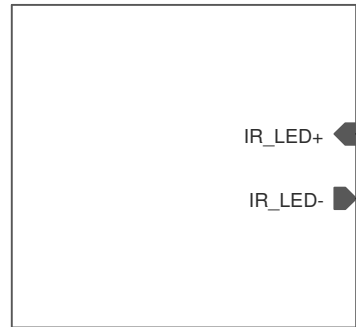
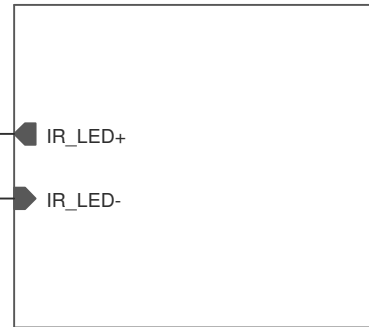


01-IR_LED



01-IR_LED

02-CONNECTOR



02-CONNECTOR



ALPCB1



1 Layer | 1.6 mm | 0.5 oz | Black Solder Masked | ROHS/REACH | HASL
SHC008_BTC-9D_IR_LED_1610040_V0_05

SCREW HOLES :

MH1 HOLE1.8-SP3.5 MH2 HOLE1.8-SP3.5



PILLAR HOLES :

MH3 HOLE1.7 MH4 HOLE1.7



SYSTECH ELECTRONICS LTD.

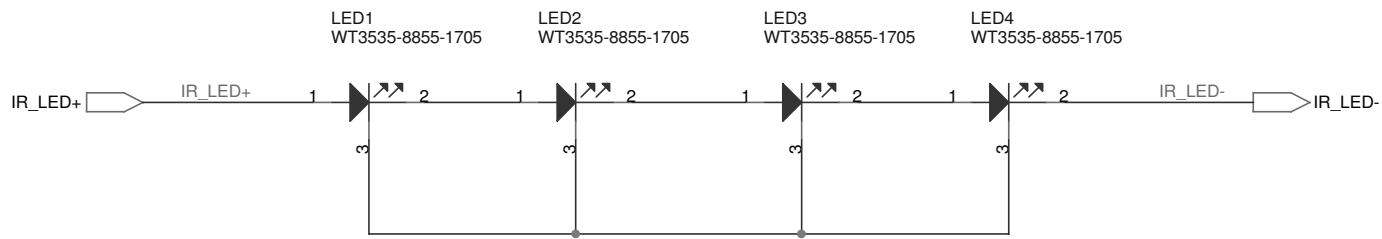
PRODUCT: **HUNTING CAMERA**
PCB NUMBER: BTC-9D_IR_LED_PCB
DESIGN ENGINEER: TIM

Title
01-MAIN

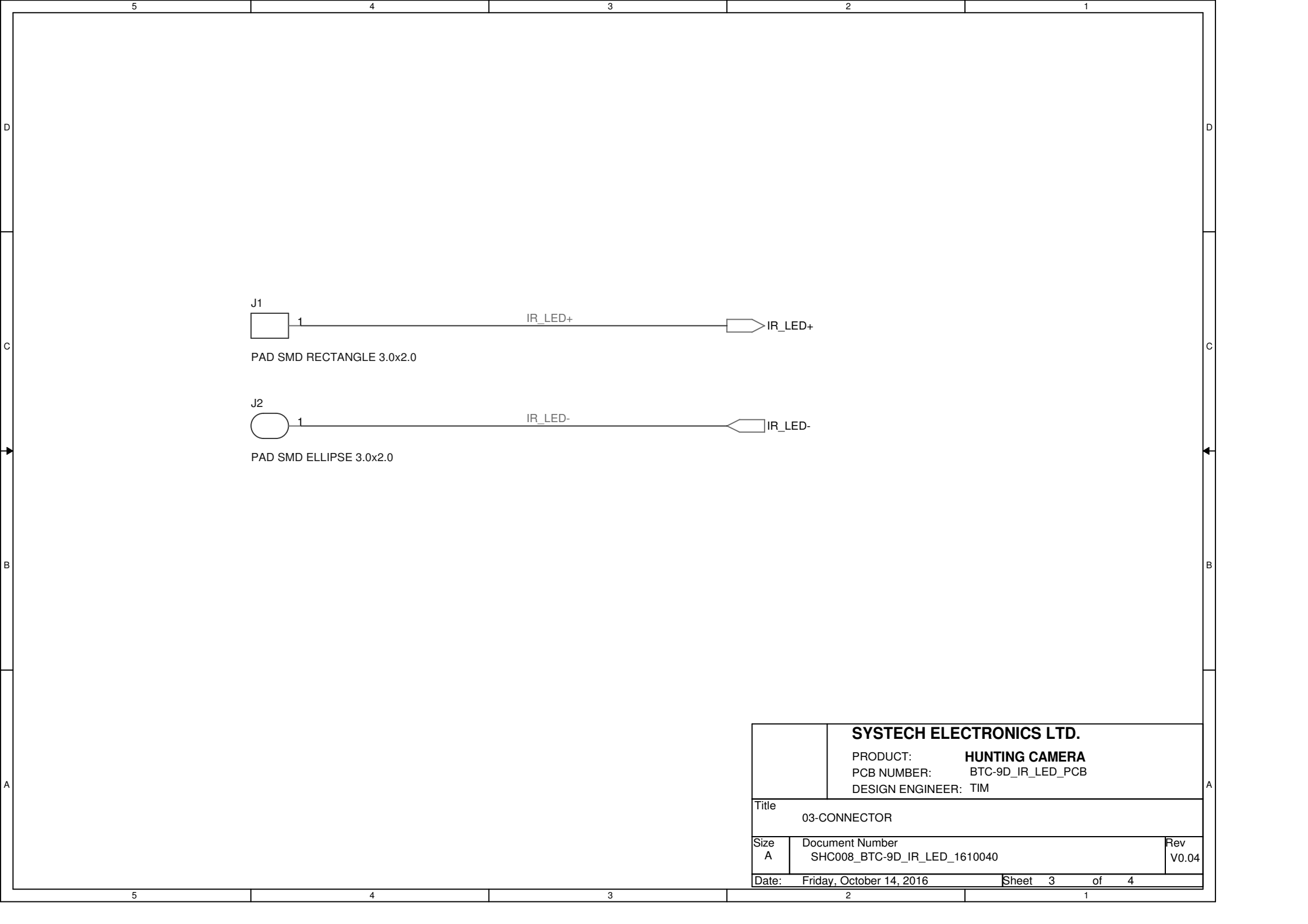
Size A Document Number
SHC008_BTC-9D_IR_LED_1610040

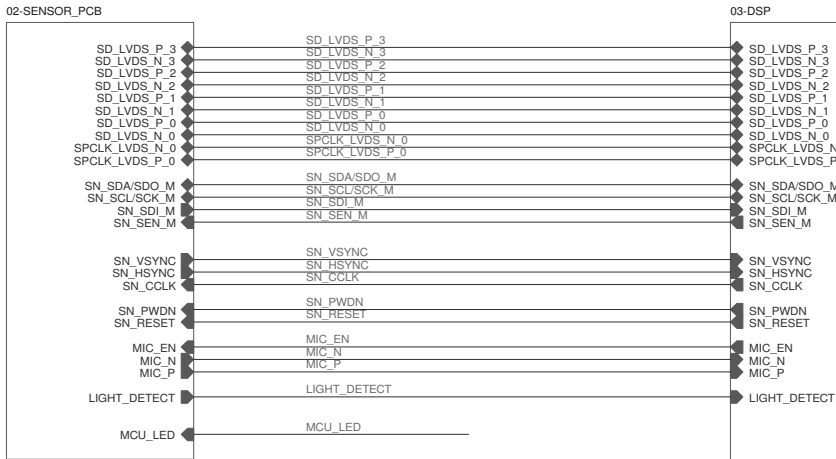
Rev
V0.04

Date: Friday, October 14, 2016 Sheet 1 of 4

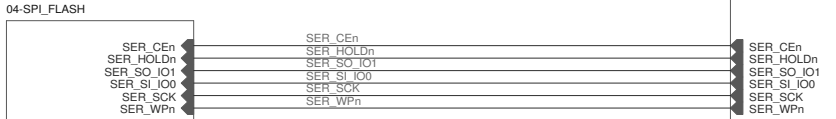


		SYSTECH ELECTRONICS LTD.	
		PRODUCT: HUNTING CAMERA	
		PCB NUMBER: BTC-9D_IR_LED_PCB	
		DESIGN ENGINEER: TIM	
Title			
02-IR_LED			
Size	Document Number		Rev
A4	SHC008_BTC-9D_IR_LED_1610040		V0.04
Date:	Friday, October 14, 2016	Sheet 2	of 4

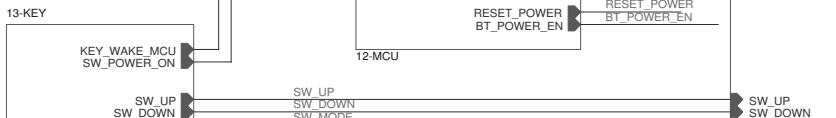




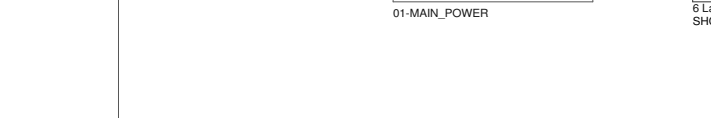
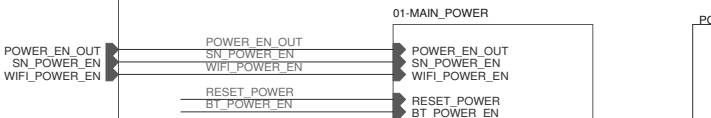
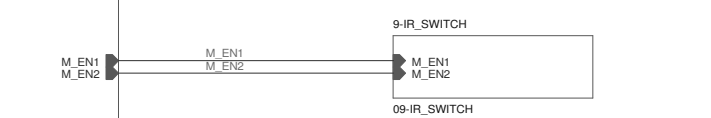
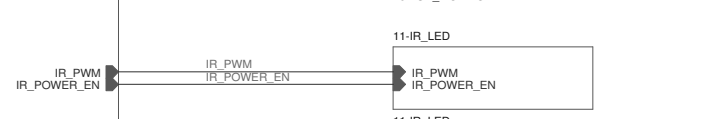
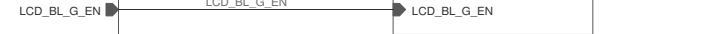
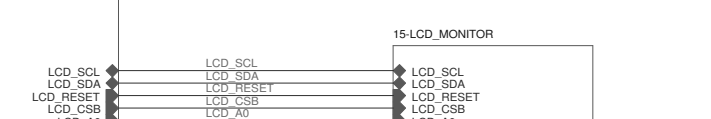
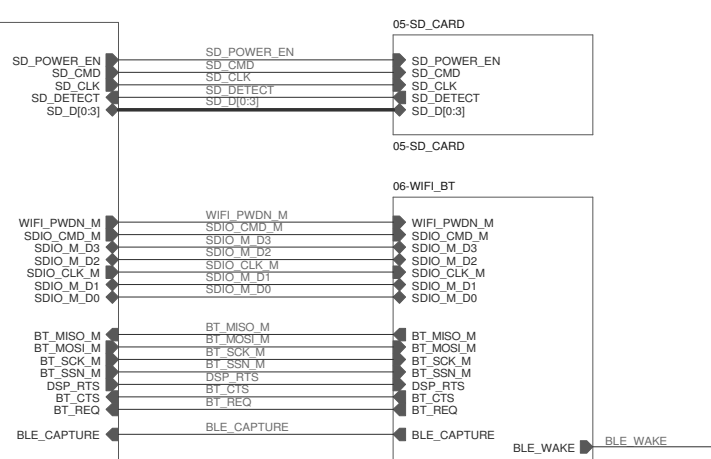
02-SENSOR_PCB



04-SPI_FLASH

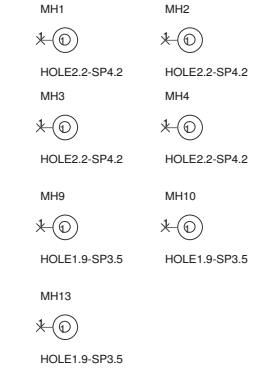


14-OTHER_SENSORS

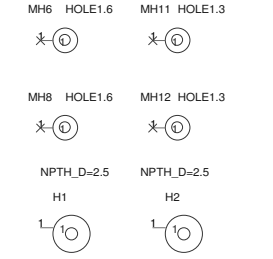


01-MAIN_POWER

SCREW HOLES:



PILLAR HOLES:



PCB1

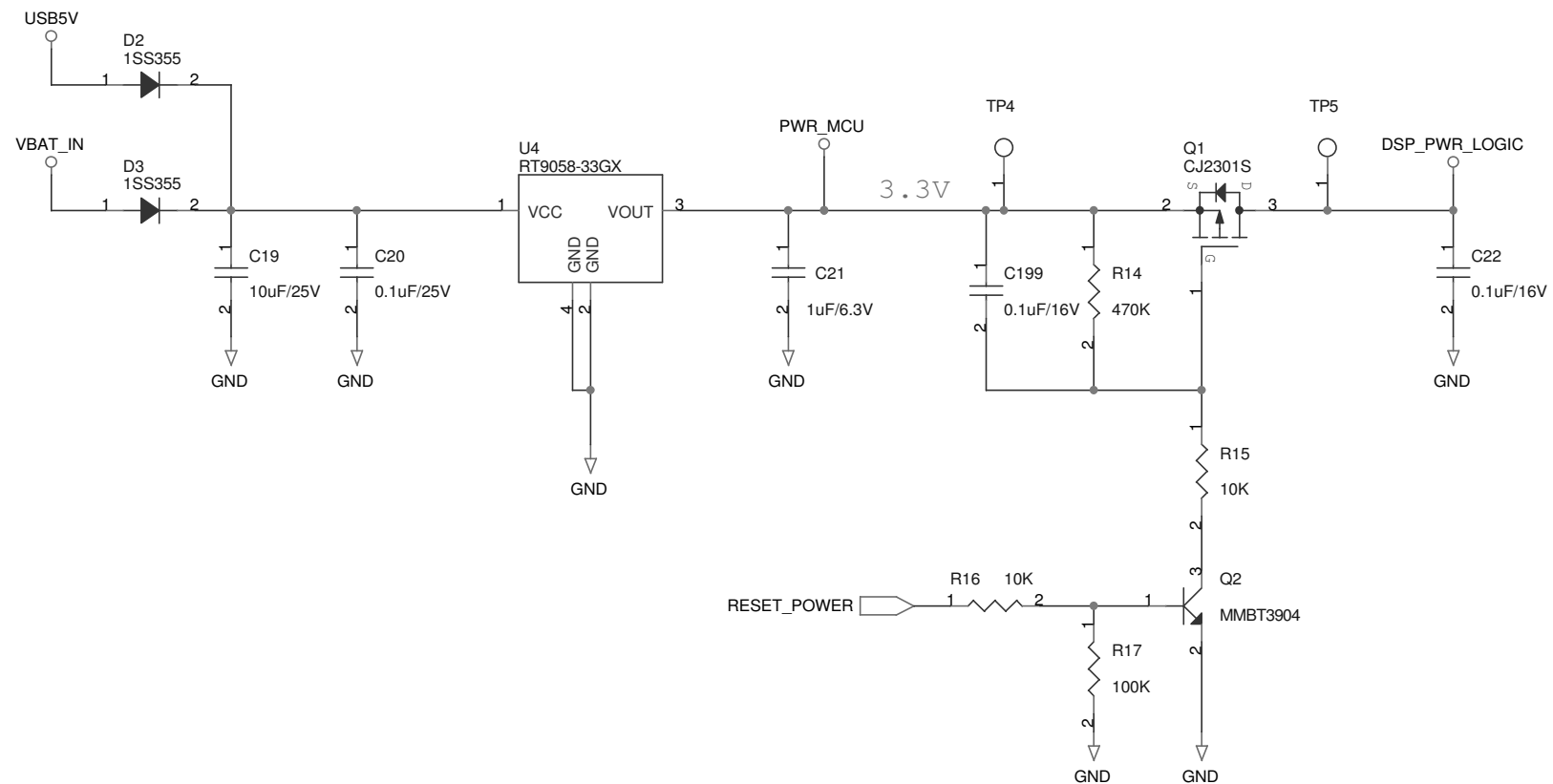
6 Layer | 1.2 mm | H/H/H/H/H | Black Solder Masked | ROHS/REACH | Gold Immersion
SHC008_BT_C-9D_MAIN_1612050_V0_07

