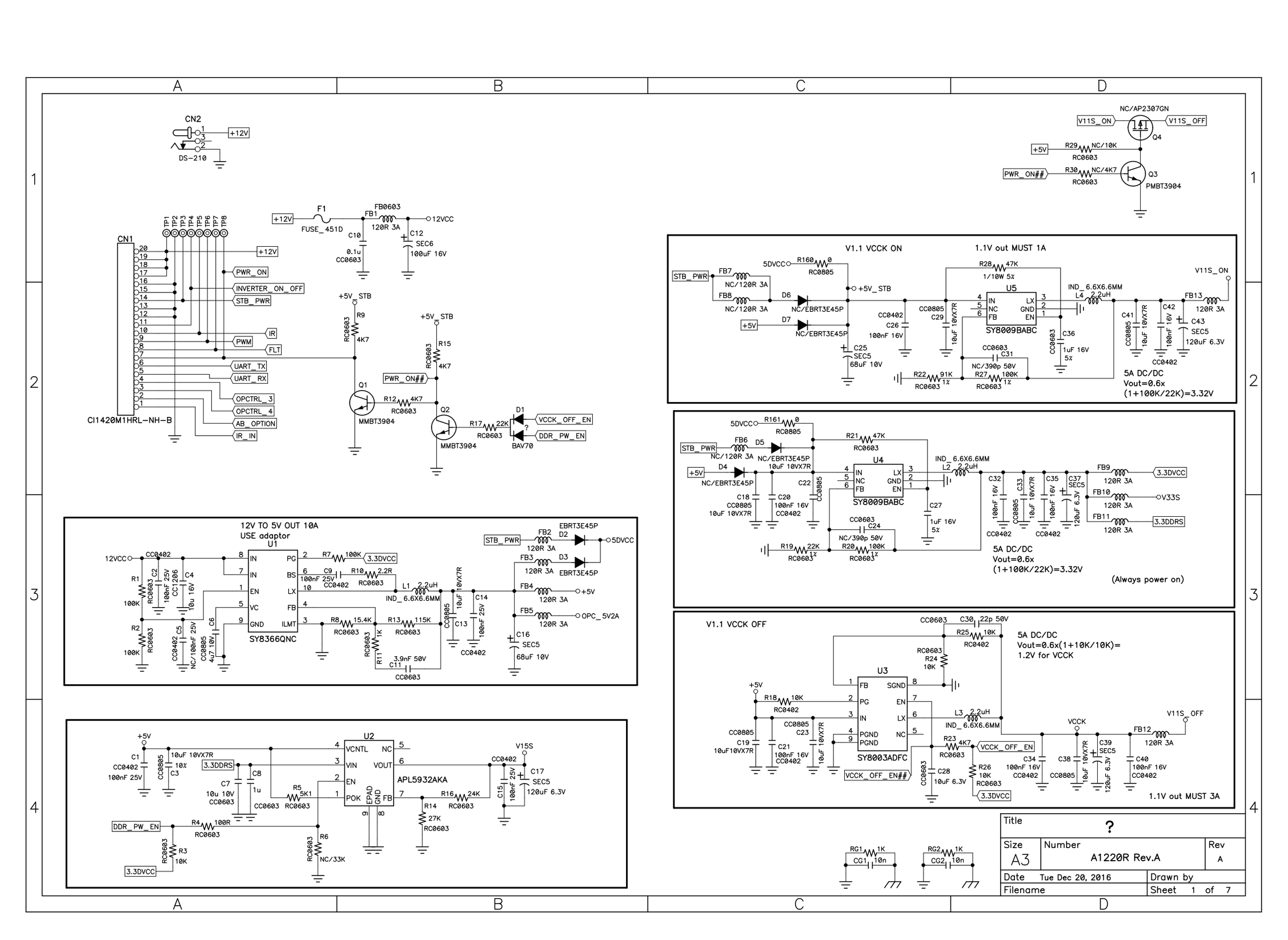
CN2
+12V
DS-210
CN1
CI1420M1HRL-NH-B
TP1 TP2 TP3 TP4 TP5 TP6 TP7 TP8
+12V
PWR_ON
INVERTER_ON_OFF
STB_PWR
IR
PWM
FLT
UART_TX
UART_RX
OPCTRL_3
OPCTRL_4
AB_OPTION
IR_IN
F1
FUSE_451D
FB0603
FB1
120R 3A
12VCC
C10
0.1u
CC0603
C12
SEC6
100uF 16V
+5V_STB
R9
RC0603
4K7
Q1
MMBT3904
R12
4K7
RC0603
PWR_ON##
R15
4K7
Q2
MMBT3904
R17
22K
RC0603
D1
BAV70
VCCK_OFF_EN
DDR_PW_EN
12V TO 5V OUT 10A
USE adaptor
U1
SY8366QNC
12VCC
CC0402
R1
100K
R2
100K
C2
100nF 25V
C4
10u 16V
C5
NC/100nF 25V
C6
4u7 10V
R7
100K
3.3DVCC
C9
100nF 25V
R10
2.2R
RC0603
L1
2.2uH
IND_6.6X6.6MM
R8
15.4K
R13
115K
C11
3.9nF 50V
CC0603
C13
10uF 10VX7R
C14
100nF 25V
C16
SEC5
68uF 10V
STB_PWR
FB2
120R 3A
D2
EBRT3E45P
FB3
120R 3A
D3
EBRT3E45P
5DVCC
FB4
120R 3A
+5V
FB5
120R 3A
OPC_5V2A
U2
APL5932AKA
VCNTL
VIN
EN
POK
VOUT
FB
NC
EPAD
GND
+5V
C1
100nF 25V
10uF 10VX7R
C3
10%
3.3DDRS
C7
10u 10V
CC0603
C8
1u
CC0603
R5
5K1
RC0603
R4
100R
RC0603
DDR_PW_EN
R3
10K
3.3DVCC
R6
NC/33K
R16
24K
R14
27K
C15
100nF 25V
V15S
C17
SEC5
120uF 6.3V
V11S_ON
V11S_OFF
NC/AP2307GN
Q4
R29
NC/10K
RC0603
+5V
R30
NC/4K7
PWR_ON##
Q3
PMBT3904
V1.1 VCCK ON
1.1V out MUST 1A
STB_PWR
FB7
NC/120R 3A
FB8
NC/120R 3A
5DVCC
R160
RC0805
D6
NC/EBRT3E45P
D7
NC/EBRT3E45P
+5V_STB
+5V
CC0402
C26
100nF 16V
C25
SEC5
68uF 10V
U5
SY8009BABC
IN
NC
FB
LX
GND
EN
R28
47K
1/10W 5%
CC0805
C29
10uF 10VX7R
CC0603
C31
NC/390p 50V
R22
91K
RC0603
R27
100K
RC0603
