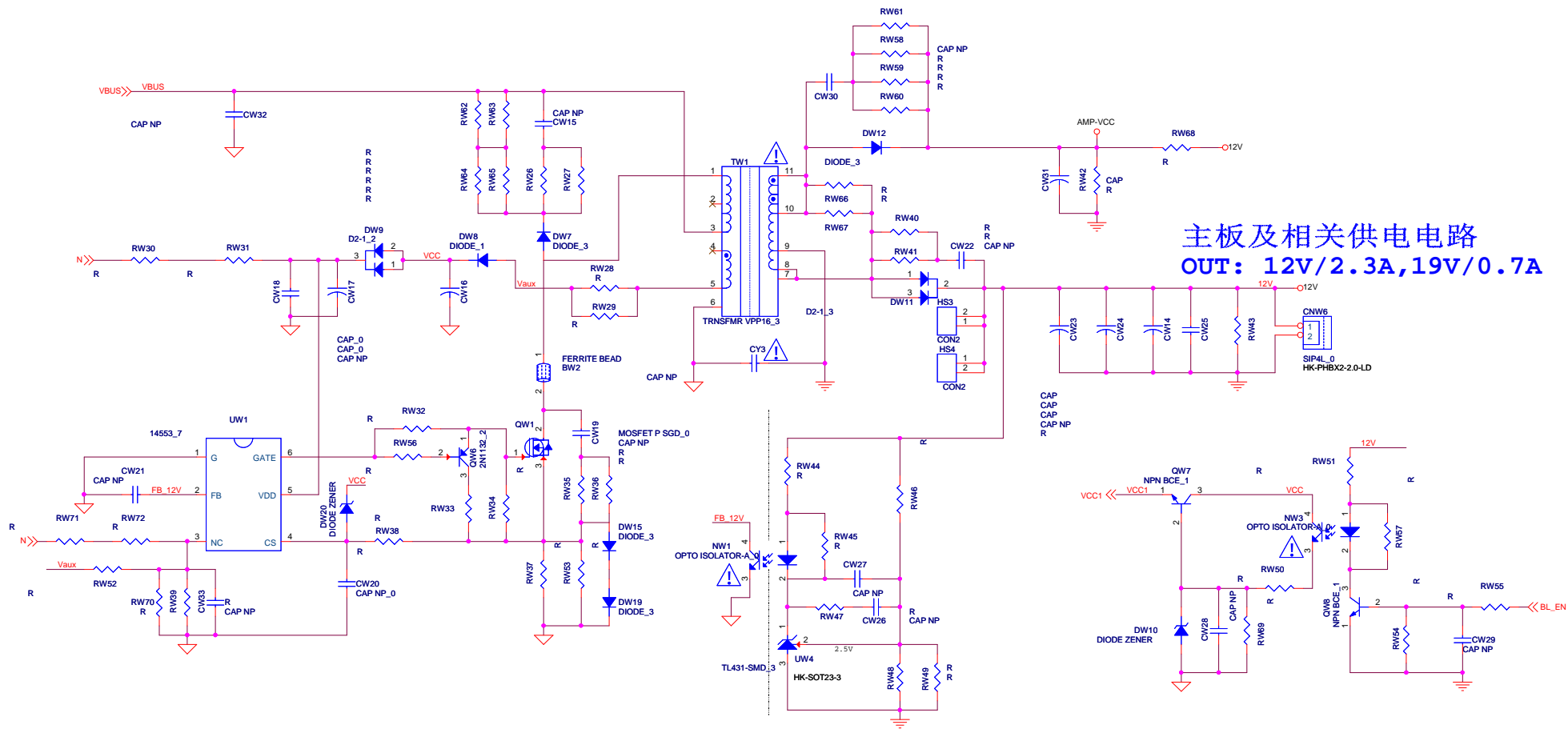
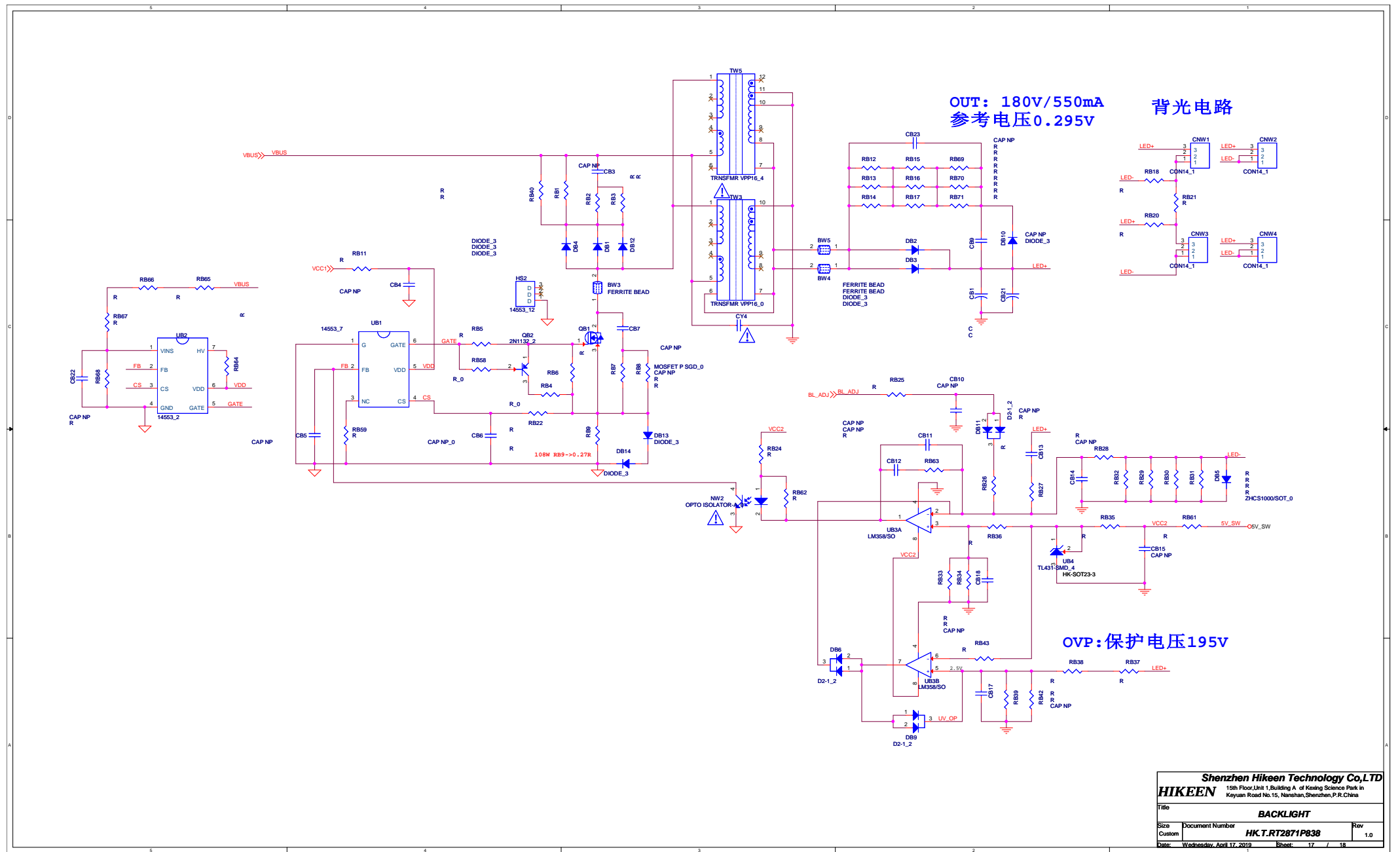


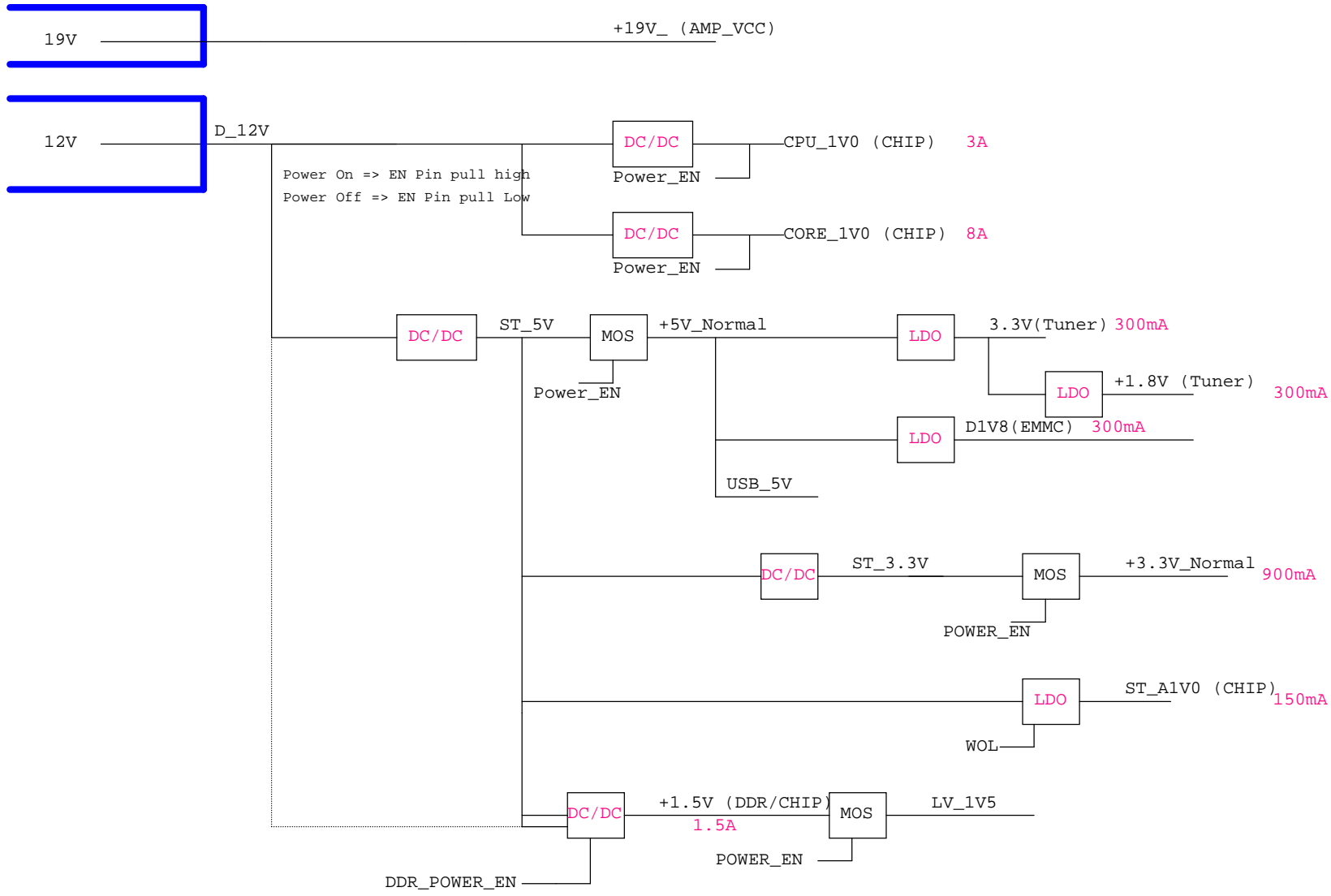
Shenzhen Hikeen Technology Co.,LTD		
HIKEEN		
15th Floor, Unit 1, Building A of Kejing Science Park in Keyuan Road No.15, Nanshan, Shenzhen, P.R. China		
Title: PFC-FAN7930C		
Size: Custom	Document Number: HK.T.RT2871P838	Rev: 1.0
Date: Wednesday, April 17, 2019	Sheet: 15 / 18	



