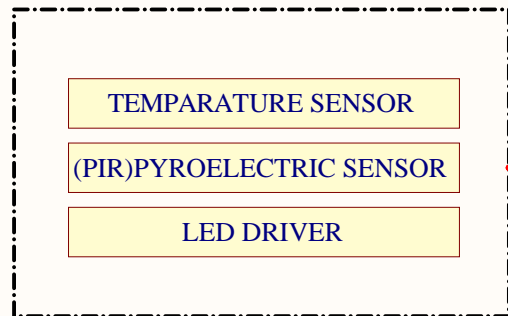
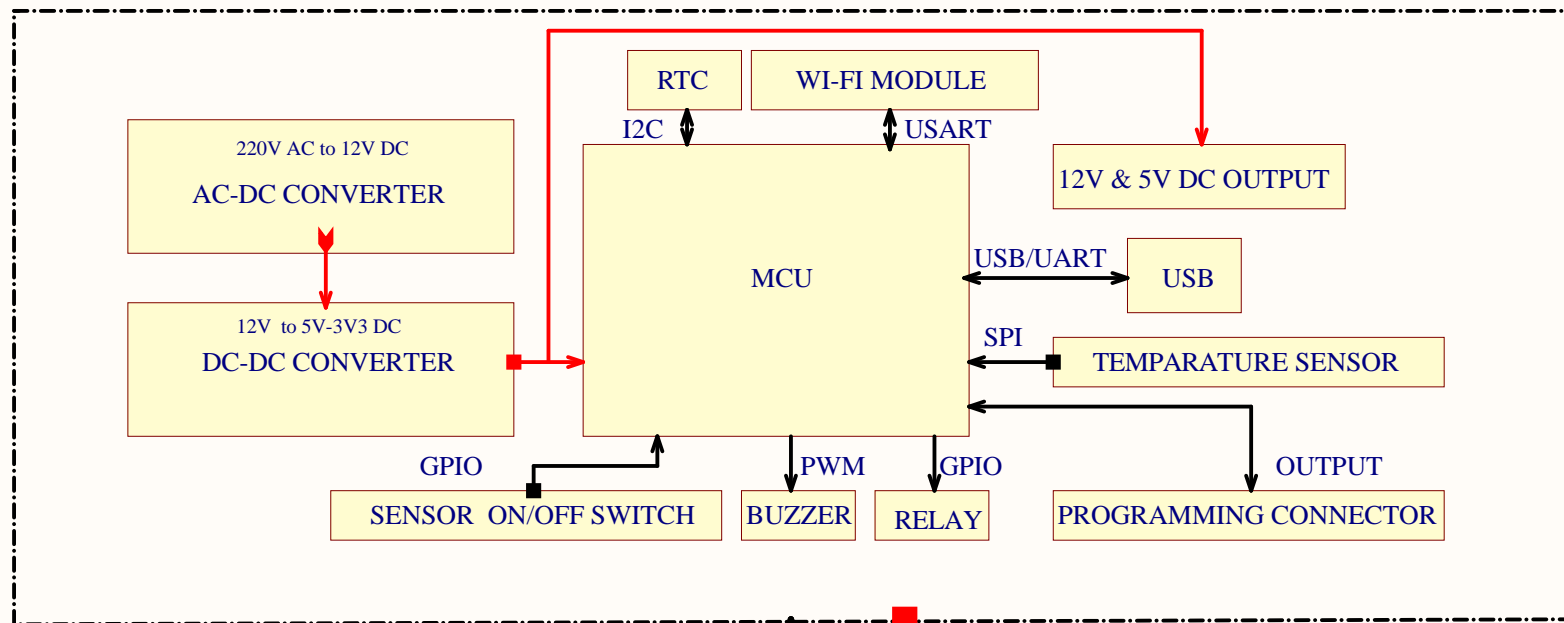