C36
1uF 16V
5%
IND_6.6X6.6MM
L4
2.2uH
V11S_ON
FB13
120R 3A
C41
CC0805
10uF 10VX7R
C42
100nF 16V
C43
SEC5
120uF 6.3V
CC0402
5A DC/DC
Vout=0.6x
(1+100K/22K)=3.32V
5DVCC
R161
RC0805
STB_PWR
FB6
NC/120R 3A
D5
NC/EBRT3E45P
D4
NC/EBRT3E45P
+5V
10uF 10VX7R
C22
CC0805
C18
CC0805
10uF 10VX7R
C20
100nF 16V
CC0402
U4
SY8009BABC
IN
NC
FB
LX
GND
EN
R21
47K
RC0603
C27
1uF 16V
5%
IND_6.6X6.6MM
L2
2.2uH
C24
CC0603
NC/390p 50V
R19
22K
RC0603
R20
100K
RC0603
C32
100nF 16V
C33
CC0805
10uF 10VX7R
C35
100nF 16V
C37
SEC5
120uF 6.3V
CC0402
CC0402
FB9
120R 3A
3.3DVCC
FB10
120R 3A
V33S
FB11
120R 3A
3.3DDRS
5A DC/DC
Vout=0.6x
(1+100K/22K)=3.32V
(Always power on)
V1.1 VCCK OFF
U3
SY8003ADFC
FB
PG
IN
PGND
PGND
SGND
EN
LX
NC
CC0603
C30
22p 50V
R25
10K
RC0402
RC0603
R24
10K
+5V
R18
10K
RC0402
CC0805
C19
10uF10VX7R
C21
100nF 16V
CC0402
CC0805
C23
10uF 10VX7R
L3
2.2uH
IND_6.6X6.6MM
R23
4K7
RC0603
VCCK_OFF_EN
VCCK_OFF_EN##
CC0603
C28
10uF 6.3V
R26
10K
RC0603
3.3DVCC
VCCK
C34
100nF 16V
CC0402
CC0805
C38
10uF 10VX7R
C39
SEC5
120uF 6.3V
V11S_OFF
FB12
120R 3A
C40
100nF 16V
CC0402
5A DC/DC
Vout=0.6x(1+10K/10K)=
1.2V for VCCK
1.1V out MUST 3A
RG1
1K
CG1
10n
RG2
1K
CG2
10n
Title
?
Size
A3
Number
A1220R Rev.A
Rev
A
Date
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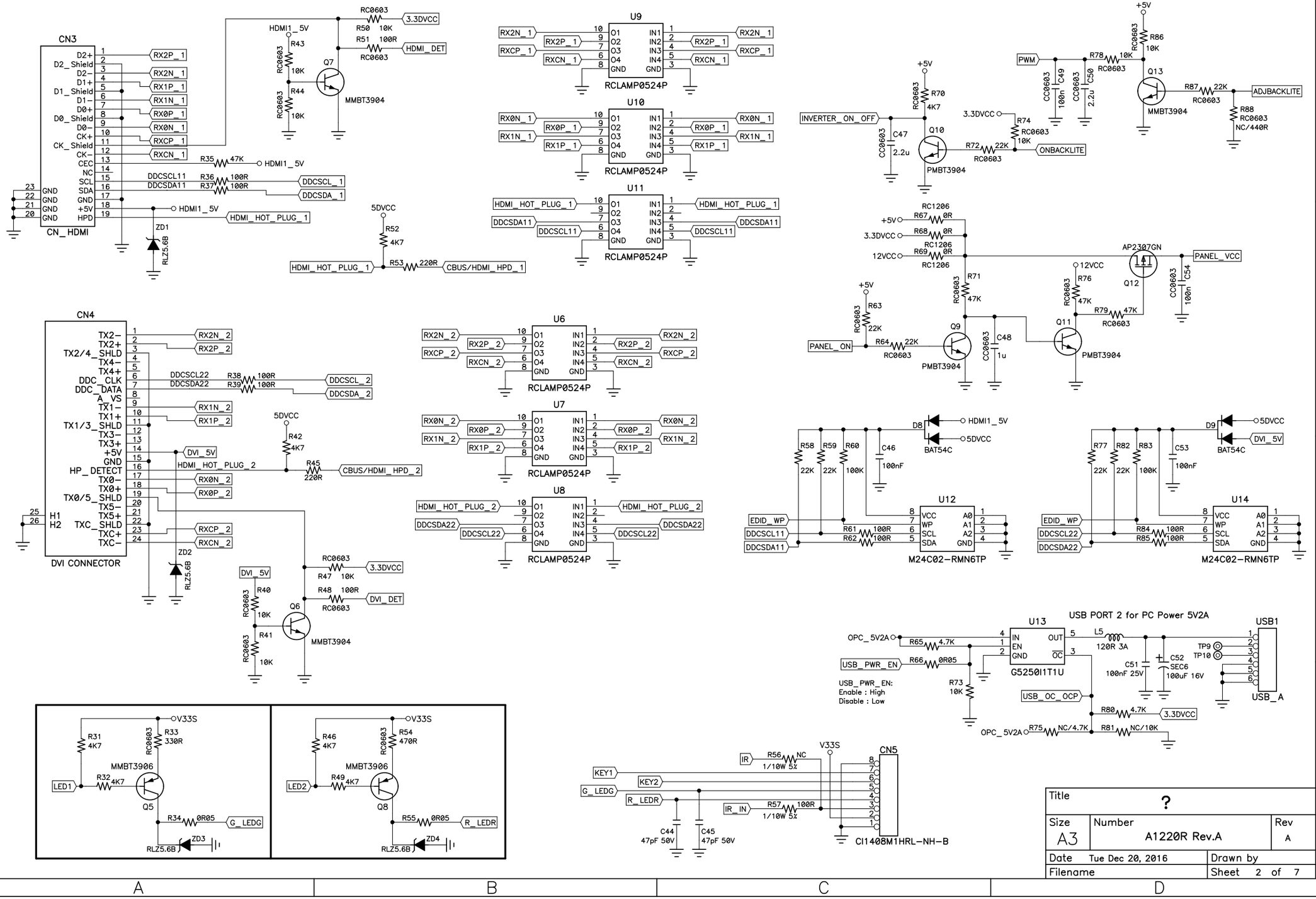
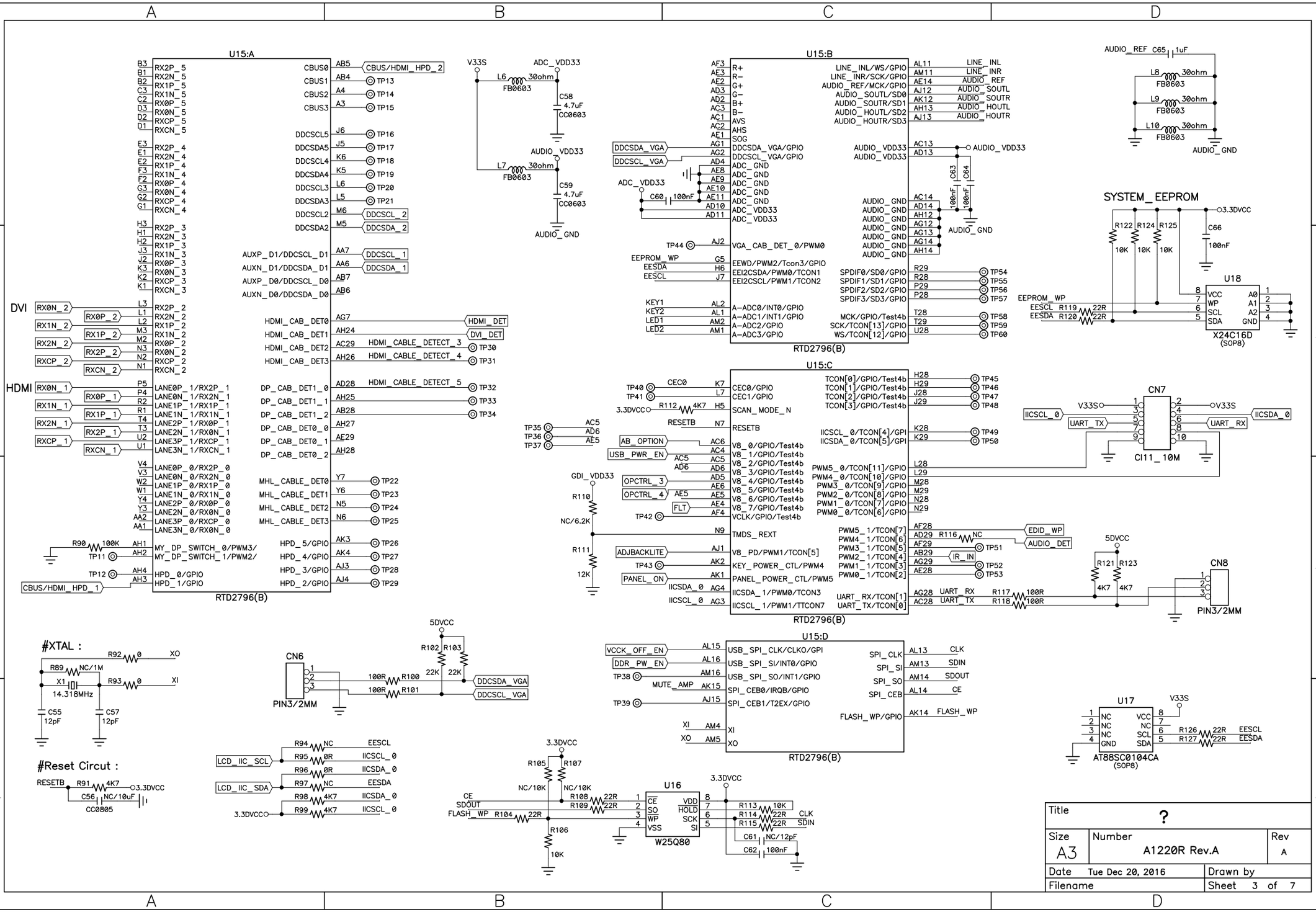
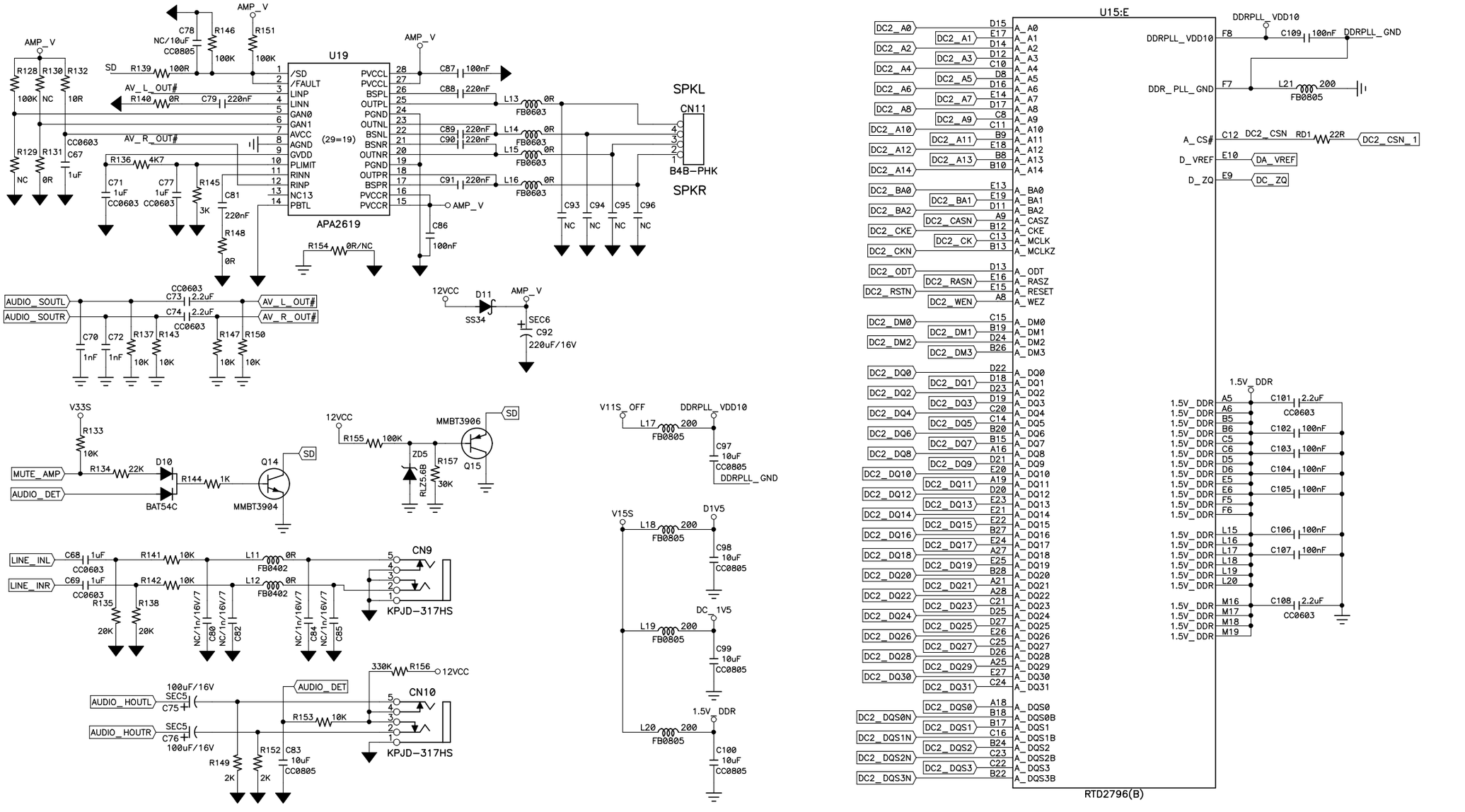
Drawn by
Filename
Sheet
1
of
7


