K
Demod_RST
RESETn
C130 0.1uF
Close to Demod.
IFP
IFN
R109 0R
R110 0R
IP
IM
XTAL_IN
XTAL_OUT
R151 1M
Z102
XTAL-24MHz
C131 27pF
C132 27pF
R113 0R
VDD33
R129 10K
R128 10K
I2CS_SDA
I2CS_SCL
SYS_SDA
SYS_SCL
I2CM_SDA
I2CM_SCL
R130 NC/0R
R131 NC/0R
TUNER_SDA
TUNER_SCL
SYS_SDA
SYS_SCL
R135 0R
R137 0R
TUNER_SDA
TUNER_SCL
TS_SYNC
TS_VLD
TS_D0
TS_CLK
R154 22R
C127 NC/10pF
Close to Demod.
IF_AGC_T2
R114 0R
22nF
C129
R115 10K
D_IF_AGC
N102
3.3V_Demod
AVDD33
C114 0.1uF
C115 0.1uF
C116 0.1uF
Close to Demod.
VDD33
C117 0.1uF
C118 0.1uF
C119 0.1uF
Close to Demod.
1.2V_Demod
VDD
C120 0.1uF
C121 0.1uF
C122 0.1uF
Close to Flash.
3.3V_Demod
+3.3V_VDD
C134 0.1uF
MSB101A
I2CS_SCL
GND
XTAL_OUT
XTAL_IN
AVDD33
RFAGC/GPIO
IF_AGC
QP
QM
GND
IP
IM
RESETZ
MSPI_CLK/SSPI_CSZ
MSPI_CSZ/SSPI_CLK
MSPI_DO/SSPI_DI