1	2	3	4	5	6																								
<div><div><div>CONTENTS</div><table><tr><th>Page No</th><th>Description</th></tr><tr><td>1</td><td>Cover</td></tr><tr><td>2</td><td>Block Diagram</td></tr><tr><td>3</td><td>Power Managment</td></tr><tr><td>4</td><td>Microcontroller</td></tr><tr><td>5</td><td>Auxiliary Sensor Board</td></tr></table></div><div><div>REVISION</div><table><tr><th>Page No</th><th>Date</th><th>Description</th></tr><tr><td>1-5</td><td>02/01/2023</td><td>First Release</td></tr></table></div><div><div>REVISION</div><table><tr><th>Description</th></tr><tr><td>Board Features</td></tr><tr><td>Gerber Files</td></tr><tr><td>Attachments</td></tr></table></div><div><div>CONTACT</div><div>Mehmet Hamza Limanlar <a href="mailto:mehmethamzalimanlar@gmail.com">mehmethamzalimanlar@gmail.com</a> +905365720782</div></div></div>						Page No	Description	1	Cover	2	Block Diagram	3	Power Managment	4	Microcontroller	5	Auxiliary Sensor Board	Page No	Date	Description	1-5	02/01/2023	First Release	Description	Board Features	Gerber Files	Attachments		
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PROJECT:		DRAWN BY:																											
WF1_HOME_SECURITY_SYS-V01.PIP		Engineer: M.Hamza Limanlar																											
REVISION: *		Starting Date: 1/26/2023	Release Date: *																										
FILE NAME:		Cover.SchDoc																											
SIZE: A3	Department: R&D	DESCRIPTION: *																											
SCALE:		Checked / Approved BY: *	SHEET 1 OF 5																										
1	2	3	4	5	6																								

PROJECT:		DRAWN BY:	
WF1_HOME_SECURITY_SYS-V01.PIP		Engineer: M.Hamza Limanlar	
REVISION: *		Starting Date: 1/26/2023	Release Date: *
FILE NAME:		Cover.SchDoc	
SIZE: A3	Department: R&D	DESCRIPTION: *	
SCALE:		Checked / Approved BY: *	SHEET 1 OF 5



**COMPONENTS:**  
 1-RTC: M41T00M6F  
 2-WI-FI MODULE: ESP32-WROOM-32E-N4  
 3-PYRO SENSOR: LHI 878/3902  
 4-TEMPERATURE OUTSIDE: TFPT1206L1002FM  
 5-TEMPERATURE INSIDE: MAX6662MSA+  
 6-MCU: STM32F103C6T6A  
 7-RELAY: ALQ112  
 8-BUZZER: CMI-96051C-0580T  
 9-SENSOR ON/OFF SWITCH: EG1215AA  
 AC-DC CONVERTER:  
 10-Transformer : BV302S12010-ZU  
 11-Bridge Diodes:DB10SS  
 DC-DC CONVERTER:  
 12-5VDC: LM2675MX-12  
 13-3V3DC:AP7361-33E-13  
 14-LED DRIVER MOSFET:SSM3K357R,LF

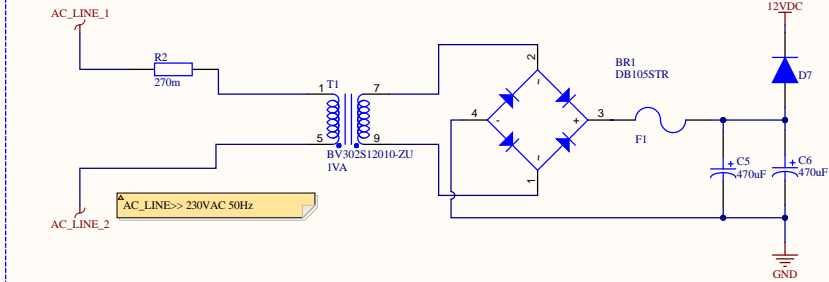
**COMPONENT SUPPLY SITES SUGGESTIONS:**  
 DIGIKEY  
 MOUSER  
 FARNELL  
 RS COMPONENT  
 LCSC