CN3
CN_HDMI
HDMI1_5V
RC0603
R50 10K
R51 100R
3.3DVCC
HDMI_DET
Q7
MMBT3904
R43 10K
R44 10K
R35 47K
DDCSCL11
DDCSDA11
R36 100R
R37 100R
DDCSCL_1
DDCSDA_1
HDMI_HOT_PLUG_1
ZD1
RLZ5.6B
5DVCC
R52 4K7
R53 220R
CBUS/HDMI_HPD_1
U9
U10
U11
RCLAMP0524P
RX2N_1
RX2P_1
RXCN_1
RXCP_1
RX0N_1
RX0P_1
RX1N_1
RX1P_1
HDMI_HOT_PLUG_1
DDCSDA11
DDCSCL11
CN4
DVI CONNECTOR
DDCSCL22
DDCSDA22
R38 100R
R39 100R
DDCSCL_2
DDCSDA_2
DVI_5V
R42 4K7
R45 220R
CBUS/HDMI_HPD_2
HDMI_HOT_PLUG_2
ZD2
RLZ5.6B
R40 10K
R41 10K
Q6
MMBT3904
R47 10K
R48 100R
DVI_DET
U6
U7
U8
RX2N_2
RX2P_2
RXCN_2
RXCP_2
RX0N_2
RX0P_2
RX1N_2
RX1P_2
HDMI_HOT_PLUG_2
DDCSDA22
DDCSCL22
+5V
3.3DVCC
12VCC
R67 0R
R68 0R
R69 0R
RC1206
AP2307GN
PANEL_VCC
R71 47K
R76 47K
R79 47K
Q12
Q11
Q9
PMBT3904
R63 22K
R64 22K
PANEL_ON
C48 1u
C54 100n
INVERTER_ON_OFF
R70 4K7
C47 2.2u
Q10
R72 22K
R74 10K
ONBACKLITE
PWM
R78 10K
R86 10K
C49 100n
C50 2.2u
Q13
R87 22K
R88 NC/440R
ADJBACKLITE
D8
BAT54C
HDMI1_5V
5DVCC
R58 22K
R59 22K
R60 100K
C46 100nF
U12
M24C02-RMN6TP
EDID_WP
DDCSCL11
DDCSDA11
R61 100R
R62 100R
D9
DVI_5V
R77 22K
R82 22K
R83 100K
C53 100nF
U14
R84 100R
R85 100R
USB PORT 2 for PC Power 5V2A
U13
G5250I1T1U
OPC_5V2A
R65 4.7K
USB_PWR_EN
R66 0R05
R73 10K
USB_PWR_EN:
Enable : High
Disable : Low
L5 120R 3A
C51 100nF 25V
C52 SEC6 100uF 16V
TP9
TP10
USB1
USB_A
USB_OC_OCP
R80 4.7K
R81 NC/10K
R75 NC/4.7K
V33S
R31 4K7
R33 330R
MMBT3906
LED1
R32 4K7
Q5
R34 0R05
G_LEDG
ZD3
RLZ5.6B
R46 4K7
R54 470R
LED2
R49 4K7
Q8
R55 0R05
R_LEDR
ZD4
KEY1
KEY2
G_LEDG
R_LEDR
IR
IR_IN
R56 NC
R57 100R
1/10W 5%
C44 47pF 50V
C45 47pF 50V
CN5
CI1408M1HRL-NH-B
Title ?
Size A3
Number A1220R Rev.A
Rev A
Date Tue Dec 20, 2016
Drawn by
Filename
Sheet 2 of 7



