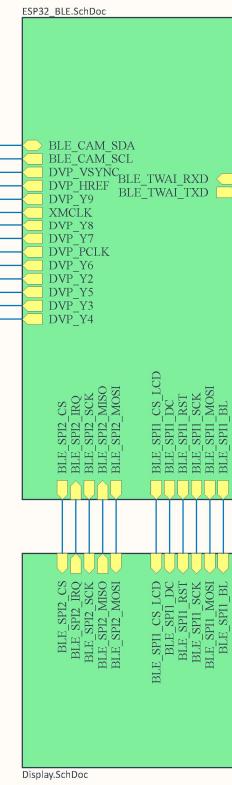


Index.SchDoc

Block\_Diagram.SchDoc

Camera.SchDoc



Power\_Diagram.SchDoc

Power\_Supply.SchDoc

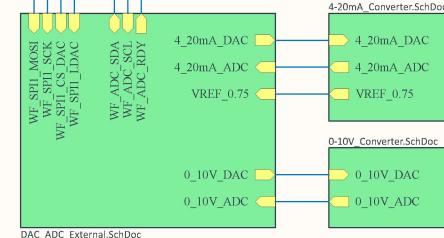
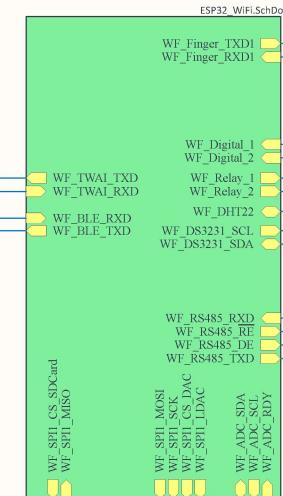
Communication.SchDoc

ESP32\_WiFi.SchDoc

FingerPrint.SchDoc

Interface\_IO.SchDoc

UART\_RS485.SchDoc



Project Name

Access Control



Size

A3

Revision

V1.0.1

Checked By:

.