MSPI_DI/SSPI_DO
TS_D[6]
TS_D[7]
TS_CLK
MSPI_CSZ
MSPI_DO
MSPI_DI
RESETn
MSPI_CLK
VDD33
VDD
C125 0.1uF
C128 0.1uF
N103
MSPI_CSZ
MSPI_DO
MSPI_WP
33R
R136
C133 0.1uF
CE#
SO
WP#
VSS
VDD
HOLD#
SCK
SI
MSPI_CLK
MSPI_DI
S25FL32-SO8
H/W Strap
I2C slave address:
TS_ERR=0, I2C slave address=0xD2
TS_ERR=1, I2C slave address=0xF2
如果TS_ERR(PIN24)悬空,默认为上拉则address=0xF2。
TS_ERR
R147 10K
Configure
R132 10K
MSPI_WP
R133 NC/10K
R134 10K
N103上件说明：
1. 当N102为MSB101S、MSB101T时N103、R153、C133、R150要 NC。
2. 当N102为MSB101A时N103、R153、C133、R150要上件。
MSB101A:DVB-T2 MSB101S:ISDB-T MSB101T:DVB-T
拟制
审核
06.DEMO
标记 数量 更改单号 签名 日期
第 6 张



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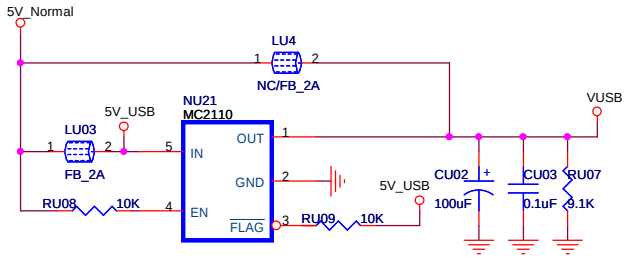
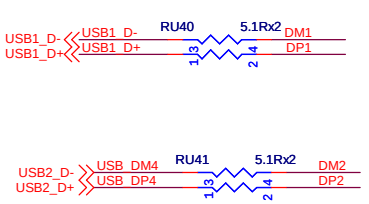
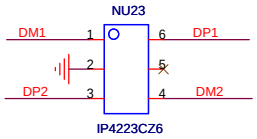
标记	数量	更改单号	签名	日期			第 7 张