Title	?		
Size A3	Number A1220R Rev.A		Rev A
Date Tue Dec 20, 2016		Drawn by	
Filename		Sheet 3 of 7	



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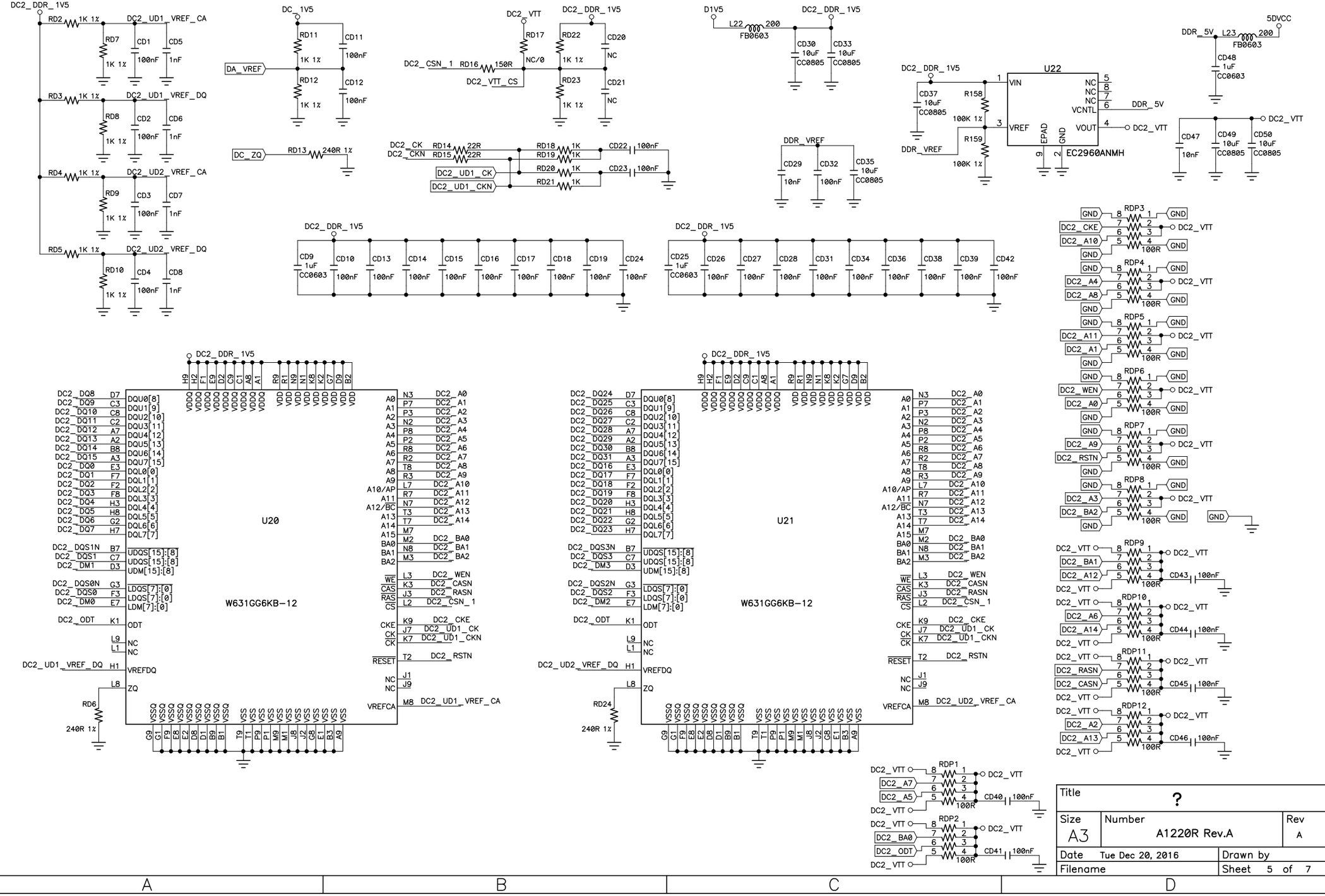
Date Tue Dec 20, 2016	Drawn by	
Filename	Sheet 4 of 7	



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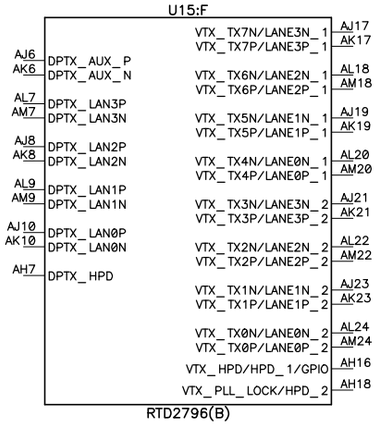
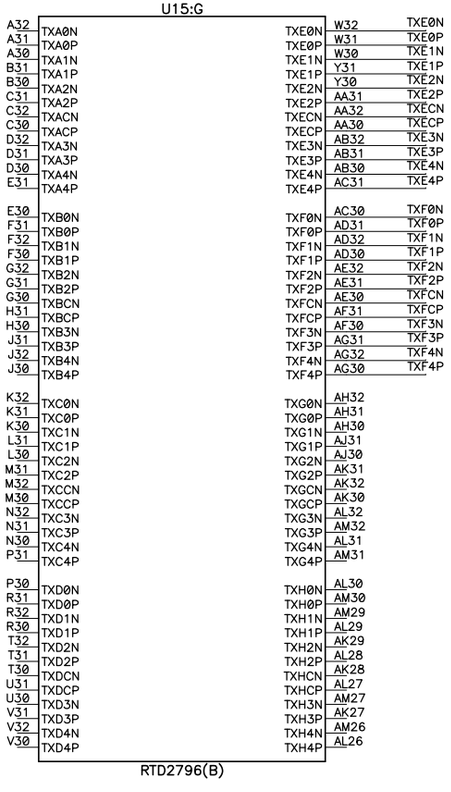
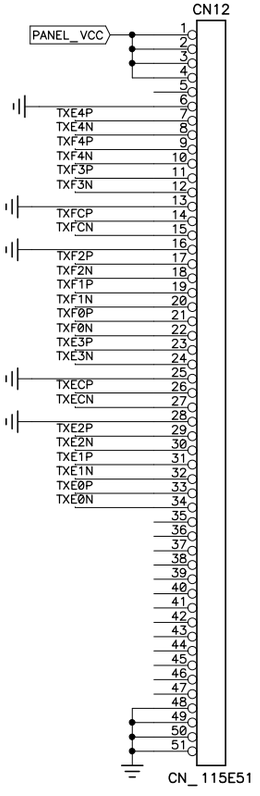
Size A3	Number A1220R Rev.A	Rev A
Date Tue Dec 20, 2016	Drawn by	
Filename	Sheet 5 of 7	







