Date	Change Detail
C0 -> C1	
2021/05/20	1.change L2 to 0 0HM resistor(R67),add ESD Diode(D17/D18/D19) 2.change R54(0R->1K)， R1/R3/R7(0R->33R),add C48(220pF),C59/C60(0.01UF) 3.TS Version: R12(10M->1M), XLR Version: R12/R55(10M->10K) 4.remove R60/C44/C45/C46/C47/U6, change C17(0.01UF->1.0UF),R30(27K->100K) 5.change R53(1K->2K) 6.change wireless transmitter to USB-C connector 7.change 5G_TX module to 2.4G module
2021/05/21	8.remove D16, add R12(0R) in series with C17
2021/06/01	9.add D16, set as DNI
C1 -> C2	
2021/09/10	1.Remove Q3B,R44,R45 2.Remove USB_SP_B10 3.Change C21,C22,C25,C26,C29,C37,C52,C53(0.1uF->10uF) 4.Change R39(0R->4.7K) 5.Change R54(1K->20K) 6.Change MCU I/O PA1 to control WHITE_LED 7.Change MCU I/O PA7 to detcet Charge IC singal 8.Change MCU I/O PB1 to detet MUTE singal 9.Add MCU I/O PA14 control RED_LED 10.Add R29,set as LED control 11.Add C44,C45, set as TX_BOOT/TX_RESET control 12.Add MCU I/O PB9 detect TX_BOOT function 13.Add MCU I/O NRST detect TX_Reset function
2021/09/29	1.Add L2 for ESD solution 2.Add C46,C47 8.2p 3.Change C59(0.1uF---->8.2pF) 4.Change C3,C9(470pF->100pF) 5.Remove R12A,R55,R23,R68,R69,C60 6.Add R23A,R23B,R55A,R55B,R45 set as TS or LXR Input 7.Change R5 (200K-->100R) 8.Change C54(10pF---->1uF) 9.Change C6(10uF->1uF) 10.Change C2(3.3pF->8.2pF) 11.Change R6(1M->1.2K) 12.Add R4R 1.2K 13.Add R18 10M 14.Change R11(1K->10M) 15.Change D6,D16 to lower capacitance TVS. For both TS and XLR 16.Add D13,D14 to lower capacitance TVS. For both TS and XLR

Date	Change Detail
C2 -> C Final	1.add temperature monitoring circuit: add Q6/Q7/R67/R68/R71 2.add charger(/CHG) to control white LED 3.add MLCC cap 0.1uF(C60/C61) for ESD solution， add R60 4.update MCU pinout: PA7(/CHG->TS), PB1(SW_MUTE->RED_LED),PA13(Unused->SW_MUTE), PA14(RED_LED->/CHG) 5.Remove R70, add D20, 6.add "USB_DETECT", add R23/D21, update MCU pinout:PA14(/CHG ->USB_DETECT) 7.Change R5(100R) to (XLR R5A/R45A:1.5K, TS R5B/R45B:200K), R23B/R55B:510K->330K, R6/R44:1.2K->510R R52/R56: 0R->750R 8.On the battery level detect circuit change power net from VBAT to drain of Q2 (TP18):VBAT1 9.add C62/C63:10uF,C64/C65:8.2PF for TX module and ADC 10.del R16:0 ohm 11.R8 change 0603 to 0402 12.Change R60(33R)to 100R,R7 (33R) to 100R 13.add C66 for TX module 14.del R12 (0R),del R26/R48/R15/R50/R51/R24/R38(0R) 15.change D6,D13,D14,D16: D5V0X1B2LP-7 -> PESD5V0V1BL
C Final -> DV	1.+3.3V ripple improvement: remove C43 2.change TX module J4: external antenna -> chip antenna 3.ESD improvement: add C60(0.1uF/50V), remove U2
DV -> PQ	1.only apply to TS, change C3: 100pF->470pF, D3: ESD Diode->0 ohm, R5B/R45B: 200K->100 ohm, R23B:330K->1M, remove C9/R55B 2.update HW version to PQ/SOR1: TS(R59 10K->22K), XLR(R58 NC->56K, R59 10K->100K) 3.remove debug connector:J1,J6

BOSE

Baby Yoda Transmitter Board

Product: Baby Yoda			
File Name: Modify history.SchDoc			
Part Number: Part Number		Size: A3	
Revision: 3.0.0	Drawn By: Vincent Xu	Mod By: *	
Status: ***PQ/SOR***	Checked By: *	Mod Date: 2022/12/8	
Lead Engineer: *		Approved By: *	
Date: 2022/12/8	Time: 16:07:30	Sheet: 1 of 3	