**SERIAL TELECOMMUNICATION PROTOCOLS:**  
 UART  
 USART  
 I2C  
 SPI

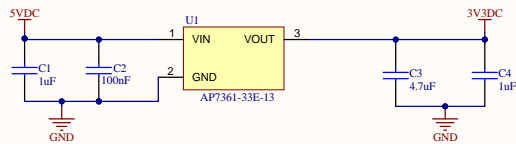
**PASSIVE COMPONENTS:**  
 RC0603FR-0710KL  
 C0603C104K4RAC  
 ALA7DA471CF450  
 PCR1E471MCL1GS

<b>PROJECT:</b> WIFI_HOME_SECURITY_SYS-V01.P/P4		<b>DRAWN BY:</b> Engineer: M.Hamza Limanlar <i>H. Limanlar</i>	
<b>REVISION:</b> P0	Starting Date: 1/26/2023	Release Date: *	
<b>FILE NAME:</b>		Block_Diagram.SchDoc	
<b>SIZE:</b> A3	<b>Department:</b> R&D	<b>DESCRIPTION:</b> Wireless Home Security System	
<b>SCALE:</b>	Checked / Approved BY:		<b>SHEET</b> 2 <b>OF</b> 5

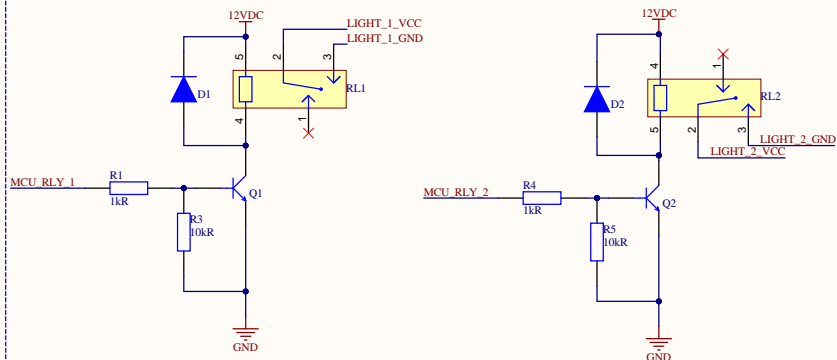
## AC-DC CONVERTER



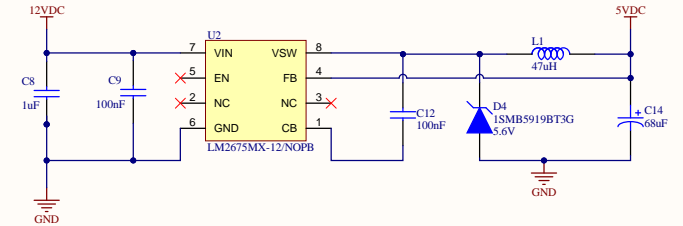