SYSTECH ELECTRONICS LTD.	
PRODUCT: HUNTING CAMERA	
PCB NUMBER: MAIN PCB	
DESIGN ENGINEER: TIM	
Title 00-MAIN	
Size Custom	Document Number SHC008_BT_C-9D_MAIN_1612050
Date: Wednesday, December 07, 2016	Sheet 1 of 29
Rev V0.22	

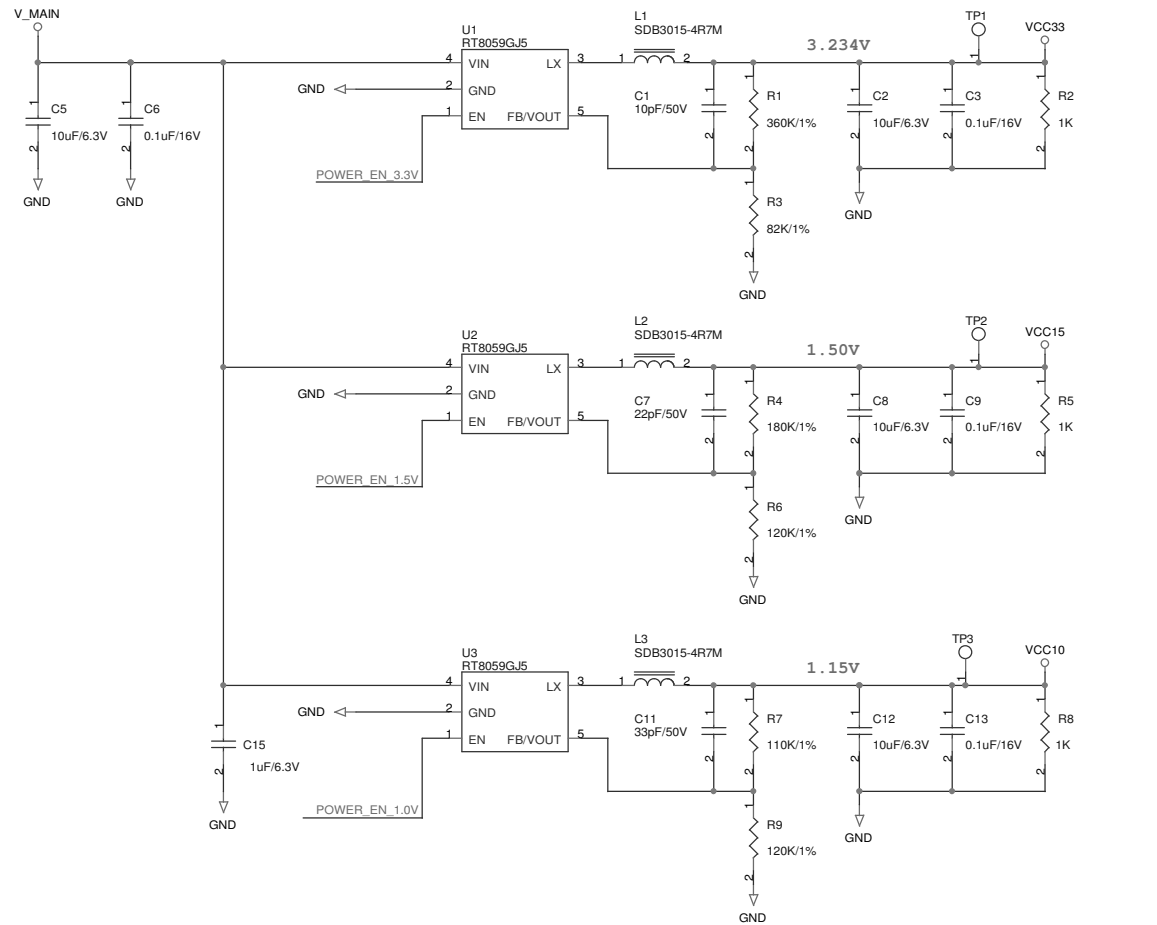
The schematic diagram illustrates a power management system centered around the R1244N001B IC. Key components and connections include:

- Input Section:** J1 (PAD SMD RECTANGLE 5.0x3.0) and J9 (PAD SMD ELLIPSE 5.0x3.0) provide input signals. J9 is connected to JP7 (SHORT) and VBAT_GND.
- IC Pin Connections:**
 - IN (Pin 5) is connected to VBAT_IN.
 - EN (Pin 4) is connected to GND.
 - SW (Pin 6) is connected to GND.
 - FB (Pin 3) is connected to GND.
- Capacitors:**
 - C47 (100uF/20V/D), C48 (10uF/25V), and C49 (0.1uF/25V) are connected to GND.
 - C46 (0.1uF/16V) is connected to the SW pin and GND.
 - C50 (470pF/50V) is connected to the FB pin and GND.
 - C51 (10uF/6.3V) and C52 (0.1uF/16V) are connected to GND.
 - C232 (0.1uF/16V) is connected to GND.
- Resistors:**
 - R40 (20K) is connected to GND.
 - R35 (47R) is connected to the SW pin and GND.
 - R37 (39K/1%), R42 (10K/1%), R36 (470K), and R41 (10K) are connected to GND.
 - R38 (1K) is connected to GND.
 - R39 (10K) is connected to GND.
 - R43 (10K) and R44 (100K) are connected to GND.
- Diodes and Transistors:**
 - D21 and D22 (B5819W) are connected to VBAT_IN and GND.
 - D7 (B5819W) is connected to the SW pin and GND.
 - Q9 (CJ2301S) is connected to GND.
 - Q10 (CJ2301S) is connected to GND.
 - Q11 (MMBT3904) is connected to GND.
- Other Components:**
 - L5 (SDB3015-4R7M) is connected to the SW pin and GND.
 - TP9 is connected to GND.
 - POWER_EN_OUT is connected to GND.
 - RESET_POWER is connected to GND.
- Output Section:** The output is connected to V_MAIN.

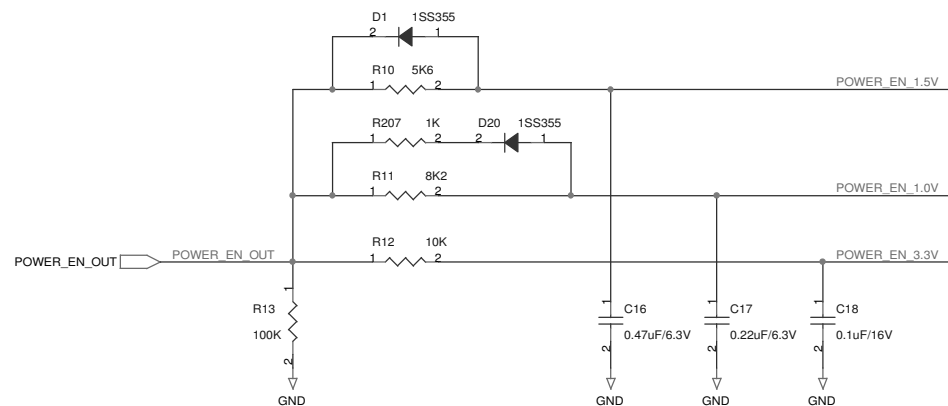
		SYSTECH ELECTRONICS LTD.	
		PRODUCT:	HUNTING CAMERA
		PCB NUMBER:	MAIN PCB
		DESIGN ENGINEER:	TIM
Title			
01-SYSTEM_POWER			
Size A3	Document Number SHC008_BTIC-9D_MAIN_1612050		Rev V0.22
Date:	Wednesday, December 07, 2016	Sheet 1	of 29



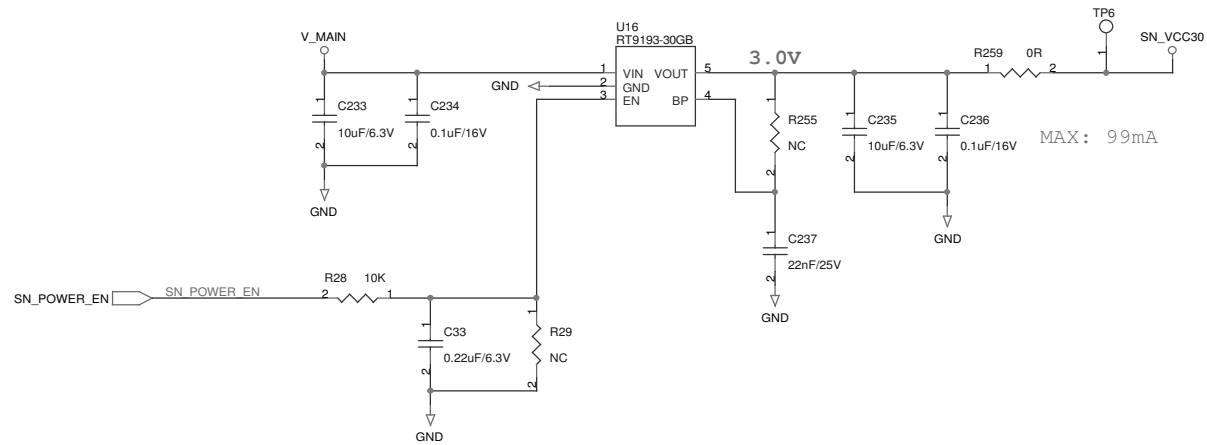
SYSTECH ELECTRONICS LTD.		
PRODUCT: HUNTING CAMERA		
PCB NUMBER: MAIN PCB		
DESIGN ENGINEER: TIM		
Title01-MCU_POWER		
SizeA4	Document NumberSHC008_BTC-9D_MAIN_1612050	RevV0.22
Date: Wednesday, December 07, 2016Sheet 2 of 29		



POWER SEQUENCE:
POWER ON:VCC33>>VCC10>>VCC15
POWER OFF:VCC15>>VCC10>>VCC33



		SYSTECH ELECTRONICS LTD.	
		PRODUCT: HUNTING CAMERA	
		PCB NUMBER: MAIN PCB	
		DESIGN ENGINEER: TIM	
Title			
01-DSP_POWER			
Size	Document Number	Rev	
A3	SHC008_BTC-9D_MAIN_1612050	V0.22	
Date:	Wednesday, December 07, 2016	Sheet	3 of 29

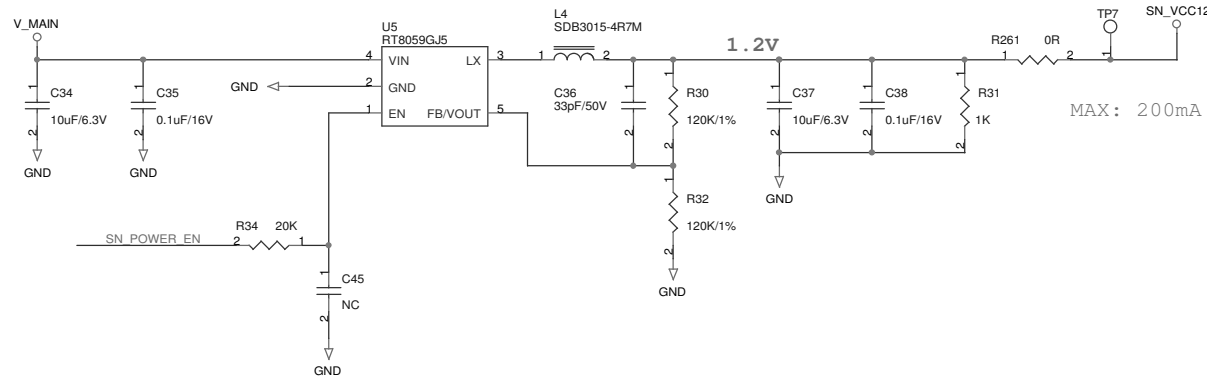
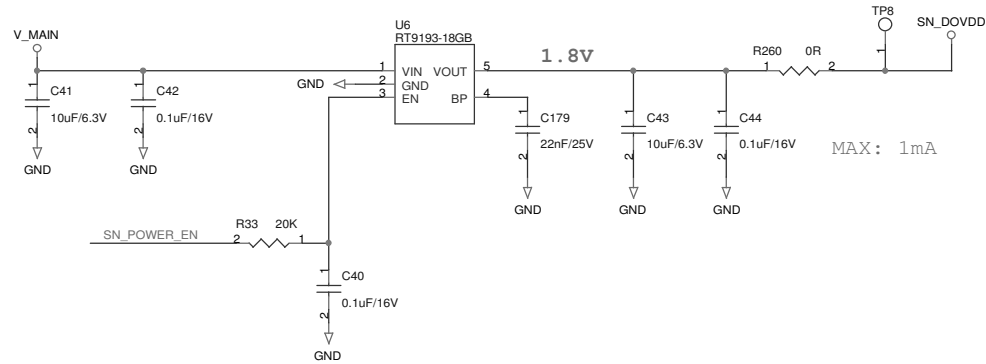


