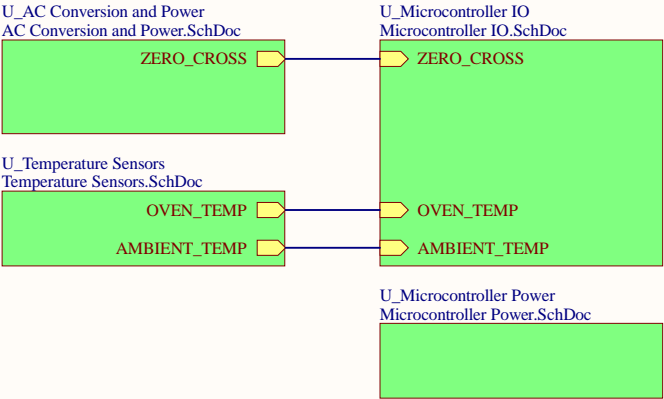


# OPEN REFLOW OVEN CONTROLLER

## TOP LEVEL SCHEMATIC




## MOUNTING HOLES

MH1  
MH-M3-NPH

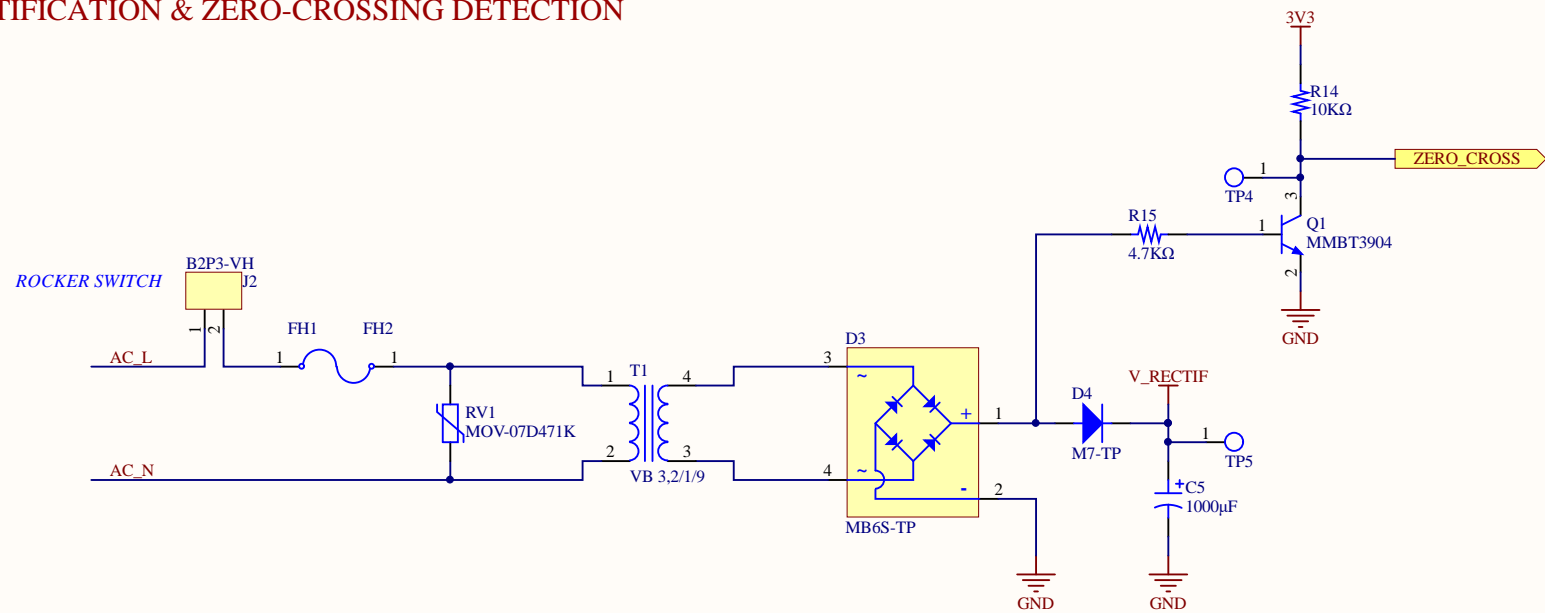
MH2  
MH-M3-NPH

MH3  
MH-M3-NPH

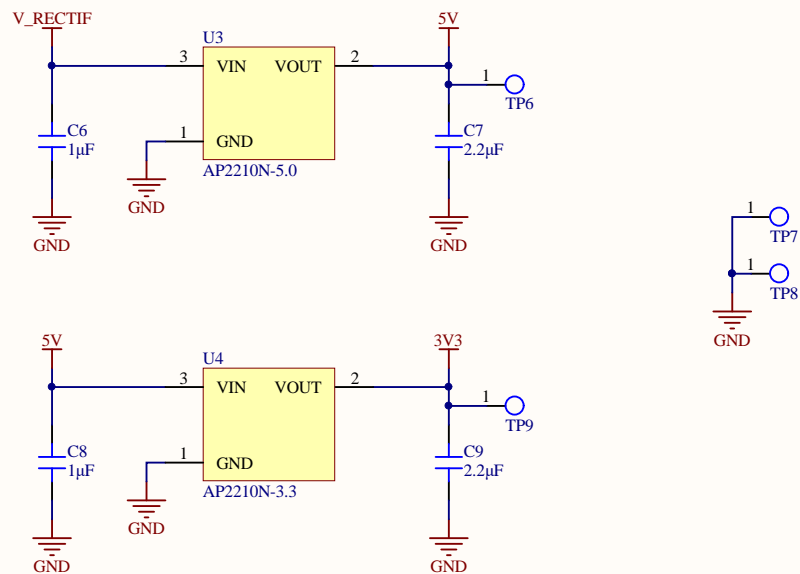
MH4  
MH-M3-NPH

Title <b>Open Reflow Oven - Top Sheet</b>			Open Reflow Oven Leonardo Márquez leonardomarquez.com <a href="https://github.com/marqueztronics">github.com/marqueztronics</a>		
Size: <b>Letter</b>	Number:001	Revision:*			
Date: 5/17/2024	Time: 6:40:18 PM	Sheet 1 of 5			
File: Main.SchDoc					

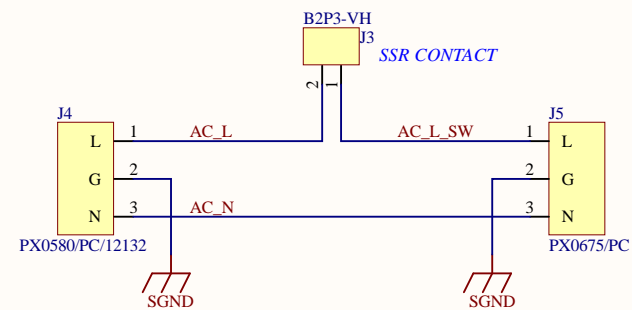
## AC RECTIFICATION & ZERO-CROSSING DETECTION