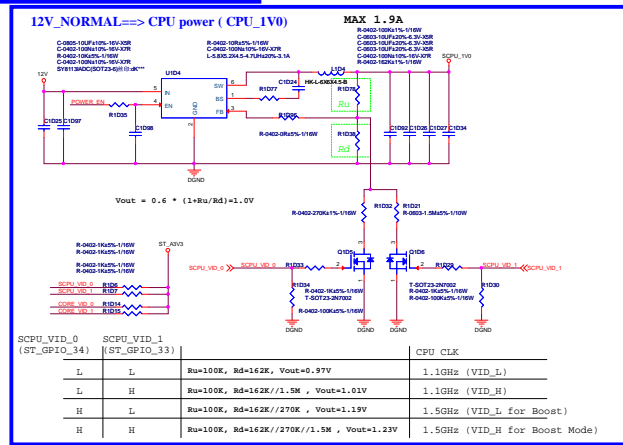
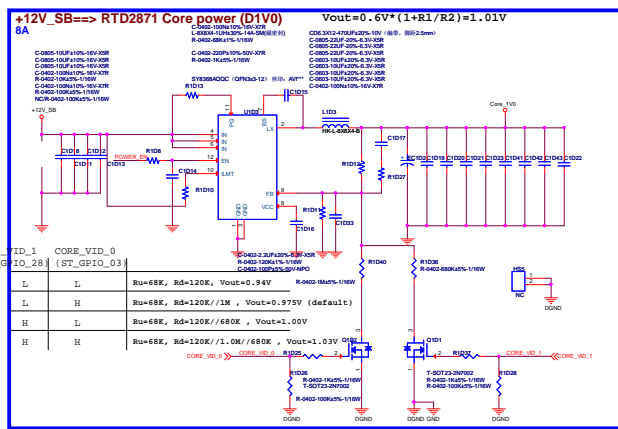
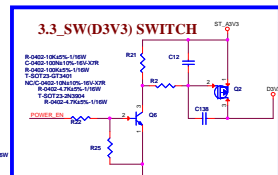
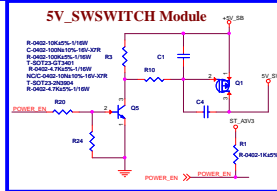
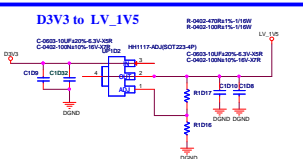
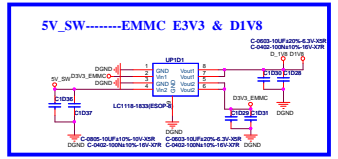
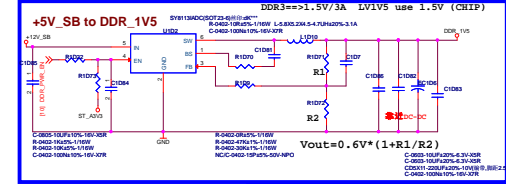
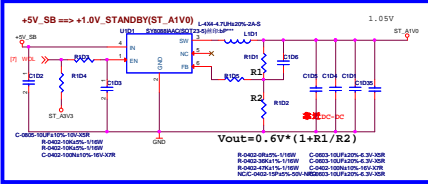
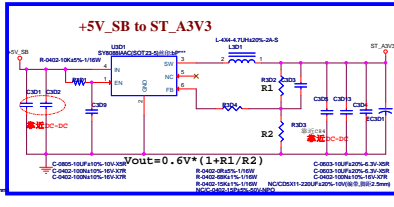
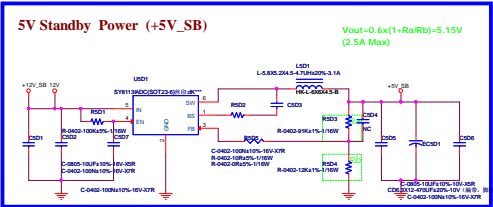
主板及相关供电电路
 OUT: 12V/2.3A, 19V/0.7A

Shenzhen Hikeen Technology Co.,LTD		
HIKEEN		
15th Floor, Unit 1, Building A of Kexing Science Park in Keyuan Road No.15, Nanshan, Shenzhen, P.R.China		
Title		
MAIN-POWER		
Size	Document Number	Rev
Custom	HK.T.RT2871P838	1.0
Date:	Wednesday, April 17, 2019	Sheet: 16 / 18

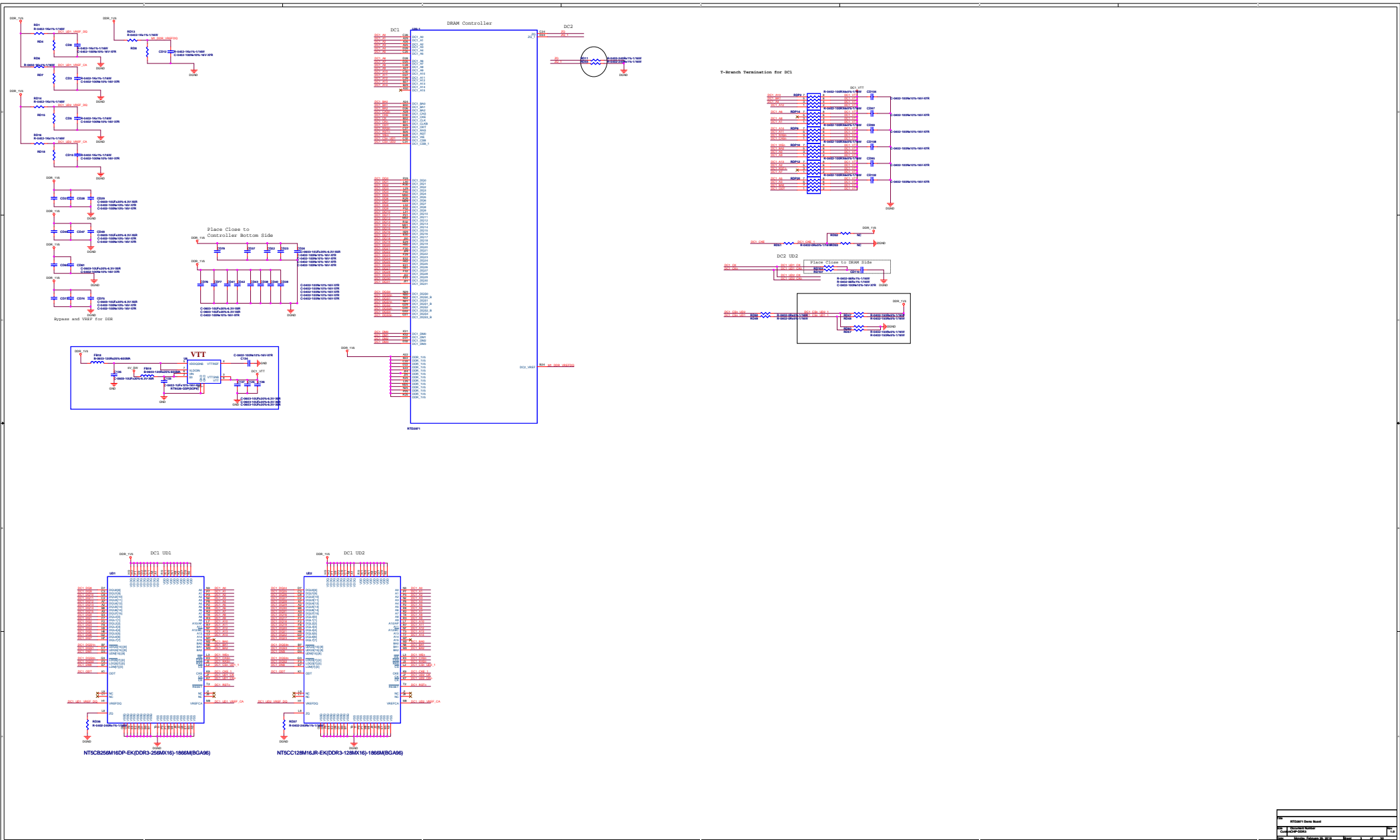


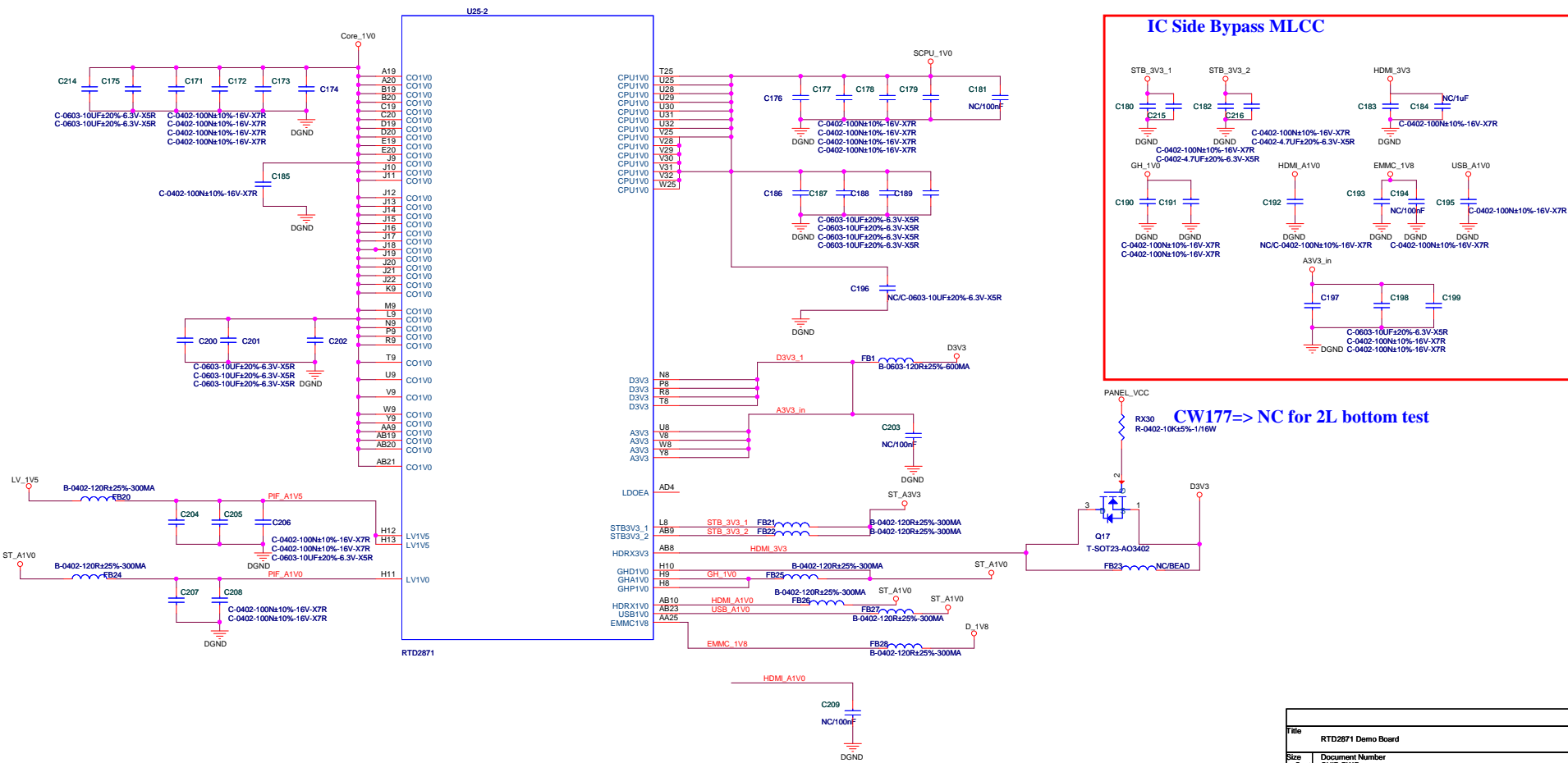


Title		
RTD2871 Demo Board		
Size	Document Number	Rev
B	Power Tree	1.0
Date:	Monday, April 01, 2019	Sheet 1 of 30