IMX291

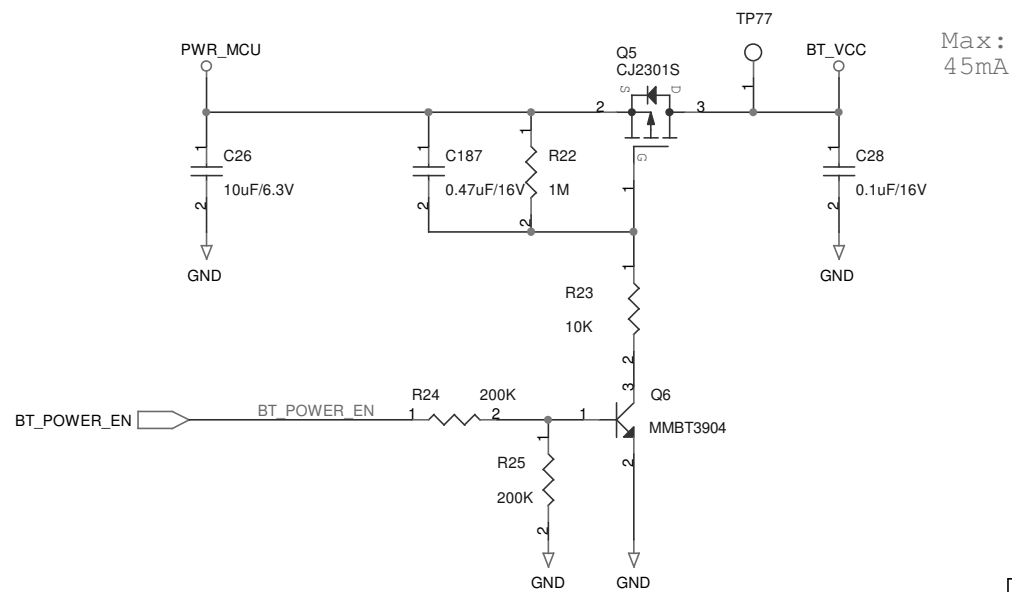
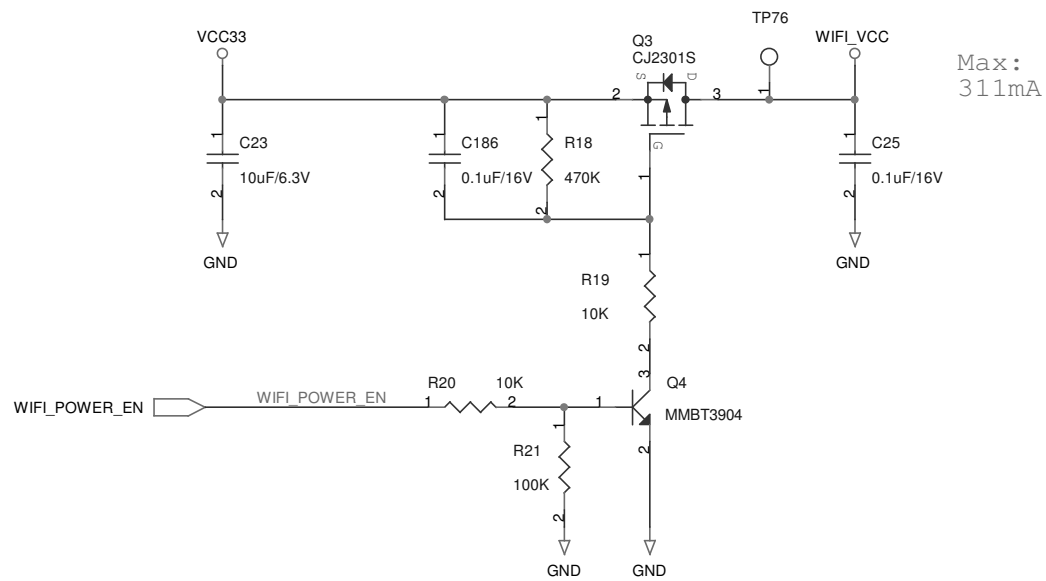
power on sequence



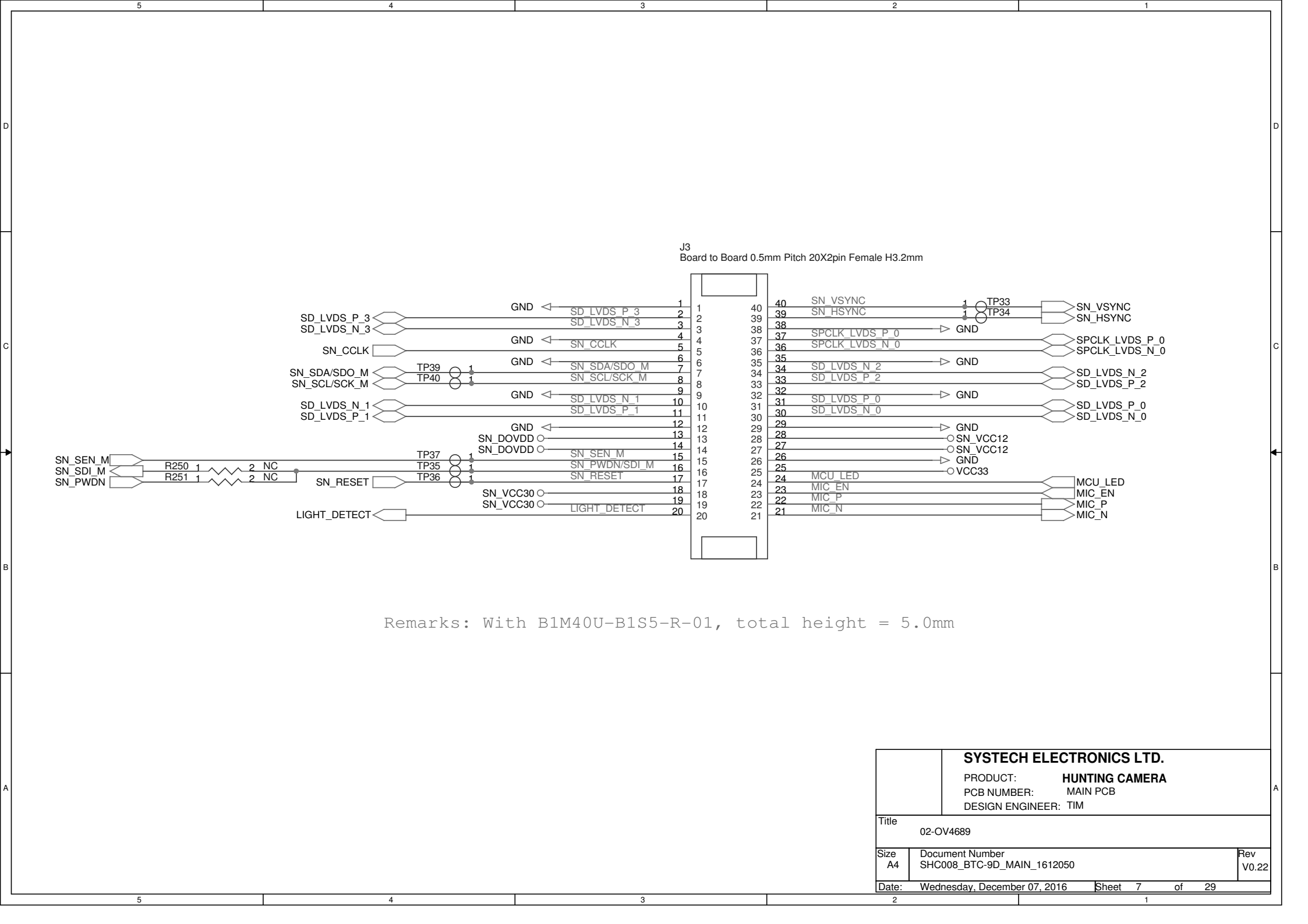
power off sequence

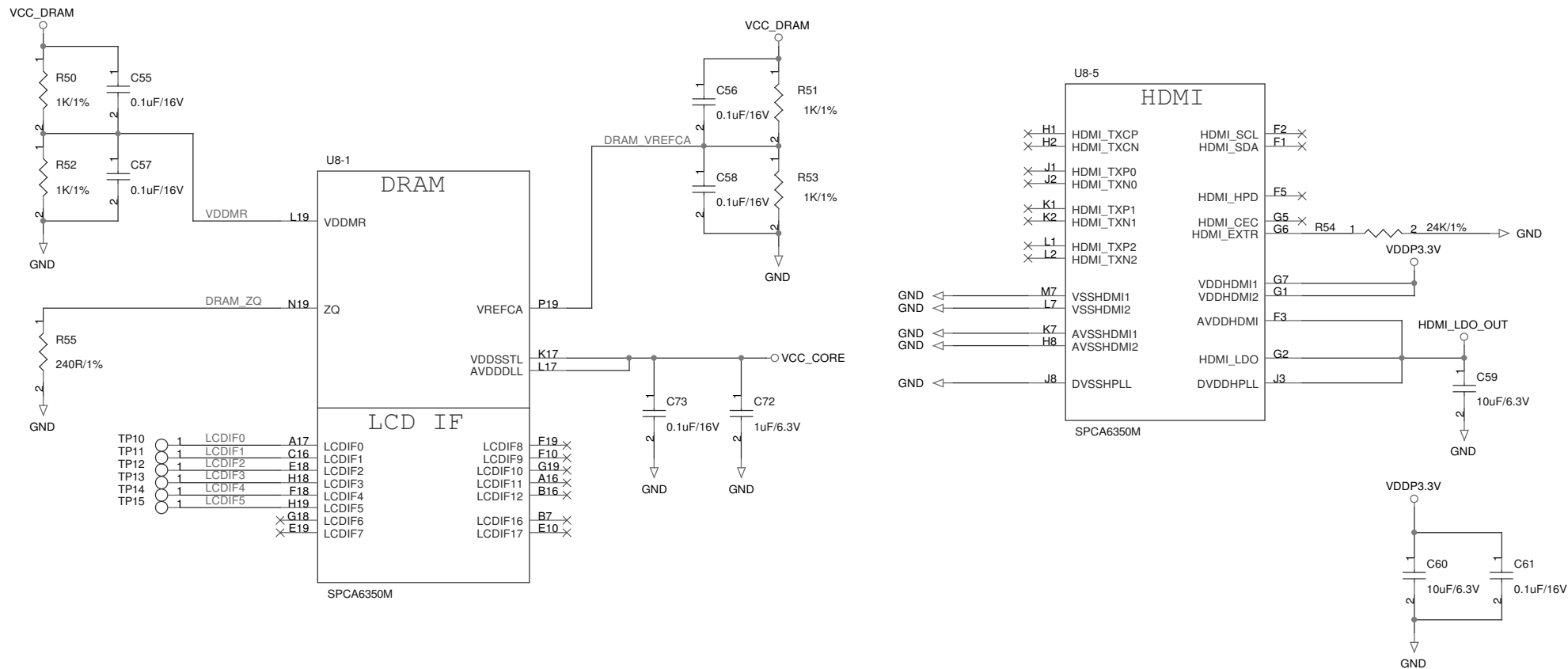


SYSTECH ELECTRONICS LTD.		
PRODUCT: HUNTING CAMERA		
PCB NUMBER: MAIN PCB		
DESIGN ENGINEER: TIM		
Title: 01-SENSOR_POWER		
Size: A3	Document Number: SHC008_BTC-9D_MAIN_1612050	Rev: V0.22
Date: Wednesday, December 07, 2016	Sheet: 4	of: 29

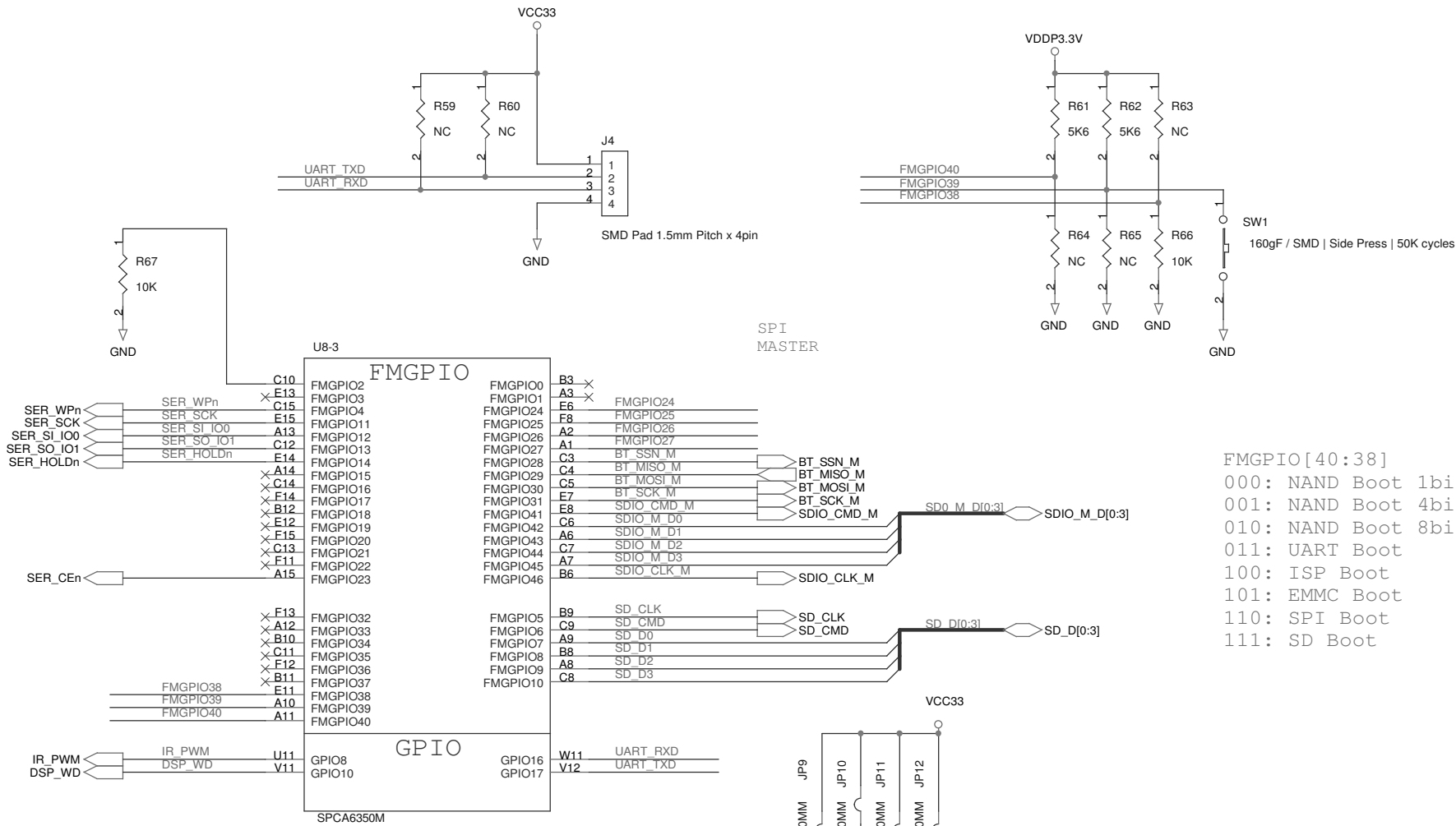


SYSTECH ELECTRONICS LTD.		
PRODUCT: HUNTING CAMERA		
PCB NUMBER: MAIN PCB		
DESIGN ENGINEER: TIM		
Title 01-RF_POWER		
Size Custom	Document Number SHC008_BTC-9D_MAIN_1612050	Rev V0.22
Date: Wednesday, December 07, 2016	Sheet 5	of 29