## LINEAR REGULATORS



## AC IN & OUT CONNECTORS



Title **AC Conversion and Power**

Size: Letter

Number:001

Revision:A01

Date: 5/17/2024

Time: 6:40:18 PM

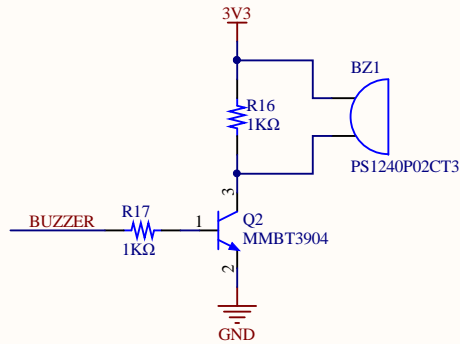
Sheet 2 of 5

File: AC Conversion and Power.SchDoc

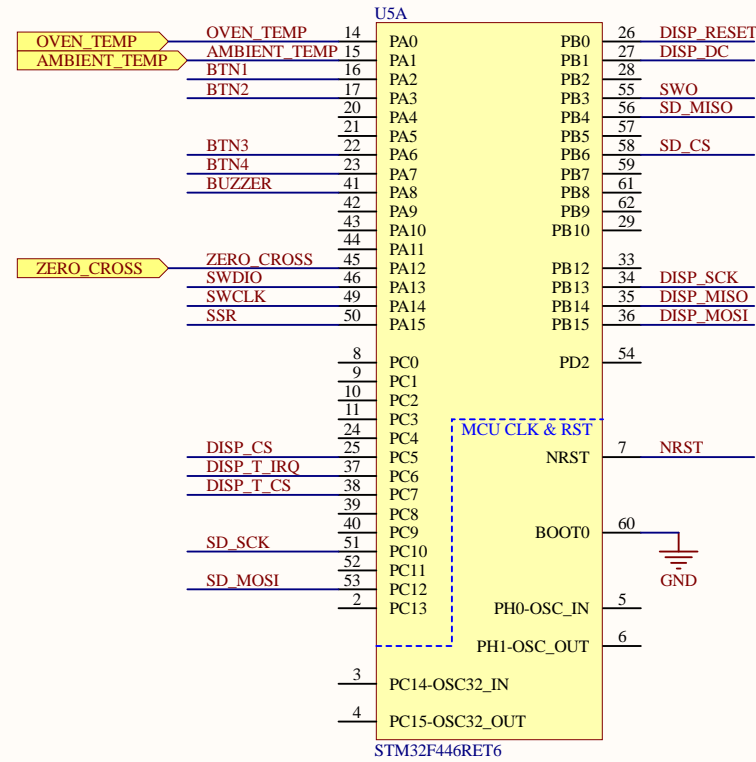
Open Reflow Oven  
Leonardo Marquez  
leonardomarquez.com  
[github.com/marqueztronics](https://github.com/marqueztronics)