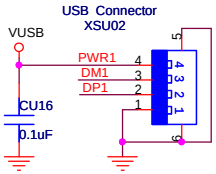
USB POWER

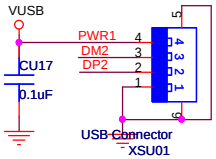


USB









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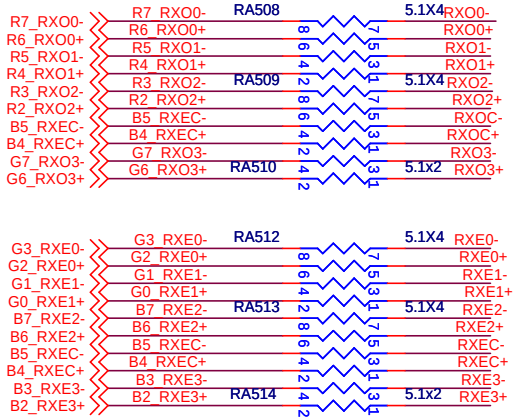
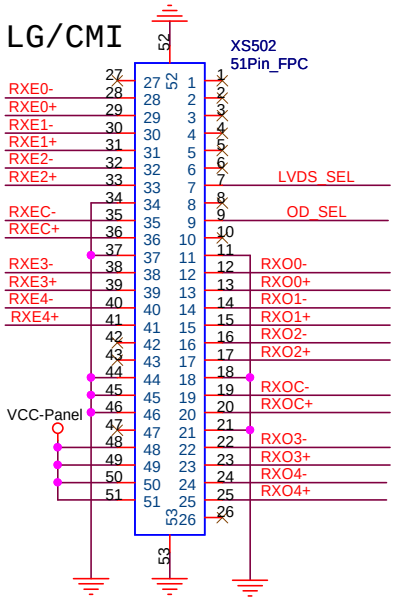
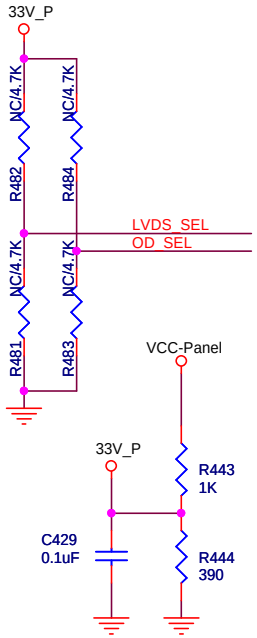
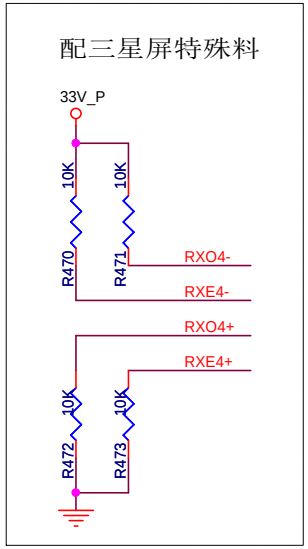
LVDS









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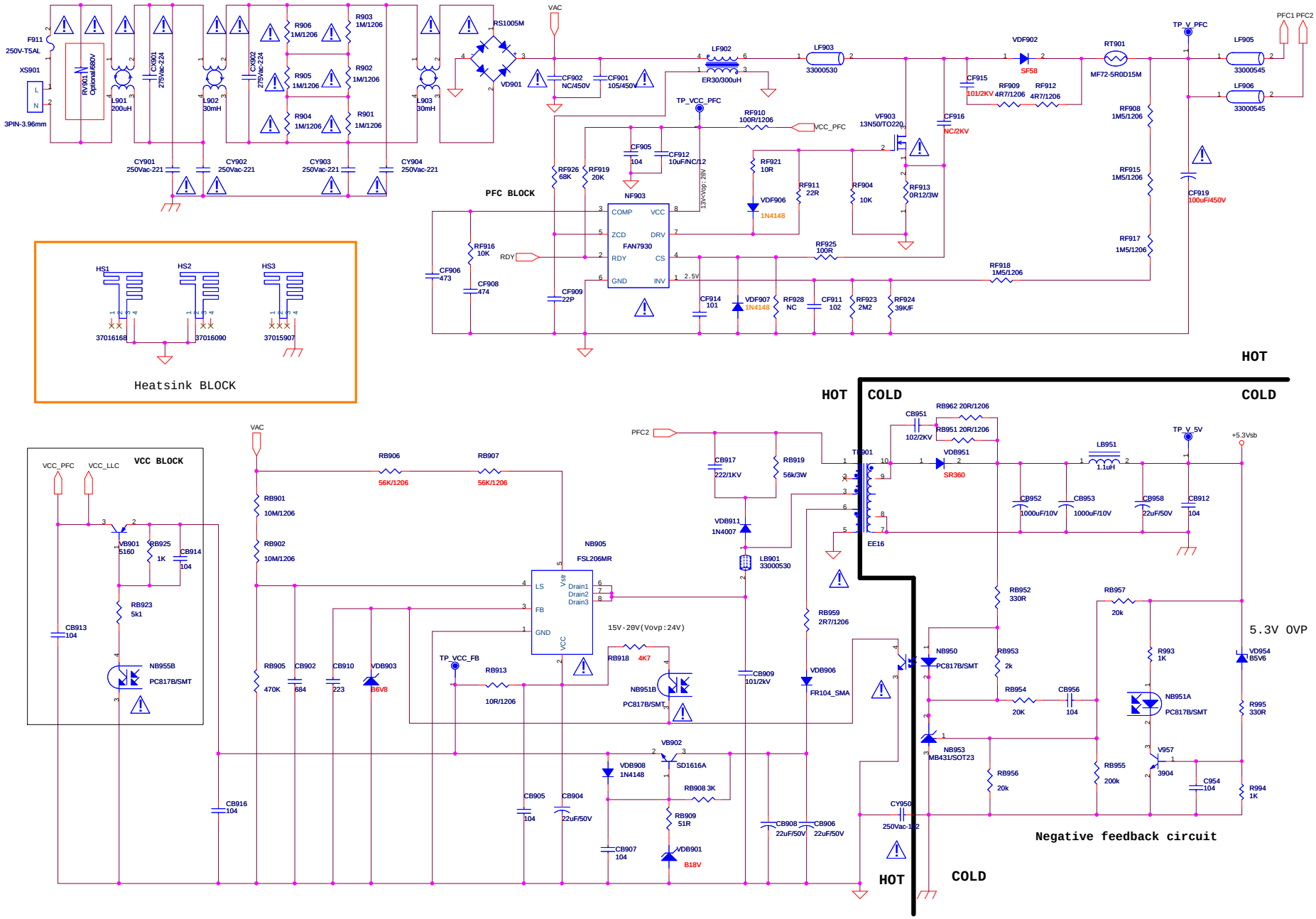
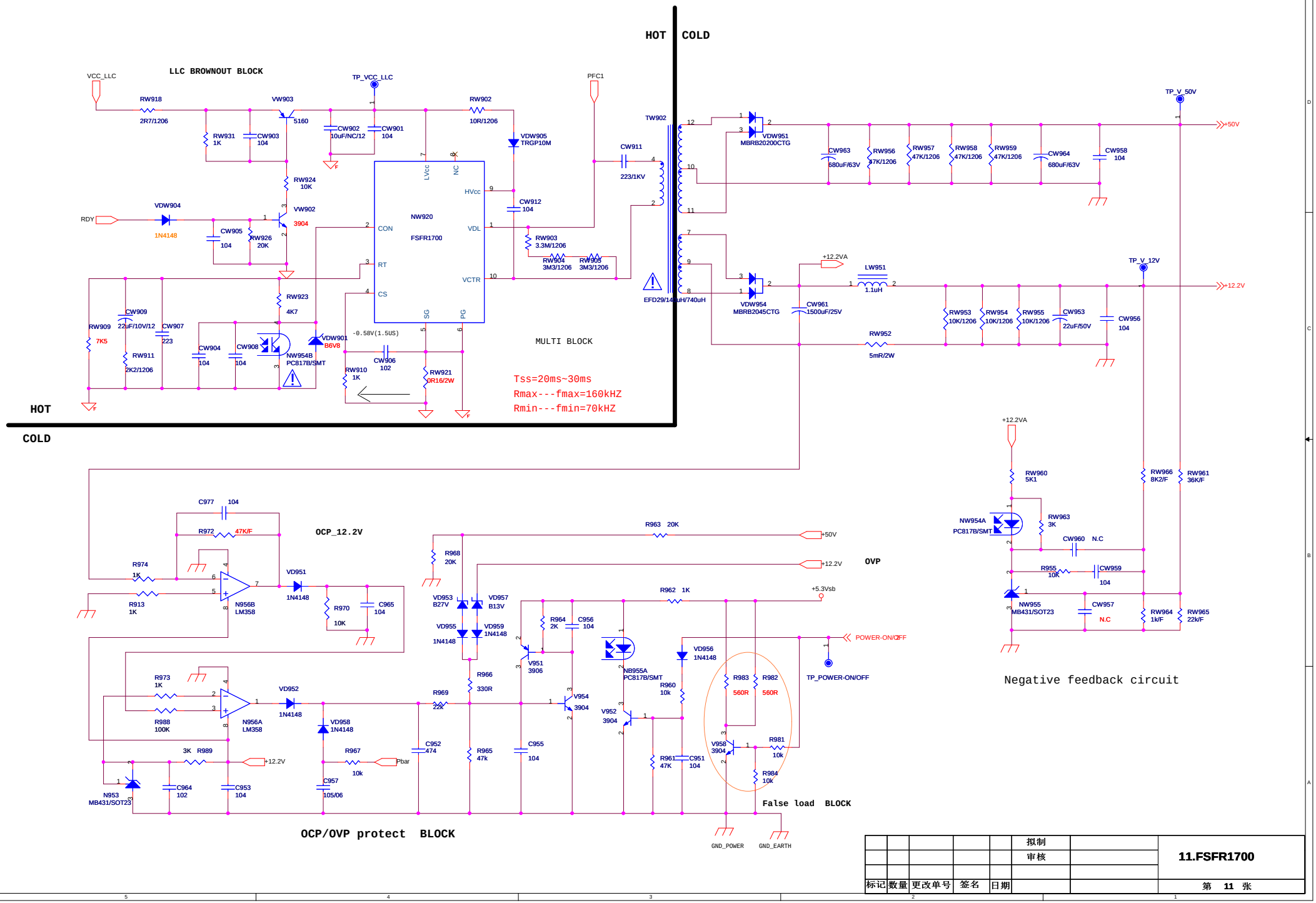
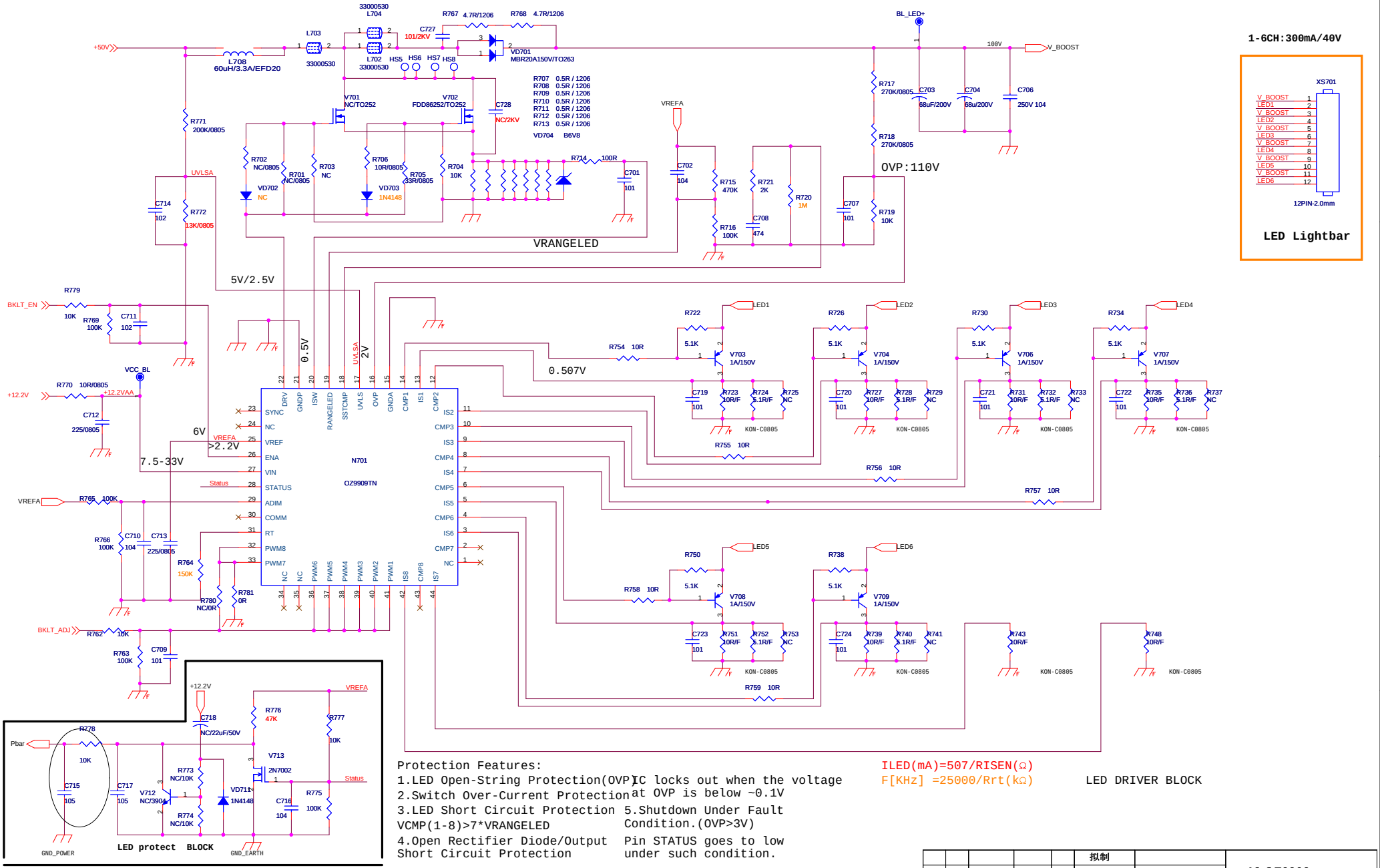

F911
250V-T5AL
XS901
3PIN-3.96mm
RV901 Optional/680V
L901 200uH
CX301 275Vac-224
L902 30mH
CX302 275Vac-224
L903 30mH
R903 1M/1206
R906 1M/1206
R905 1M/1206
R902 1M/1206
R904 1M/1206
R901 1M/1206
CY901 250Vac-221
CY902 250Vac-221
CY903 250Vac-221
CY904 250Vac-221