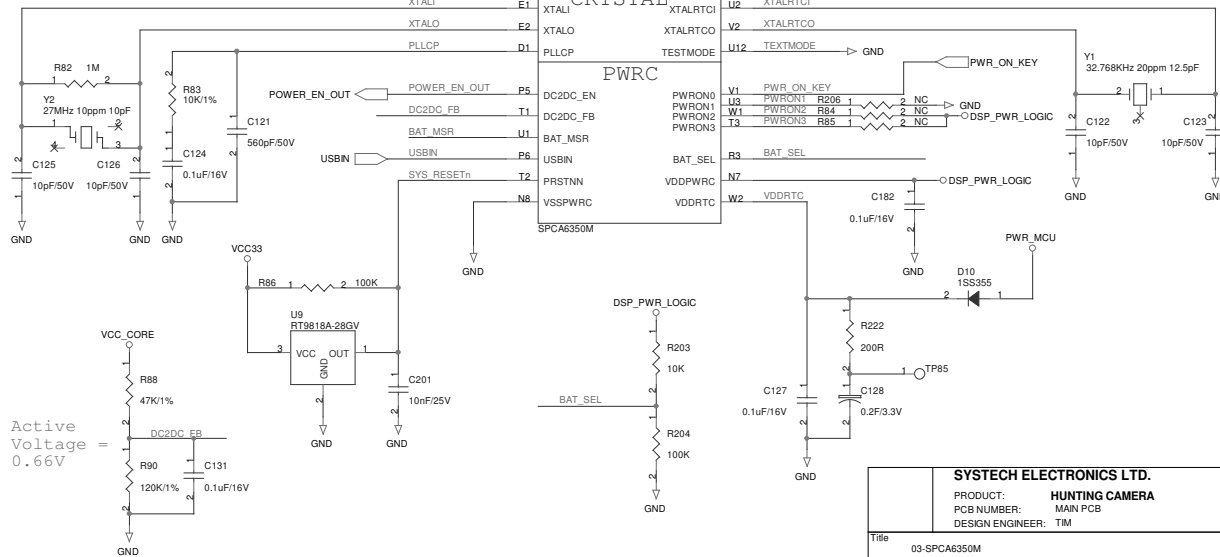
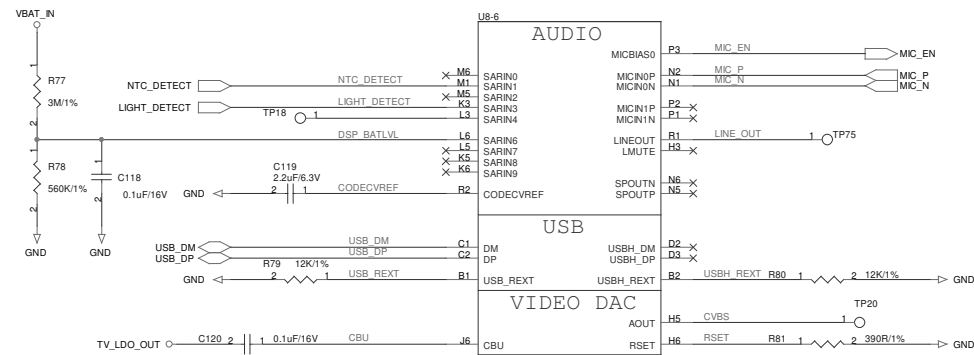
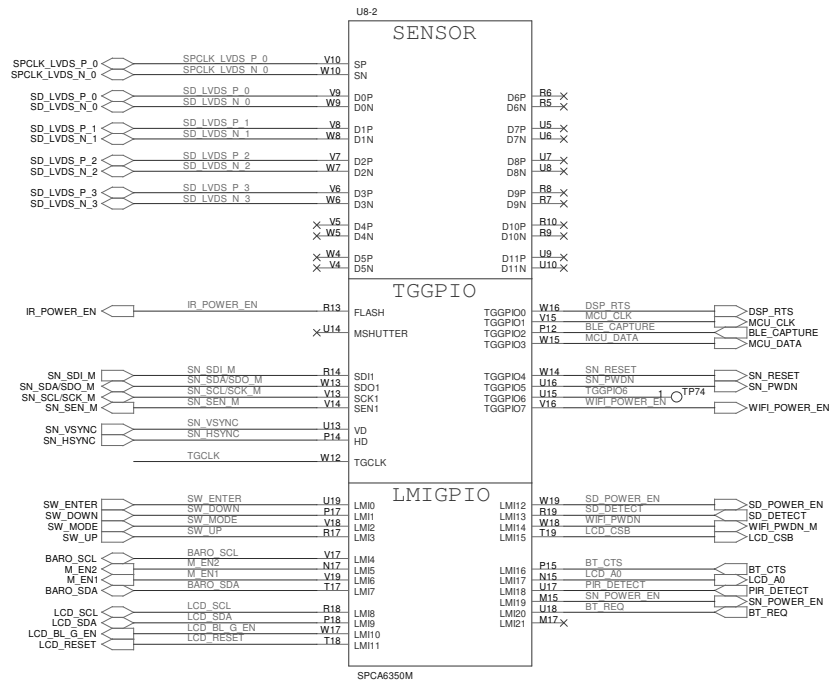




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Title 03-SPCA6350M		
Size	Document Number CustprSHC008_BTC-9D_MAIN_1612050	Rev V0.22
Date:	Wednesday, December 07, 2016	Sheet 8 of 29

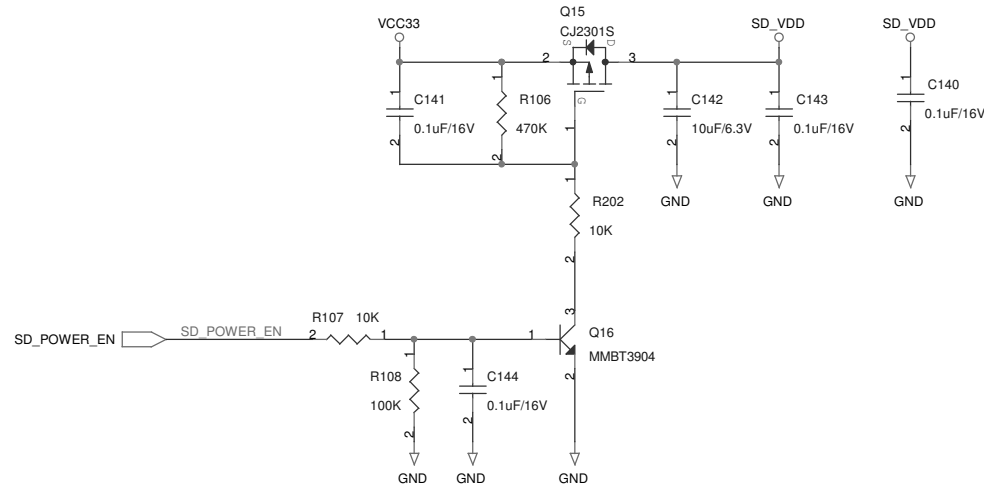
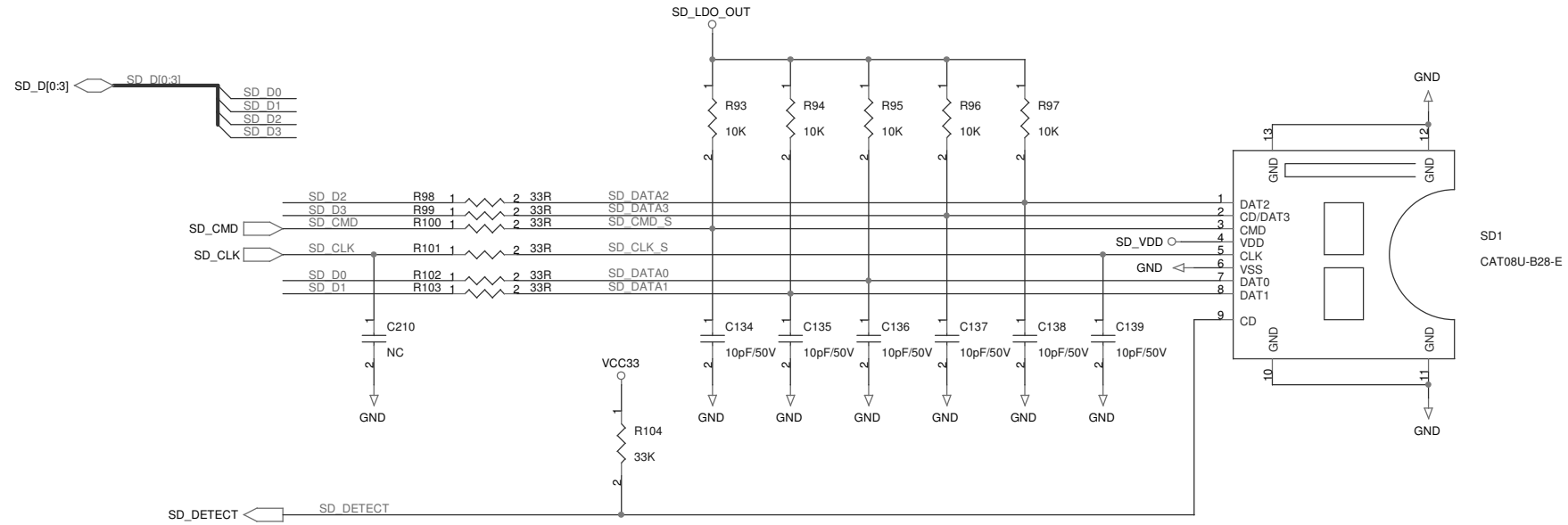


SYSTECH ELECTRONICS LTD.		
PRODUCT: HUNTING CAMERA		
PCB NUMBER: MAIN PCB		
DESIGN ENGINEER: TIM		
Title 03-SPCA6350M		
Size	Document Number	Rev
Custom	6HC008_BTC-9D_MAIN_1612050	V0.22
Date:	Wednesday, December 07, 2016	Sheet 9 of 29

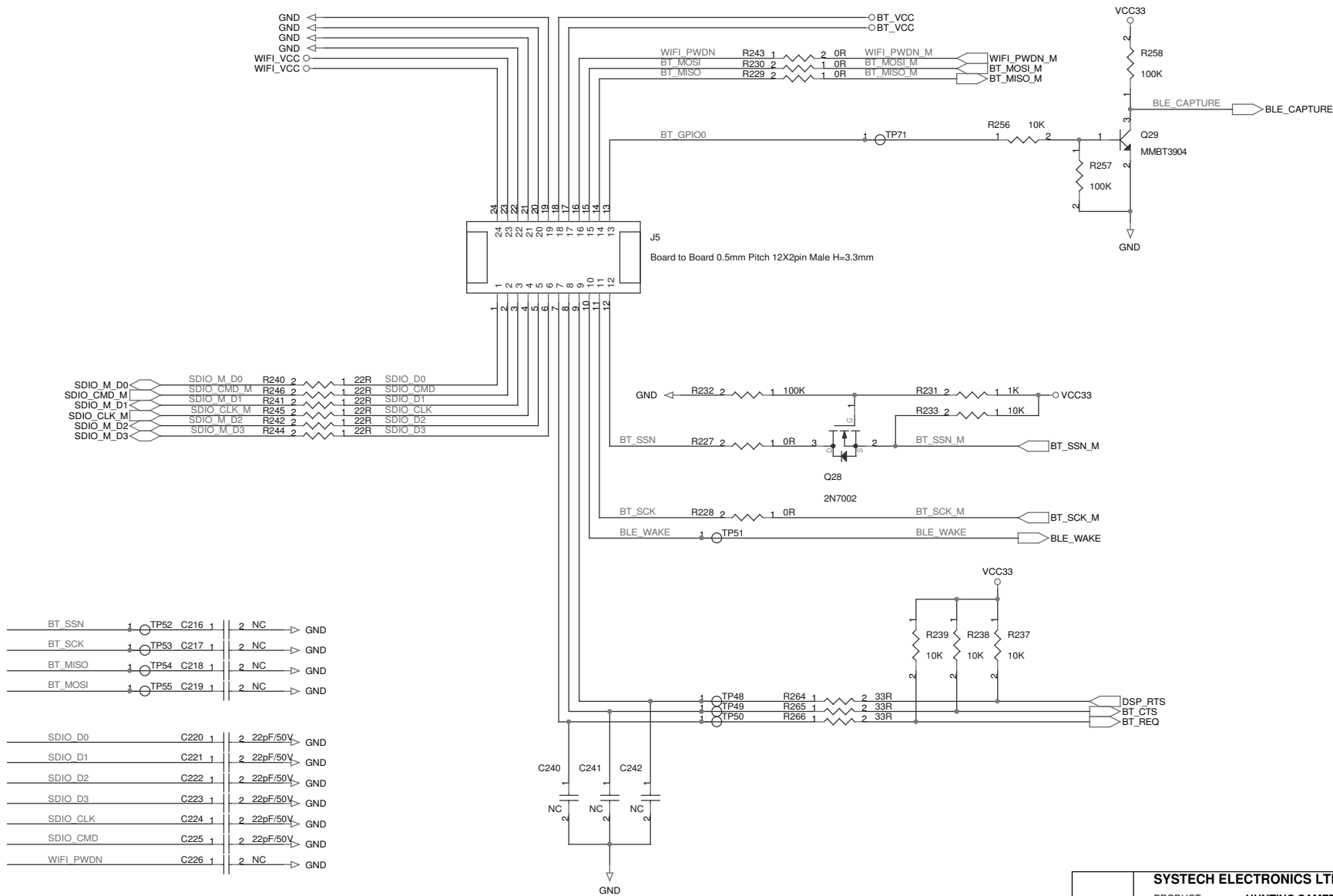


SYSTECH ELECTRONICS LTD.			
PRODUCT:		HUNTING CAMERA	
PCB NUMBER:		MAIN PCB	
DESIGN ENGINEER:		TIM	
Title			
03-SPCA6350M			
Size	Document Number		Rev
Custom	SHC008_BT-9D_MAIN_1612050		V0.22
Date:	Wednesday, December 07, 2016	Sheet 11 of 29	

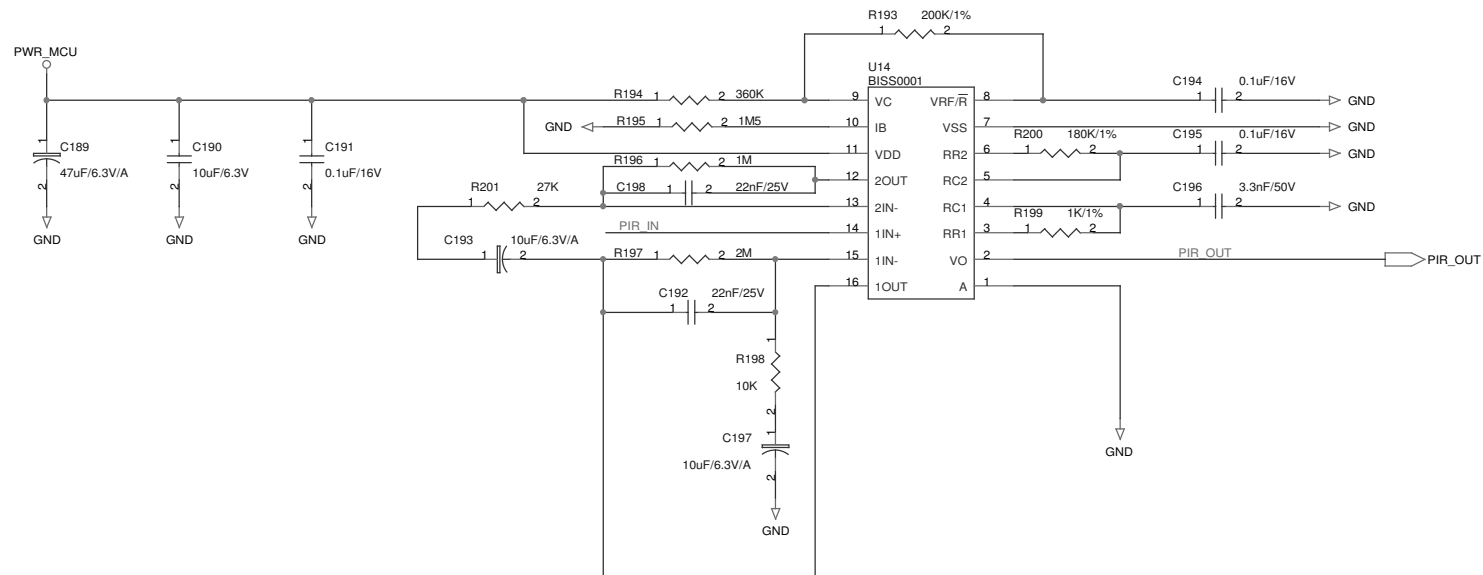
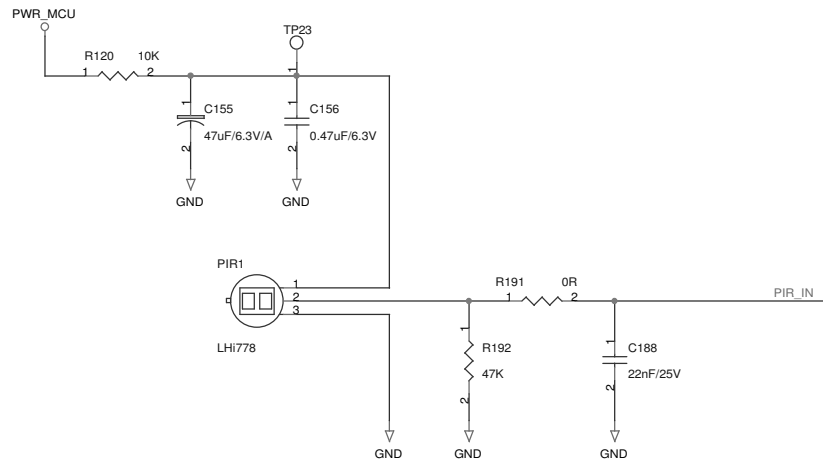
Micro SD Card