Description of Changes/Notes	Rev.
	3.0

TS/XLR INPUT

Audio Input

-.1/4" TS Input

-.XLR Input

XLR_P/TS_T

XLR_N/TS_S

INPUT_GND

L1 L2 L3

D1 BAV99LT1G

D2

D3

XLR: ESD DIODE,TS: 0 OHM

D4 BAV99LT1G

C3 XLR:100pF, TS:470PF 50V

C9 100PF 50V

R5A 1.5K

R5B 100

R45A 1.5K

R45B 100

R23A 10K

R23B 1M

R55A 10K

R55B 1M

R52 750

R56 750

R11 10M

R18 10M

C6 1.0UF 10V

C54 1.0UF 10V

C2 8.2PF 50V

C47 8.2PF 50V

U7B OPA1678IDRGR

U7A

R6 510

R44 510

R57 100K

C46 8.2PF 50V

C7 .10UF 50V

C55 .10UF 50V

+3.3V -3.3V

ADCI_P ADCI_N

	C3	D3
TS	470pF	0 OHM
XLR	100pF	ESD DIODE

MCU

U1 STM32L010F4P6TR

PB9-BOOT0 PA14
PC14-OSC32_IN PA13
PC15-OSC32_OUT PA10
NRST PA9
VDDA VDD
PA0-CK_IN VSS
PA1 PB1
PA2 PA7
PA3 PA6
PA4 PA5

TX Boot TP31 C44 470PF R54 20K

USB_DAM_MODE TP38

TX Reset

MCU_RESET

ADC_RESET

ST_3.3V

HW Ver

White LED R60 100

UART1_RX R1 33

UART1_TX R3 33

VBAT1 R2 100K TP15

R4 82K C1 0.01UF 50V

Battery Level Detect

C8 10UF 10V C45 470PF 50V C4 470PF 50V C61 0.10UF C50 10UF C51 .10UF 50V

R58 TS:100K, XLR:56K R59 TS:22K,XLR:100K

TS			
HW Ver		R58	R59
Dev	0.3V	100K	10K
PQ/SOR1	0.6V	100K	22K
SOR2	0.9V	100K	39K
SOR3	1.2V	100K	56K
	1.5V	100K	82K
	1.8V	82K	100K

XLR			
HW Ver		R58	R59
Dev	0V	NC	10K
PQ/SOR1	2.1V	56K	100K
SOR2	2.4V	39K	100K
SOR3	2.7V	22K	100K
	3.0V	10K	100K
	3.3V	100K	--

USB_DETECT D21 1N4148WS SW_MUTE D20 1N4148WS

C60 0.10UF

R9 4.7K R10 4.7K R8 0 ohm

SWCLK SWDIO I2C_SDA I2C_SCL

C11 0.01UF 50V

R7 100 RED_LED

TS P_CON_OUT P_CON_IN

For SW Debug

TP27 TP14 TP23 TP19 TP21 TP28

MCU_RESET SWCLK SWDIO UART1_TX UART1_RX

J1

ADC

U3 PLV320ADC5140IRTWR

TP24 ADC_BIAS C12 100PF 50V

C59 8.2PF 50V

C5 1.0UF 10V C13 .10UF 50V C14 10UF 10V C15 .10UF 50V

C64 8.2PF 50V

C19 0.01UF 50V C20 10UF 10V C62 10UF 10V

C23 10UF 10V C24 10UF 10V

C21 10UF 10V C22 10UF 10V C25 10UF 10V C26 10UF 10V C29 10UF 10V C37 10UF 10V C52 10UF 10V C53 10UF 10V

IN1P_GPI1 MICBIAS AVSS VREF AREG AVDD T-Pad

IN1M_GPO1 IN2P_GPI2 IN2M_GPO2 IN3P_GPI3 IN3M_GPIO3 IN4P_GPI4

DREG FSYNC BCLK SDOUT GPIO1 IOVDD

IN4M_GPO4 SHDNZ ADDR1_MISO ADDR0_SCLK SCL_MOSI SDA_SSZ

R17 0 OHM I2S_LRCK
R20 0 OHM I2S_BCLK
R21 0 OHM I2S_DOUT
R22 0 OHM MCLK

ADC_+3.3V TP29

C27 0.01UF 50V C28 10UF 10V

ADCI_P ADCI_N

I2C_SDA I2C_SCL

ADC_RESET R46 100K

R47 4.7K R49 0 OHM

For SW Upgrade

J6 TP42 TP49 TP50 TP51

2.4G_TX_Module

J4

DGND RF_ANT DGND GPIO_24 GPIO_25 GPIO_14 Flash_CS Flash_SCK Flash_SO GPIO_17 Flash_SI DGND PORN