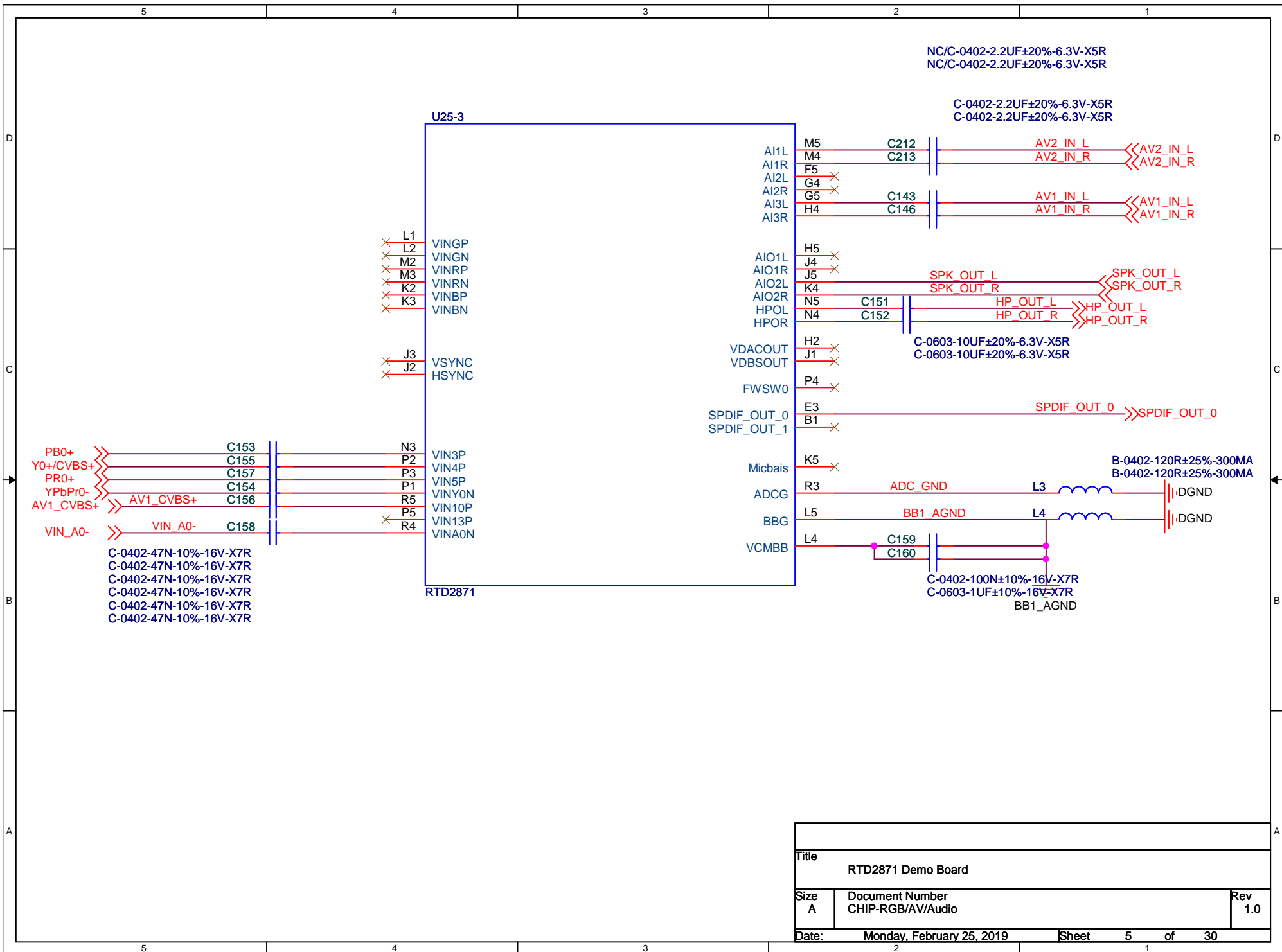


Rev	Document Number	Page	of
1	RTD2871 Data Sheet	10	10
Date: Monday, February 28, 2012 10:22 AM			

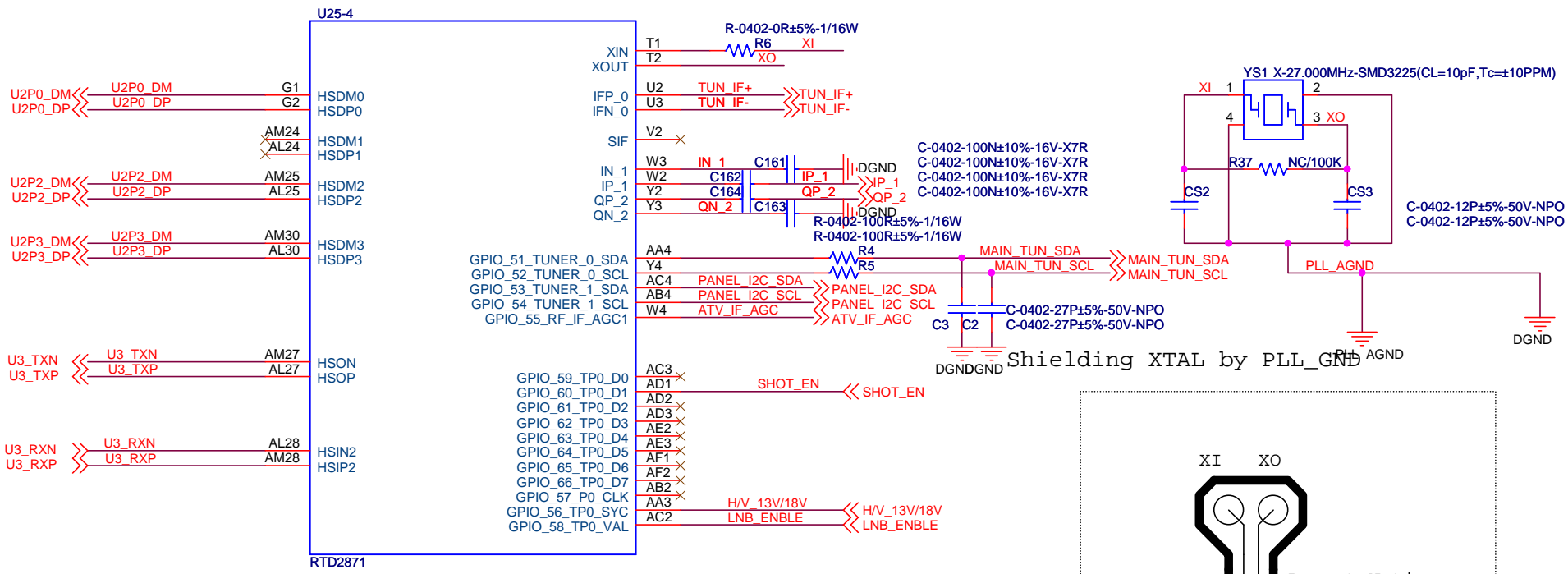




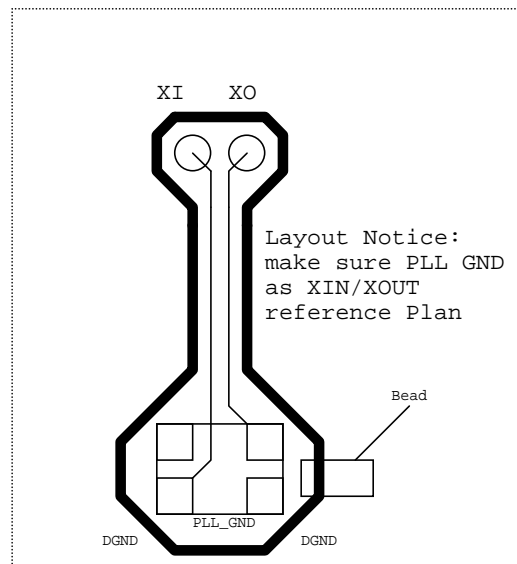
File		
RTD2871 Demo Board		
Size	Document Number	Rev
Customer	CHIP-PWR	1.0
Date:	Monday, February 25, 2016	Sheet 4 of 30