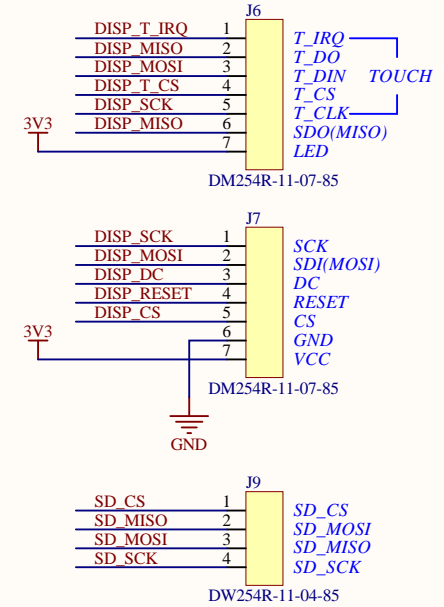
## BUZZER



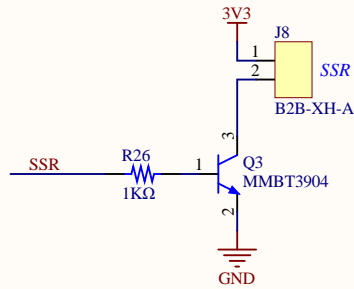
## MICROCONTROLLER



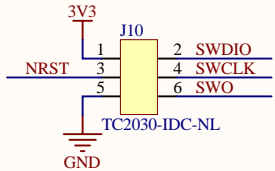
## DISPLAY MODULE CONNECTORS



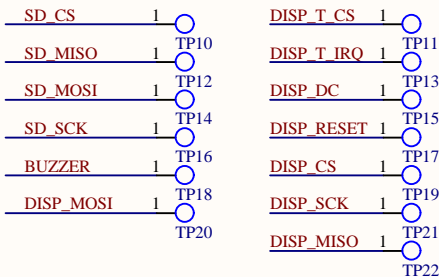
## SSR CONTROL



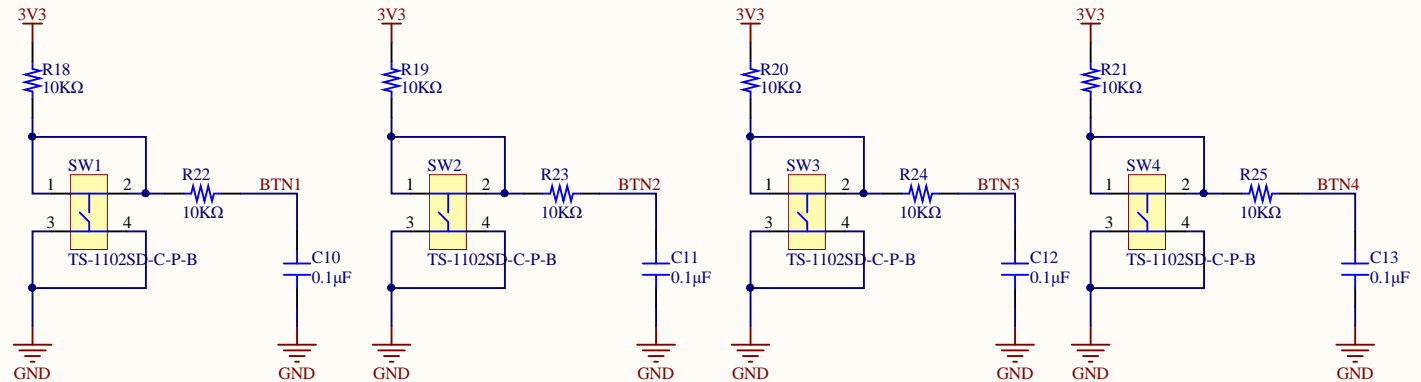
## DEBUG CONNECTOR



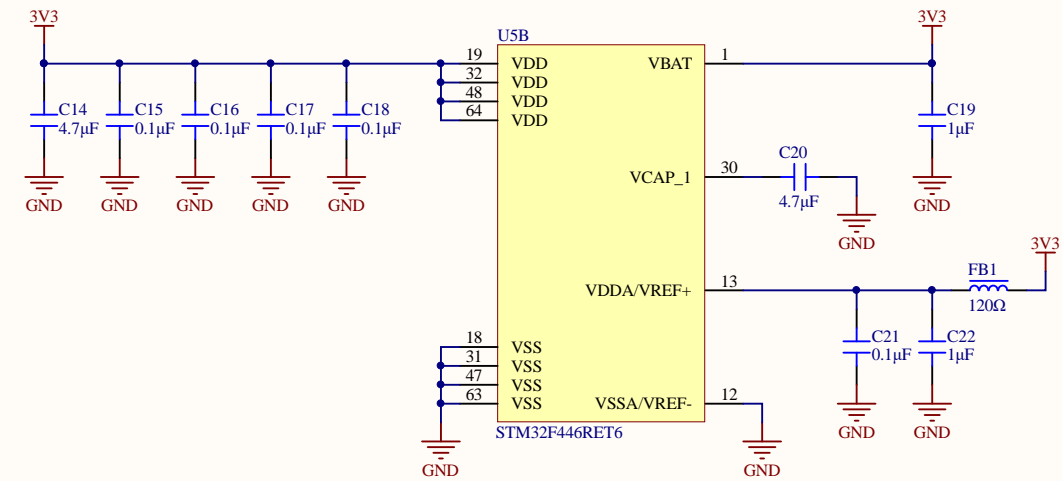
## TEST POINTS



## USER BUTTONS



STM32 POWER