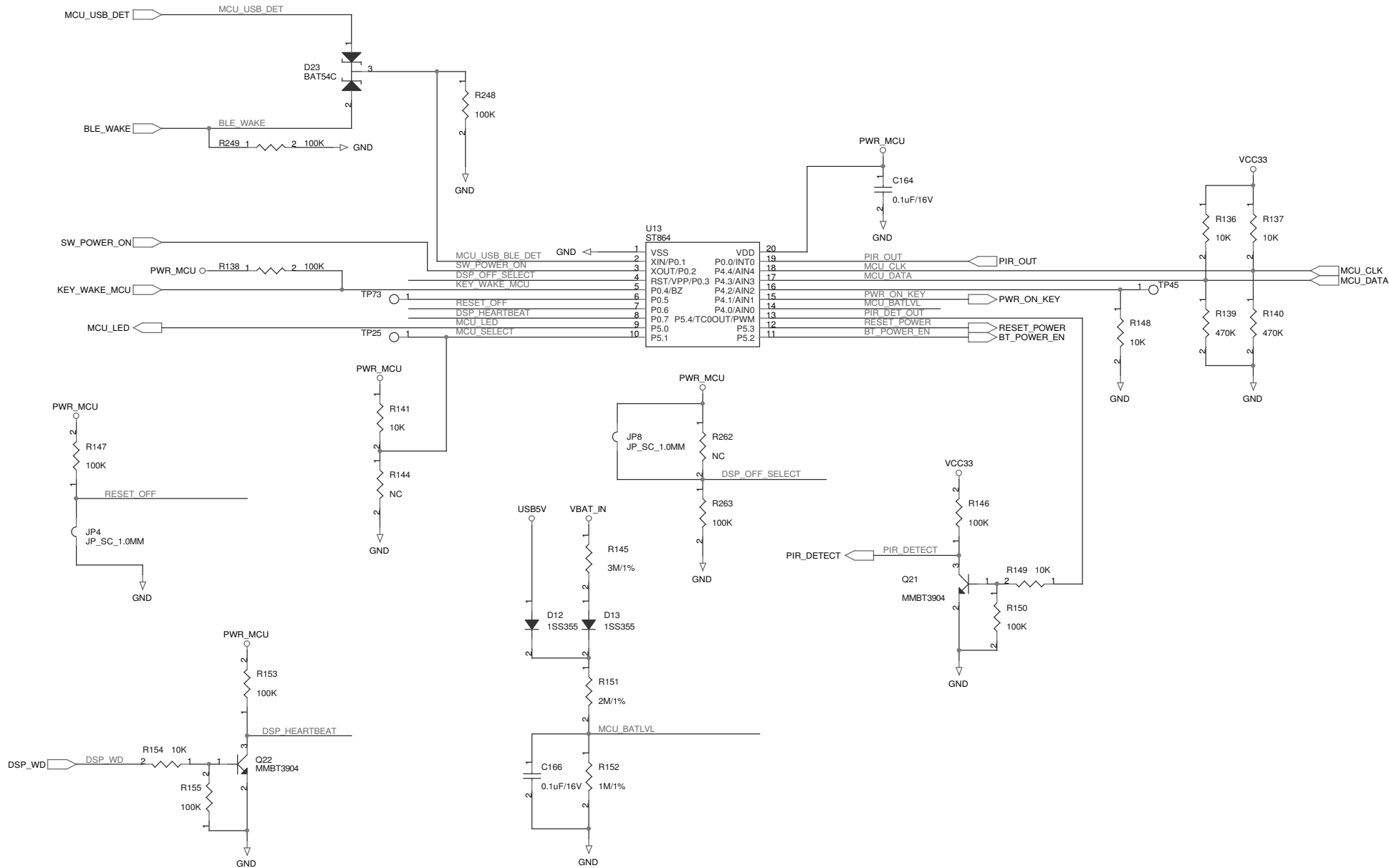
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PRODUCT: HUNTING CAMERA		
PCB NUMBER: MAIN PCB		
DESIGN ENGINEER: TIM		
Title: 05-MIRCO_SD		
Size B	Document Number: SHC008_BTC-9D_MAIN_1612050	Rev V0.22
Date: Friday, December 09, 2016	Sheet 13	of 29



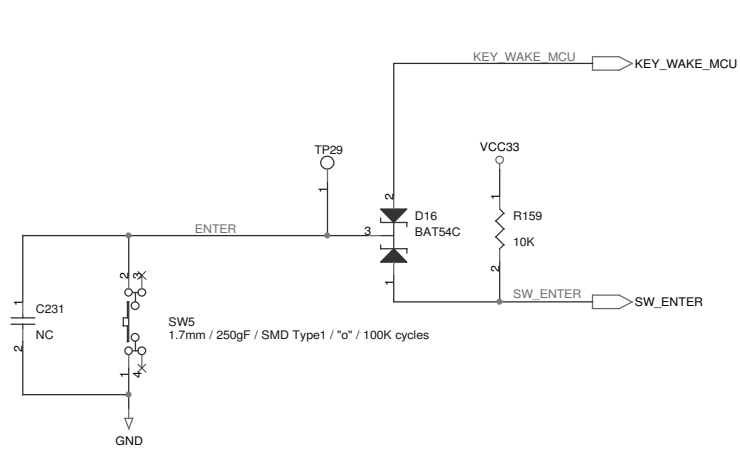
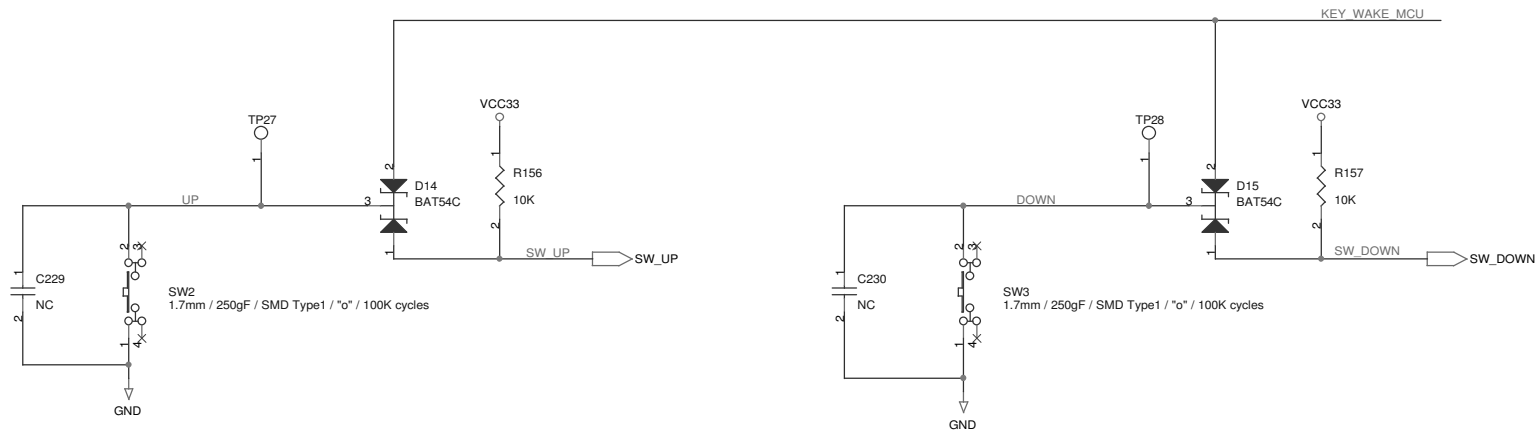
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Title 06-WIFI_BT	
Size A3	Document Number SHC008_BT-C-9D_MAIN_1612050
Date: Wednesday, December 07, 2016	
Sheet 14 of 29	
Rev V0.22	



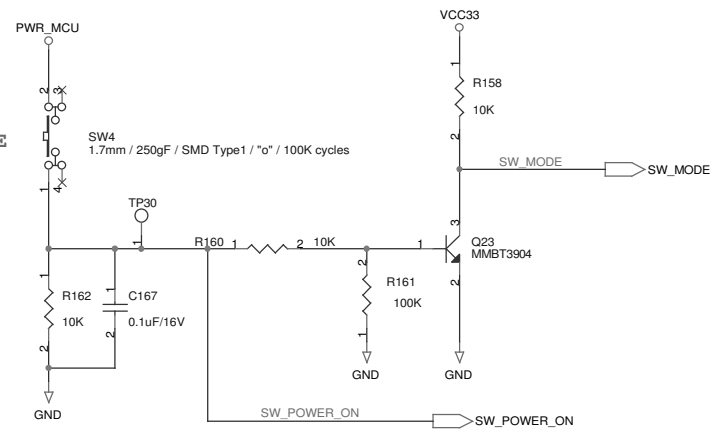
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Title: 10-PIR		
Size: A3	Document Number: SHC008_BTC-9D_MAIN_1612050	Rev: V0.22
Date: Wednesday, December 07, 2016	Sheet: 17	of: 29



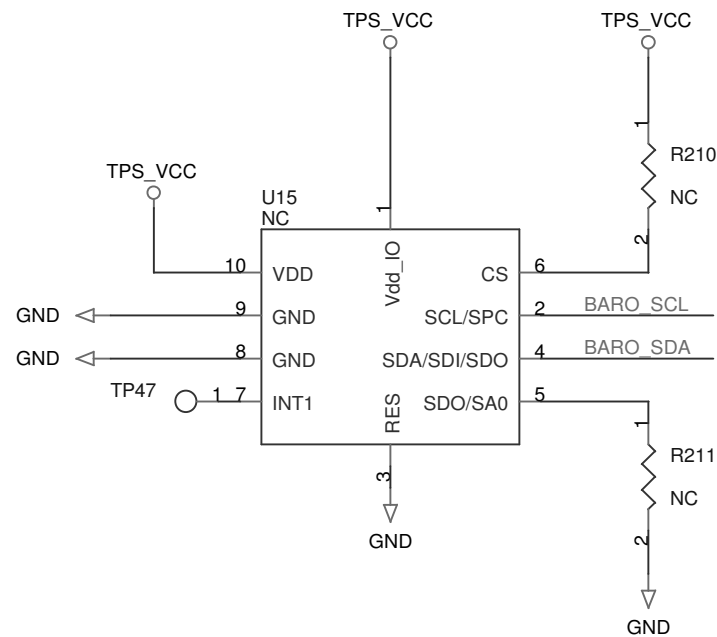
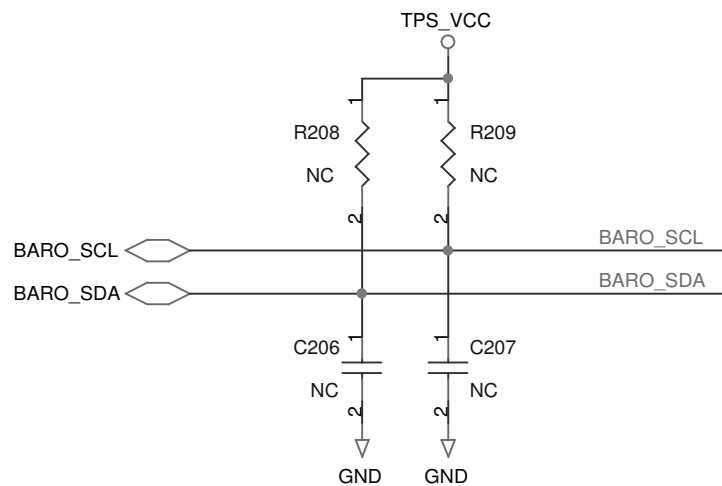
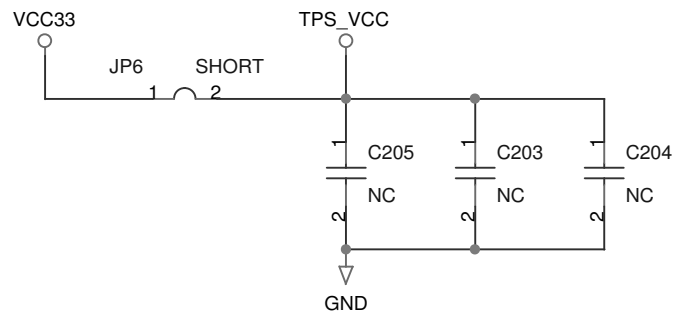
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		PRODUCT: HUNTING CAMERA	
		PCB NUMBER: MAIN PCB	
		DESIGN ENGINEER: TIM	
Title			
12-MCU			
Size	Document Number		Rev
A3	SHC008_BTC-9D_MAIN_1612050		V0.22
Date:	Wednesday, December 07, 2016	Sheet 19	of 29



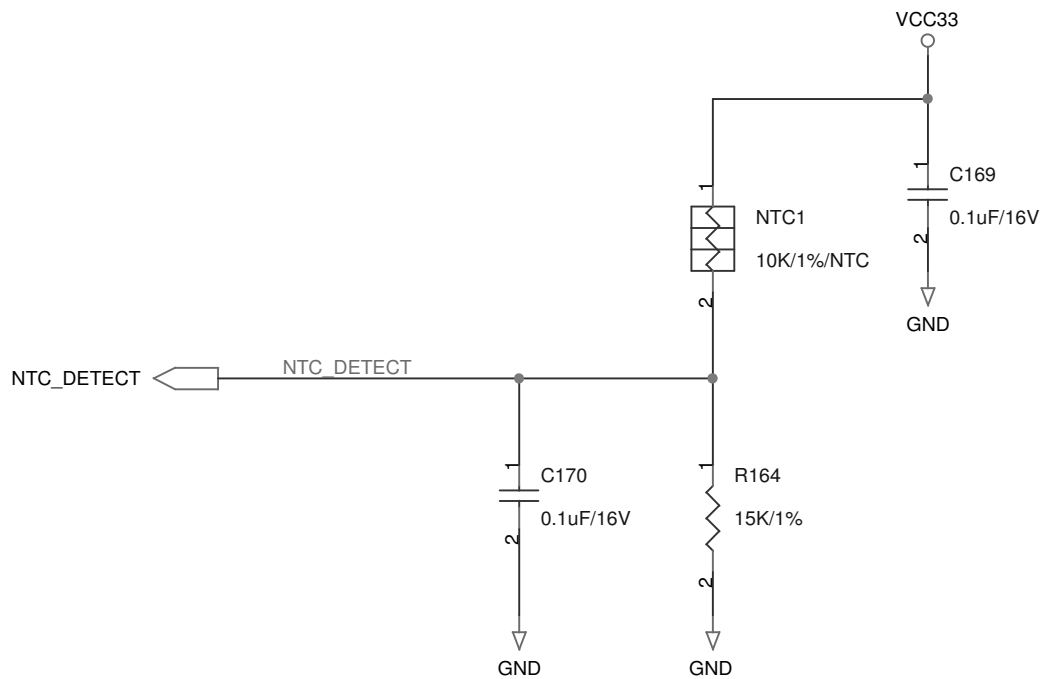
ON/OFF/MODE



		SYSTECH ELECTRONICS LTD.	
		PRODUCT: HUNTING CAMERA	
		PCB NUMBER: MAIN PCB	
		DESIGN ENGINEER: TIM	
Title			
13-KEY			
Size	Document Number		Rev
A3	SHC008_BTC-9D_MAIN_1612050		V0.22
Date:	Wednesday, December 07, 2016	Sheet 20	of 29



		SYSTECH ELECTRONICS LTD.	
		PRODUCT:	HUNTING CAMERA
		PCB NUMBER:	MAIN PCB
		DESIGN ENGINEER:	TIM
Title			
10-LPS25HBTR			
Size	Document Number		Rev
A	SHC008_BTC-9D_MAIN_1612050		V0.22
Date:	Wednesday, December 07, 2016	Sheet	21 of 29



SYSTECH ELECTRONICS LTD.