## (5V TO 3V3) DC-DC CONVERTER



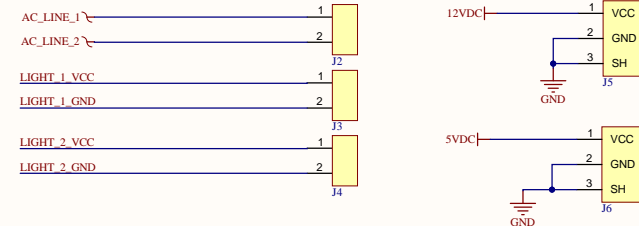
## RELAY



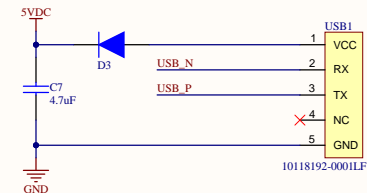
## (12V TO 5V) DC-DC CONVERTER



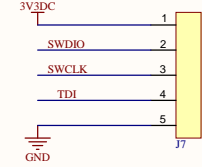
## CONNECTORS



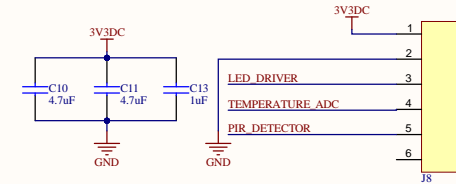
## USB



## PROGRAMMING CONNECTOR

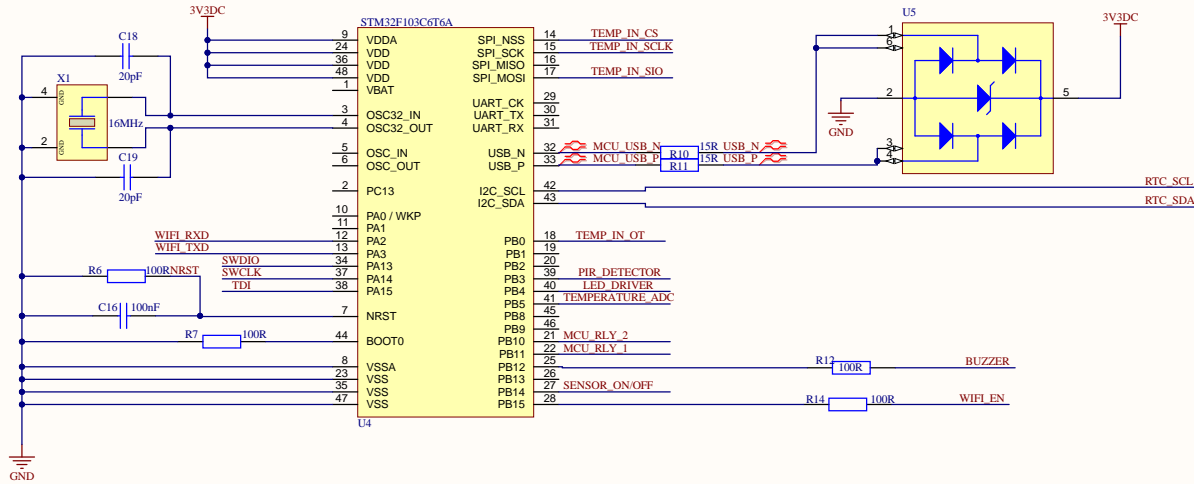


## AUX BOARD CONNECTOR

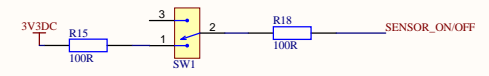


PROJECT:	DRAWN BY:	
WIFI_HOME_SECURITY_SYS-V01.P/P/P	Engineer: M.Hamza Limanlar <i>H. Limanlar</i>	
REVISION: P1	Starting Date: 1/26/2023	Release Date:
FILE NAME:	Power_Managment.SchDoc	
SIZE: A3	Department: R&D	DESCRIPTION: Wireless_Security
SCALE:	Checked / Approved By: *	SHEET 3 OF 5

