

**Project:** DM3370  
**Current Revision:** R1M1E2  
**Assembly variant:** Production

## DM3370 Revision History:

Date	Revision	Reason for Change	Changes Implemented
28th July 2022	R0M0E0		Initial release
	R1M1E1	1. Mounting holes should have GND copper annular ring 2. move the LCD components away from motors 3. change the component type for M3 standoff on M.2 card 4. Changed the BMS with dedicated charger, fuel gauge, button supervisor 5. Removed DRF 6.	
	R1M1E2	1. Correct and add missing parameters	1. Added missing parameters for CS2, CS5, CS6, R71

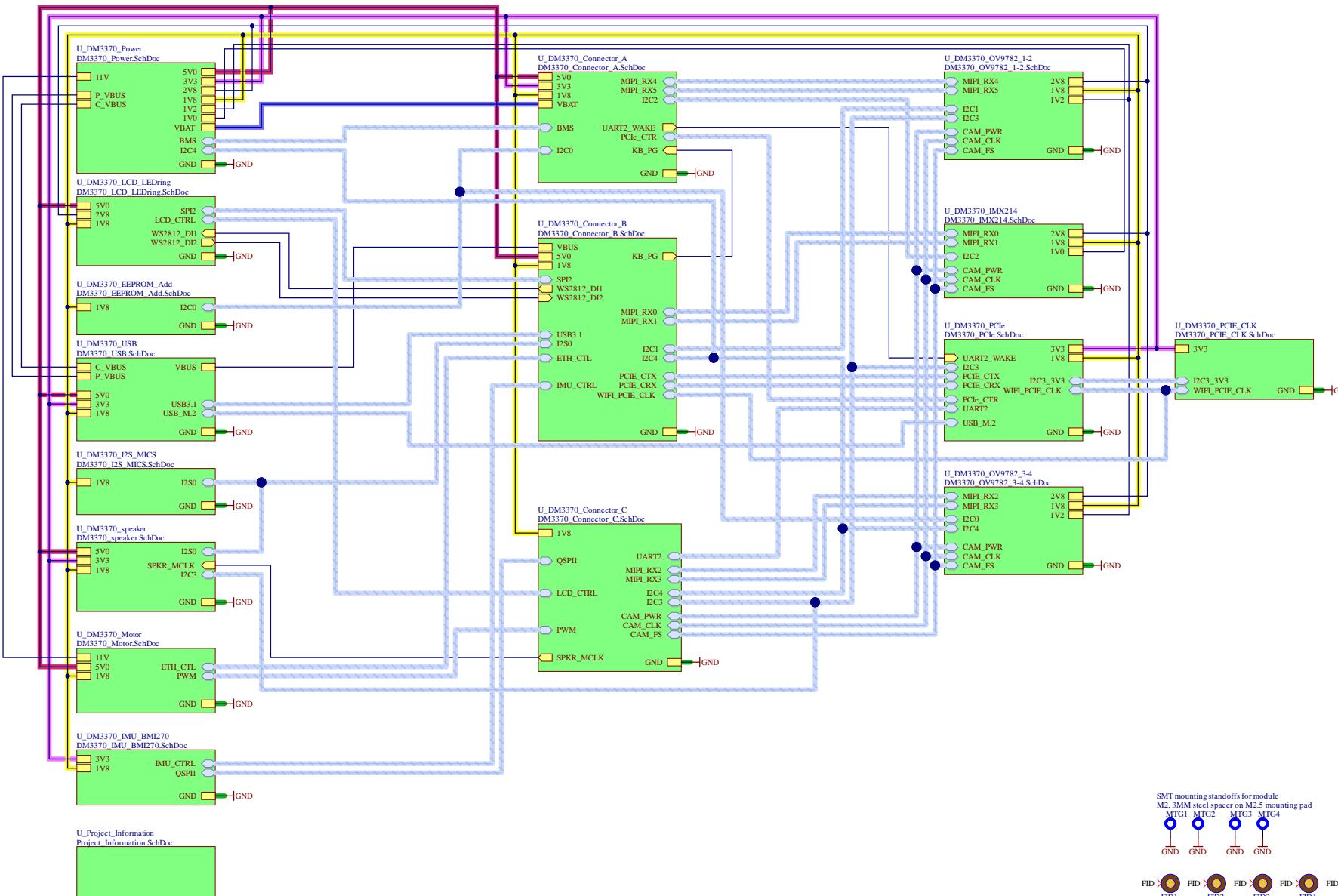
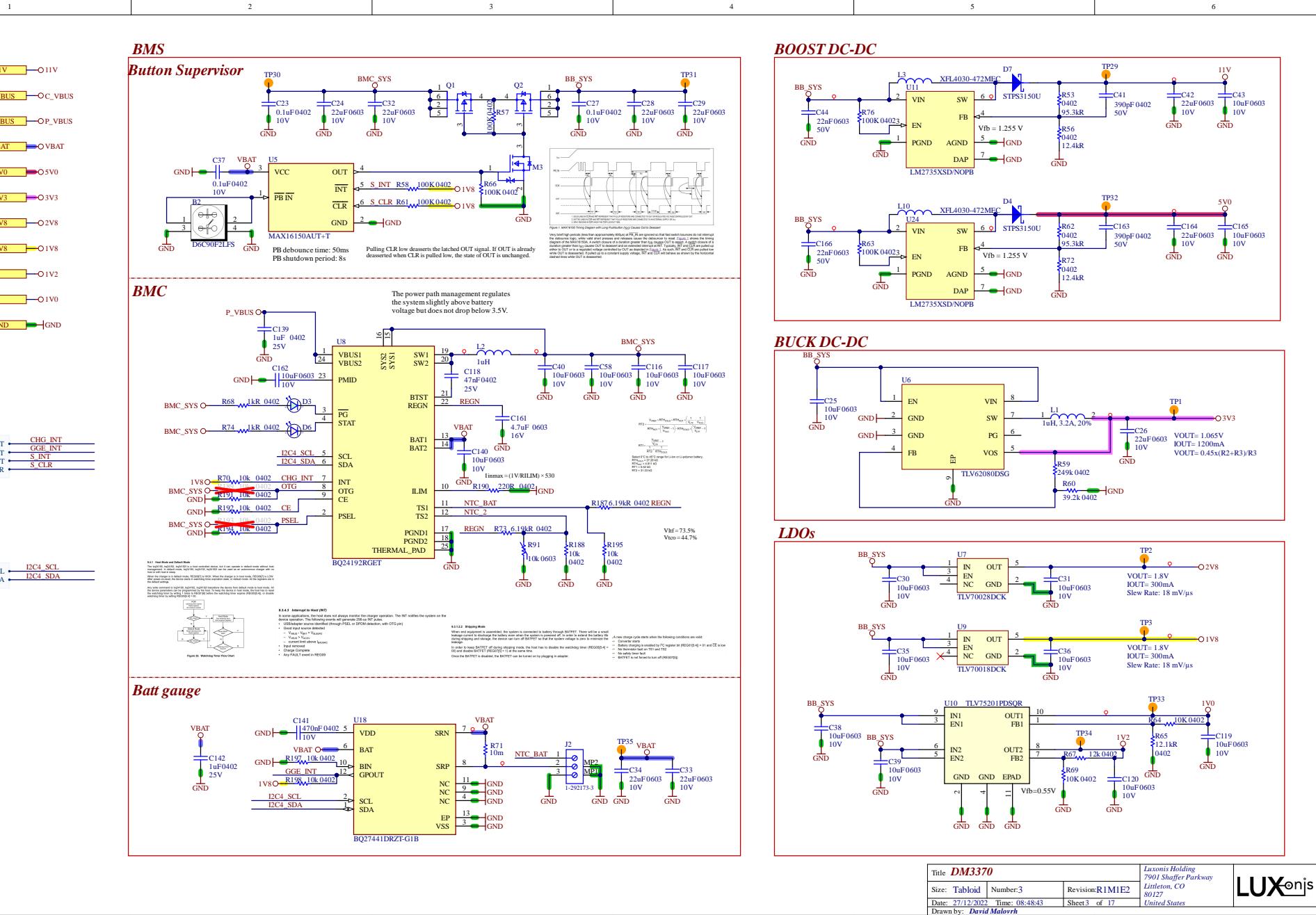