PRODUCT: **HUNTING CAMERA**

PCB NUMBER: MAIN PCB

DESIGN ENGINEER: TIM

Title

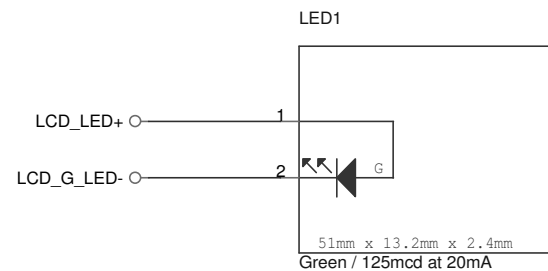
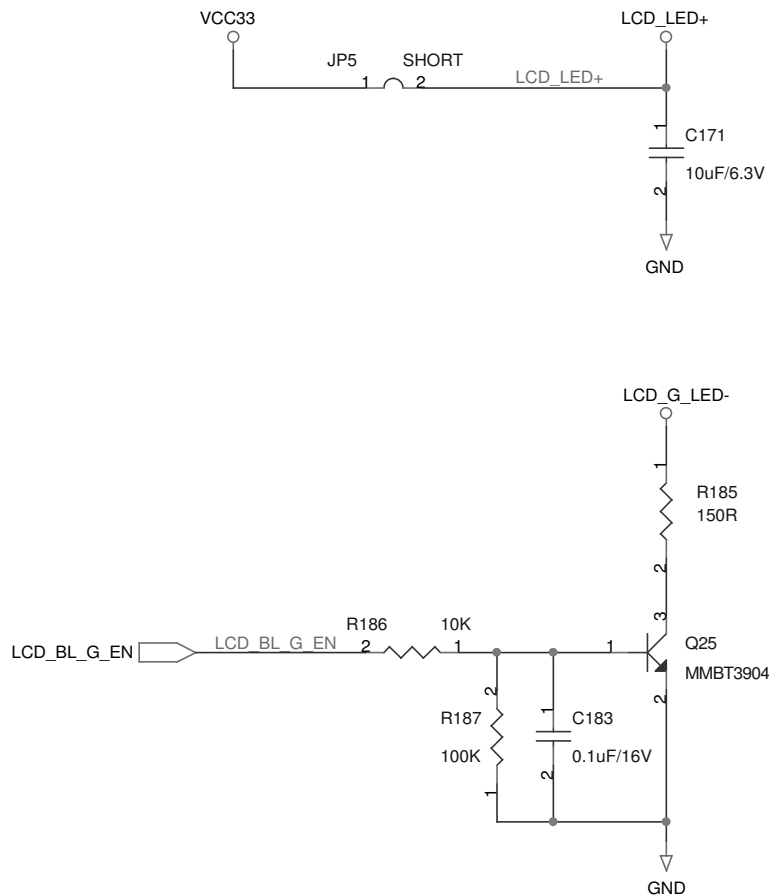
14-NTC

Size
A

Document Number
SHC008_BTC-9D_MAIN_1612050

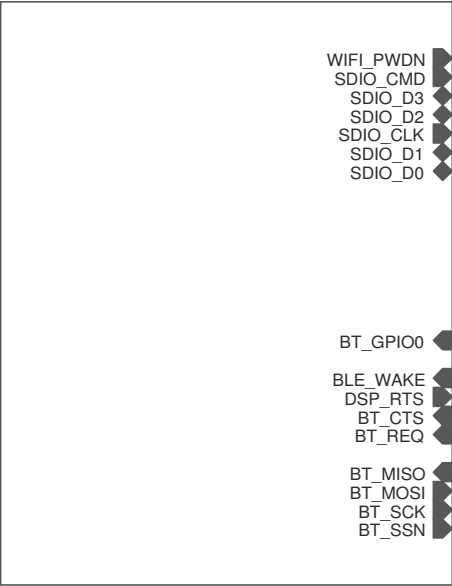
Rev
V0.22

Date: Wednesday, December 07, 2016 Sheet 22 of 29



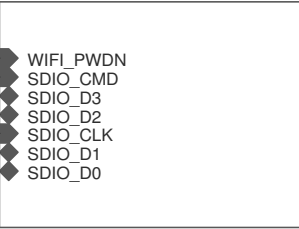
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		PRODUCT:	HUNTING CAMERA
		PCB NUMBER:	MAIN PCB
		DESIGN ENGINEER:	TIM
Title		15-LCD_BACKLIGHT	
Size	Document Number	Rev	
A4	SHC008_BTC-9D_MAIN_1612050	V0.22	
Date:	Wednesday, December 07, 2016	Sheet	23 of 29

01-CONNECTOR



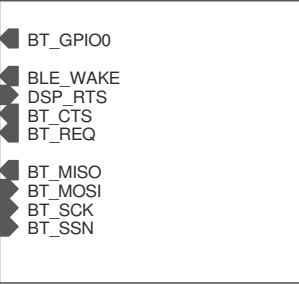
01-CONNECTOR

02-WIFI



02-WIFI

03-BLUETOOTH_PA



03-BLUETOOTH_PA

SCREW HOLES :

MH1



HOLE1.9-SP3.5

MH2



HOLE1.9-SP3.5

PCB1

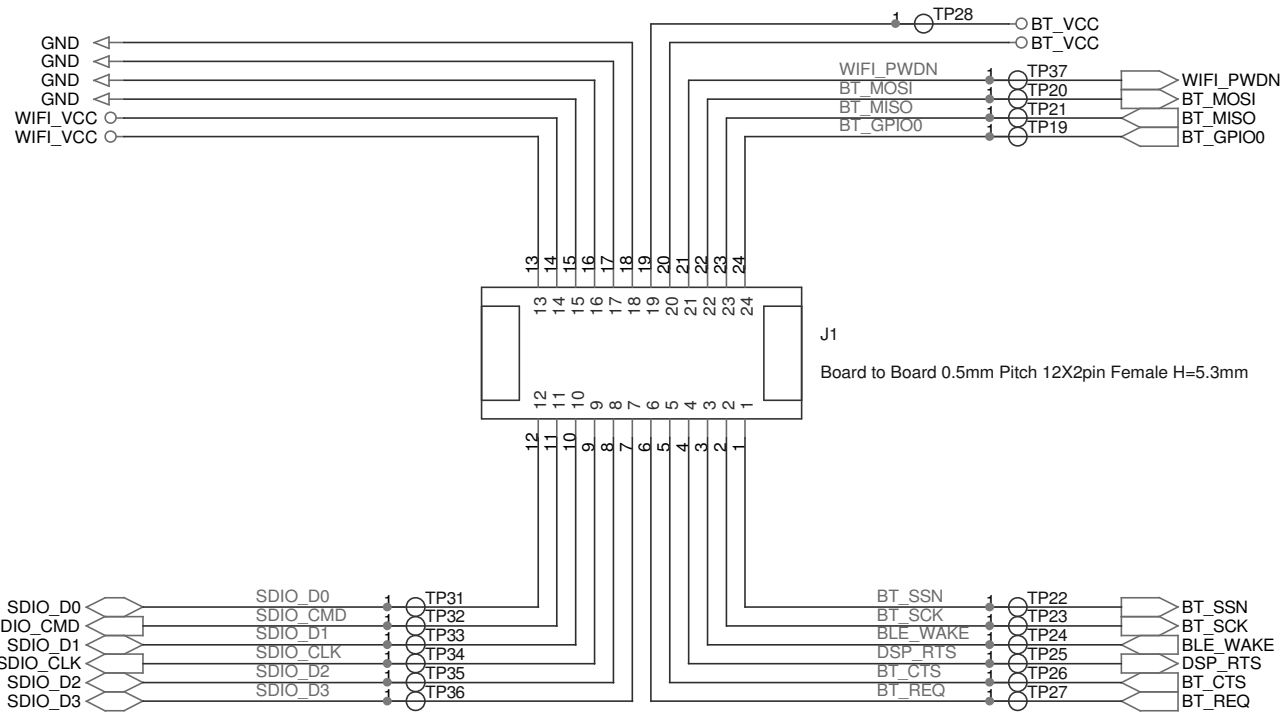


4 Layer | 1.2 mm | H/H/H/H | Black Solder Masked | ROHS/REACH | Gold Immersion
SHC008_BTC-BABY_RF_1612050_V0-14_YP

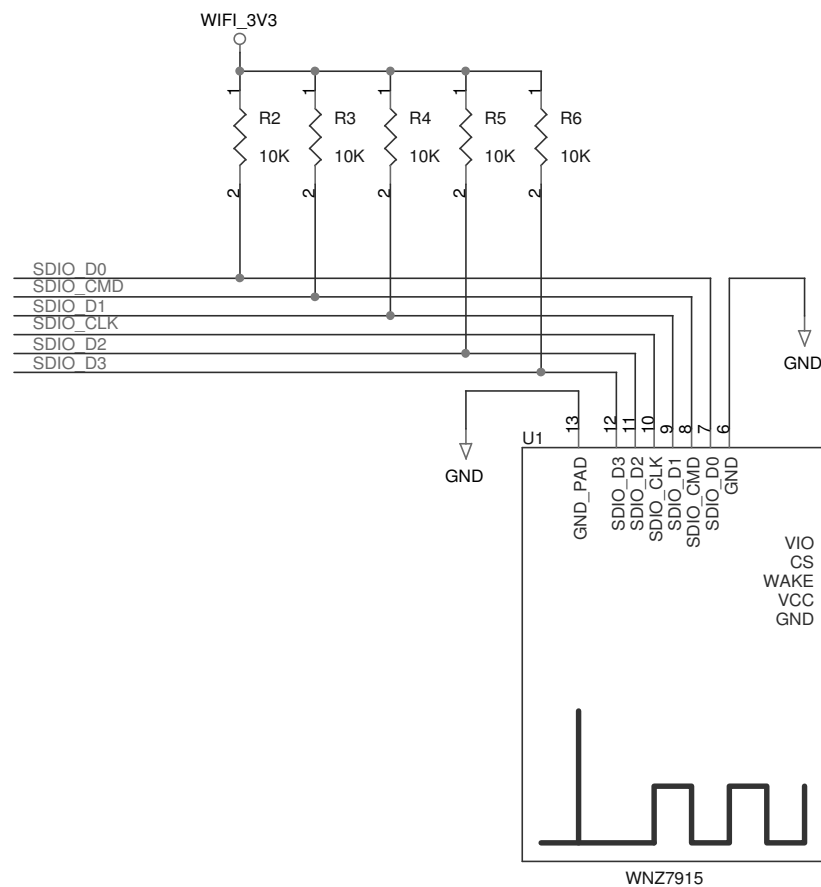
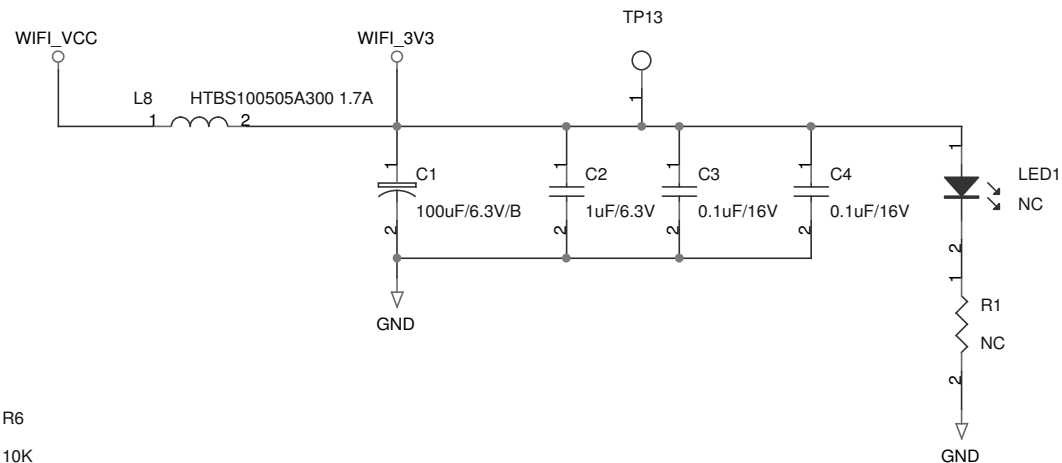
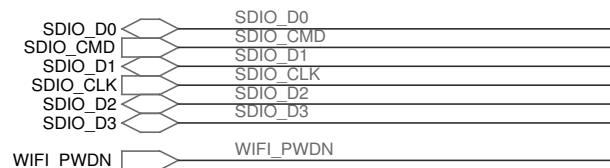
SYSTECH ELECTRONICS LTD.