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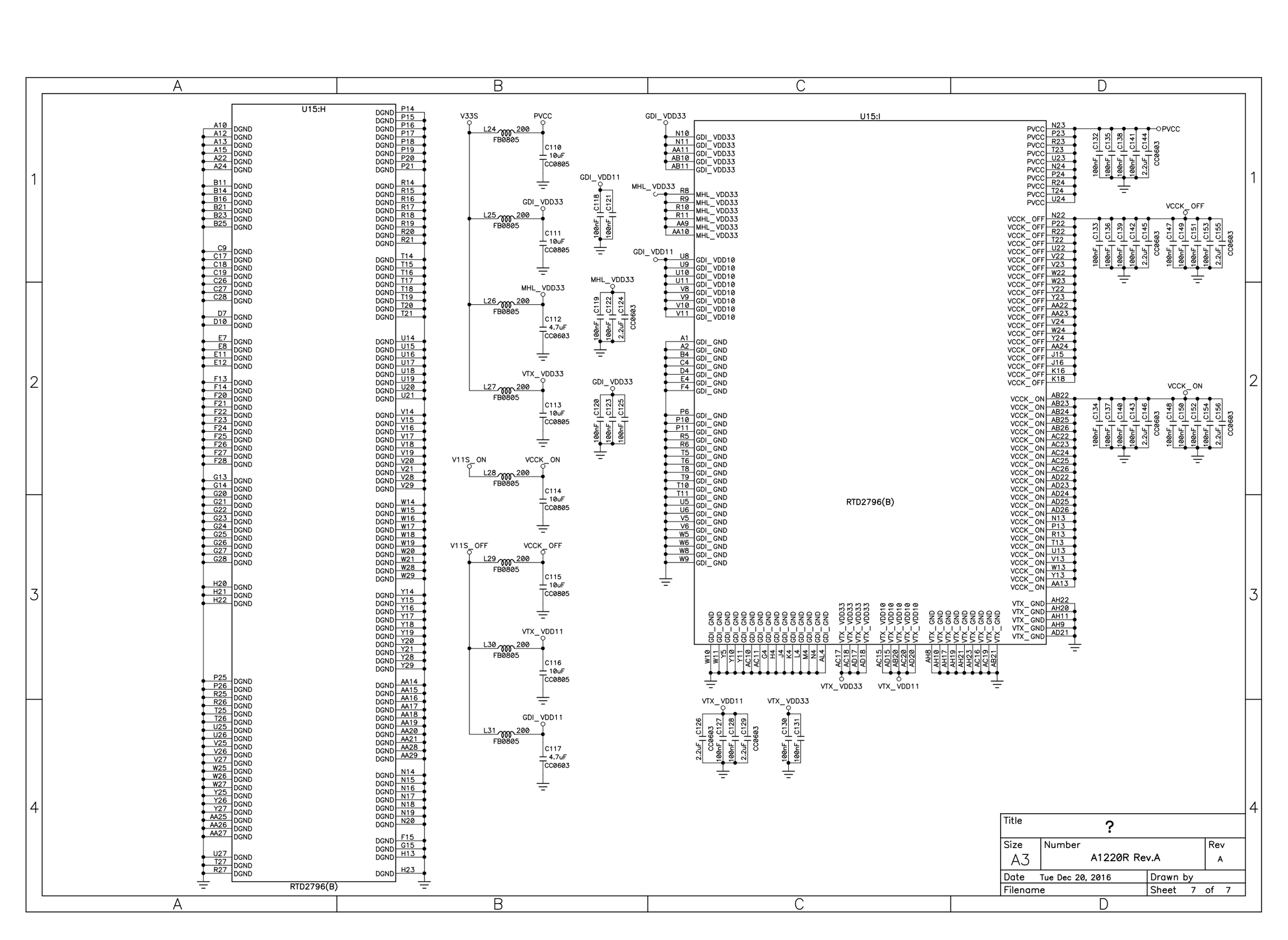
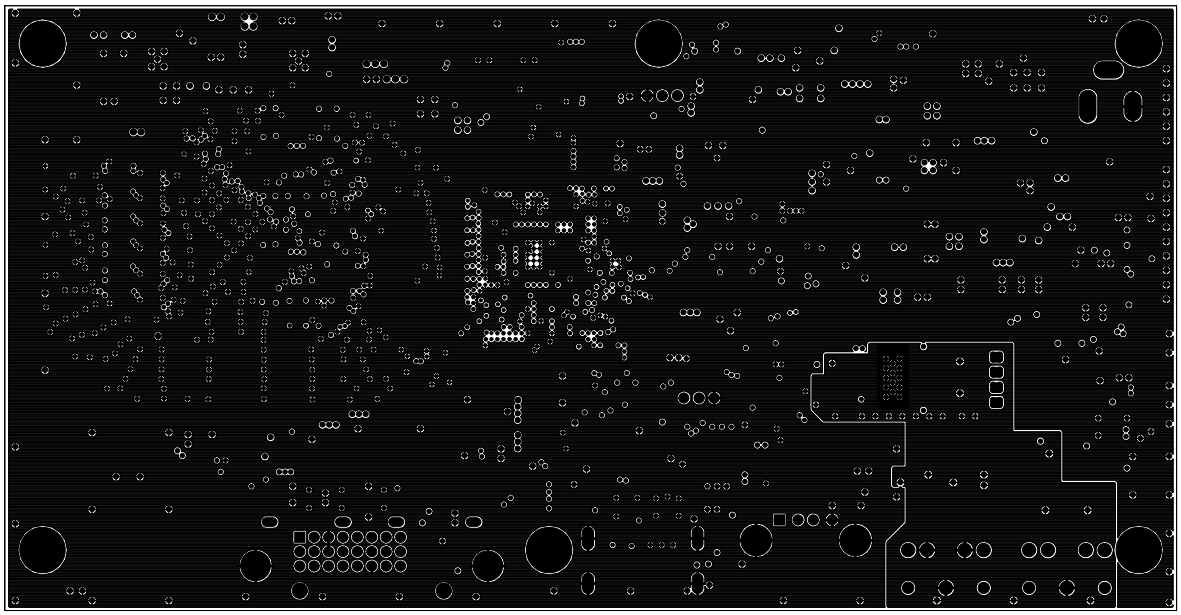
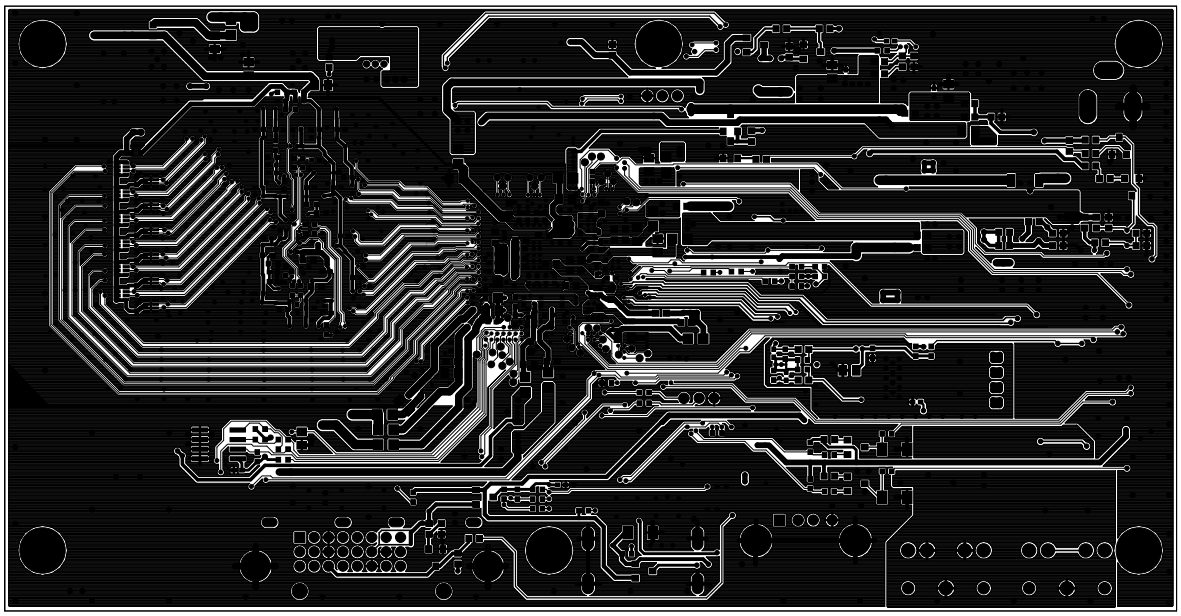
Size A3	Number A1220R Rev.A	Rev A
Date Tue Dec 20, 2016	Drawn by	
Filename	Sheet 6 of 7	