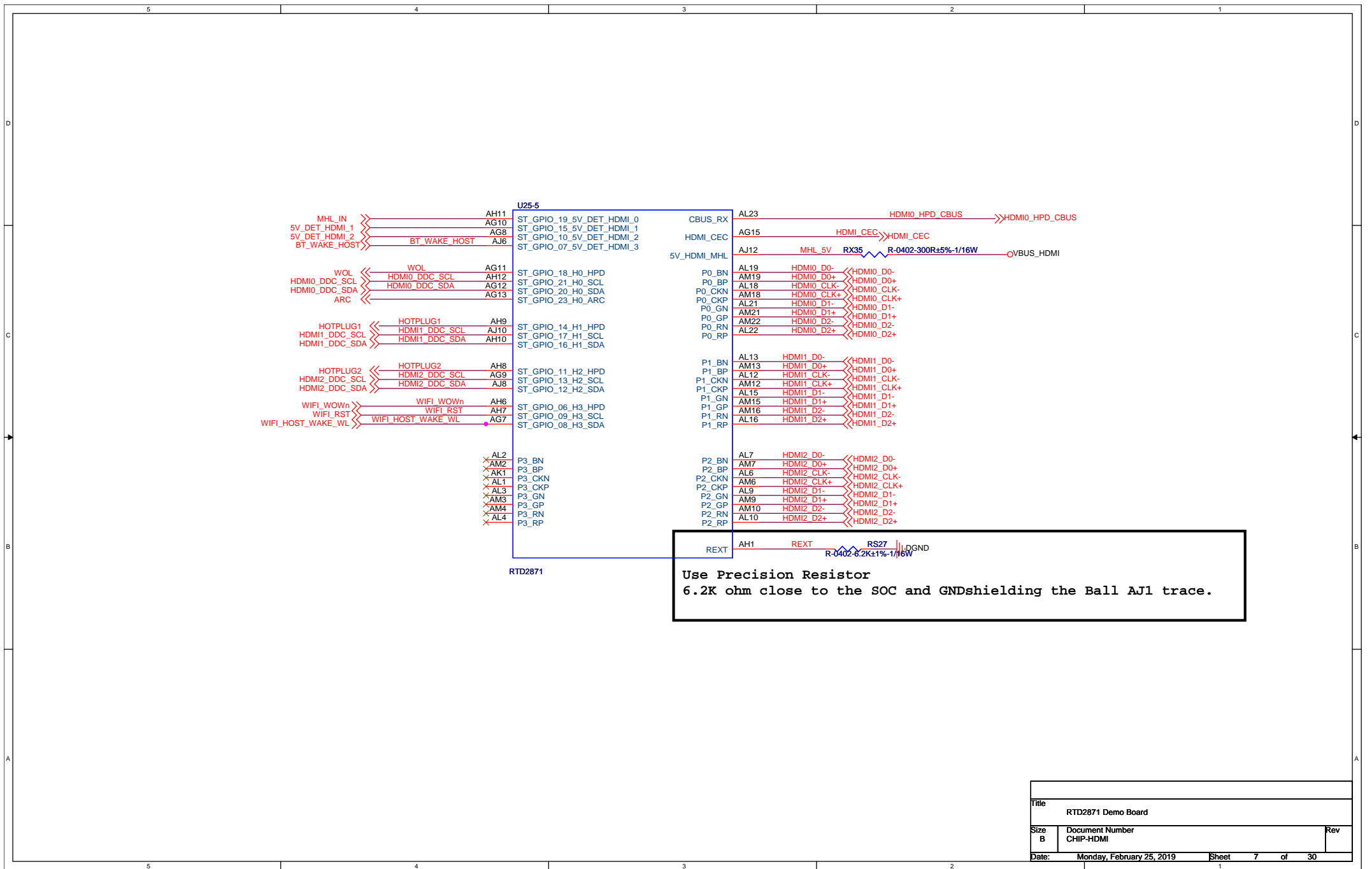
Title		
RTD2871 Demo Board		
Size	Document Number	Rev
A	CHIP-RGB/AV/Audio	1.0
Date:	Monday, February 25, 2019	Sheet 5 of 30



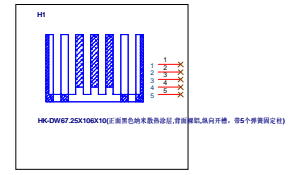
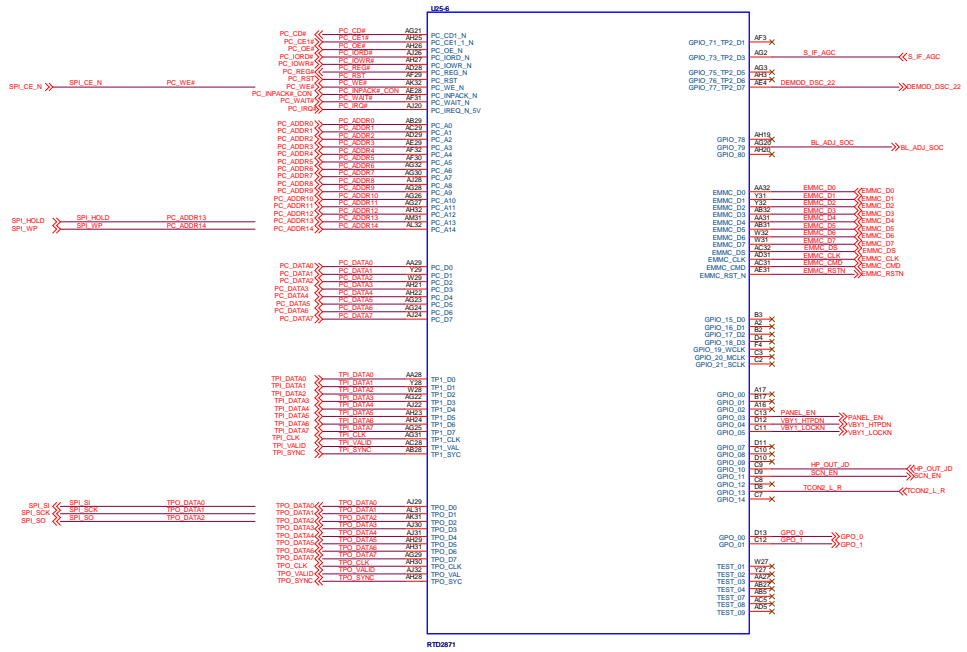
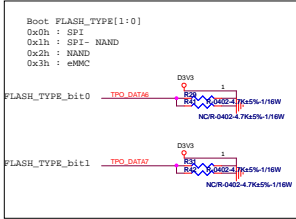
Shielding XTAL by PLL_GND

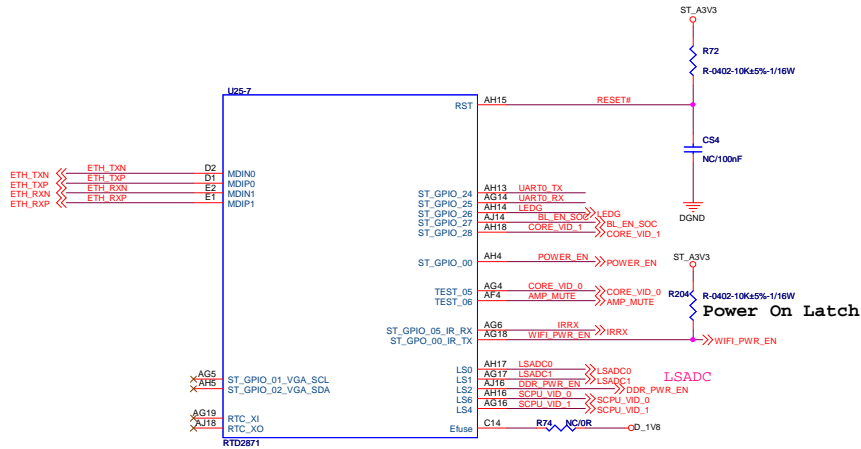
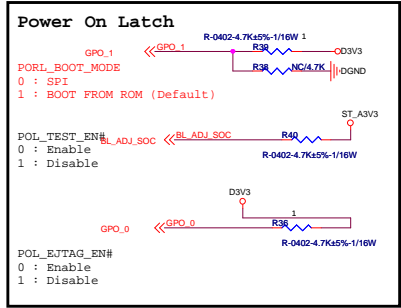
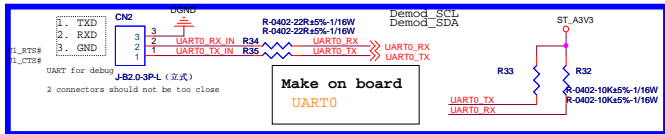


Title		
RTD2871 Demo Board		
Size	Document Number	Rev
A4	CHIP-USB/IFD	
Date:	Wednesday, February 27, 2019	Sheet 6 of 30

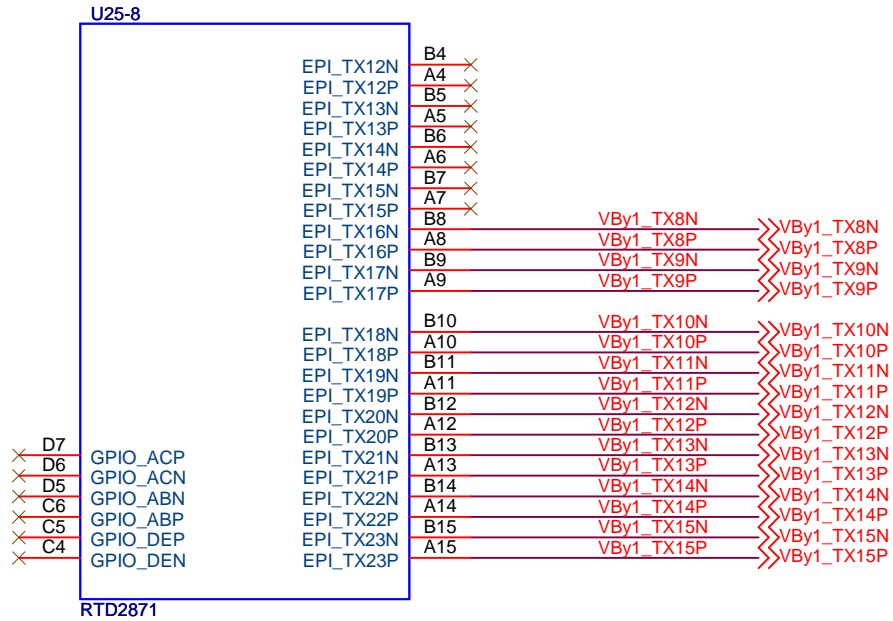


Title		RTD2871 Demo Board	
Size	Document Number	Rev	
B	CHIP-HDMI		
Date:	Monday, February 25, 2019	Sheet	7 of 30