PRODUCT: HUNTING CAMERA
PCB NUMBER: RF_PCB
DESIGN ENGINEER: TIM

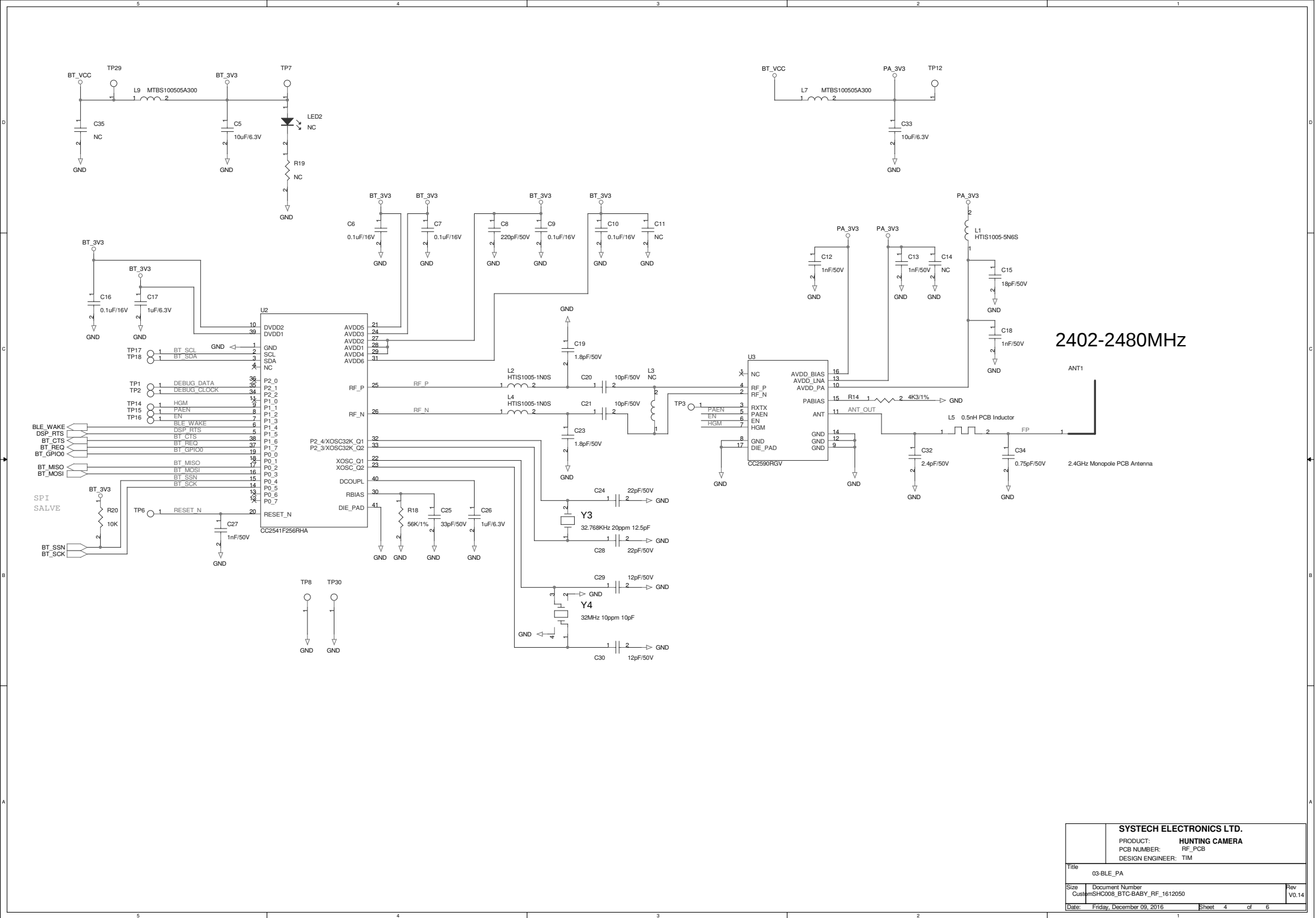
Title		
00-MAIN		
Size	Document Number	Rev
A4	SHC008_BTC-BABY_RF_1612050	V0.14
Date:	Friday, December 09, 2016	Sheet 1 of 6



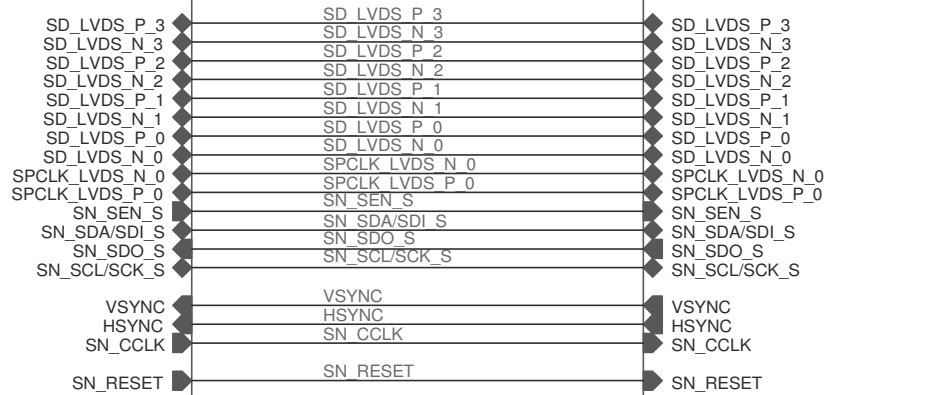
SYSTECH ELECTRONICS LTD.	
PRODUCT: HUNTING CAMERA	
PCB NUMBER: RF_PCB	
DESIGN ENGINEER: TIM	
Title 01-CONNECTOR	
Size A4	Document Number SHC008_BT-C-BABY_RF_1612050
Date: Tuesday, December 06, 2016	Sheet 2 of 6
Rev V0.14	



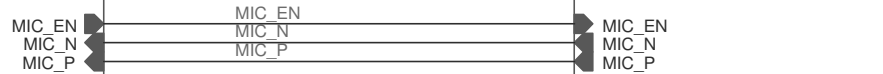
SYSTECH ELECTRONICS LTD.	
PRODUCT: HUNTING CAMERA	
PCB NUMBER: RF_PCB	
DESIGN ENGINEER: TIM	
Title 02-WIFI	
Size A4	Document Number SHC008_BTC-BABY_RF_1612050
Date: Tuesday, December 06, 2016	Sheet 3 of 6
Rev V0.14	



01-CONNECTOR



02-IMAGE_SENSOR



03-MIC

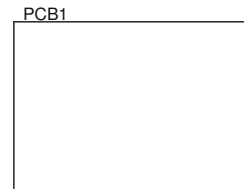
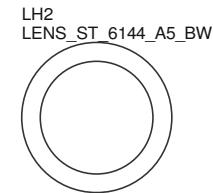
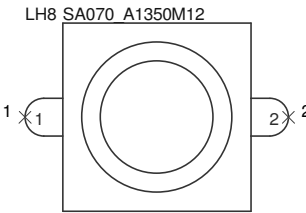


04-LIGHT_SENSOR



05-MCU_LED

01-CONNECTOR



4 Layer | 1.2 mm | H/H/H/H | Black Solder Masked | ROHS/REACH | Gold Immersion
SHC008_BTC-9-10D_SENSOR_IMX291_1612050_V0_05

SCREW HOLES :

MH1



HOLE1.9-SP3.5

MH2



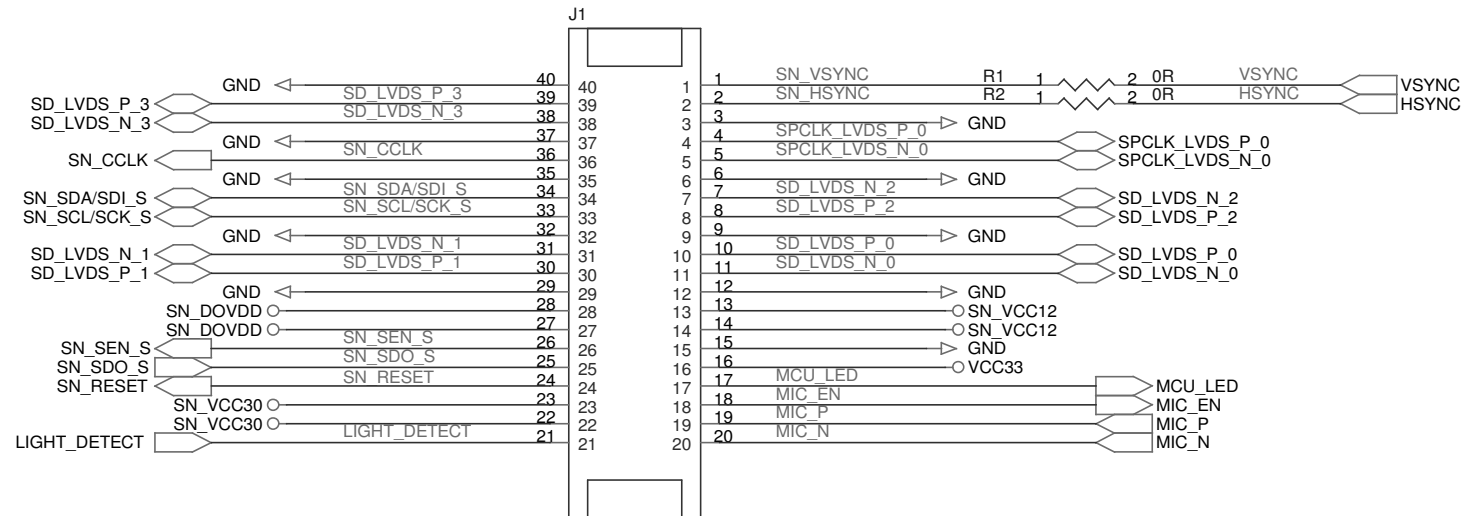
HOLE1.9-SP3.5

MH3



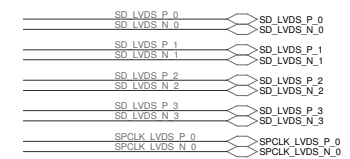
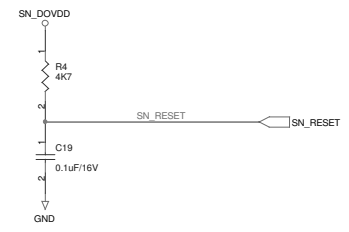
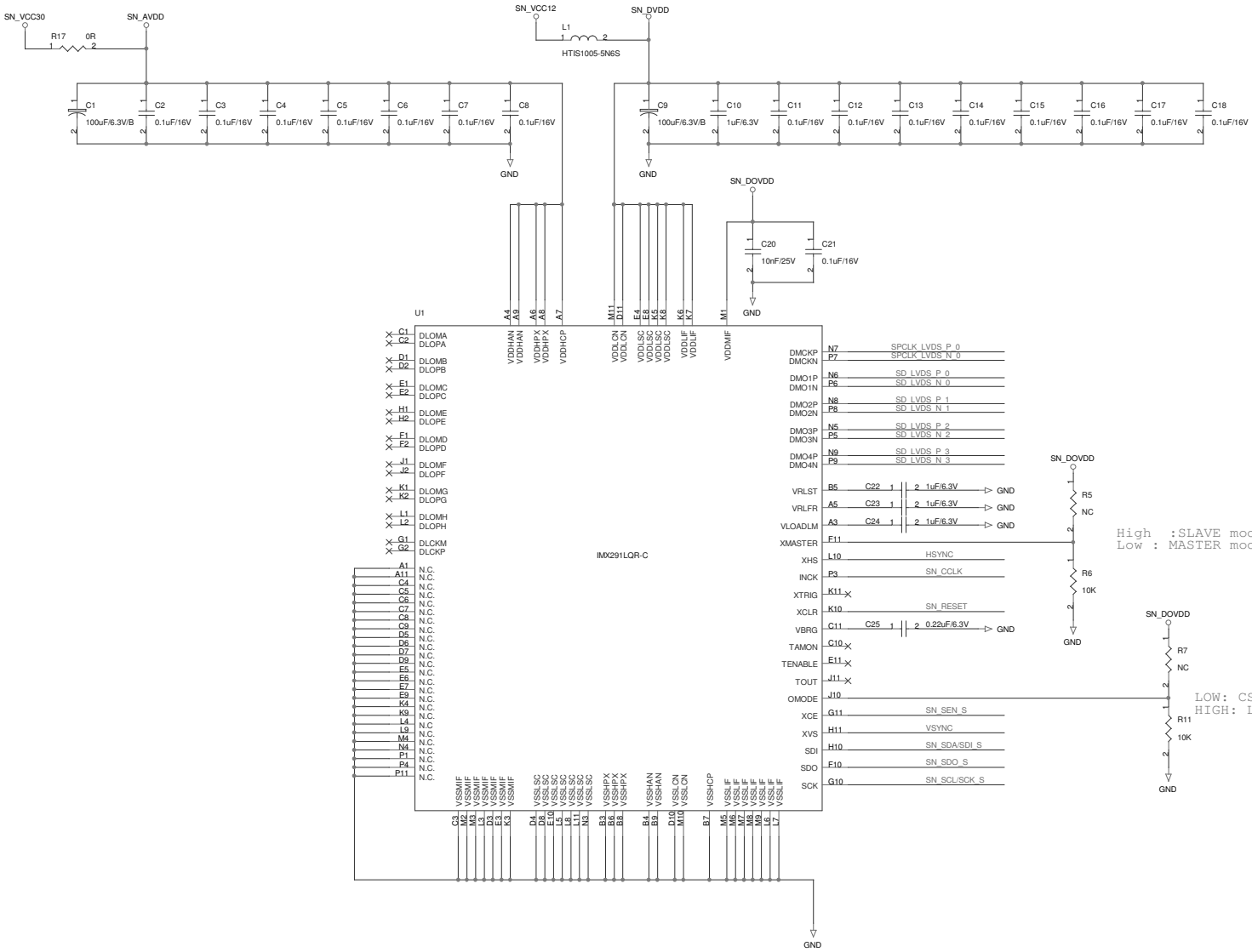
HOLE1.9-SP3.5

SYSTECH ELECTRONICS LTD.		
PRODUCT: HUNTING CAMERA		
PCB NUMBER: SENSOR_PCB		
DESIGN ENGINEER: YP		
Title 00-MAIN		
Size A4	Document Number SHC008_BTC-9-10D_SENSOR_IMX291_1612050	Rev V0.06
Date: Tuesday, December 06, 2016	Sheet 1	of 7

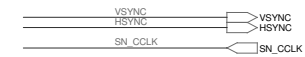


Remarks: With B1F40U-B1S6-R-01, total height = 5.0mm

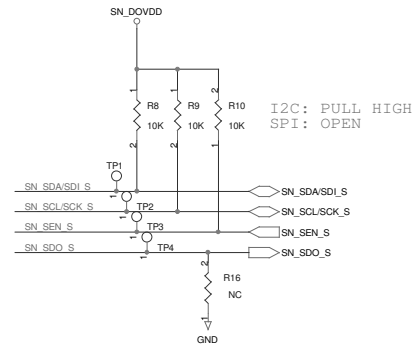
SYSTECH ELECTRONICS LTD.	
PRODUCT: HUNTING CAMERA	
PCB NUMBER: SENSOR_PCB	
DESIGN ENGINEER: YP	
Title 01-CONNECTOR	
Size A4	Document Number SHC008_BTC-9-10D_SENSOR_IMX291_1612050
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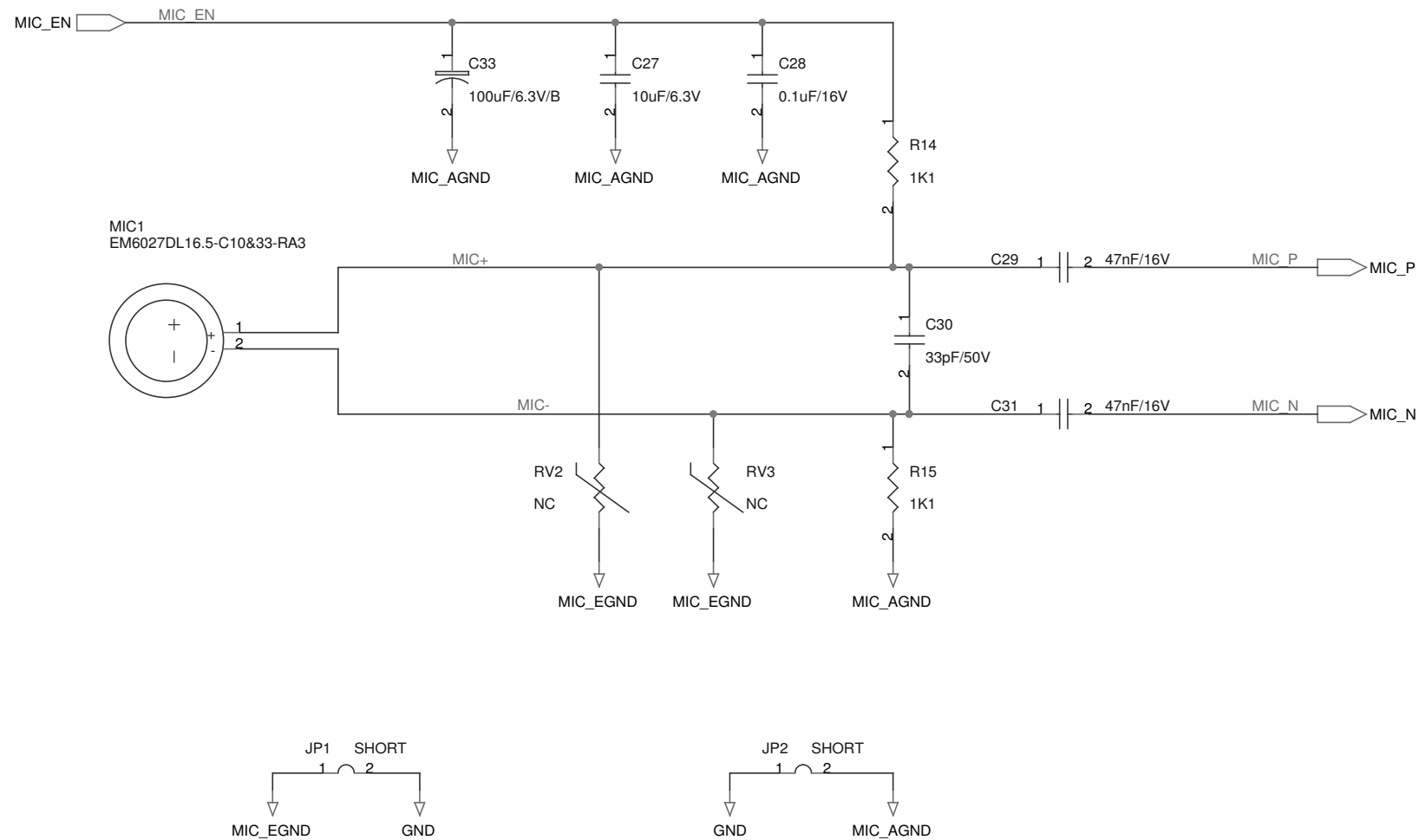
Differential pairs /impedance 100ohm