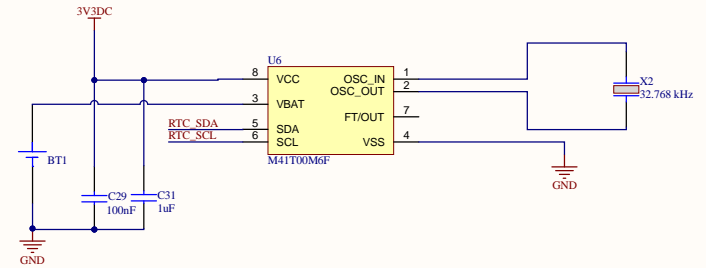
## MICROCONTROLLER



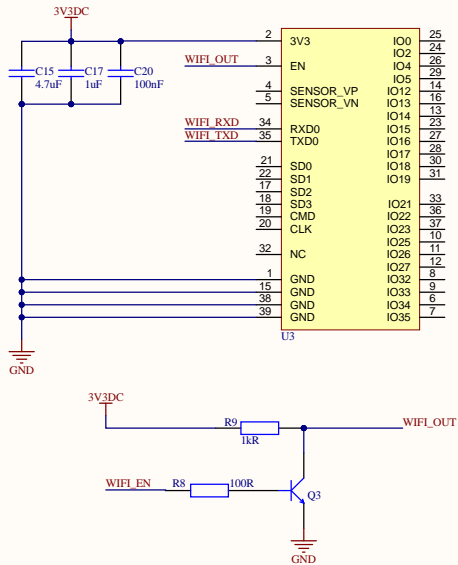
## SENSOR ON/OFF SWITCH



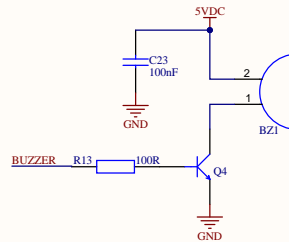
## RTC



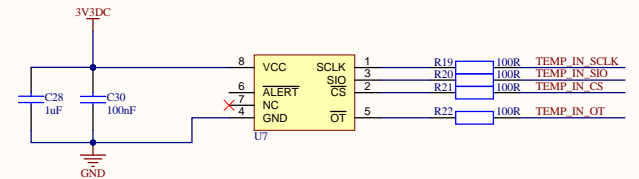
## ESP32\_WIFI MODULE



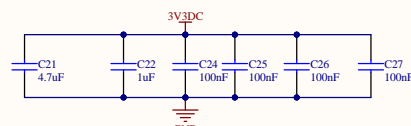
## BUZZER



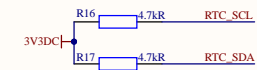
## TEMPERATURE SENSOR



## DECOUPLING CAPACITORS

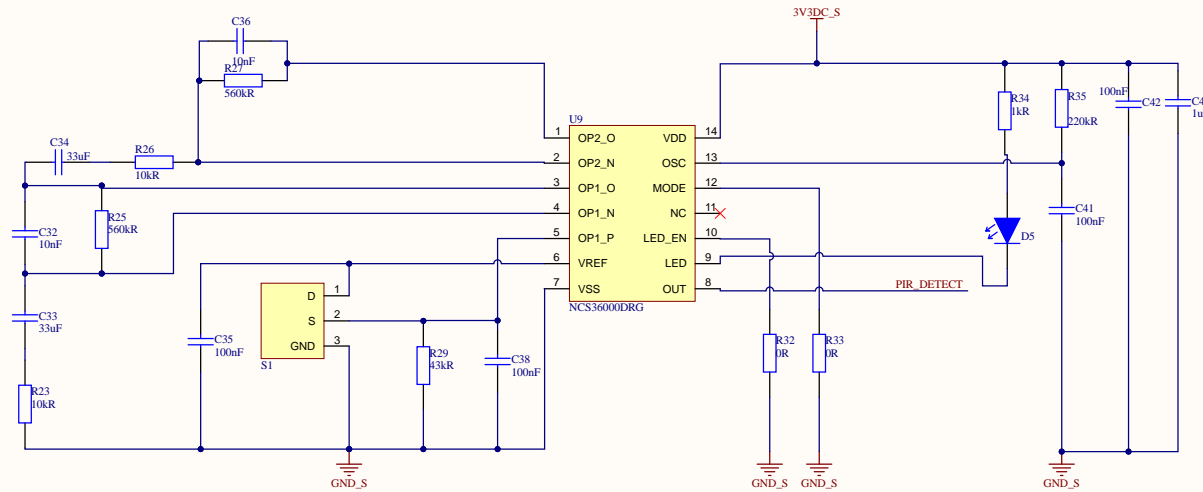


## PULL-UP&PULL-DOWN RESISTORS

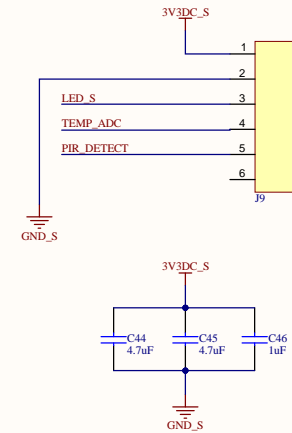


<b>PROJECT:</b>		<b>DRAWN BY:</b>	
WIFI_HOME_SECURITY_SYS-V01.P/P4		Engineer: M.Hamza Limanlar <i>H. Limanlar</i>	
REVISION: P2		Starting Date: 1/26/2023	Release Date:
FILE NAME:		MCU.SchDoc	
SIZE: A3	Department: R&D	DESCRIPTION: Wireless_Security	
SCALE:	Checked / Approved By: *		SHEET 4 OF 5

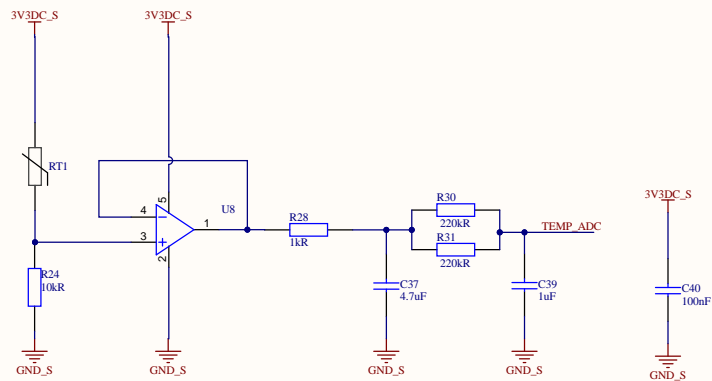
## PIR DETECTOR



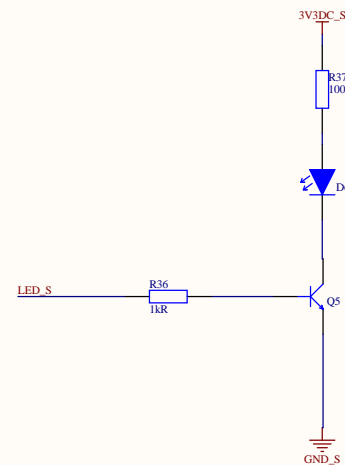