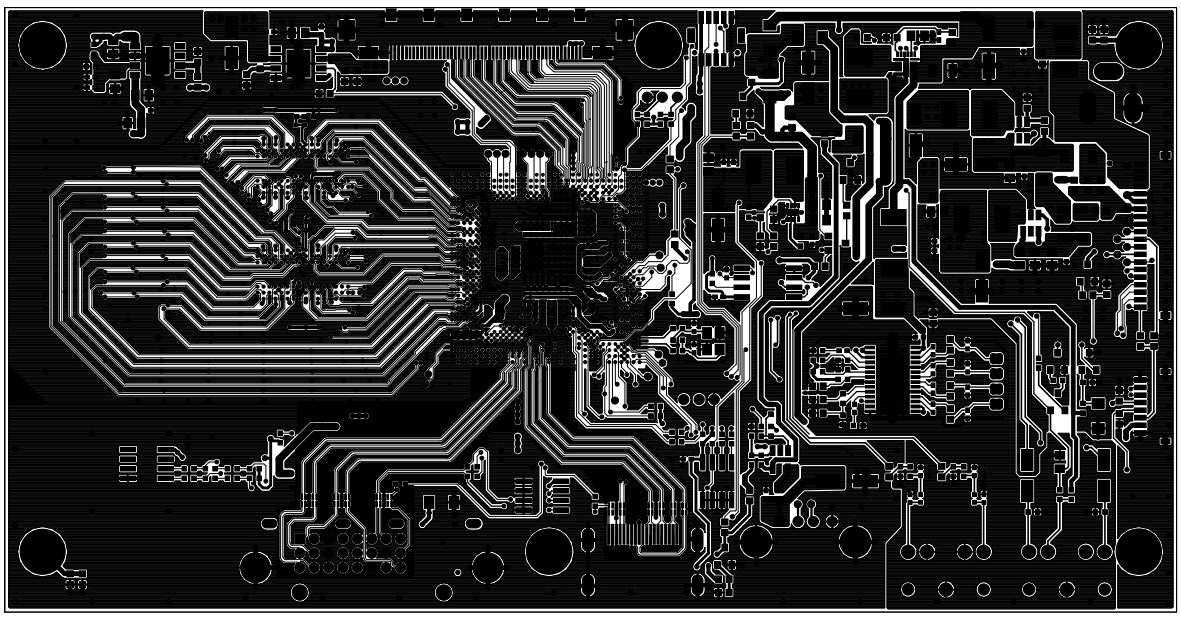

U15:H
RTD2796(B)
U15:I
RTD2796(B)
V33S
PVCC
V11S_ON
VCCK_ON
V11S_OFF
VCCK_OFF
GDI_VDD33
MHL_VDD33
GDI_VDD11
VTX_VDD33
VTX_VDD11
VCCK_OFF
VCCK_ON
Title
?
Size
A3
Number
A1220R Rev.A
Rev
A
Date
Tue Dec 20, 2016
Drawn by
Filename
Sheet 7 of 7