Exhibit DM3370

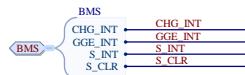
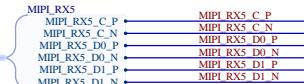
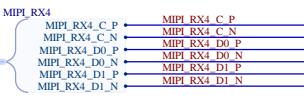
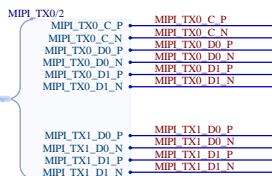
Title <b>DM3370</b>			Luxon's Housing 1925 Harmony Park Drive Westminster, CO 80234  United States
Size: Tabloid	Number: 2	Revision: R1MIE2	
Date: 27/12/2022	Time: 08:48:42	Sheet 2 of 17	
P:	P:	DM3370	



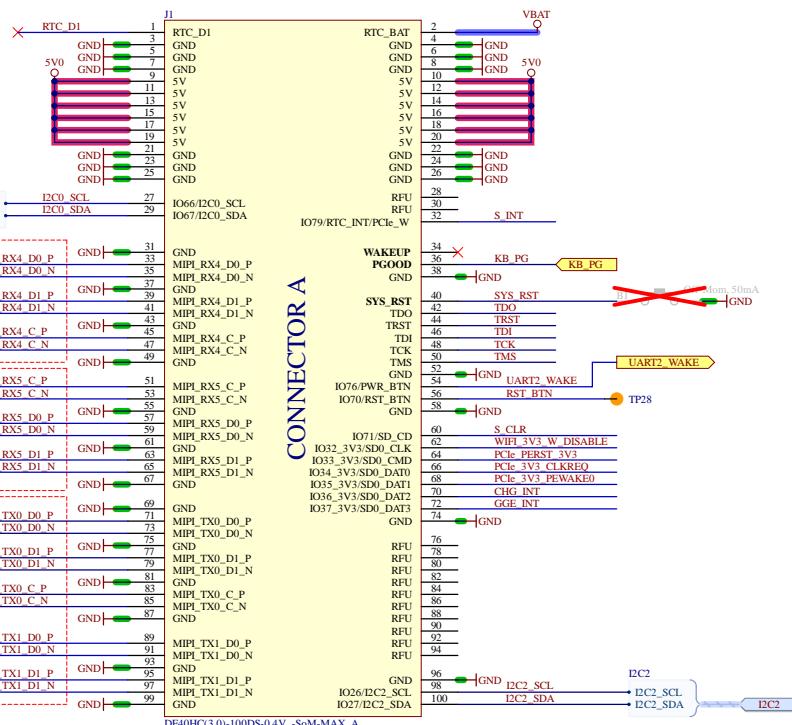
VBAT → OVBAT  
 5V0 → O5V0  
 3V3 → O3V3  
 1V8 → O1V8  
 GND → GND

5V drawn by BW2099 can be up to 1A  
 VBUS on BW2099 is only sense input

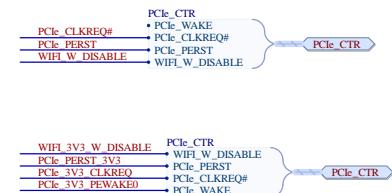
A  
 VBAT  
 5V0  
 3V3  
 1V8  
 GND



## DM3399 CONNECTOR A



DF40HC(3.0)-100DS-04V\_-SoM-MAX-A

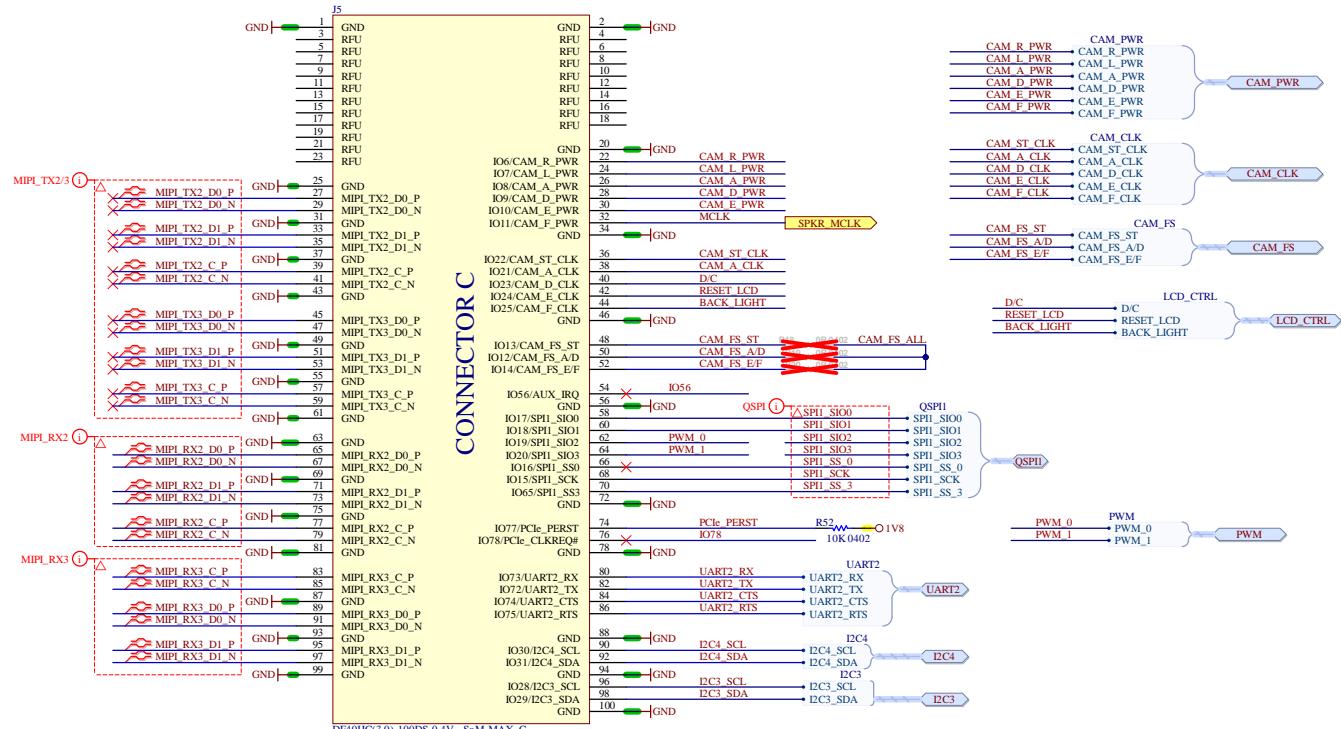
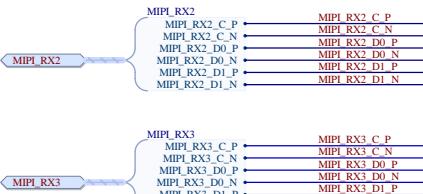
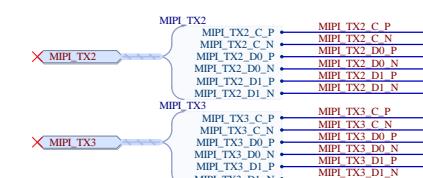
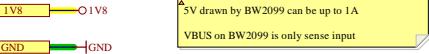