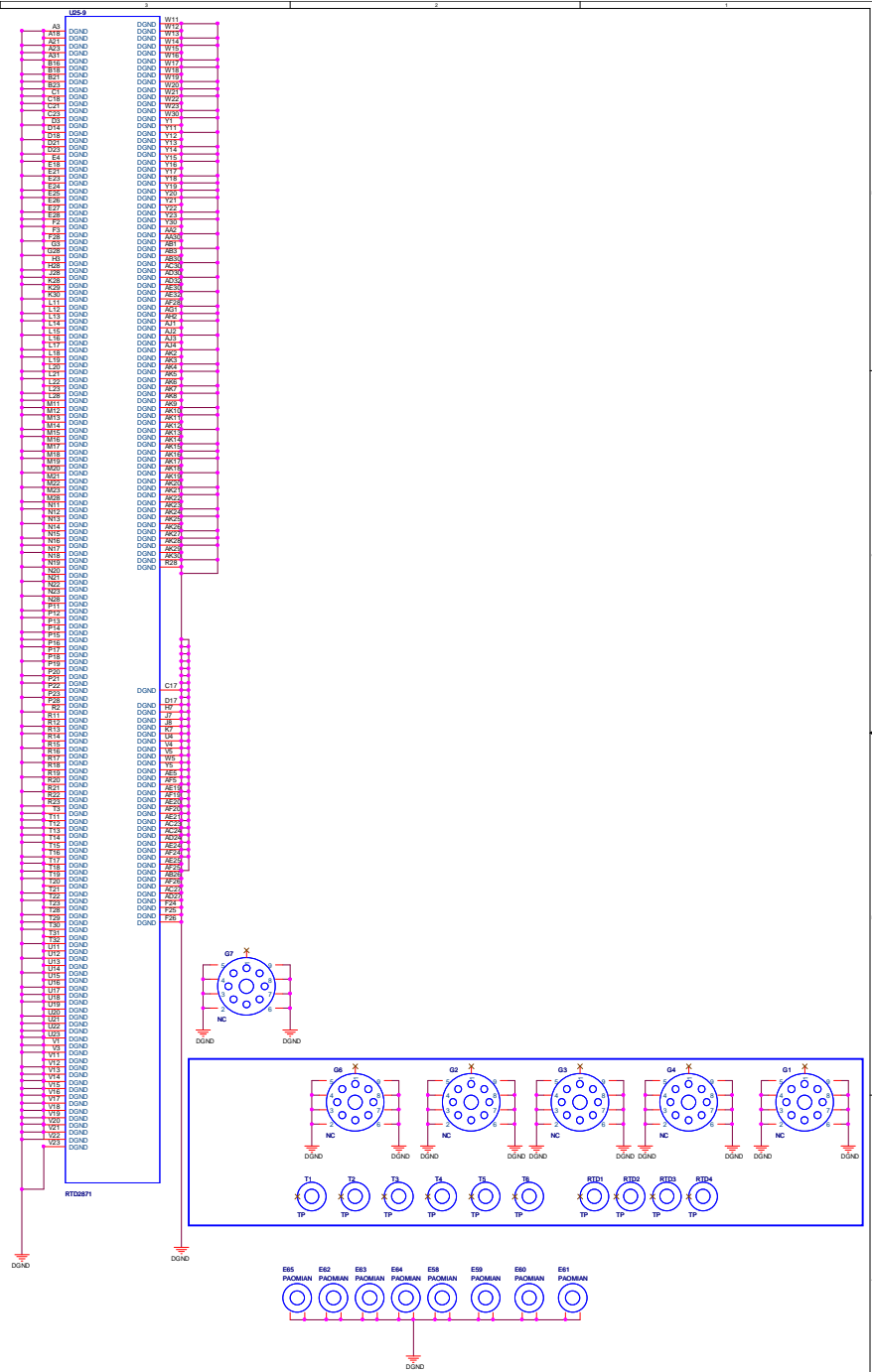




Title	RTD2871 Demo Board		
Size	Document Number	Rev	
C	CHP-Standby		
Date:	Monday, February 26, 2019	Sheet	9 of 30



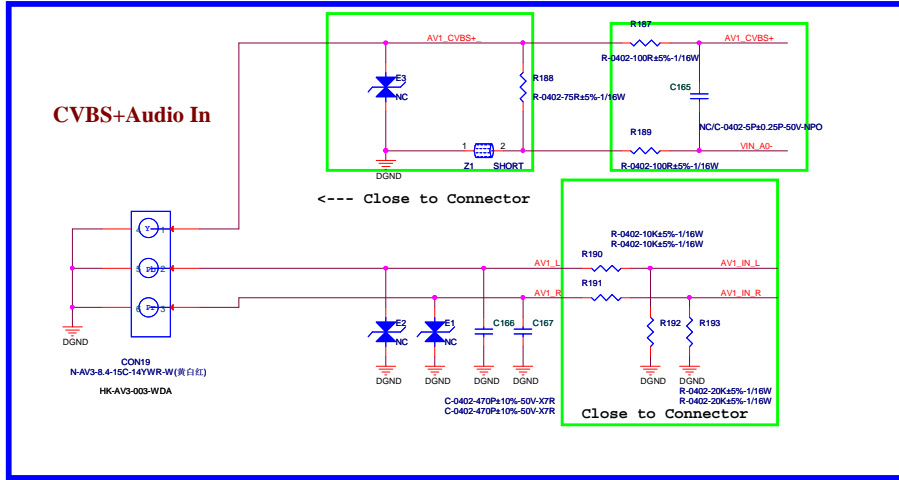
Title		
RTD2871 Demo Board		
Size	Document Number	Rev
A	CHIP-DISPLAY	
Date:	Monday, February 25, 2019	Sheet 10 of 30



File	RTD2871 Demo Board	
Rev	Mount Number	Rev
Customer	CHP-GND	
Date	Monday, February 24, 2010	Sheet 11 of 30

CVBS+Audio In

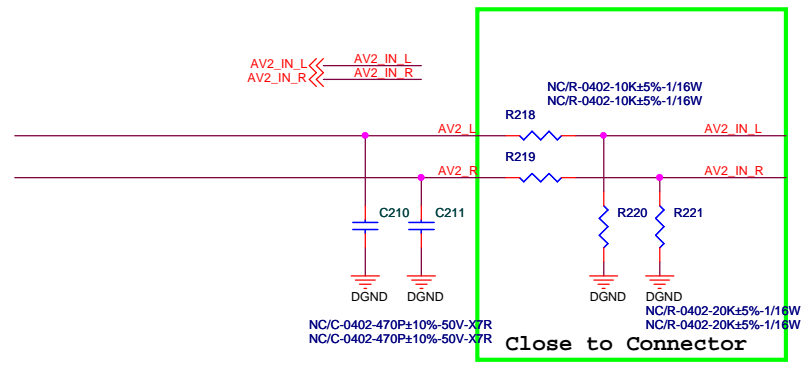
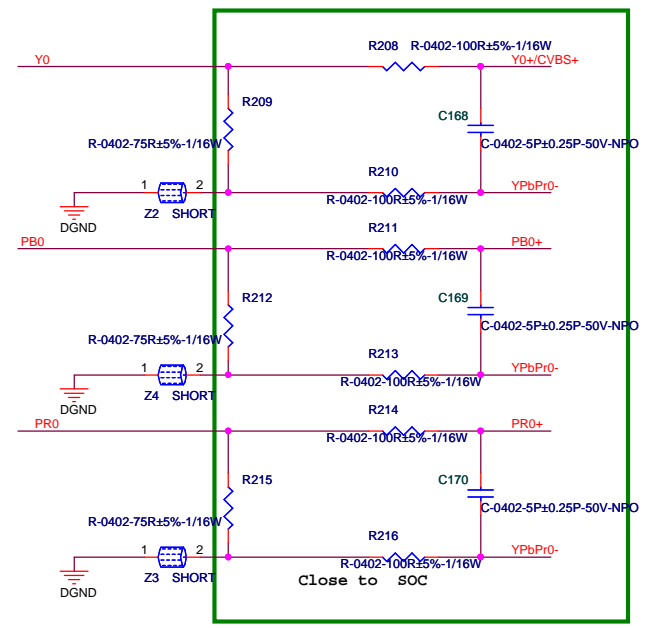
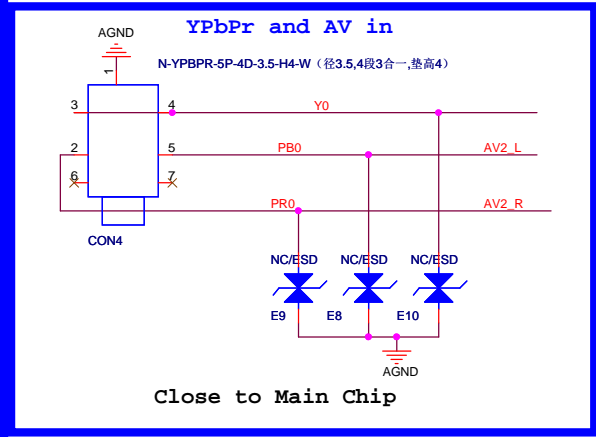
AV1_CVBS+
 VIN_A0
 AV1_IN_L
 AV1_IN_R



Title		
proj 0409 L182CL1H		
Size	Document Number	Rev
C	AWAUD_IN	1.0
Date:	Monday, February 25, 2019	Sheet 12 of 30

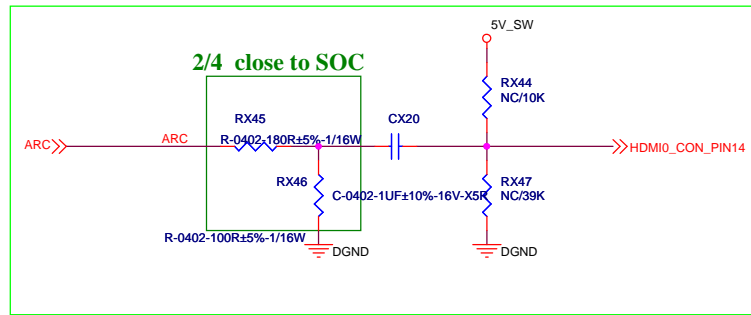
From Main Chip

Y0+/CVBS+ << Y0+/CVBS+
 PB0+ << PB0+
 PR0+ << PR0+
 YPbPr0- << YPbPr0-



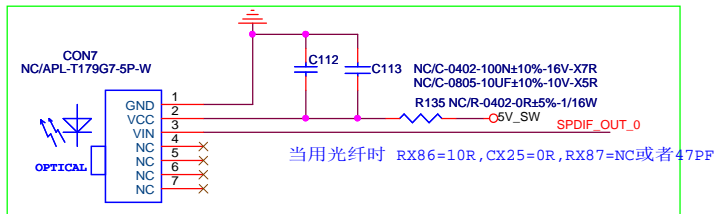
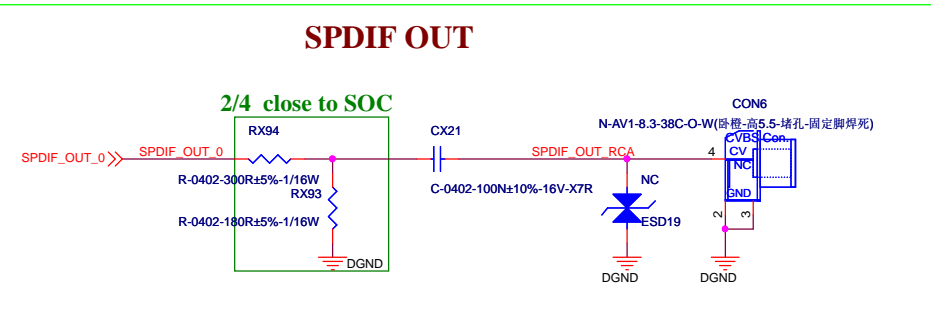
Title			<Title>
Size	Document Number	Rev	
B	<Doc>	<Rev Code>	
Date:	Monday, February 25, 2019	Sheet	14 of 30

HDMI 1.4 ARC Fun.