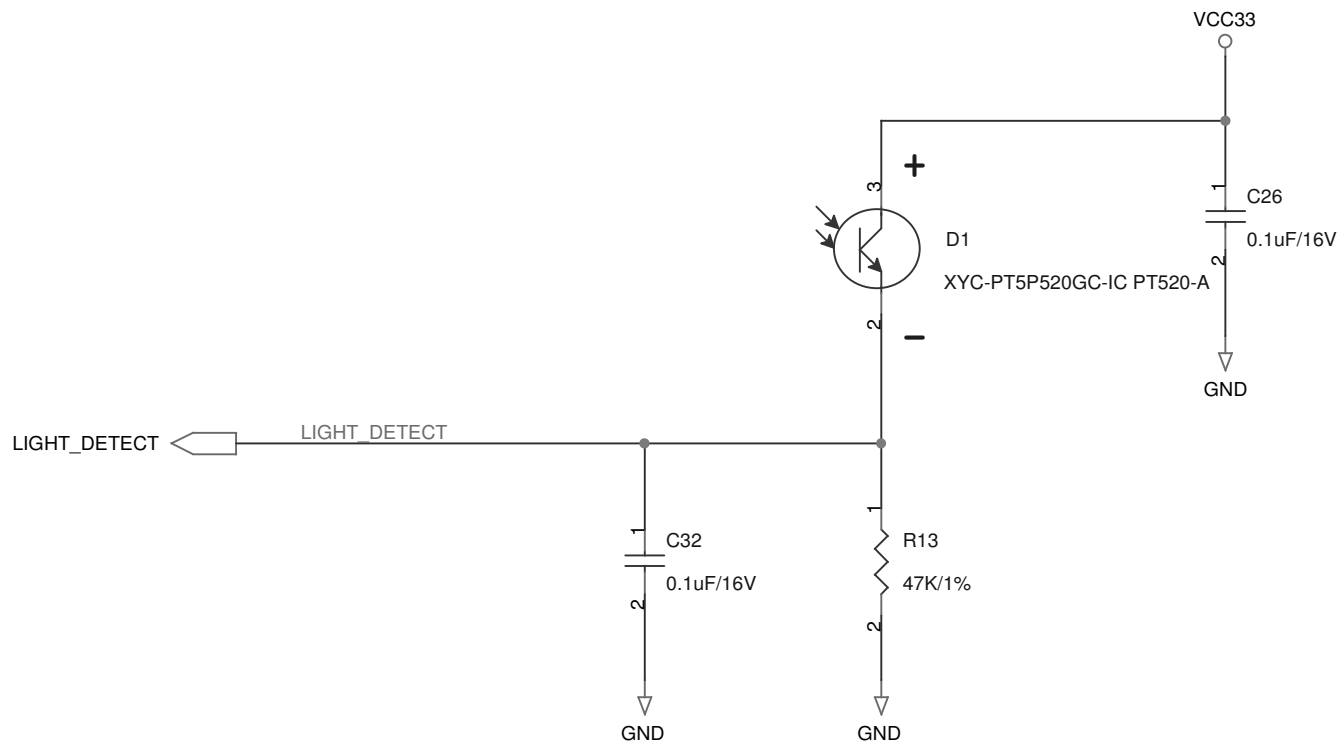
High :SLAVE mode
Low : MASTER mode



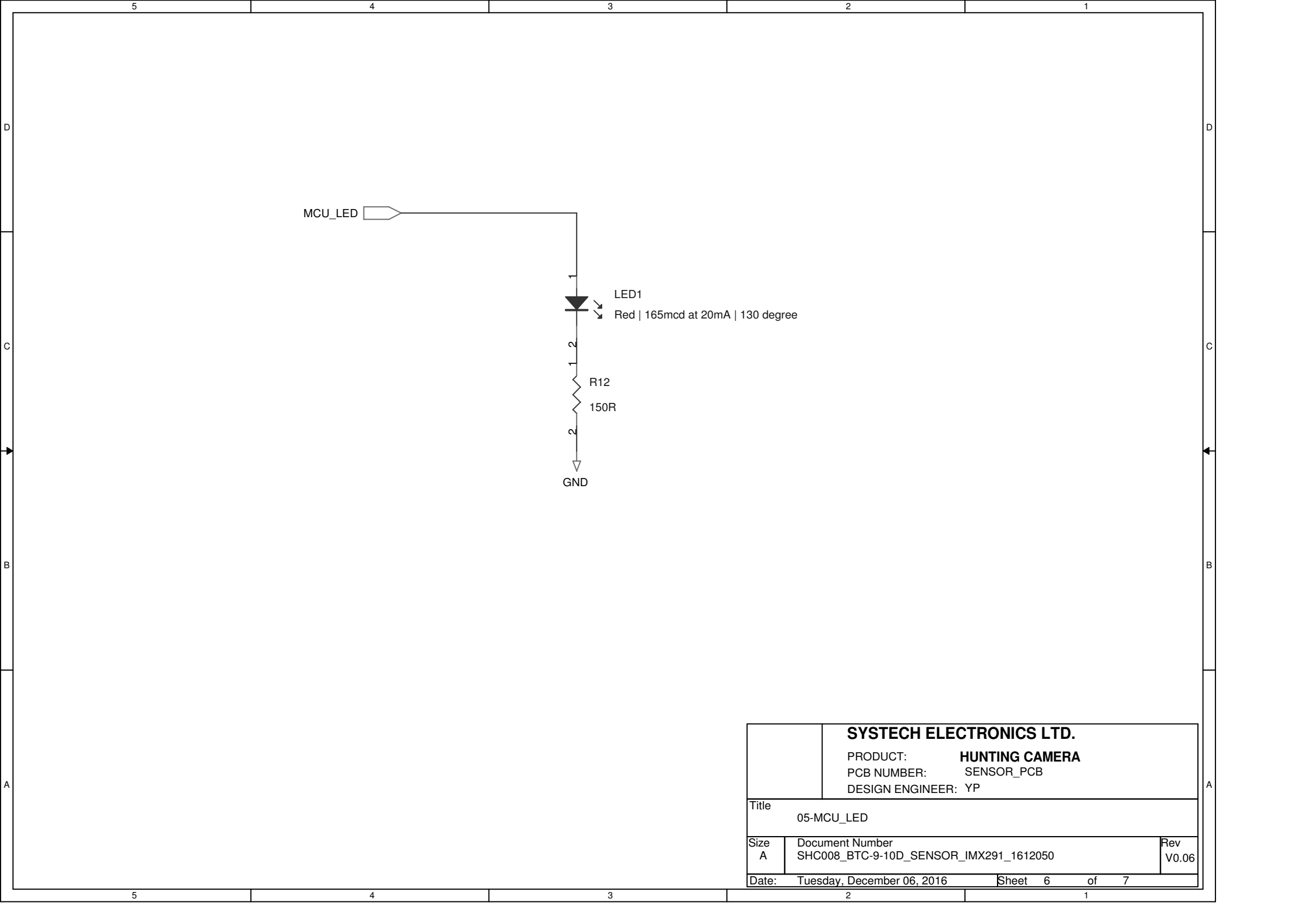
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PRODUCT: HUNTING CAMERA	
PCB NUMBER: SENSOR_PCB	
DESIGN ENGINEER: YP	
Title	02-IMX291
Size	Document Number
C	SHC008_BTIC-9-10D_SENSOR_IMX291_1612050
Date:	Tuesday, December 06, 2016
Sheet	3 of 7
Rev	V0.06



SYSTECH ELECTRONICS LTD.		
PRODUCT: HUNTING CAMERA		
PCB NUMBER: SENSOR_PCB		
DESIGN ENGINEER: YP		
Title03-MIC		
SizeA4	Document NumberSHC008_BTC-9-10D_SENSOR_IMX291_1612050	RevV0.06
Date: Friday, December 16, 2016Sheet 4 of 7		



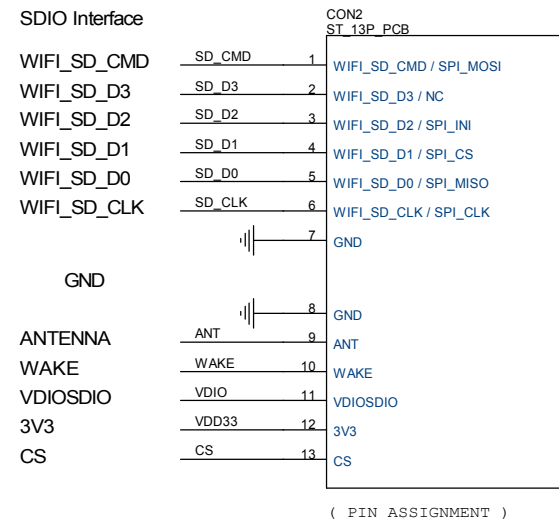
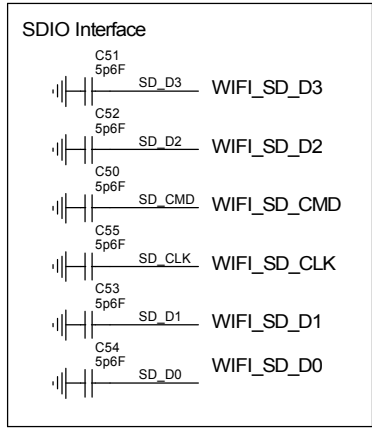
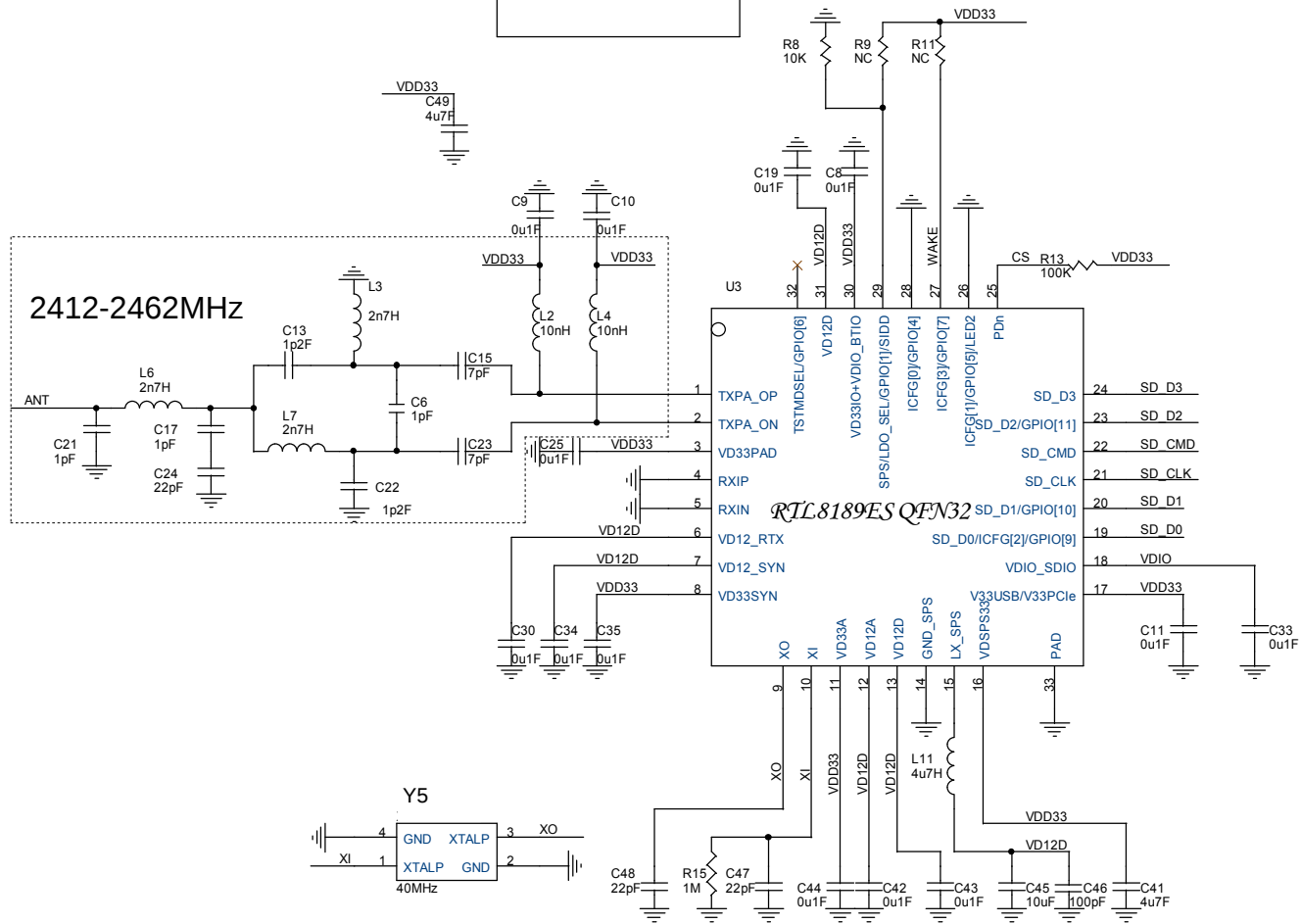
SYSTECH ELECTRONICS LTD.		
PRODUCT: HUNTING CAMERA		
PCB NUMBER: SENSOR_PCB		
DESIGN ENGINEER: YP		
Title 04-LIGHT_SENSOR		
Size A	Document Number SHC008_BTC-9-10D_SENSOR_IMX291_1612050	Rev V0.06
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Description #

(1) Internal 1.2V Switching Regulator:
- 10K for R8 & NC for R9
- 4.7uH for L11

(2) Internal 1.2V LDO:
- NC for R8 & 10K for R9
- 0R/0805 for L11



RTL8189ES STAMP Module-1V0		
Realtek Confidential		
Title		
Size	Document Number	Rev v1
Date: Friday, March 02, 2012	Sheet 1 of 1	