VCC DGND SPB_I2S_MCLK GPIO_15 GPIO_1 NC NC SPA_I2S_DATA SPB_I2S_LRCK SPB_I2S_BCK

GPIO_26 GPIO_27 I2C_DATA I2C_CLK GPIO_16 GPIO_35 GPIO_2 GPIO_21 GPIO_0 DGND

TP4 TP5 TP22 R14 10K R19 100K

TP6 I2S_DOUT I2S_LRCK I2S_BCLK

VCC_Module C65 4PF C63 10UF 10V C18 0.01UF 50V C16 10UF 10V R13 0 OHM TP36 GND

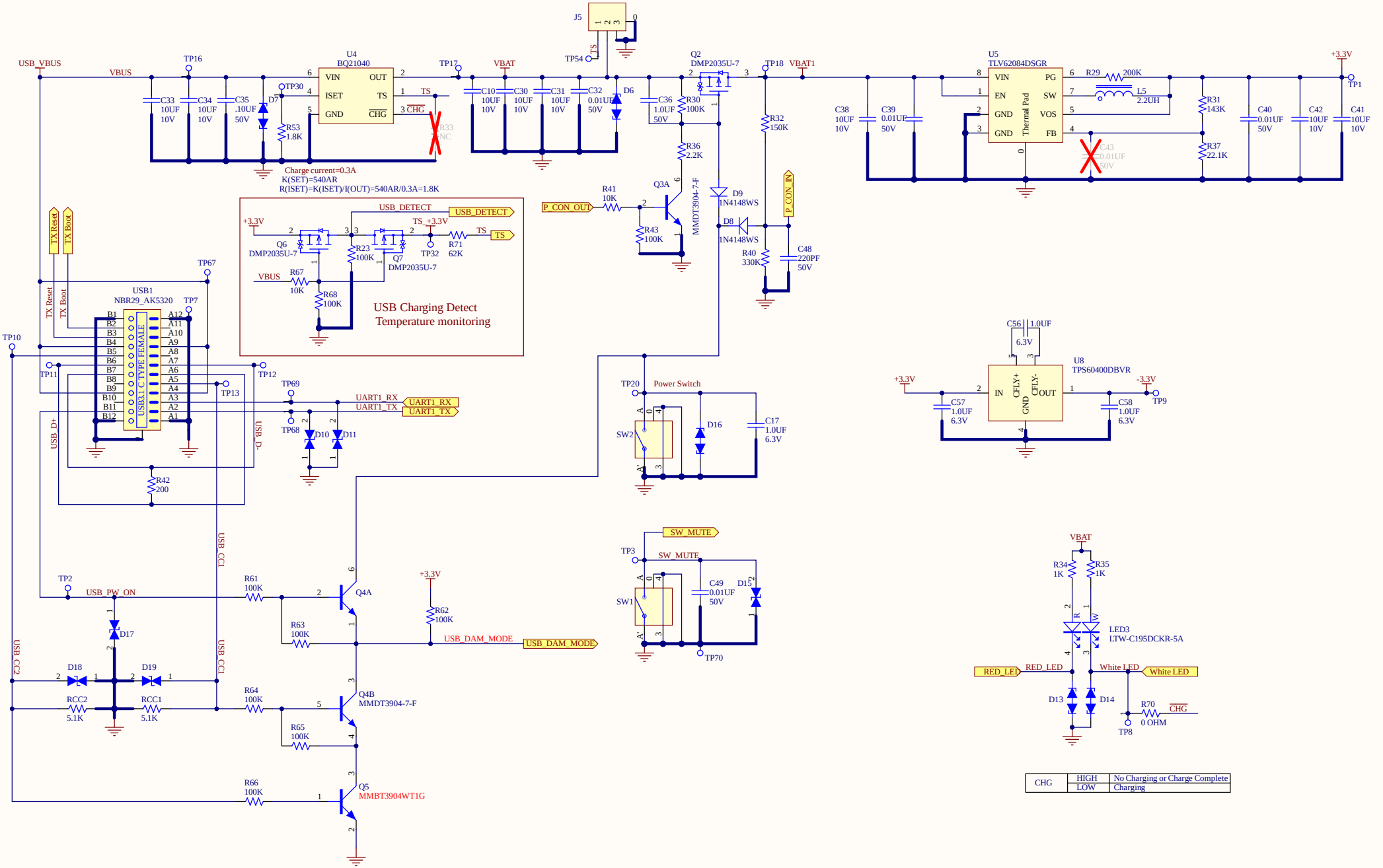
ID Pair LED VCC_Module LED2 Blue R25 470 C66 0.01UF D12

I2C_SDA R27 0 OHM
I2C_SCL R28 0 OHM

BOSE		Baby Yoda Transmitter Board	Description of Changes/Notes / Rev.
		Product: Baby Yoda	
		File Name: 2.4G Transmitter_Input&ADC&MCU&TX_Module.SchDoc	
		Part Number: Part Number	Size: A3
		Revision: 3.0.0 / Drawn By: Vincent Xu	Mod By: *
		Status: PQ/SOR / Checked By: *	Mod Date: 2022/12/8
		Lead Engineer: *	Approved By: *
		Date: 2022/12/8 / Time: 16:07:30	Sheet: 2 of 3

3.0

3.7V Battery Pack



CHG	HIGH	No Charging or Charge Complete
	LOW	Charging

FID1 FID2 FID3 FID4 FID5 FID6 FID7 FID8

Baby Yoda Transmitter Board			Description of Changes/Notes	Rev.
Product: Baby Yoda				
File Name: 2.4G Transmitter_Power.SchDoc				
Part Number: Part Number		Size: A3		
Revision: 3.0.0	Drawn By: Vincent Xu	Mod By: *		3.0
Status: PQ/SOR	Checked By: *	Mod Date: 2022/12/8		
Lead Engineer: *		Approved By: *		
Date: 2022/12/8	Time: 16:07:30	Sheet: 3 of 3		