SPDIF_O one signal for two ball out

SPDIF OUT

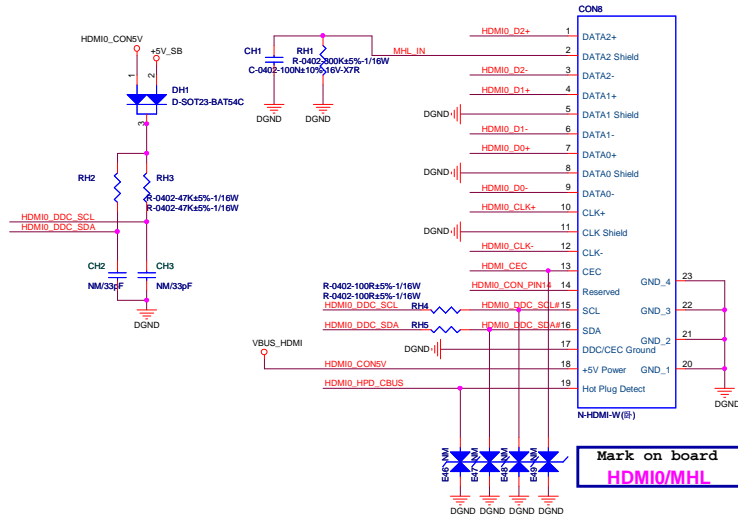


Title		
RTD2871 Demo Board		
Size	Document Number	Rev
B	CHIP-SPDIF OUT	1.0
Date:	Monday, February 25, 2019	Sheet 15 of 30

HDMI0	
HDMI0_D2+	HDMI0_D2+
HDMI0_D2-	HDMI0_D2-
HDMI0_D1+	HDMI0_D1+
HDMI0_D1-	HDMI0_D1-
HDMI0_D0+	HDMI0_D0+
HDMI0_D0-	HDMI0_D0-
HDMI0_CLK+	HDMI0_CLK+
HDMI0_CLK-	HDMI0_CLK-
HDMI0_DDC_SCL	HDMI0_DDC_SCL
HDMI0_DDC_SDA	HDMI0_DDC_SDA
HDMI_CEC	HDMI_CEC
HDMI0_CON_PIN14	HDMI0_CON_PIN14

CBUS & HPD pin share	
HDMI0_HPD_CBUS	HDMI0_HPD_CBUS
HDMI: HPD	
MHL: CBUS	

Using ST GPIO	
MHL_IN	High: with MHL cable
MHL_IN	Low: without MHL cable



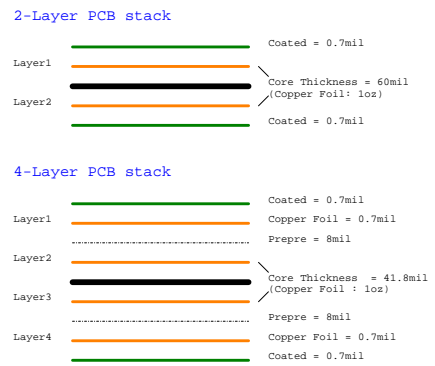
MHL Impedence (D0+/D0-)
 Differential mode = 100R ± 15%
 Common mode = 30R ± 6R

2-Layer PCB

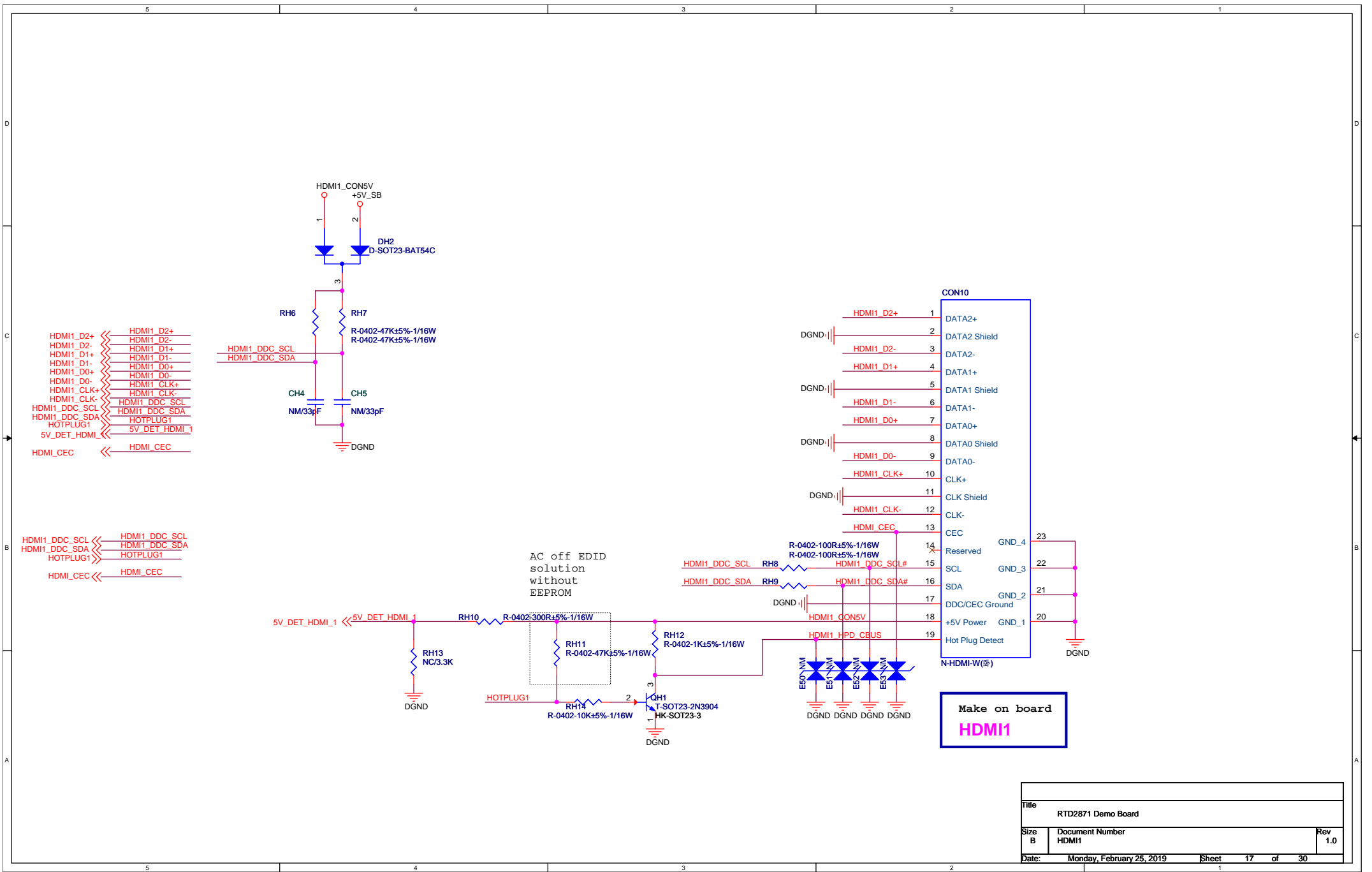
GND	4mil	D0+	4mil	GND	4mil	D0-	4mil	GND
>10mil		12mil		5mil		12mil		>10mil

4-Layer PCB

GND	8mil	D0+	7mil	D0-	8mil	GND		
>10mil		5mil		5mil		>10mil		



Title		RTD2871 Demo Board	
Size	Document Number	Rev	
C	HDMI0/MHL	1.0	
Date:	Monday, February 25, 2019	Sheet	16 of 30



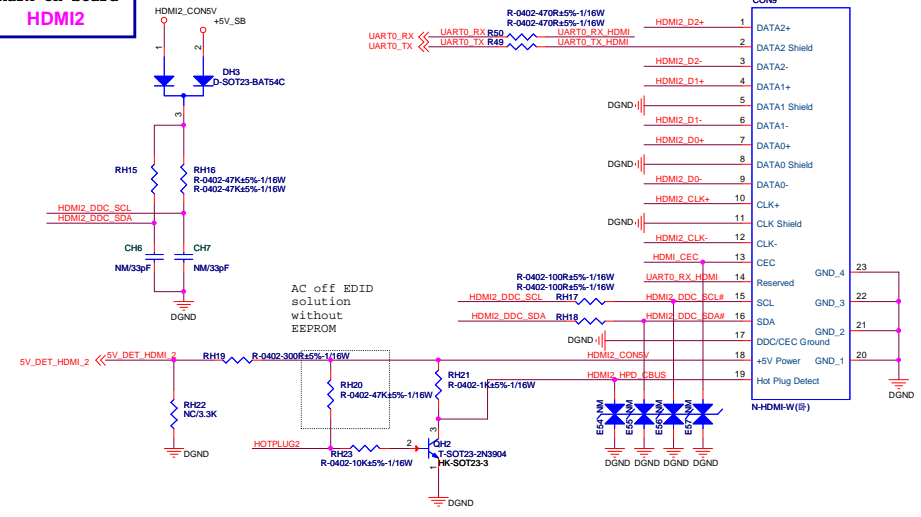
Title		
RTD2871 Demo Board		
Size	Document Number	Rev
B	HDMI1	1.0
Date:	Monday, February 25, 2019	Sheet 17 of 30

HDMI 2	
HDMI2_D2+ <<	HDMI2_D2+
HDMI2_D2- <<	HDMI2_D2-
HDMI2_D1+ <<	HDMI2_D1+
HDMI2_D1- <<	HDMI2_D1-
HDMI2_D0+ <<	HDMI2_D0+
HDMI2_D0- <<	HDMI2_D0-
HDMI2_CLK+ <<	HDMI2_CLK+
HDMI2_CLK- <<	HDMI2_CLK-
HDMI2_DDC_SCL <<	HDMI2_DDC_SCL
HDMI2_DDC_SDA <<	HDMI2_DDC_SDA
HOTPLUG2 <<	HOTPLUG2
HDMI_CEC <<	HDMI_CEC

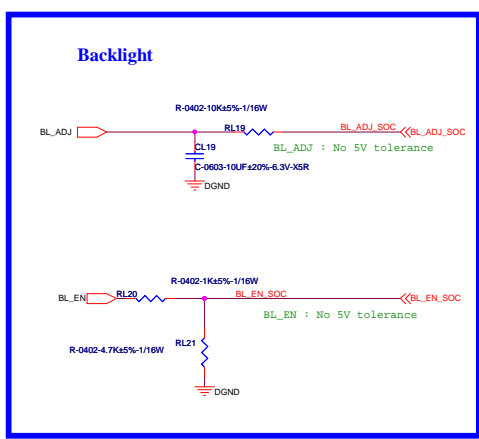
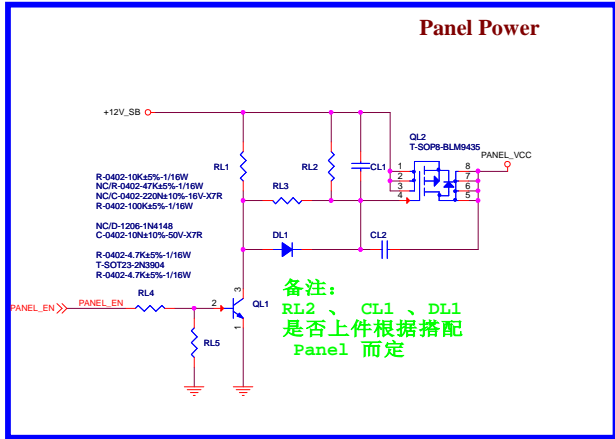
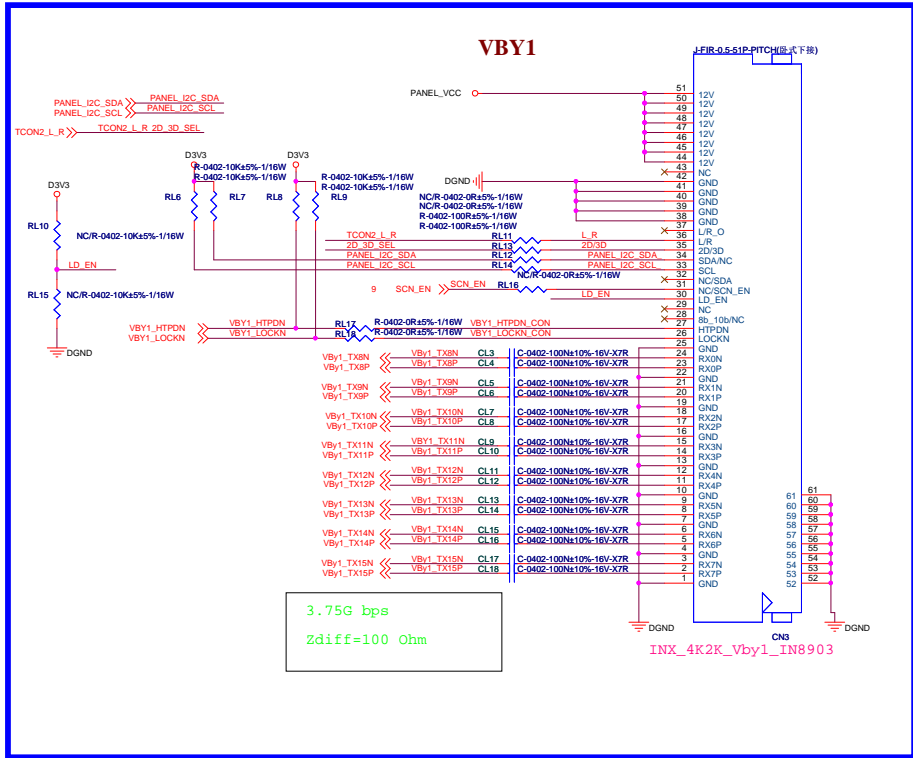
HDMI2_D2+ <<	HDMI2_D2+
HDMI2_D2- <<	HDMI2_D2-
HDMI2_D1+ <<	HDMI2_D1+
HDMI2_D1- <<	HDMI2_D1-
HDMI2_D0+ <<	HDMI2_D0+
HDMI2_D0- <<	HDMI2_D0-
HDMI2_CLK+ <<	HDMI2_CLK+
HDMI2_CLK- <<	HDMI2_CLK-
HDMI2_DDC_SCL <<	HDMI2_DDC_SCL
HDMI2_DDC_SDA <<	HDMI2_DDC_SDA
HOTPLUG2 <<	HOTPLUG2
SV_DET_HDMI_2 <<	SV_DET_HDMI_2