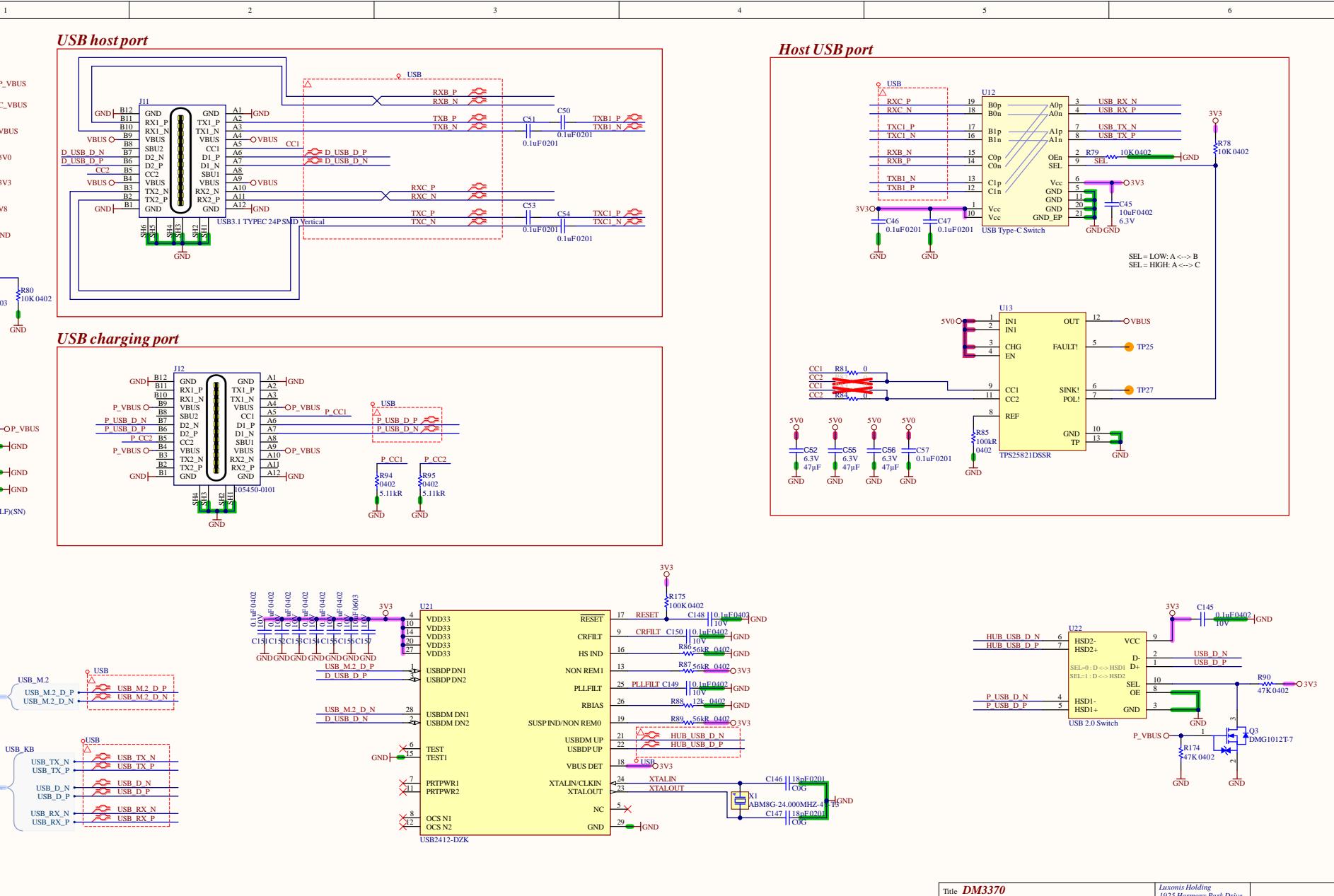
IV8  
GND

5V drawn by BW2099 can be up to 1A  
VBUS on BW2099 is only sense input

## DM3399 CONNECTOR C

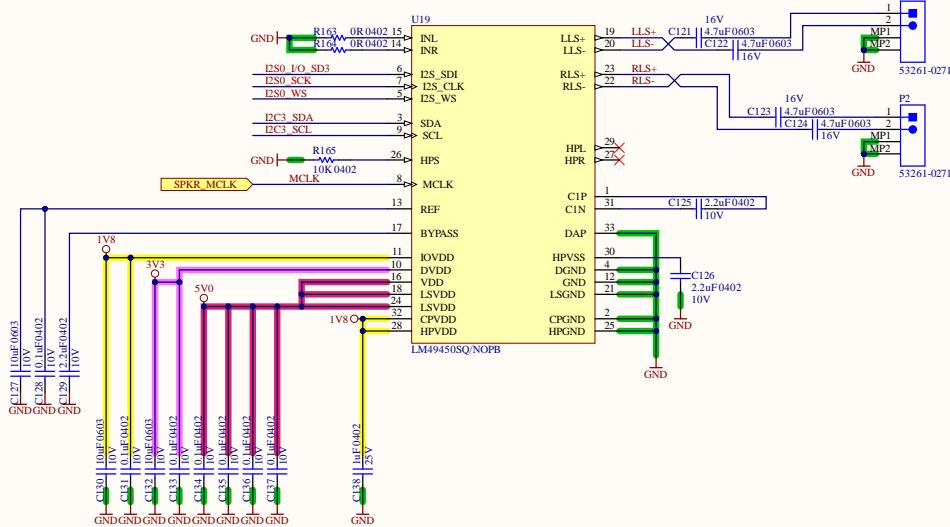
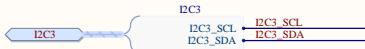
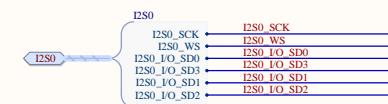