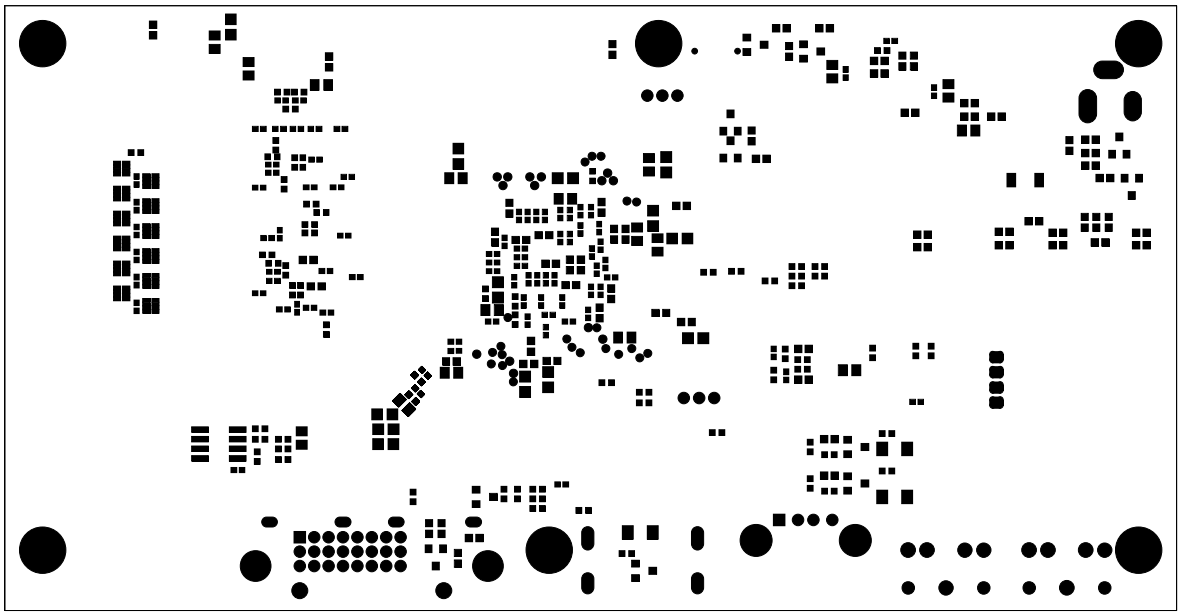
LAYER : GROUND/INT1
Tue Dec 20, 2016



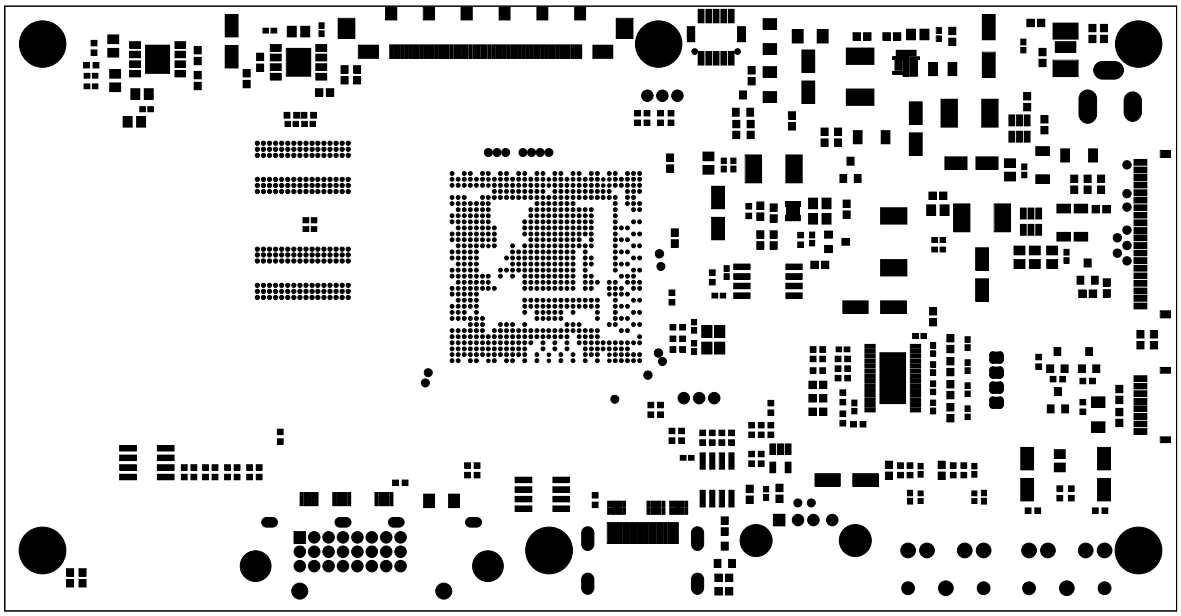
LAYER : SOLDER SIDE
Tue Dec 20, 2016



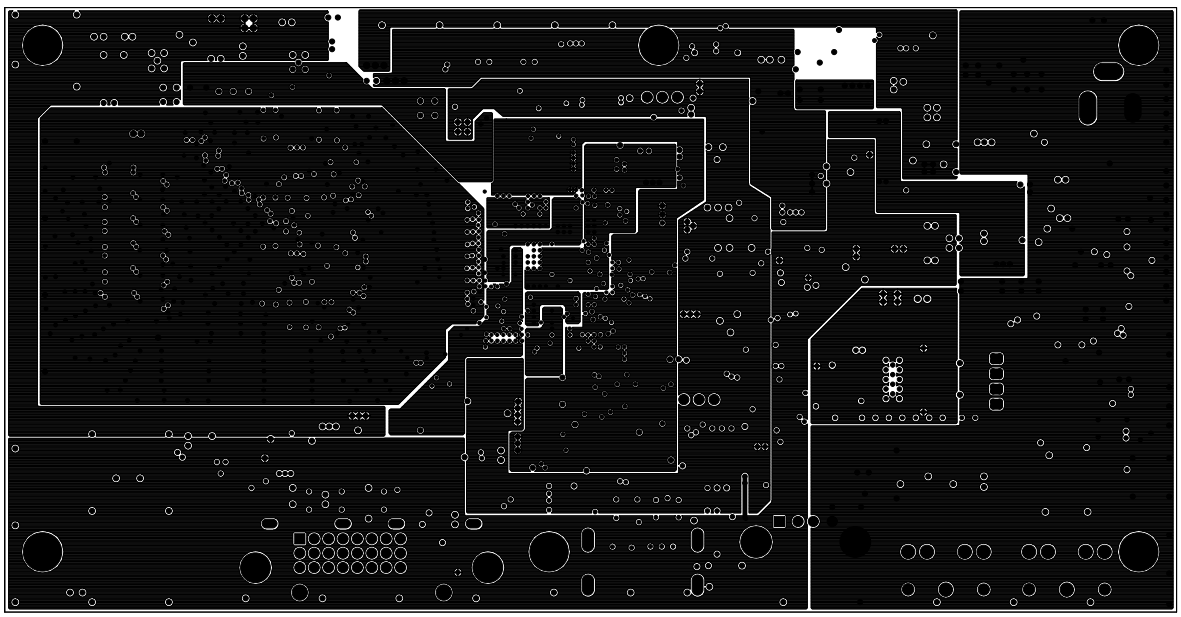
LAYER : COMPONENT SIDE
Tue Dec 20, 2016



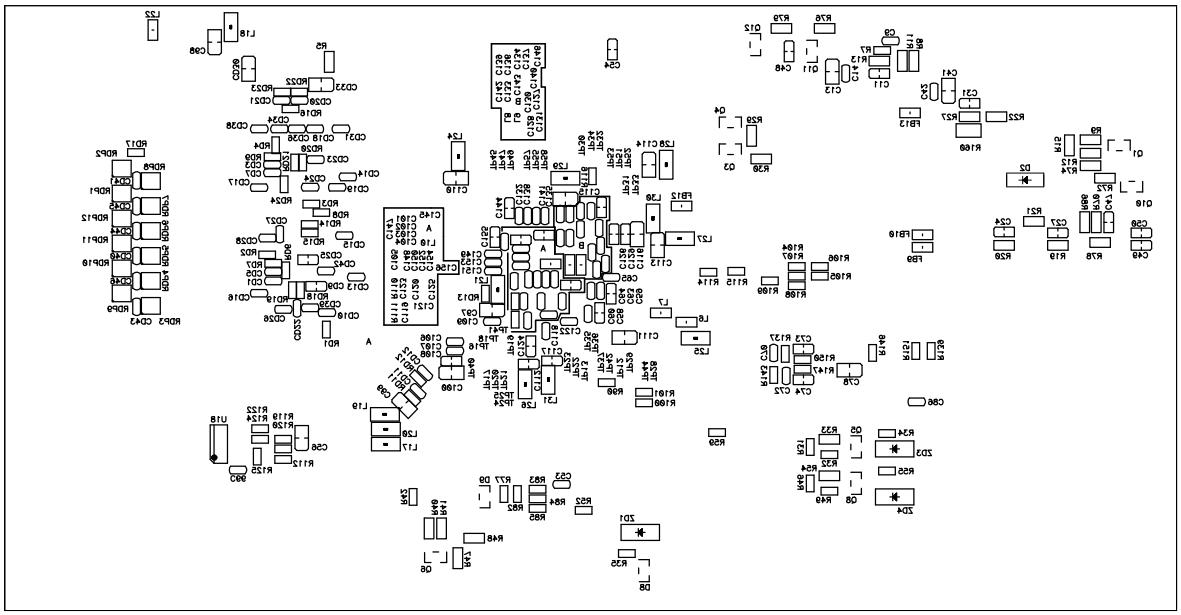
LAYER : SOLDER MASK(BOTTOM)
Tue Dec 20, 2016