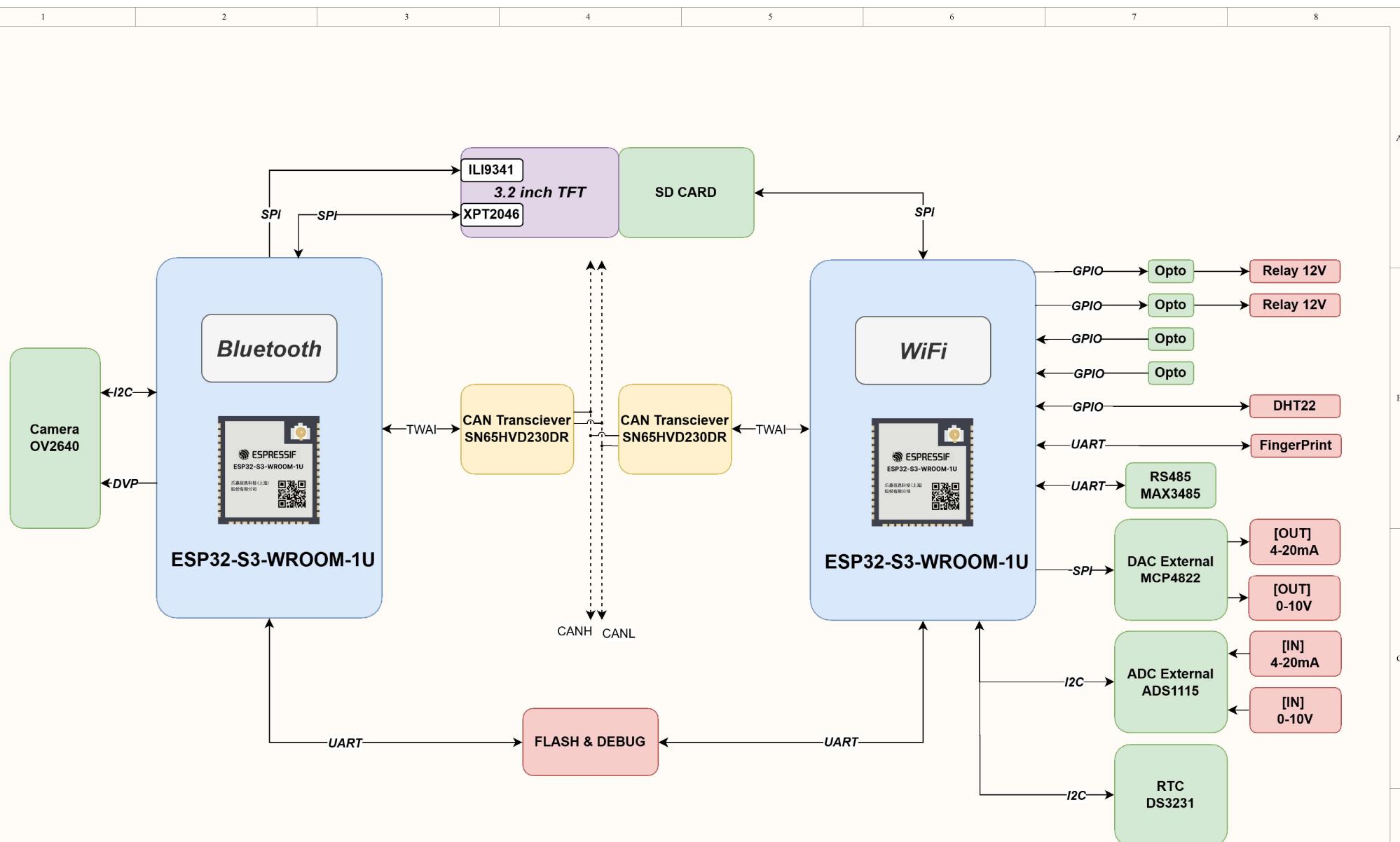
Date: 4/24/2025

Last Modified: 4/18/2025

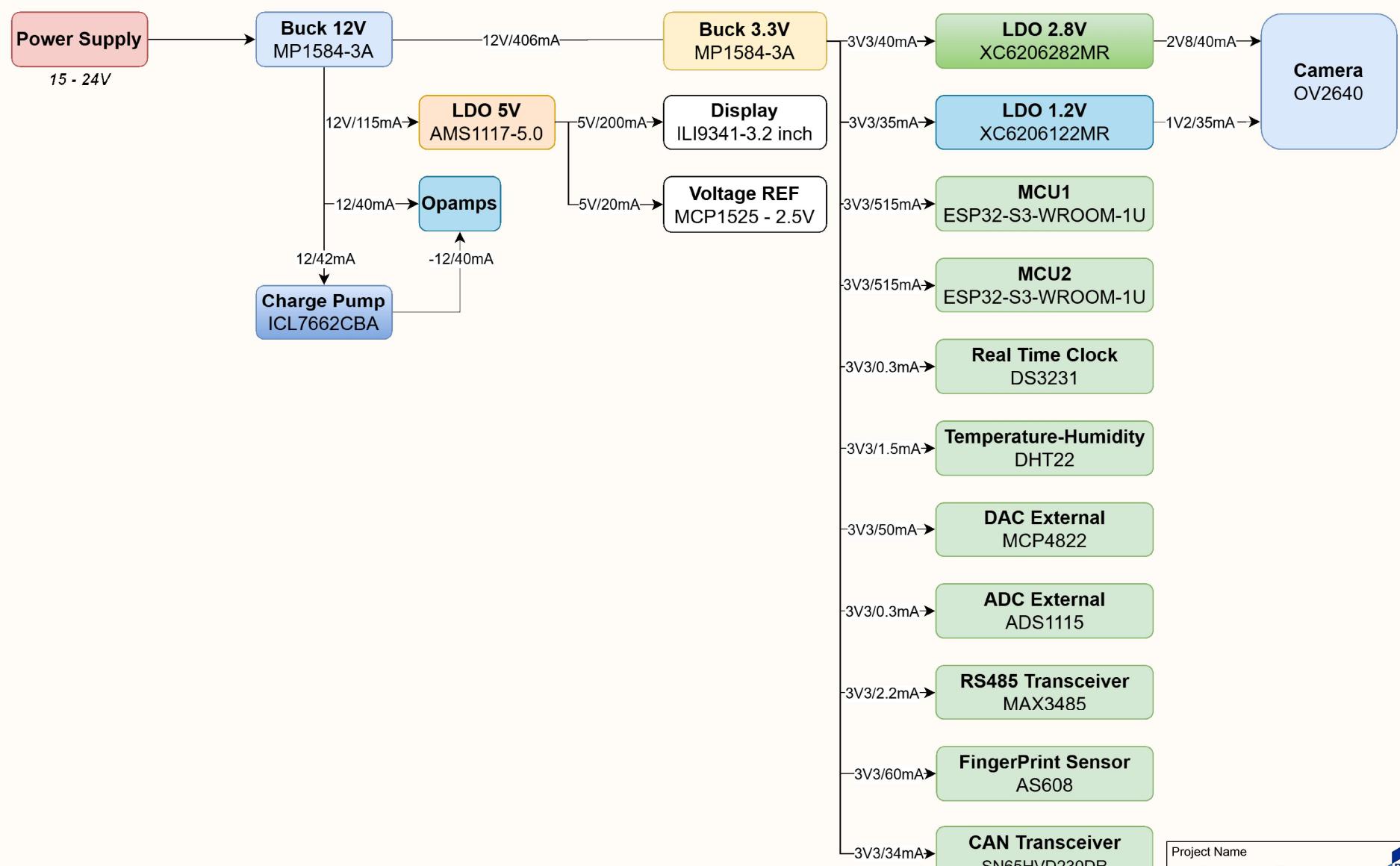
Drawn By: Q.Thang &amp; T.Khoa

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File: Overview\_Schematic.SchDoc



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Size <b>A3</b>	Revision V1.0.1	Checked By: -
Date: 4/24/2025	Last Modified: 4/18/2025	
Drawn By: Q.Thang & T.Khoa		Sheet 2 of 16
File: Block_Diagram.SchDoc		



Project Name Access Control		
Size A3	Revision V1.0.1	Checked By: -
Date: 4/24/2025	Last Modified: 4/23/2025	
Drawn By: Q.Thang & T.Khoa	Sheet 3 of 16	
File: Power_Diagram.SchDoc		

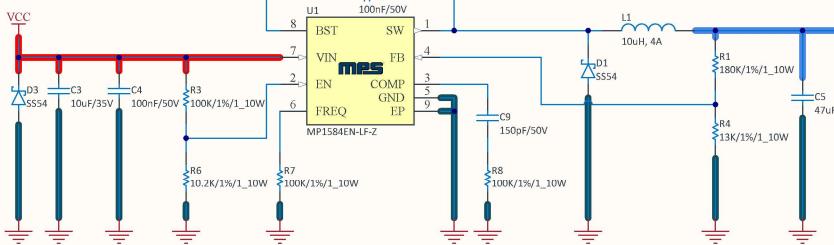
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009	Camera
010	Display
011	FingerPrint
012	UART_RS485
013	4-20mA_Converter
014	0-10V_Converter
015	DAC_ADC_External
016	Interface_IO

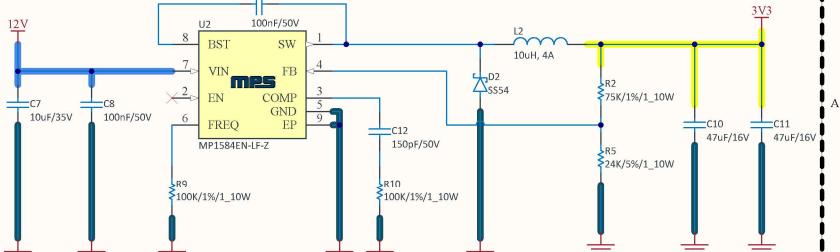
## Access Control Schematic V1.0.1

Project Name <b>Access Control</b>		
		Checked By: *
Size <b>A4</b>	Revision <b>V1.0.1</b>	
Date: 4/24/2025	Last Modified: 4/18/2025	
Drawn By: Q.Thang & T.Khoa		Sheet 4 of 16
File: Index.SchDoc		