▲ U5 is used to connect the FSIN pins from CAM A and D (FSIN\_4LANE) to the FSIN pins of CAM B and C (COM\_AUX\_02). Drive FSIN\_MODE\_SELECT high to connect all FSIN signals together.

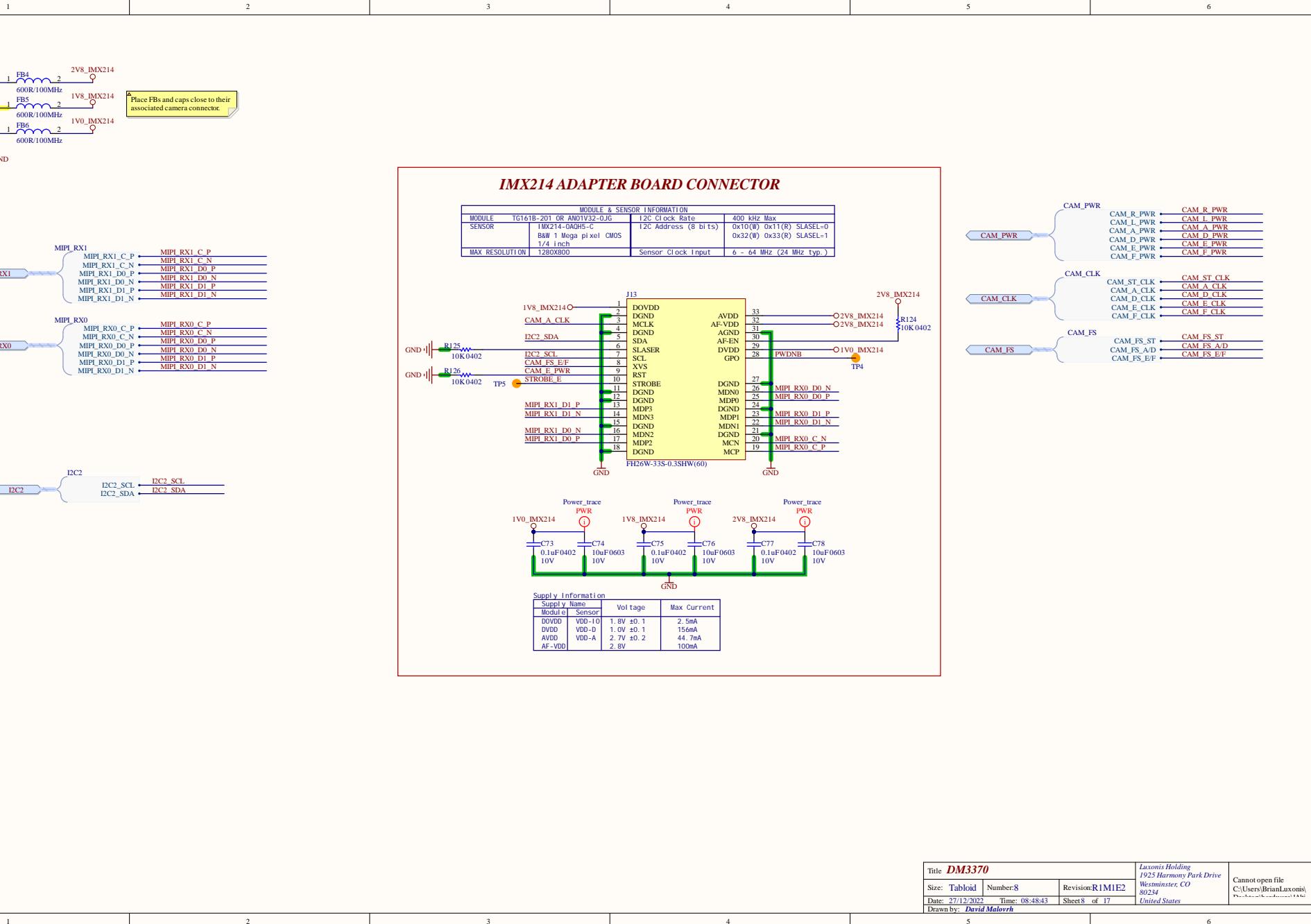


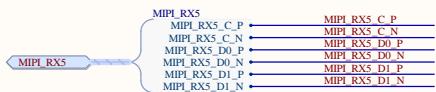
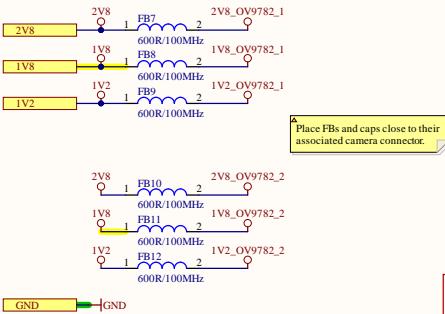
Title	<b>DM3370</b>	Luxonis Holding 1925 Harmony Park Drive Westminster, CO 80234	Cannot open file C:\Users\Brian.luxonis\
Size:	Tabloid	Number:7	Revision:R1M1E2
Date:	27/12/2022	Time: 08:48:43	Sheet 7 of 17 United States

5V0  
3V3  
1V8  
GND



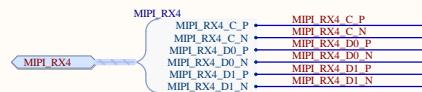
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Size: Tabloid	Number: DXXXX
Date: 27/12/2022	Revision: R1M1E2 Time: 08:48:43
Drawn by: David Malovrh	Cannot open file C:\Users\BrianLuxonis\OneDrive\...\\