Title **Microcontroller Power**

Size: Letter

Number:001

Revision:A01

Date: 5/17/2024

Time: 6:40:18 PM

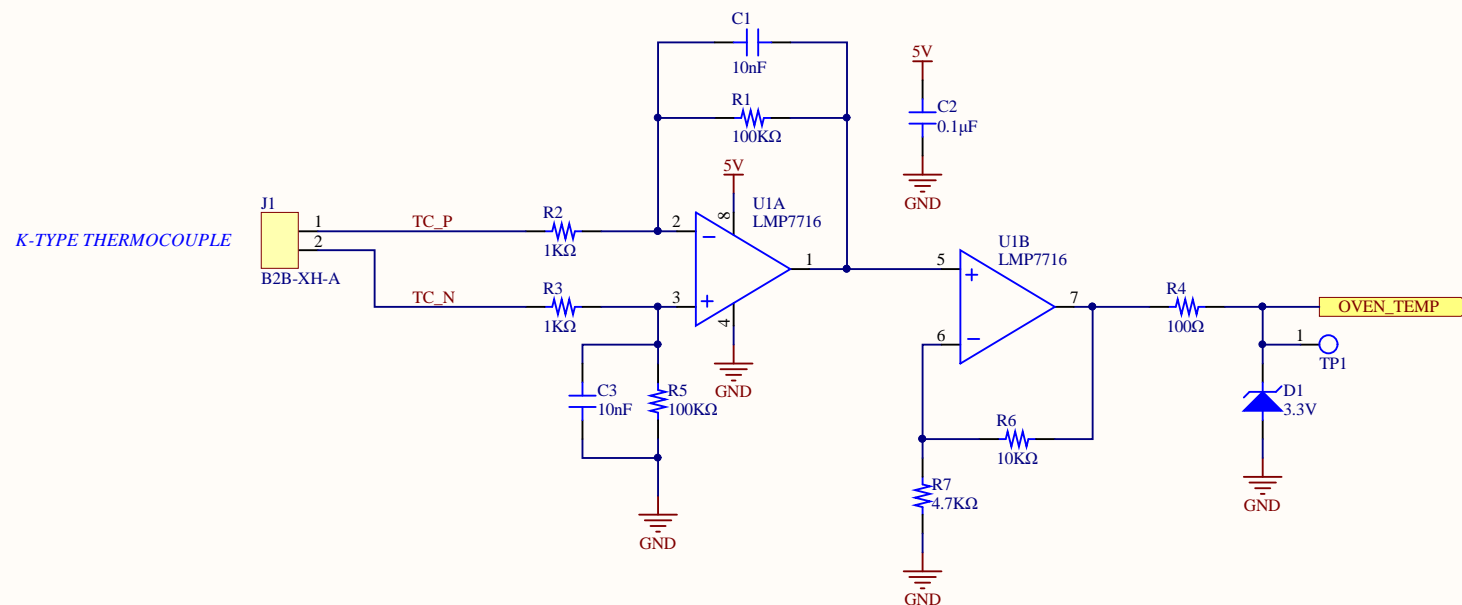
Sheet 4 of 5

File: Microcontroller Power.SchDoc

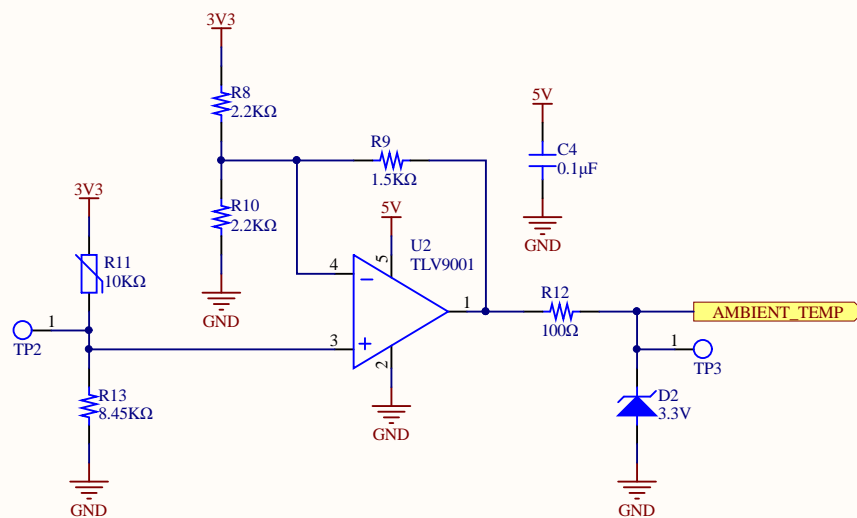
Open Reflow Oven  
Leonardo Marquez  
leonardomarquez.com  
[github.com/marqueztronics](https://github.com/marqueztronics)