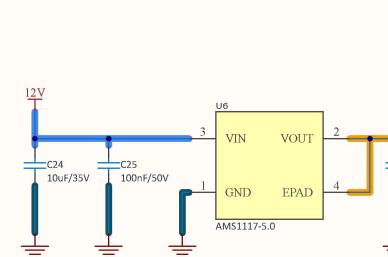
## SWITCHING 24V-12V



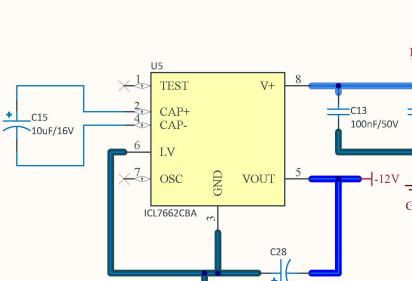
## SWITCHING 12V-3V3



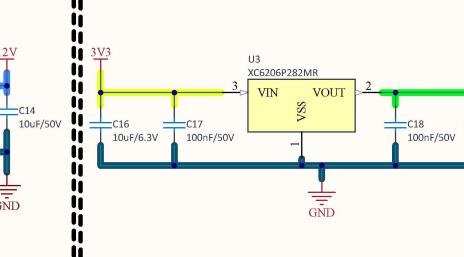
## LDO 12V-5V



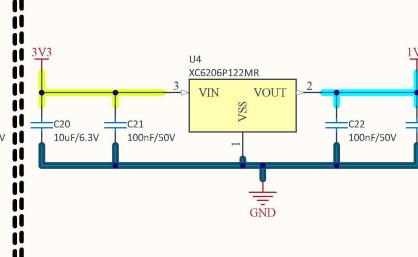
## CHARGE PUMP -12V



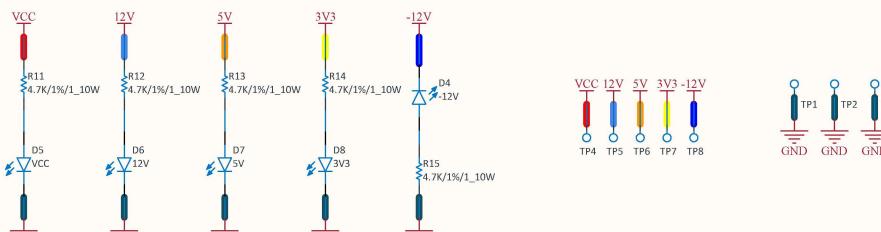
## LDO 3V3-2V8



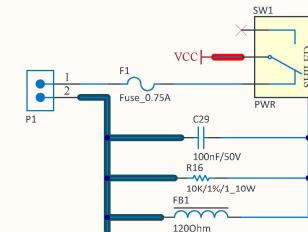
## LDO 3V3-1V2



## POWER: LED & TESTPOINT



## SWITCH POWER

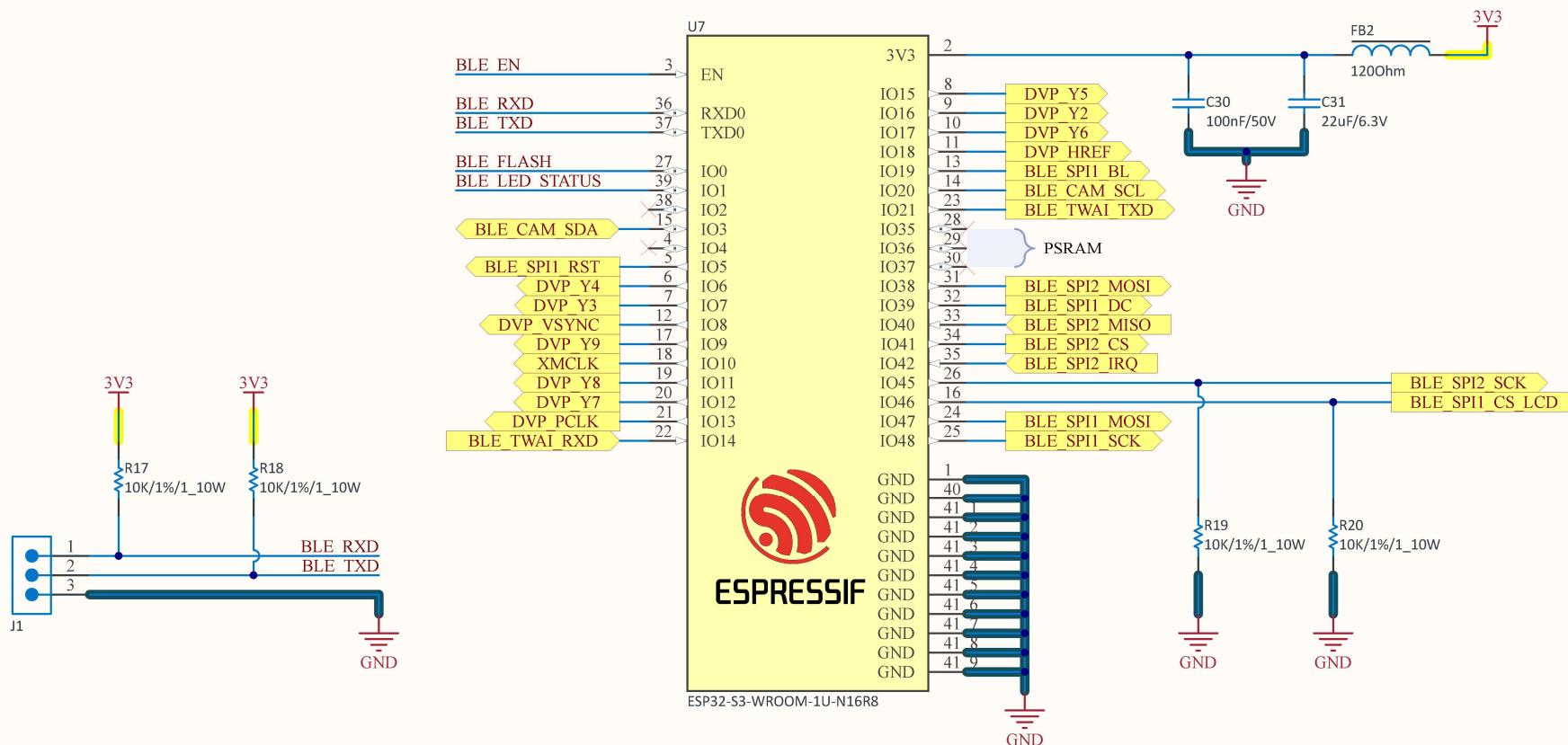


## OTHERS

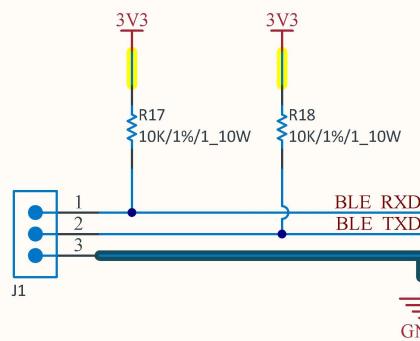


Project Name	Access Control	
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Drawn By: Q.Thang & T.Khoa	Sheet 5 of 16	
File: Power_Supply.SchDoc		