RS1005M
VD901
VAC
CF902 NC/450V
CF901 105/450V
LF902
ER30/300uH
LF903 33000530
VDF902 SF58
CF915 101/2KV
RF909 4R7/1206
RF912 4R7/1206
RT901 MF72-5R0D15M
TP_V_PFC
LF905 33000545
LF906 33000545
PFC1 PFC2
TP_VCC_PFC
RF910 100R/1206
VCC_PFC
VF903 13N50/TO220
CF916 NC/2KV
RF908 1M5/1206
RF915 1M5/1206
RF917 1M5/1206
CF919 100uF/450V
PFC BLOCK
CF905 104
CF912 10uF/NC/12
RF926 68K
RF919 20K
NF903
FAN7930
COMP
VCC
ZCD
DRV
RDY
CS
GND
INV
13V<Vopp<26V
RF921 10R
VDF906 1N4148
RF911 22R
RF904 10K
RF913 0R12/3W
RF916 10K
CF906 473
CF908 474
CF909 22P
RF925 100R
RF918 1M5/1206
CF914 101
VDF907 1N4148
RF928 NC
CF911 102
RF923 2M2
RF924 39K/F
HS1
HS2
HS3
37016168
37016090
37015907
Heatsink BLOCK
HOT
COLD
HOT
COLD
VCC BLOCK
VCC_PFC
VCC_LLC
VB901 5160
RB925 1K
CB914 104
RB923 5k1
CB913 104
NB955B