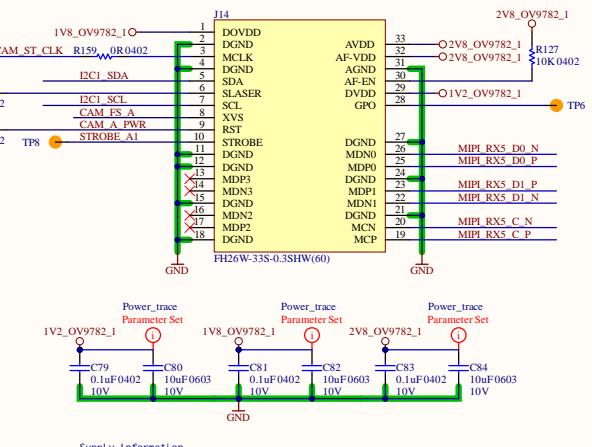
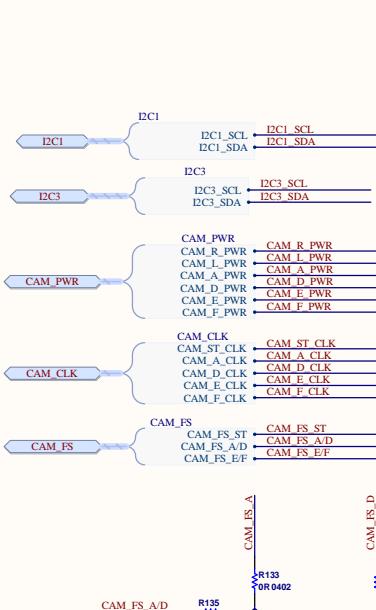
On the BW1097, the IMX378 camera module is hardwired into the "Cam-A" logical position. This means the logic which used to be required to support the module being plugged into different physical connectors (and different logical positions) is no longer needed and can be removed.

Note: It is still a limitation that the clock source for the cameras must be shared between CAMA/C and CAMB/D.



### OV9782 MODULE CONNECTOR

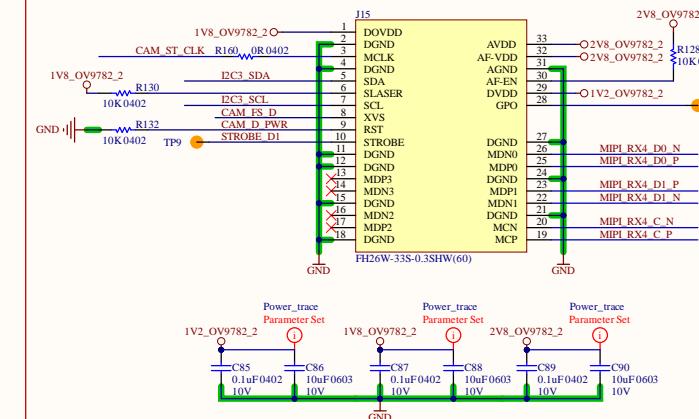
MODULE & SENSOR INFORMATION			
MODULE	TG161B-201 OR AN01V32-DJG		
SENSOR	OV9782 B&W 1 Mega pixel CMOS 1/4 inch		
MAX RESOLUTION	1280X800	I2C Clock Rate	400 kHz Max
		I2C Address (8 bits)	0xC0(0) 0xC1(R)
		Sensor Clock Input	6 - 64 MHz (24 MHz typ.)



Supply Information	Supply Name	Voltage	Max Current
Module level Sensor	DOVDD	1.8V	2.5mA
	VDD-I-10	1.2V	52mA
Module level Sensor	DVDD	1.2V	52mA
	VDD-D	2.8V	24mA
	AVDD	2.8V	24mA

### OV9782 MODULE CONNECTOR

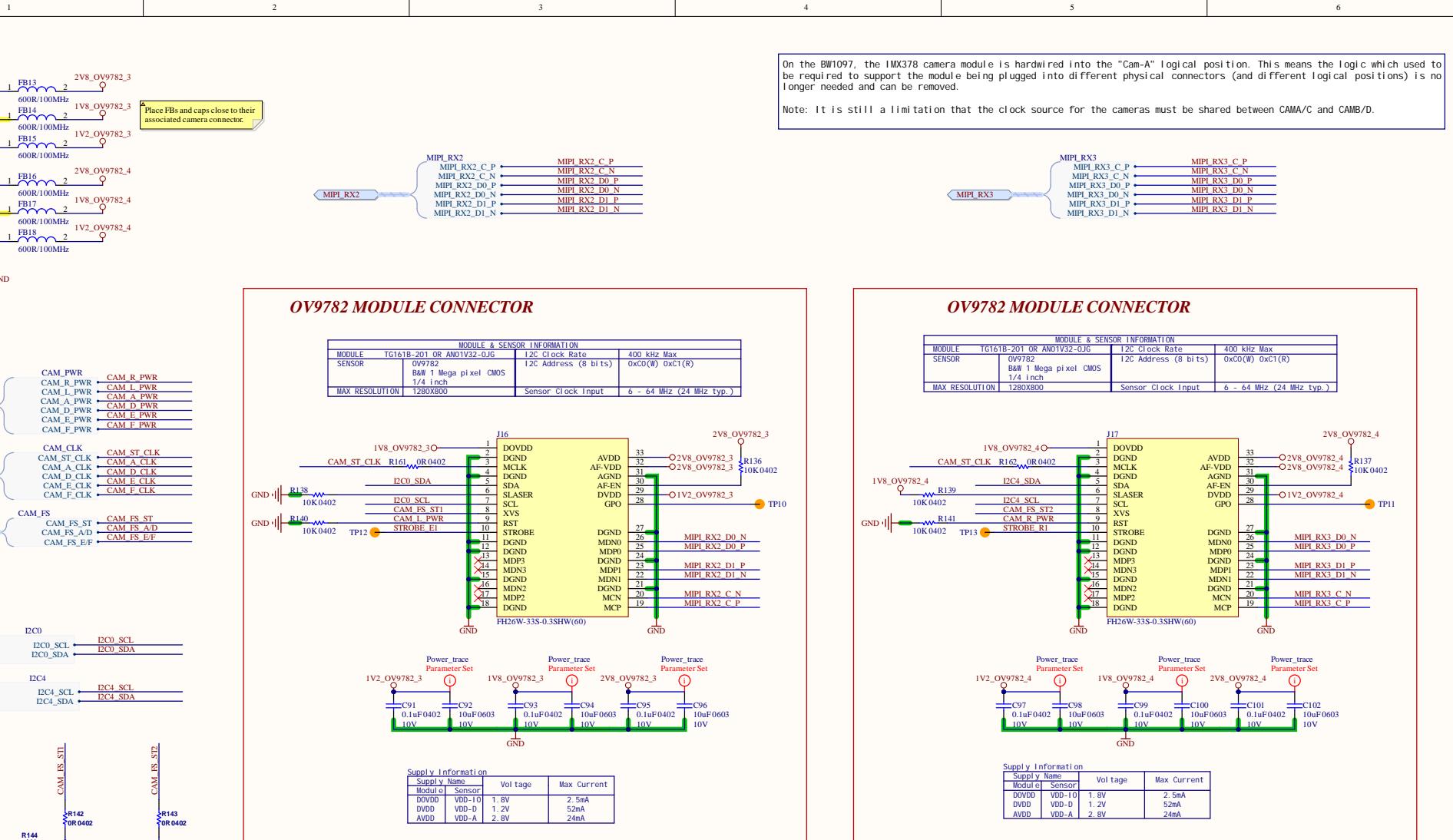
MODULE & SENSOR INFORMATION	
MODULE	TG161B-201 OR AN01V32-DJG
SENSOR	OV9782 B&W 1 Mega pixel CMOS 1/4 inch