HDMI_CEC << HDMI_CEC

Mark on board
HDMI2

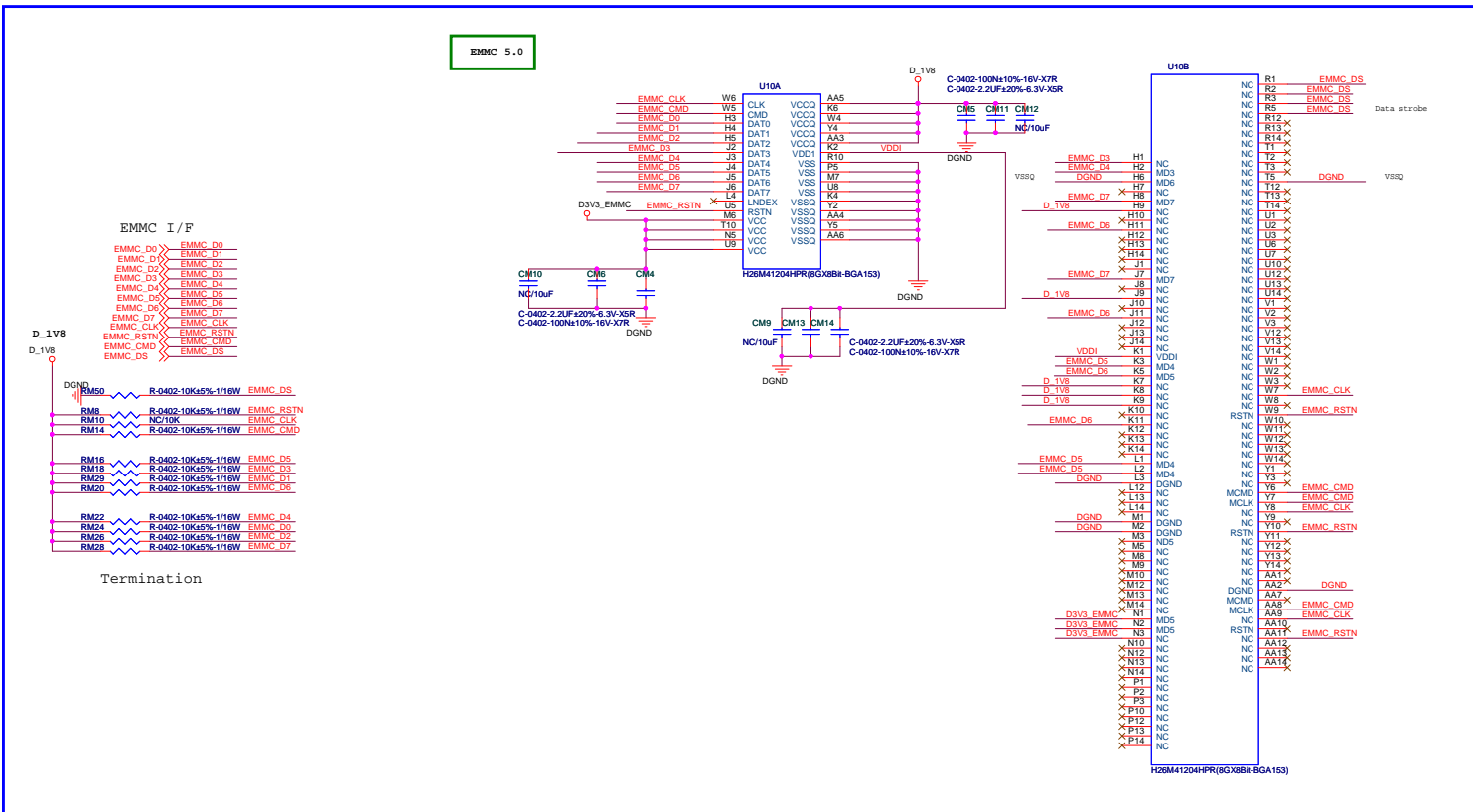


Title	RTD2871 Demo Board	
Size	Document Number	Rev
C	HDMI2	1.0
Date:	Monday, February 25, 2019	Sheet 18 of 30



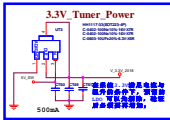
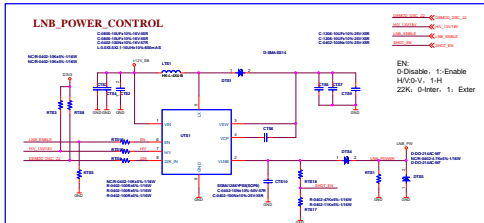
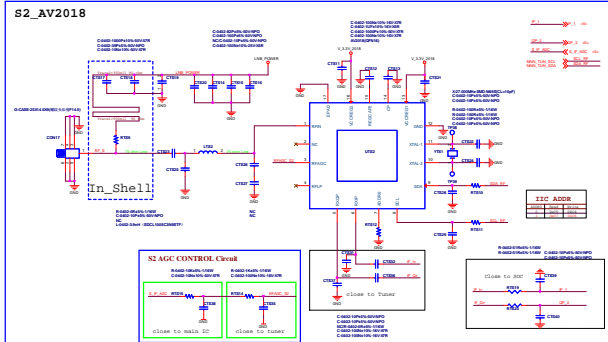
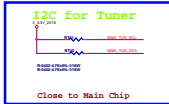
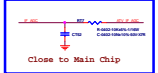
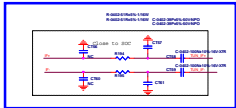
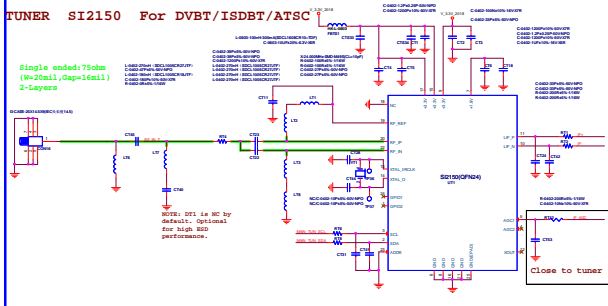
Title	RTD2871 Demo Board		
Size	Document Number	Rev	1.0
C	Panel Interface		
Date:	Monday, February 25, 2019	Sheet	19 of 30

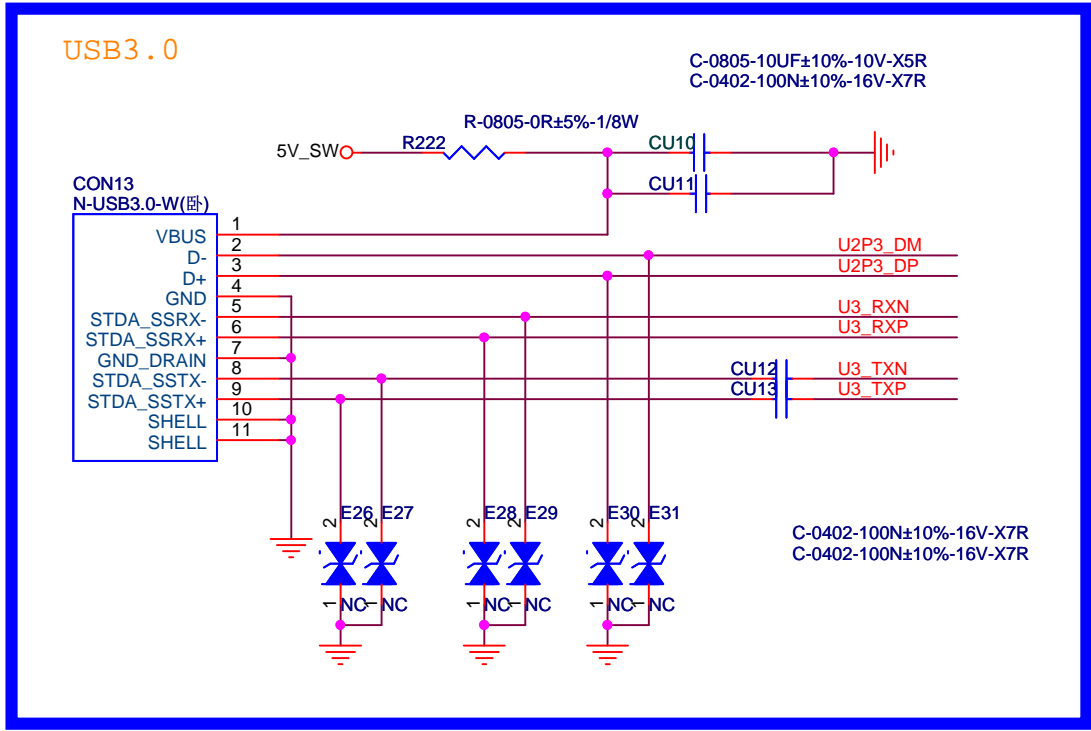
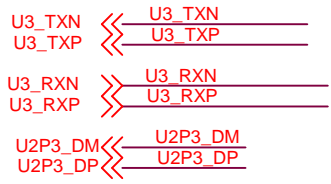
EMMC 5.0