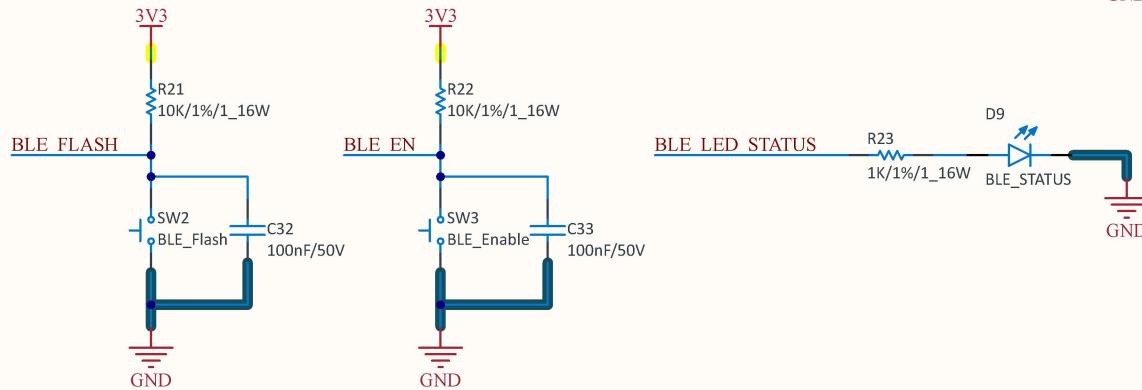
A



B

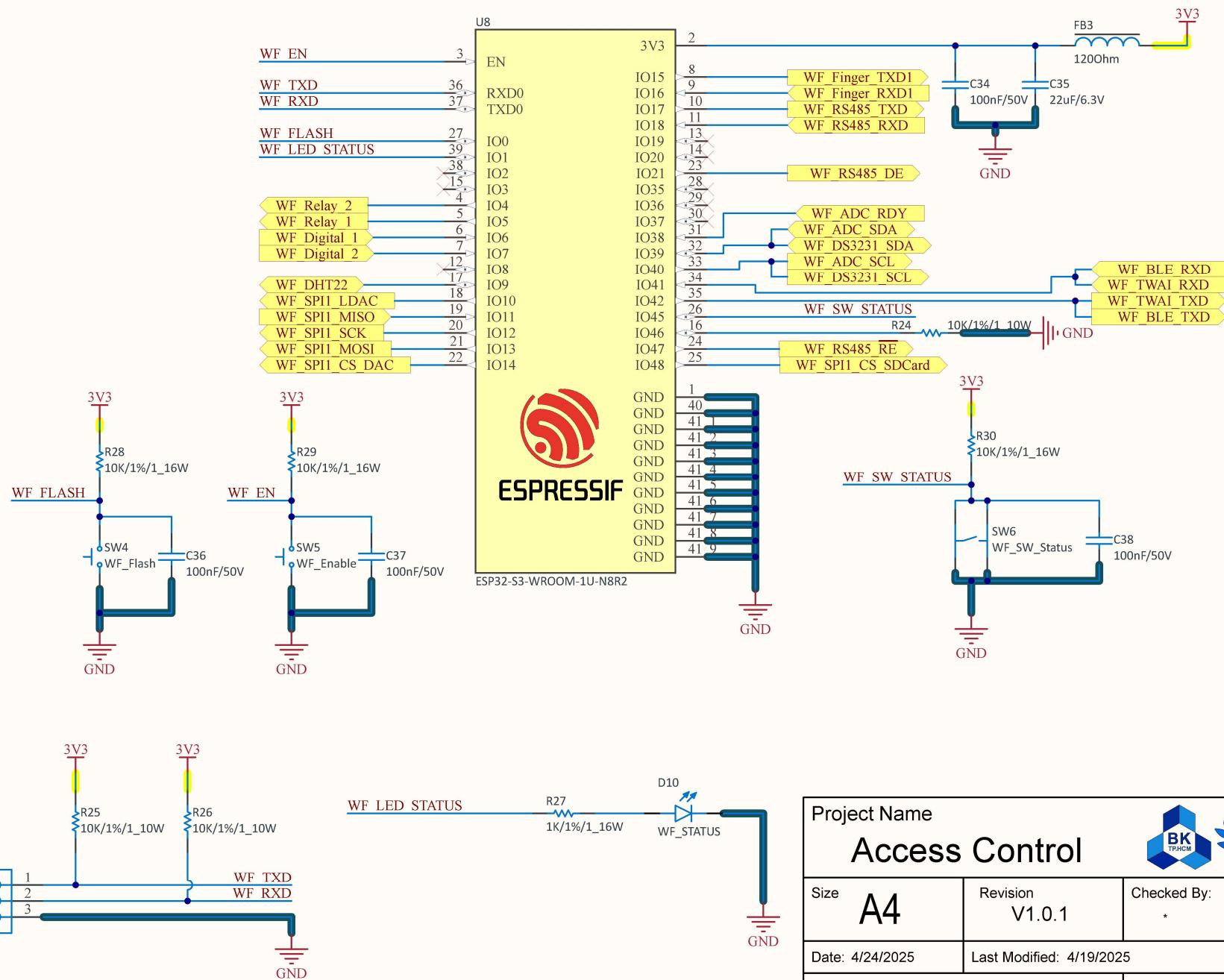


C



D

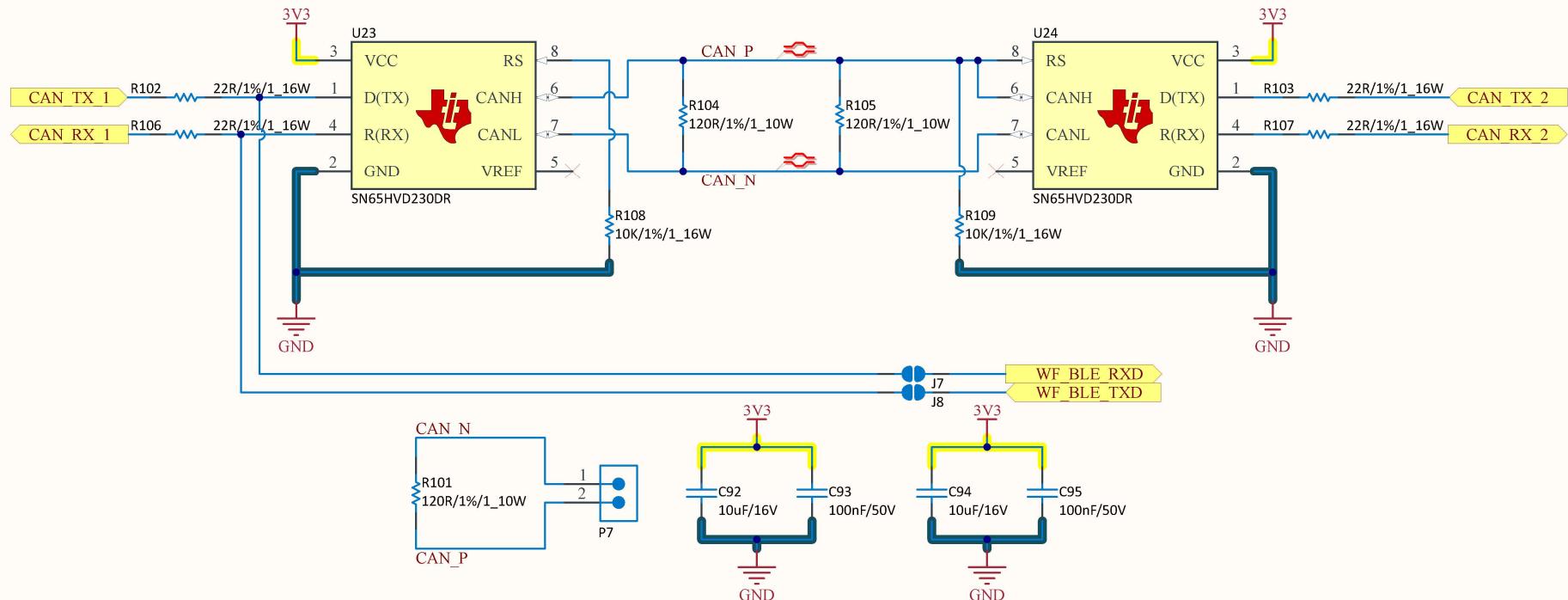
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A

A



B

B

C

C

D

D

Project Name

Access Control



Size

A4

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Checked By:

\*

Date: 4/24/2025

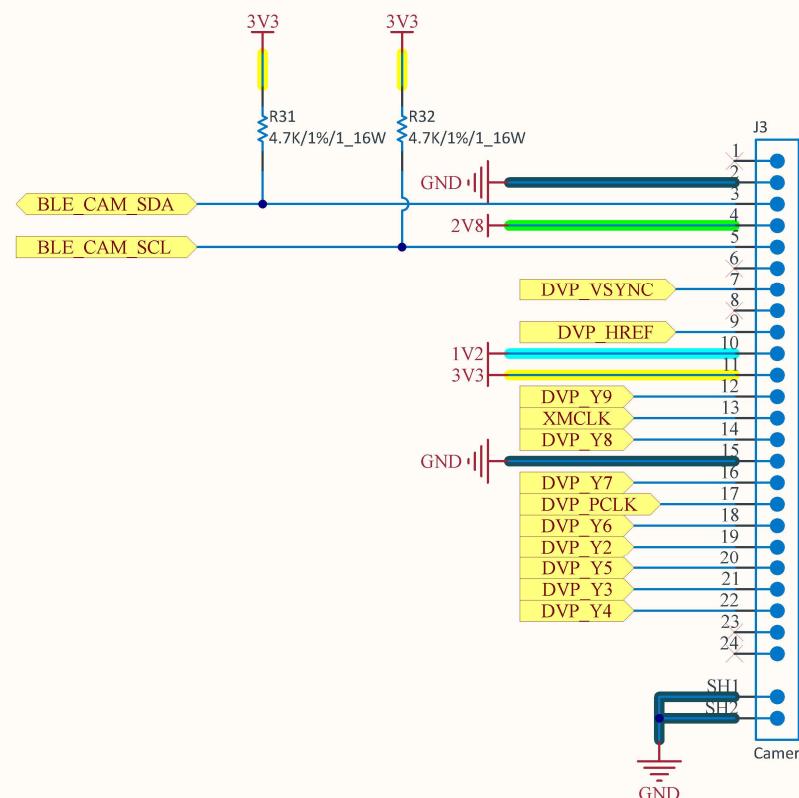
Last Modified: 4/19/2025

Drawn By: Q.Thang &amp; T.Khoa

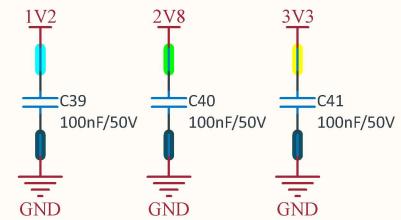
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File: Communication.SchDoc

A



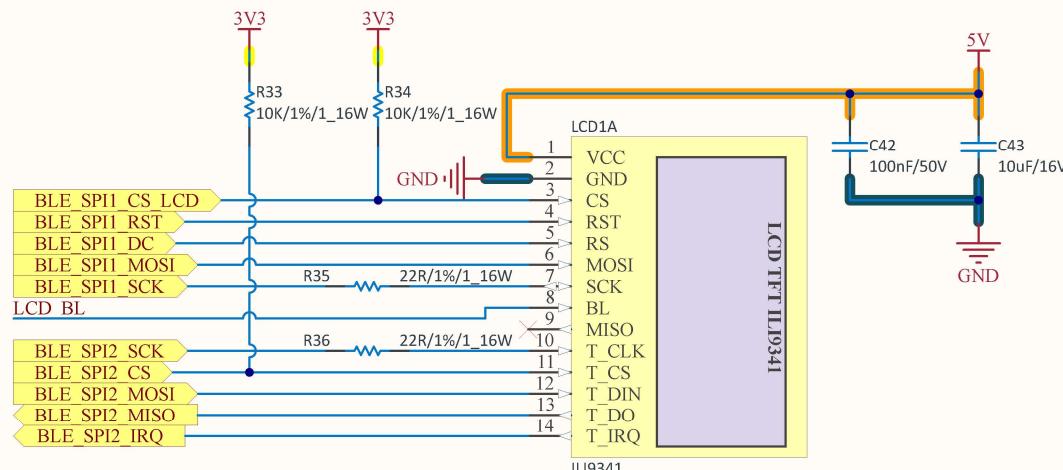
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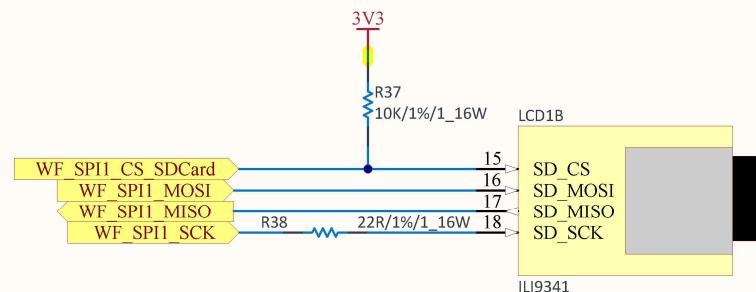
C

Project Name <b>Access Control</b>		
<b>BK TP.HCM</b>	<b>PIF</b>	
<b>Size</b>	<b>A4</b>	<b>Revision</b> V1.0.1
<b>Date:</b> 4/24/2025		<b>Last Modified:</b> 4/18/2025
<b>Drawn By:</b> Q.Thang & T.Khoa		<b>Sheet</b> 9 <b>of</b> 16
<b>File:</b> Camera.SchDoc		

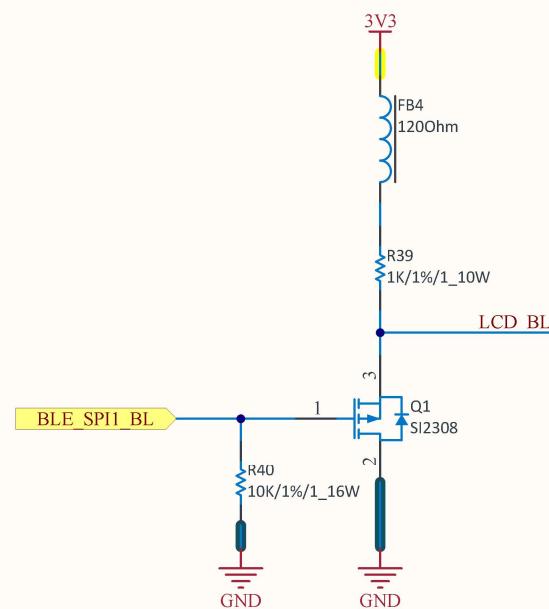
A



B



C



D

Project Name		
Access Control		
Size	Revision	Checked By:
A4	V1.0.1	*
Date: 4/24/2025	Last Modified: 4/19/2025	
Drawn By: Q.Thang & T.Khoa		Sheet 10 of 16
File: Display.SchDoc		