Supply Information	Supply Name	Voltage	Max Current
Module level Sensor	DOVDD	1.8V	2.5mA
	VDD-I-10	1.2V	52mA
Module level Sensor	DVDD	1.2V	52mA
	VDD-D	2.8V	24mA
	AVDD	2.8V	24mA

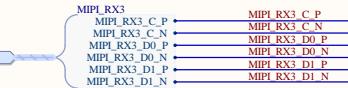
Title **DM3370**

Size: Tabloid Number:9 Revision:R1MIE2  
Westminster, CO 80234 United States  
Date: 27/12/2022 Time: 08:48:44 Sheet 9 of 17  
Drawn by: David Malovrh



On the BW1097, the IMX378 camera module is hardwired into the "Cam-A" logical position. This means the logic which used to be required to support the module being plugged into different physical connectors (and different logical positions) is no longer needed and can be removed.

Note: It is still a limitation that the clock source for the cameras must be shared between CAMA/C and CAMB/D.

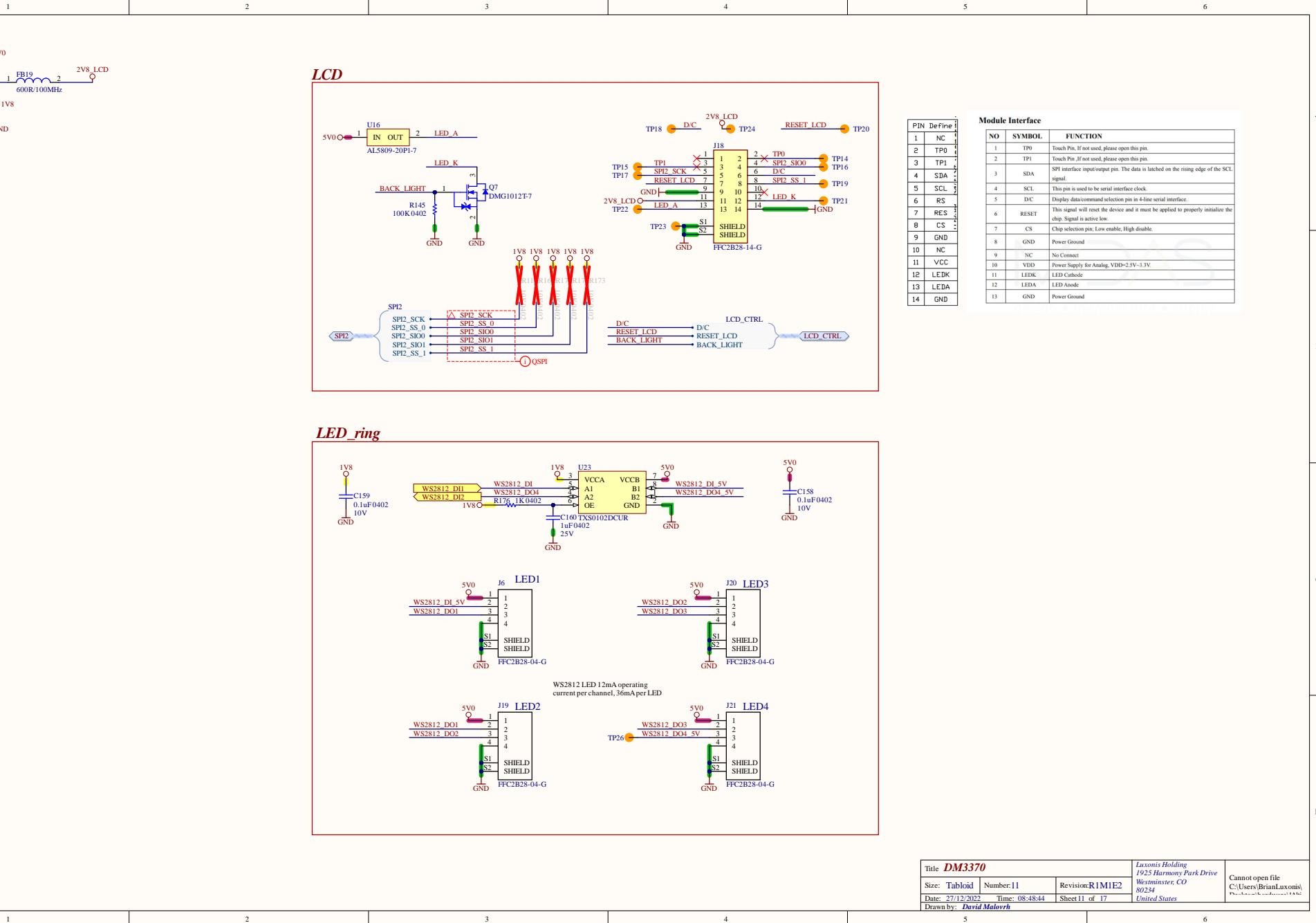


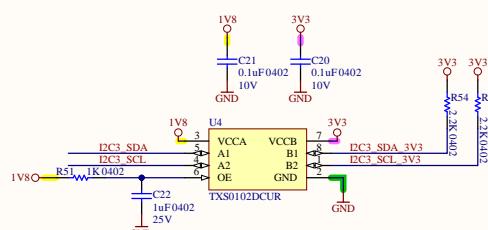
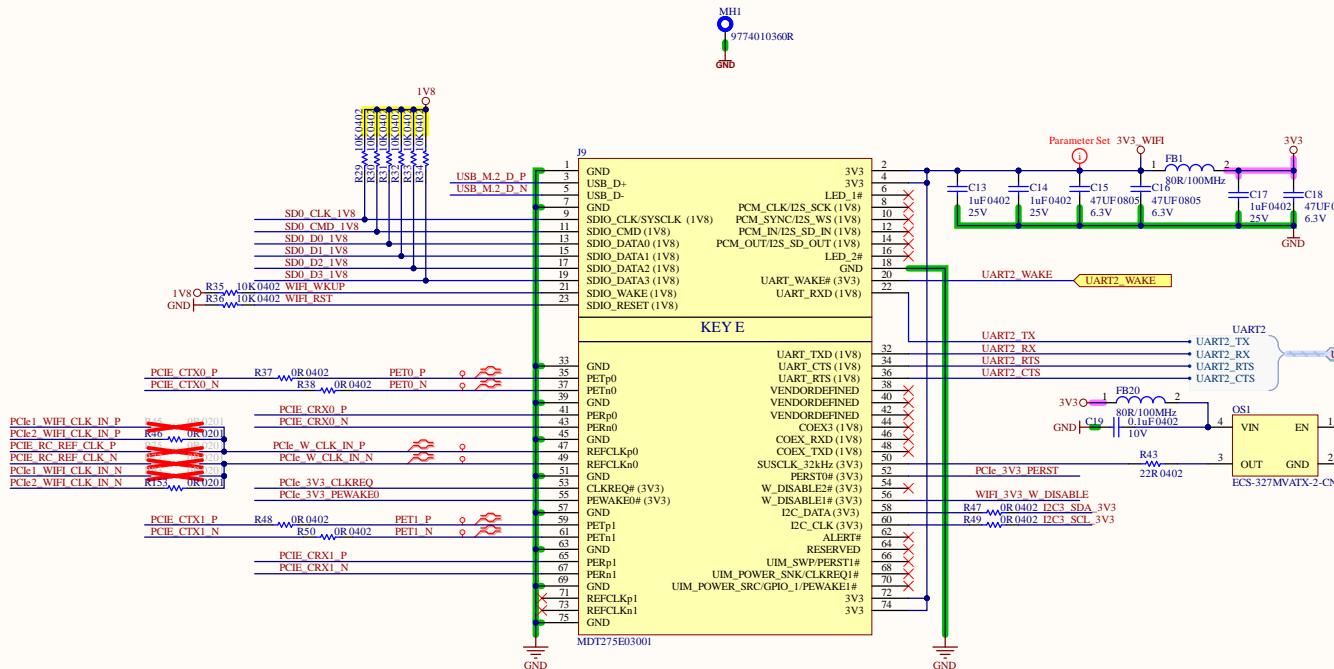
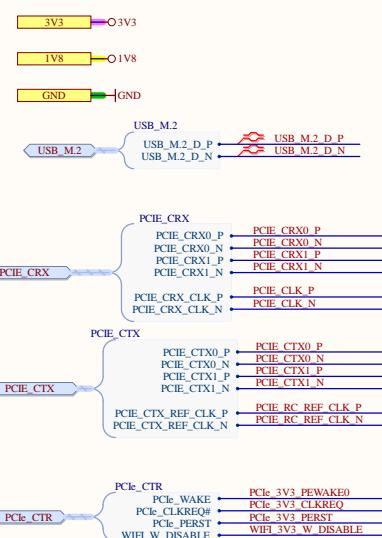
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MIP1\_RX3\_C\_P  
MIP1\_RX3\_C\_N  
MIP1\_RX3\_D0\_P  
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MIP1\_RX3\_D1\_N

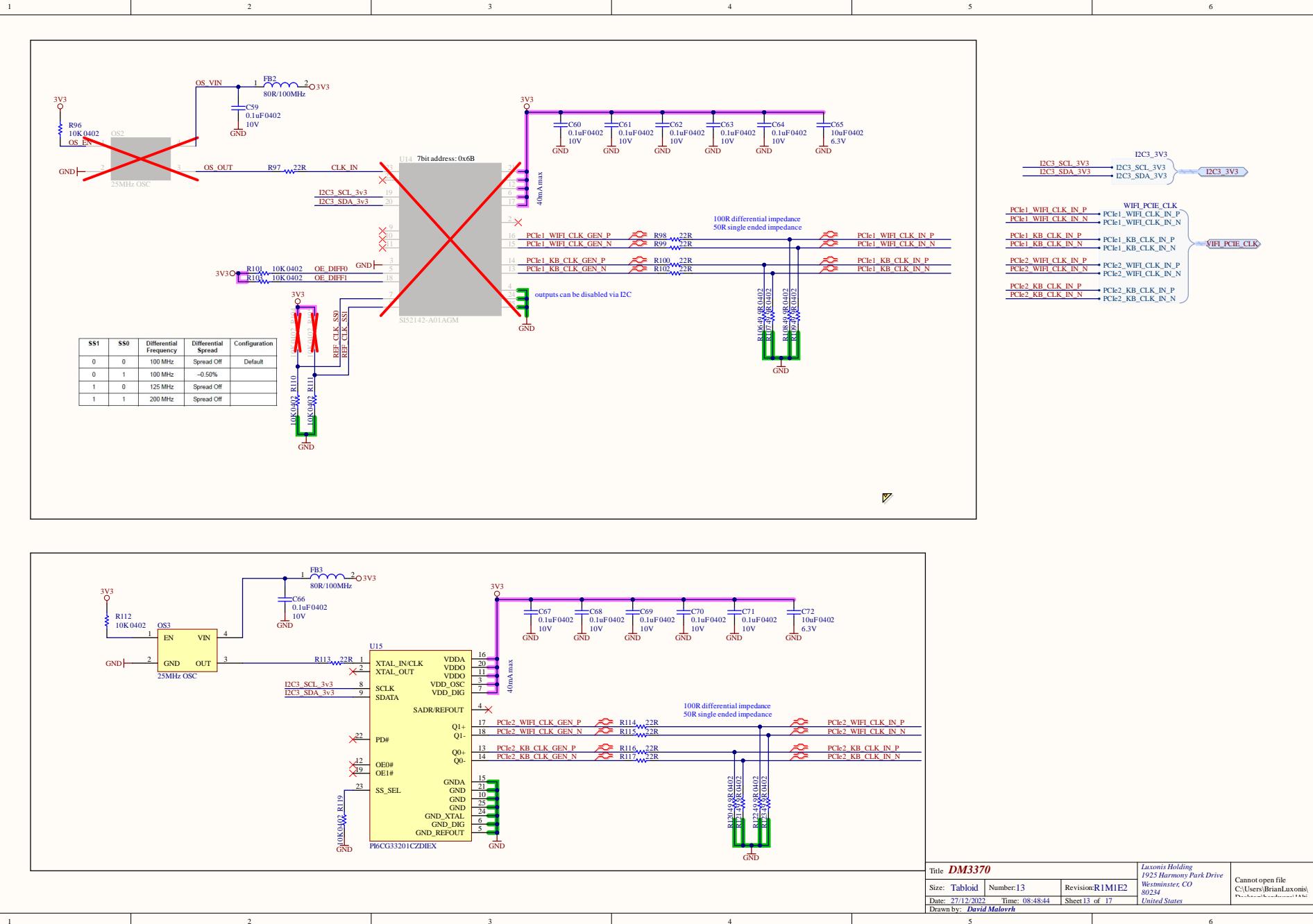
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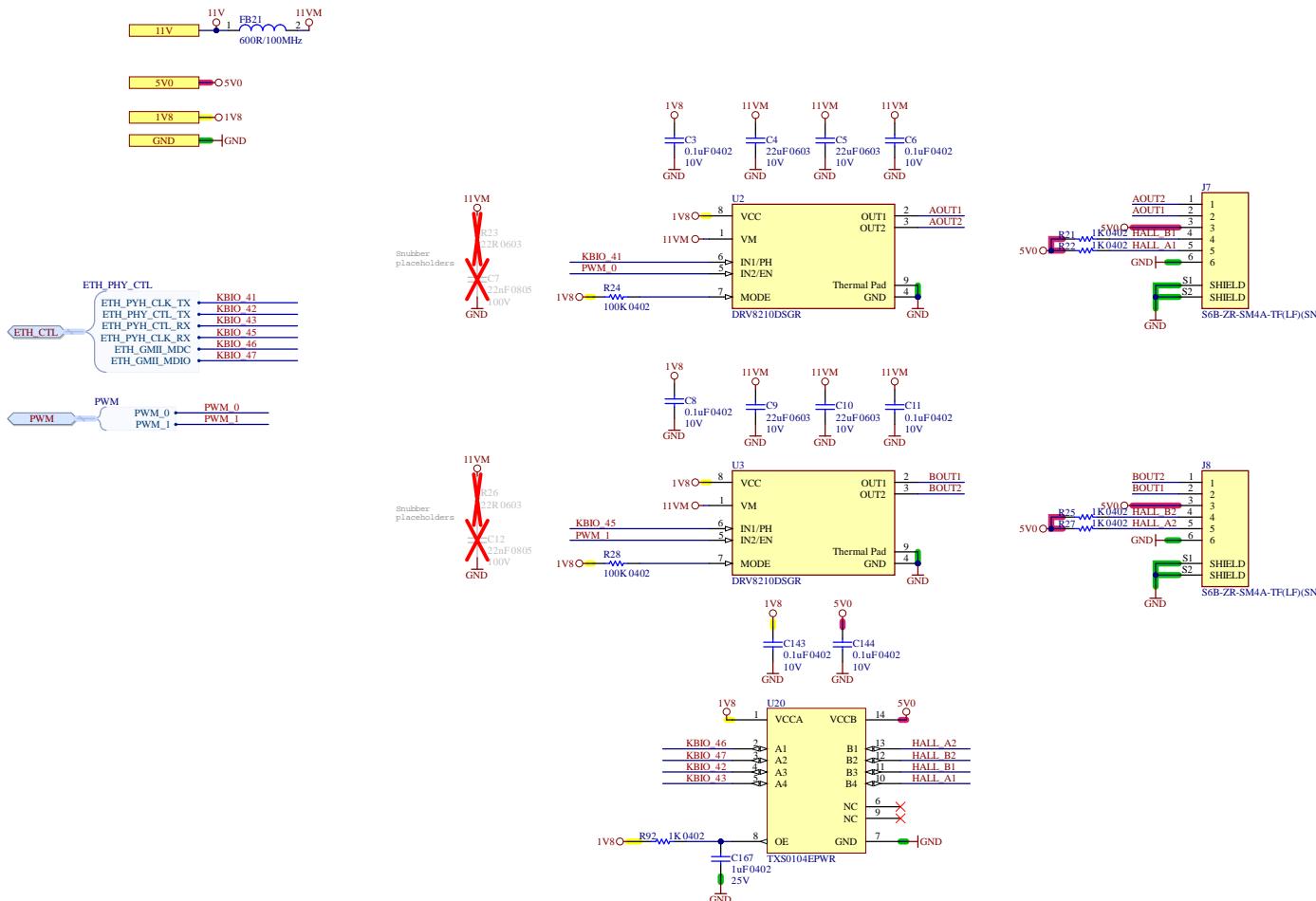
### DM3370