## OVEN TEMPERATURE ACQUISITION



## AMBIENT TEMPERATURE ACQUISITION



Title **Temperature Sensors**

Size: Letter

Number:001

Revision:A01

Date: 5/17/2024

Time: 6:40:18 PM

Sheet 5 of 5

File: Temperature Sensors.SchDoc

Open Reflow Oven  
Leonardo Marquez  
leonardomarquez.com  
[github.com/marqueztronics](https://github.com/marqueztronics)



Country	City	Company	Product	Year	Value (M USD)	Units	Weight (kg)	Volume (m³)
USA	New York	Apple Inc.	iPhone 15 Pro	2023	12000	1000000	150000	15000
		Apple Inc.	MacBook Pro	2023	8000	80000	120000	12000
USA	Los Angeles	Google LLC	Pixel 8 Pro	2023	8000	800000	120000	12000
		Google LLC	Android TV	2023	5000	500000	75000	7500
USA	San Francisco	Meta Platforms	Quest 3	2023	5000	50000	10000	10000
		Meta Platforms	Facebook	2023	3000	300000	45000	4500
USA	Chicago	Amazon.com	Kindle Paperwhite	2023	3000	300000	30000	3000
		Amazon.com	Amazon Echo	2023	2000	200000	20000	2000
USA	Seattle	Microsoft Corp.	Xbox Series X	2023	4000	40000	8000	8000
		Microsoft Corp.	Windows 11	2023	2500	250000	37500	3750
USA	Phoenix	Oracle Corp.	Cloud Infrastructure	2023	2000	200000	20000	2000
		Oracle Corp.	Java SE	2023	1500	150000	15000	1500
USA	Philadelphia	Wells Fargo	Banking Services	2023	1000	100000	10000	1000
		Wells Fargo	Wells Fargo Card	2023	800	80000	8000	800
USA	San Diego	Qualcomm	Snapdragon 8 Gen 3	2023	6000	600000	90000	9000
		Qualcomm	Qualcomm Snapdragon	2023	4000	400000	60000	6000
USA	Dallas	AT&T	Telecom Services	2023	7000	700000	70000	7000
		AT&T	AT&T Internet	2023	5000	500000	50000	5000
USA	San Jose	LinkedIn	Professional Network	2023	9000	900000	110000	11000
		LinkedIn	LinkedIn Premium	2023	7000	700000	87500	8750
USA	Portland	Nike Inc.	Sportswear	2023	11000	1100000	130000	13000
		Nike Inc.	Nike Air Max	2023	9000	900000	108000	10800
USA	San Antonio	Alamo Drafthouse	Cinema	2023	13000	1300000	150000	15000
		Alamo Drafthouse	Alamo Drafthouse Cinema	2023	10000	1000000	120000	12000
USA	San Francisco	Twitter Inc.	Social Media	2023	14000	1400000	160000	16000
		Twitter Inc.	Twitter Premium	2023	11000	1100000	132000	13200
USA	San Jose	Netflix Inc.	Streaming Service	2023	15000	1500000	170000	17000
		Netflix Inc.	Netflix Premium	2023	12000	1200000	144000	14400
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USA	San Jose	Meta AI	AI Research	2023	18000	1800000	200000	20000
		Meta AI	Meta AI LLaMA	2023	15000	1500000	180000	18000
USA	San Jose	Amazon AI	AI Research	2023	19000	1900000	210000	21000
		Amazon AI	Amazon AI Bedrock	2023	16000	1600000	192000	19200
USA	San Jose	Microsoft AI	AI Research	2023	20000	2000000	220000	22000
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USA	San Jose	IBM AI	AI Research	2023	21000	2100000	230000	23000
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USA	San Jose	LinkedIn AI	AI Research	2023	26000	2600000	280000	28000
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USA	San Jose	Nike AI	AI Research	2023	27000	2700000	290000	29000
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USA	San Jose	Wells Fargo AI	AI Research	2023	38000	3800000	400000	40000
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USA	San Jose	Nike AI	AI Research	2023	42000	4200000	440000	44000
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