A

A

B

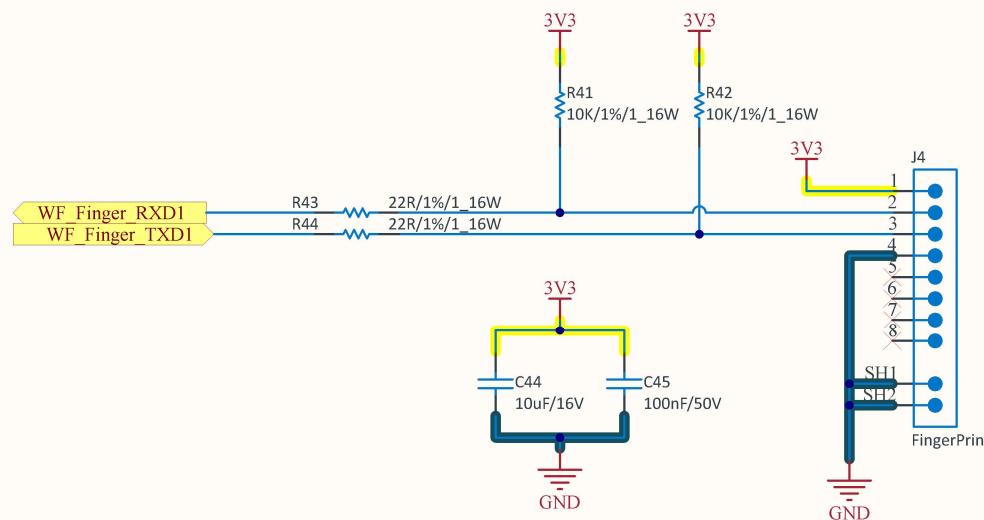
B

C

C

D

D



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Size <b>A4</b>	Revision <b>V1.0.1</b>	Checked By: *
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Drawn By: Q.Thang & T.Khoa		Sheet 11 of 16
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A

A

B

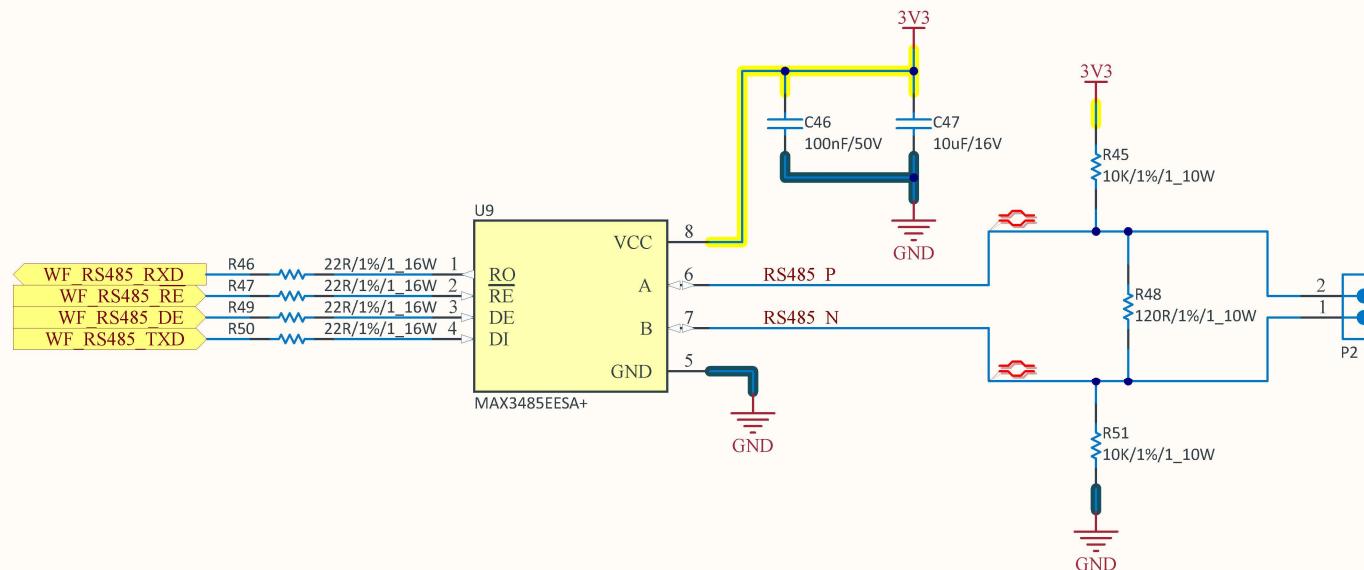
B

C

C

D

D



Project Name

**Access Control**

Size

**A4**

Revision

**V1.0.1**

Checked By:

\*

Date: 4/24/2025

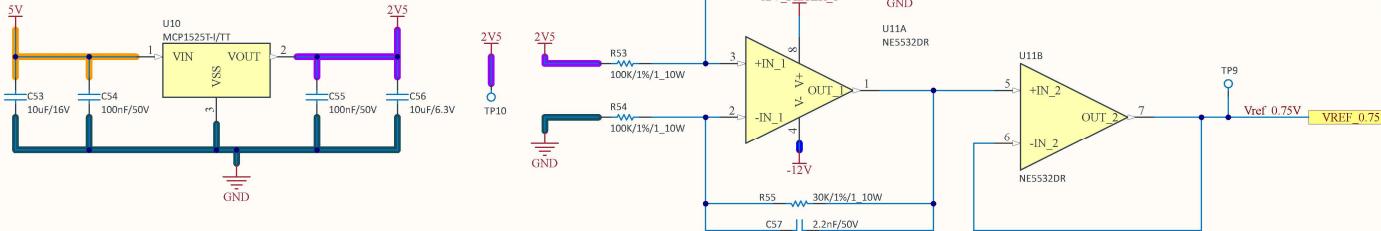
Last Modified: 4/19/2025

Drawn By: Q.Thang &amp; T.Khoa

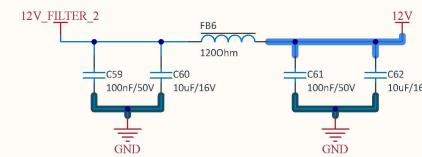
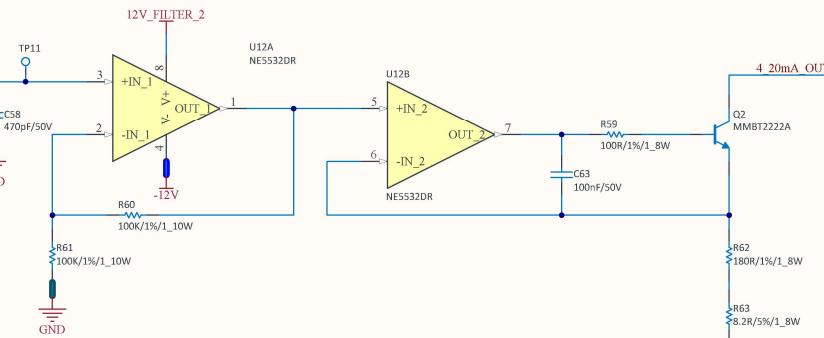
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File: UART\_RS485.SchDoc