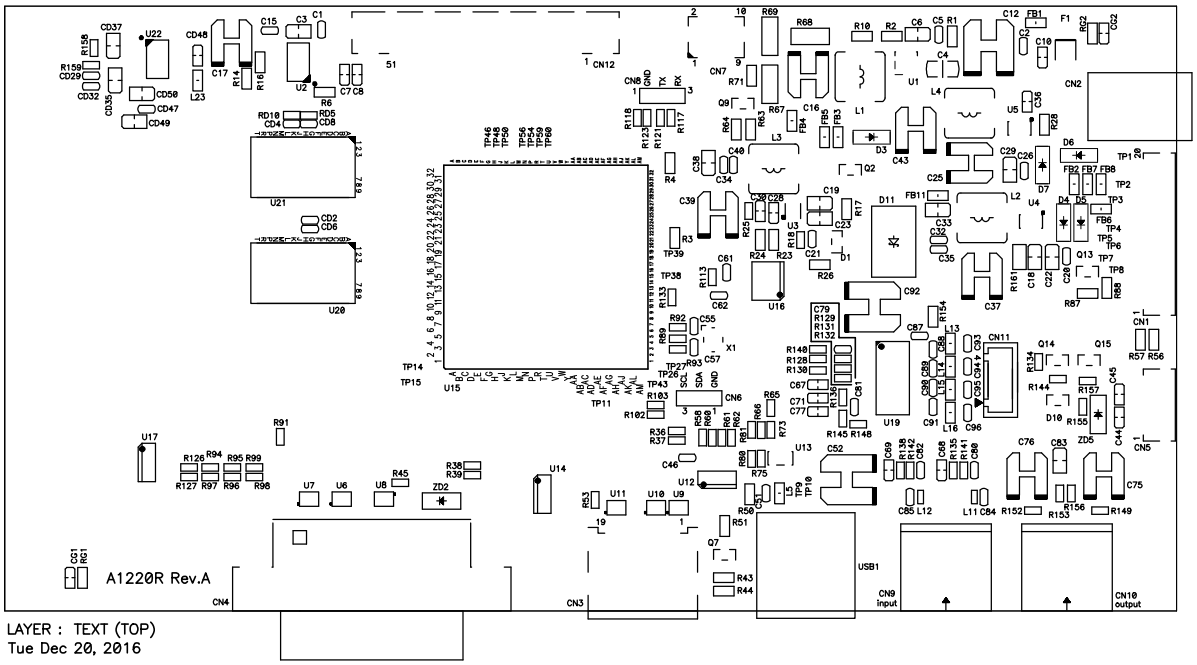
LAYER : SOLDER MASK(TOP)
Tue Dec 20, 2016



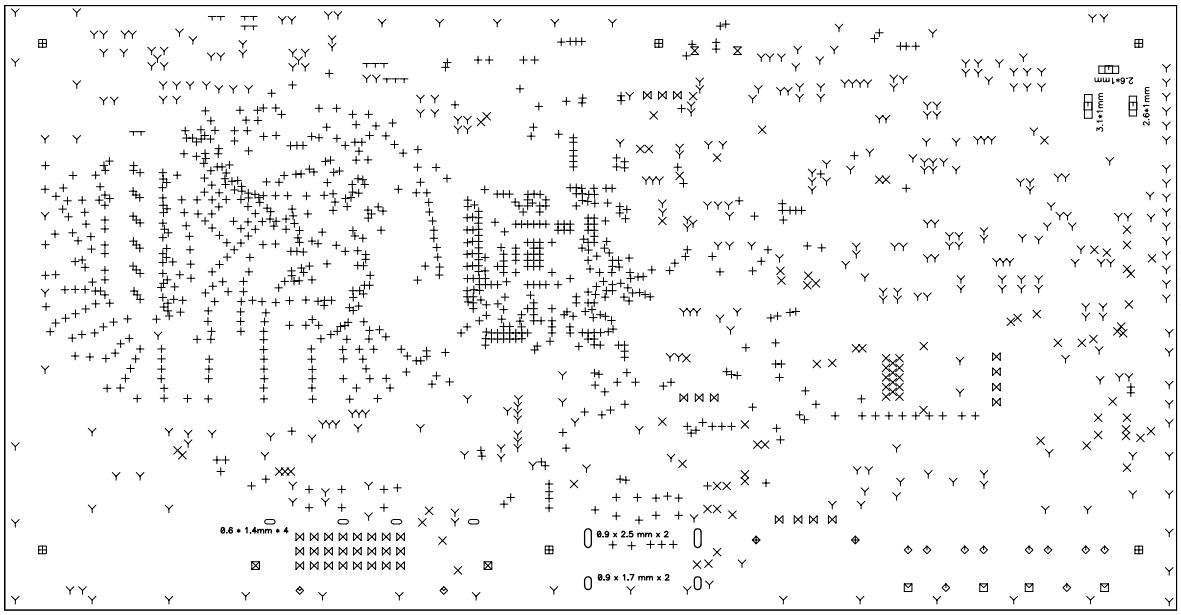
LAYER : POWER/INT2
Tue Dec 20, 2016

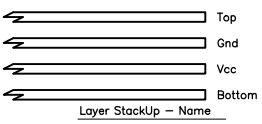


LAYER : (BOTTOM) TEXT
Tue Dec 20, 2016



LAYER : TEXT (TOP)
Tue Dec 20, 2016

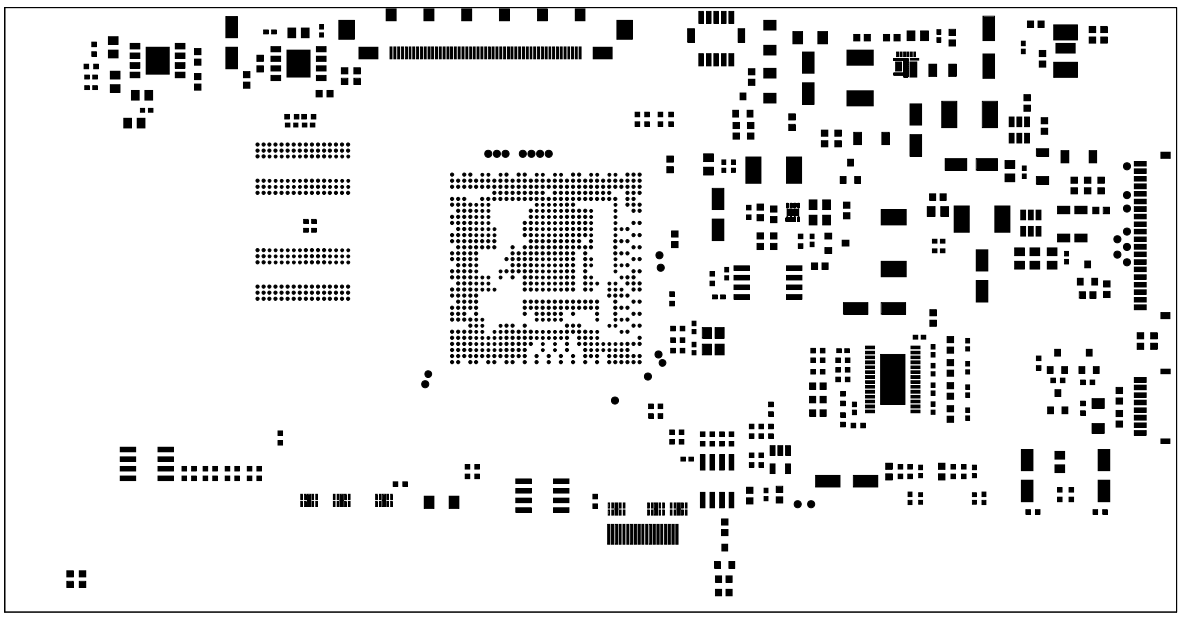




Drill Table			
Hole Dia (mm)	Symbol	Quantity	Plated
0.300	+	843	Yes
0.350	X	92	Yes
0.450	Y	340	Yes
0.550	⊤	14	Yes
0.600	⧖	2	No
0.850	⋈	38	Yes
1.000	□	3	Yes
1.200	◇	10	Yes
1.500	⊠	4	Yes
2.000	◈	2	Yes
2.100	⊠	2	Yes
2.500	◆	2	Yes
3.800	⊞	6	Yes

LAYER : DRILL MAP
Tue Dec 20, 2016

LAYER : SOLDER PASTE(BOTTOM)
Tue Dec 20, 2016



LAYER : SOLDER PASTE(TOP)
Tue Dec 20, 2016