## CONNECTOR



## TEMPERATURE SENSOR AND FILTER



## LED DRIVER



PROJECT:	DRAWN BY:	
WIFI_HOME_SECURITY_SYS-V01.P/P4	Engineer: M.Hamza Limanlar <i>H. Limanlar</i>	
REVISION: P3	Starting Date: 1/26/2023	Release Date: *
FILE NAME:	AUX_Sensor_Board.SchDoc	
SIZE: A3	Department: R&D	DESCRIPTION: Wireless_Security
SCALE:	Checked / Approved BY:	SHEET 5 OF 5

Layer	Name	Material	Thickness	Constant	Board Layer Stack
	Top Overlay				
	Top Solder	SM-001	1.00mil	4	
	Top Surface Finish	PbSn	0.79mil		
1	Top Layer	CF-004	1.38mil		
	Dielectric 1	PP-017	5.10mil	4.3	
	Dielectric 2	PP-017	5.10mil	4.3	
2	Int1 (GND)	CF-004	1.38mil		
	Dielectric 3	Core-039	28.00mil	4.8	
	Int2 (PWR)	CF-004	1.38mil		
3	Dielectric 4	PP-017	5.10mil	4.3	
	Dielectric 5	PP-017	5.10mil	4.3	
	Bottom Layer	CF-004	1.38mil		
4	Bottom Surface Finish	PbSn	0.79mil		
	Bottom Solder	SM-001	1.00mil	4	
	Bottom Overlay				