PC817B/SMT
RB901 10M/1206
RB902 10M/1206
RB906 56K/1206
RB907 56K/1206
RB905 470K
CB902 684
CB910 223
VDB903 B6V8
CB916 104
NB905
FSL206MR
LS
FB
GND
VCC
Vstr
Drain1
Drain2
Drain3
15V-20V(Vovp:24V)
TP_VCC_FB
RB913 10R/1206
RB918 4K7
NB951B
PC817B/SMT
CB909 101/2KV
VDB908 1N4148
VB902 SD1616A
RB908 3K
RB909 51R
VDB901 B18V
CB907 104
CB905 104
CB904 22uF/50V
CB908 22uF/50V
CB906 22uF/50V
PFC2
CB917 222/1KV
RB919 56k/3W
VDB911 1N4007
LB901 33000530
TP901
EE16
CB951 102/2KV
RB962 20R/1206
RB951 20R/1206
VDB951 SR360
LB951 1.1uH
TP_V_5V
+5.3Vsb
CB952 1000uF/10V
CB953 1000uF/10V
CB958 22uF/50V
CB912 104
RB952 330R
RB957 20k
5.3V OVP
NB950
PC817B/SMT
RB953 2k
RB954 20K
CB956 104
R993 1K
VD954 B5V6
NB951A
PC817B/SMT
R995 330R
NB953
MB431/SOT23
RB956 20k
RB955 200k
V957 3904
C954 104
R994 1K