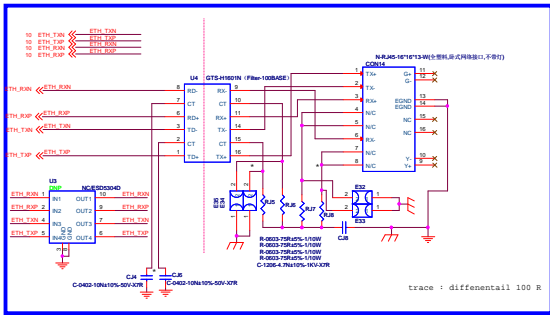
Title	RTD2871 Demo Board	
Size	Document Number	Rev
C	NAND/SP/EMMC/EEPROM	
Date:	Wednesday, February 27, 2018	Sheet 20 of 30

Main Chip





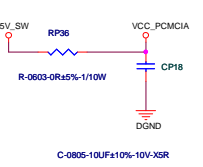
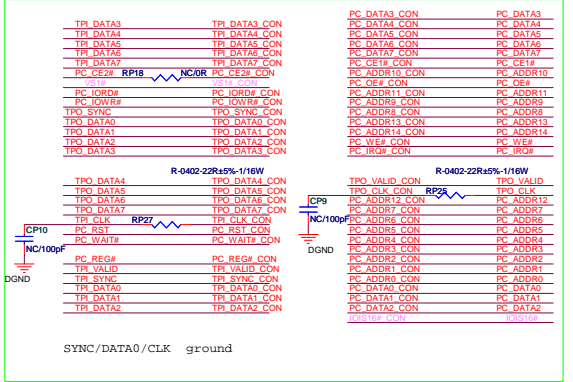
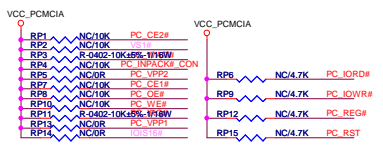
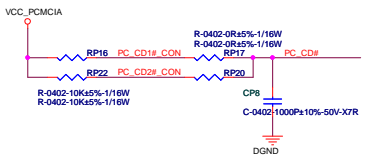
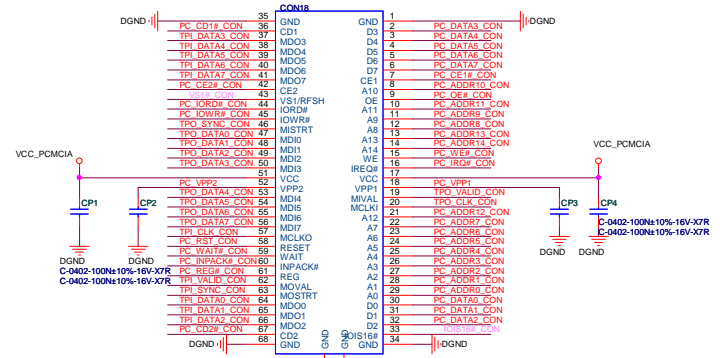
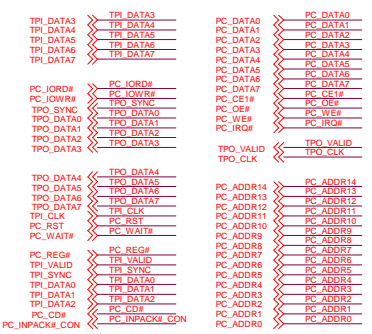
Title		
RTD2871 Demo Board		
Size	Document Number	Rev
A	USB_3.0_TYPE C	1.0
Date:	Monday, February 25, 2019	Sheet 23 of 30



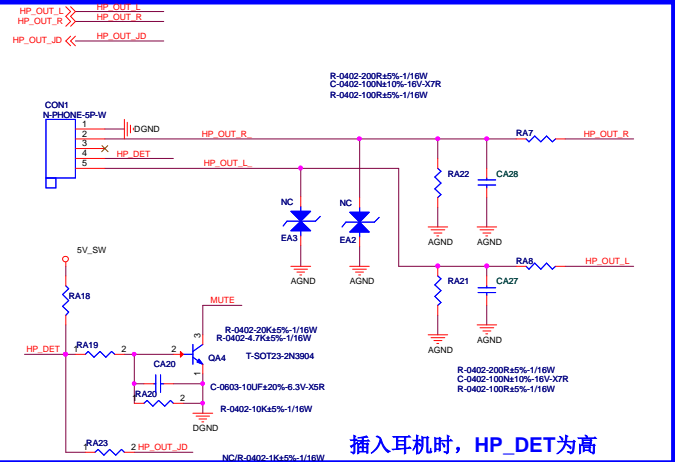
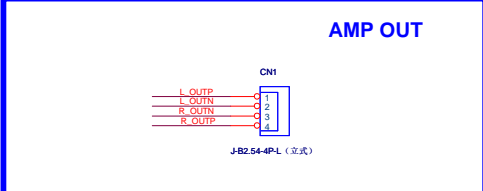
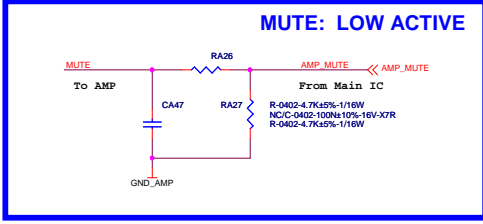
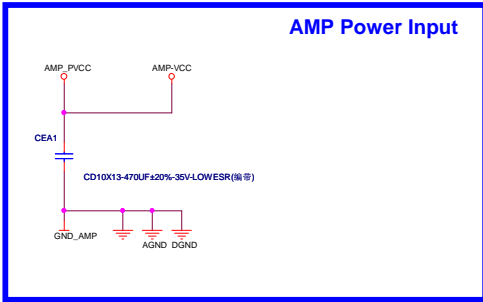
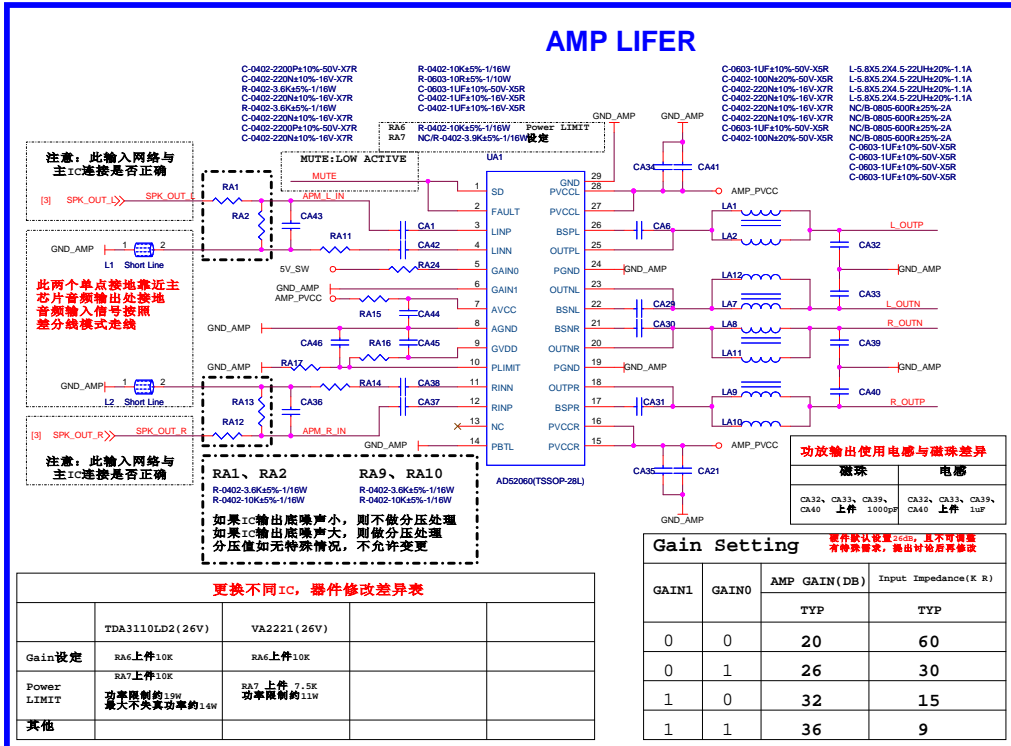
REV		RTD02P1 Demo Board	
D		Document Number	Rev. 0
Date		Doc. 01000000	
Date		Monday, February 28, 2018	Sheet 24 of 30

TPO : From Scalar (From demod for Europe)
 TPI : To Scalar
 PC : To Scalar

Mark on board
 PC CARD

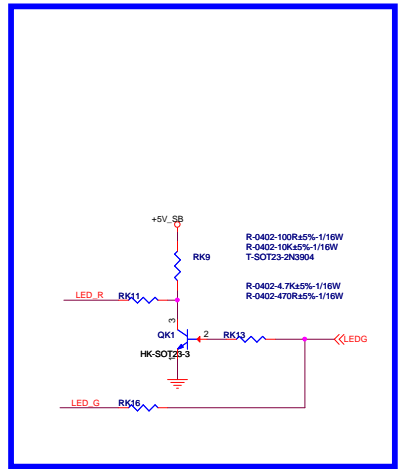
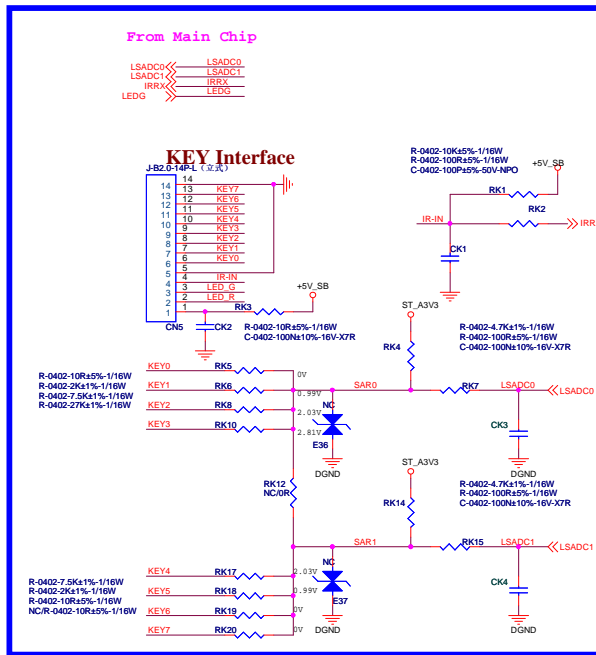


Title		RTD2871 Demo Board	
Size	Document Number	Rev	
C	PCMCIA (CI CARD)	1.0	
Date:	Monday, February 25, 2019	Sheet	26 of 30



Title	RTD2871 Demo Board		
Size	Document Number	Rev	
C	I2S OUTPUT Amp	1.0	
Date:	Thursday, March 14, 2019	Sheet	26 of 30

Make on board
Keypad



Title	RTD2871 Demo Board	
Size	Document Number	Rev
C	Key1LED/IDA	
Date:	Monday, February 25, 2019	Sheet 27 of 30