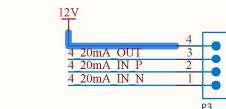
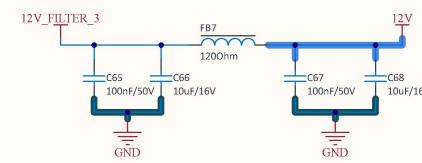
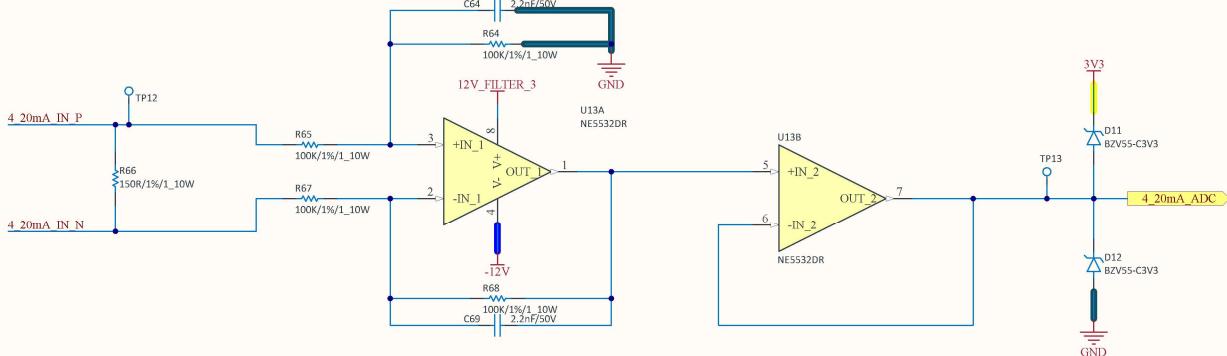
## CREATE VREF 0.75V



## 4-20mA OUTPUT

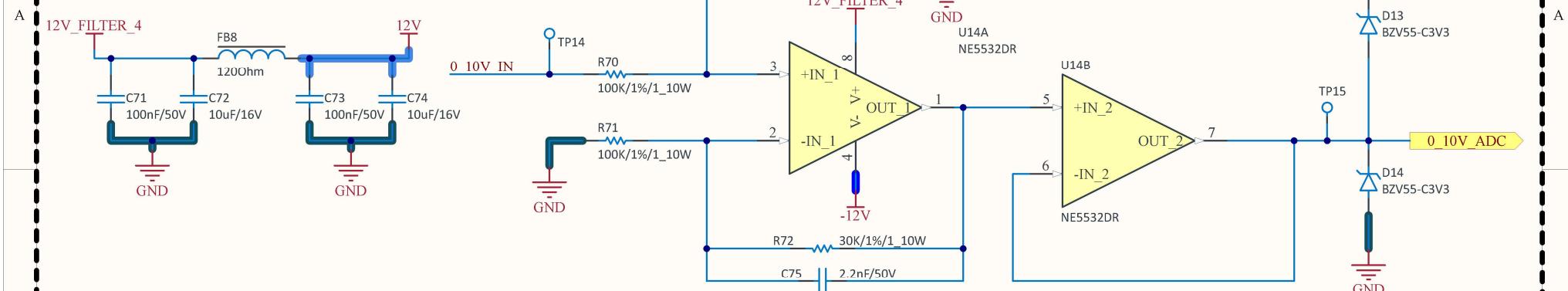


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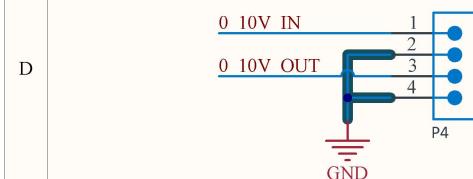
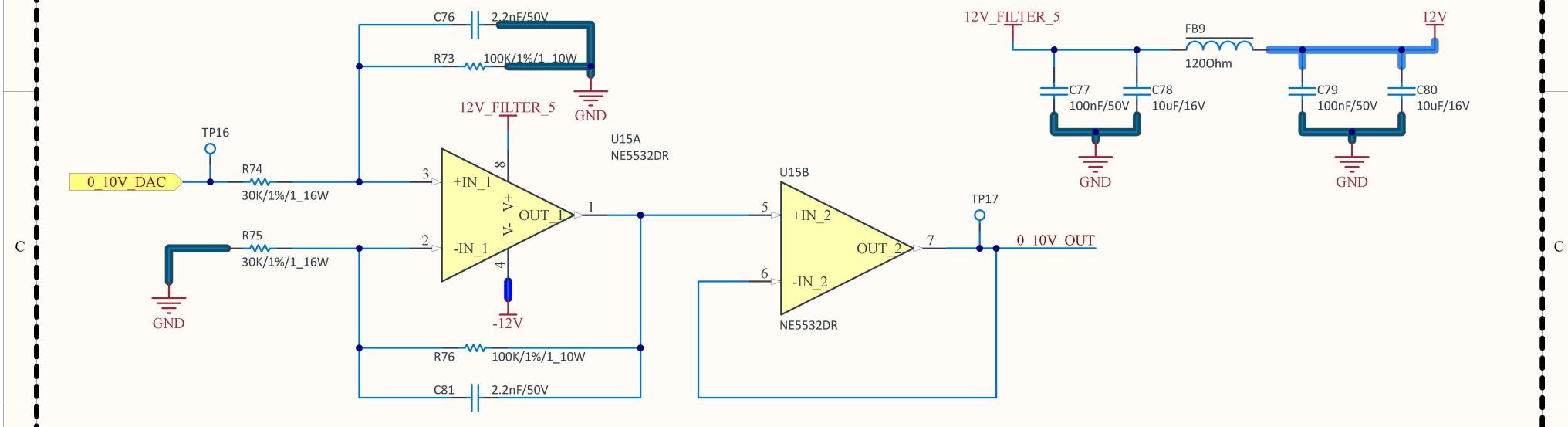


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Drawn By: Q.Thang & T.Khoa	Sheet	13 of 16
File: 4-20mA_Converter.SchDoc		

## 0-10V INPUT



## 0-10V OUTPUT



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Access Control



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Checked By:

\*

Date: 4/24/2025

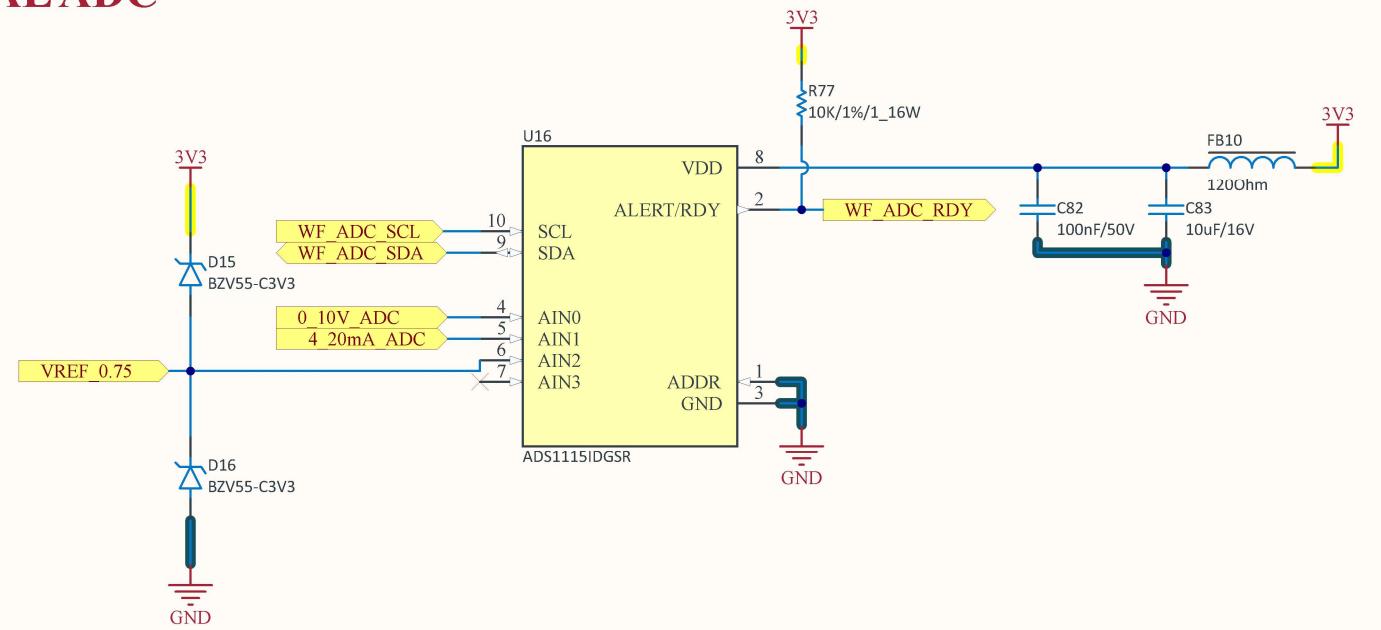
Last Modified: 4/18/2025

Drawn By: Q.Thang & T.Khoa

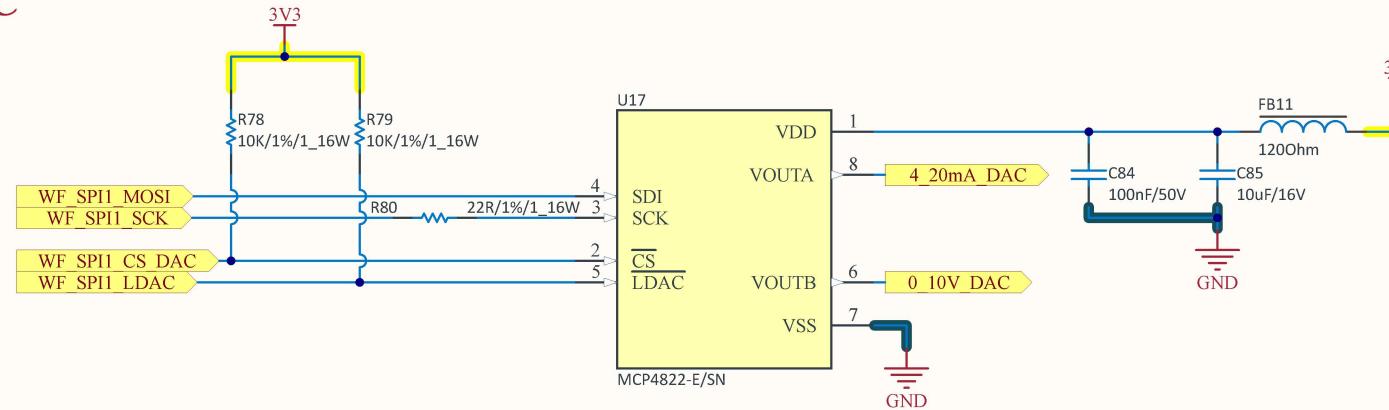
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File: 0-10V\_Converter.SchDoc

## EXTERNAL ADC



## EXTERNAL DAC



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Access Control



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Checked By:

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Date: 4/24/2025

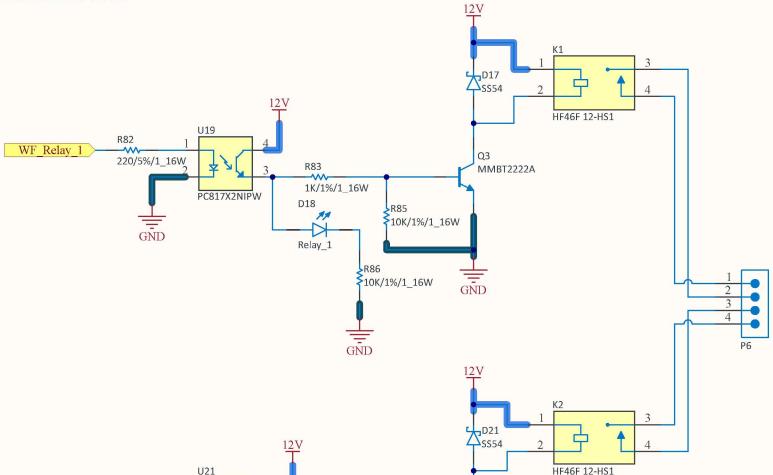
Last Modified: 4/19/2025

Drawn By: Q.Thang & T.Khoa

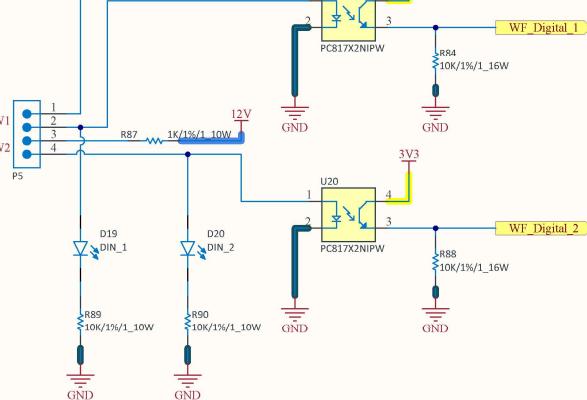
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File: DAC\_ADC\_External.SchDoc

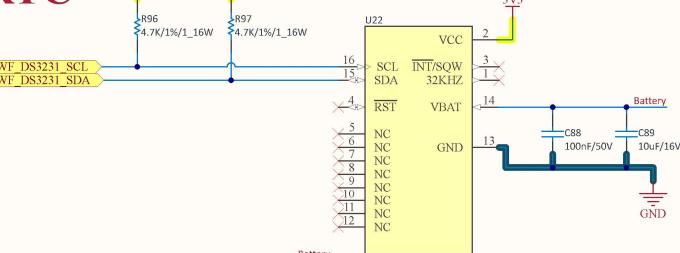
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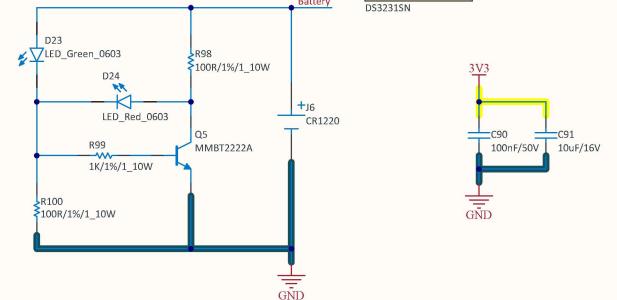
## DIGITAL INPUT



## RTC



## DHT22



Project Name  
Access Control



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A3	V1.0.1	*
Date: 4/24/2025	Last Modified: 4/19/2025	
Drawn By: Q.Thang & T.Khoa	Sheet 16 of 16	
File: Interface_Io.SchDoc		