CY950 250Vac-102
Negative feedback circuit
HOT
COLD
拟制
审核
标记 数量 更改单号 签名 日期
10.FAN7930+FSL206MR
第 10 张



					拟制		11.FSFR1700
					审核		
标记	数量	更改单号	签名	日期			第 11 张


1-6CH:300mA/40V
XS701
V_BOOST 1
LED1 2
V_BOOST 3
LED2 4
V_BOOST 5
LED3 6
V_BOOST 7
LED4 8
V_BOOST 9
LED5 10
V_BOOST 11
LED6 12
12PIN-2.0mm
LED Lightbar
OVP:110V
VRANGELED
5V/2.5V
0.507V
N701
OZ9909TN
LED protect BLOCK
Protection Features:
1.LED Open-String Protection(OVP)IC locks out when the voltage
2.Switch Over-Current Protection at OVP is below ~0.1V
3.LED Short Circuit Protection 5.Shutdown Under Fault
VCMP(1-8)>7*VRANGELED Condition.(OVP>3V)
4.Open Rectifier Diode/Output Pin STATUS goes to low
Short Circuit Protection under such condition.
ILED(mA)=507/RISEN(Ω)
F[KHz] =25000/Rrt(kΩ)
LED DRIVER BLOCK
12.OZ9909
第 11 张