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Size:	Tabloid	Number:10	Revision:R1MIE2
Date:	27/12/2022	Time: 08:48:44	Sheet 10 of 17
Drawn by:	David Malovrh		

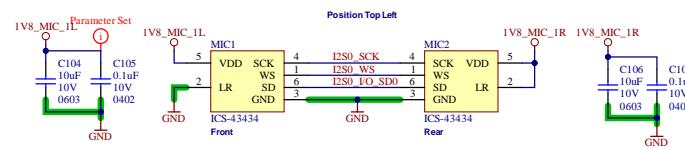
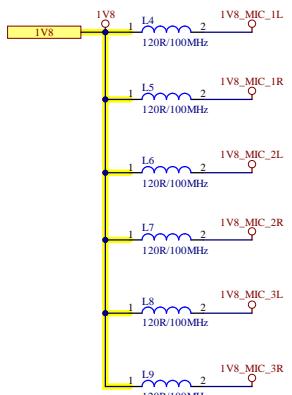






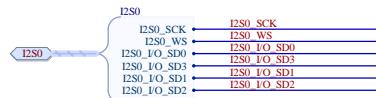
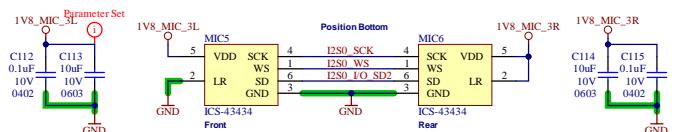


Title <b>DM3370</b>		
Size: Tabloid	Number: 14	Revision: R1M1E2
Date: 27/12/2022	Time: 08:48:44	Sheet 14 of 17
Drawn by: David Malovrh		United States
LUXONIS Holding 7901 Shaffer Parkway Littleton, CO 80127		<b>LUXONIS</b>



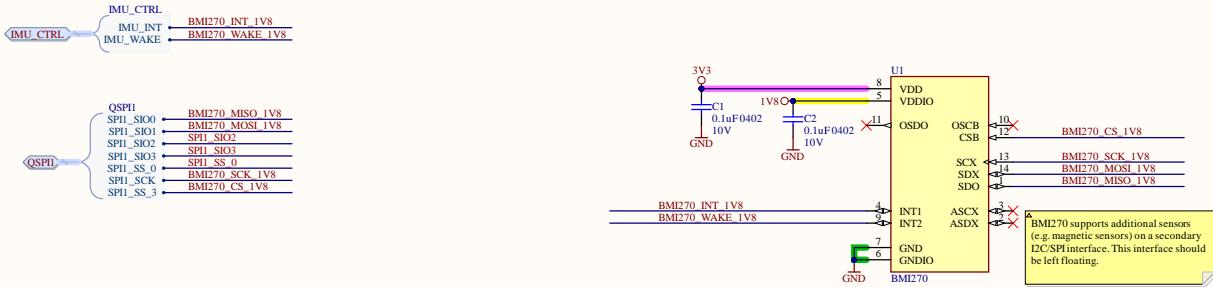
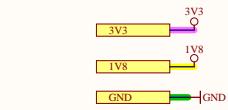
B

GND



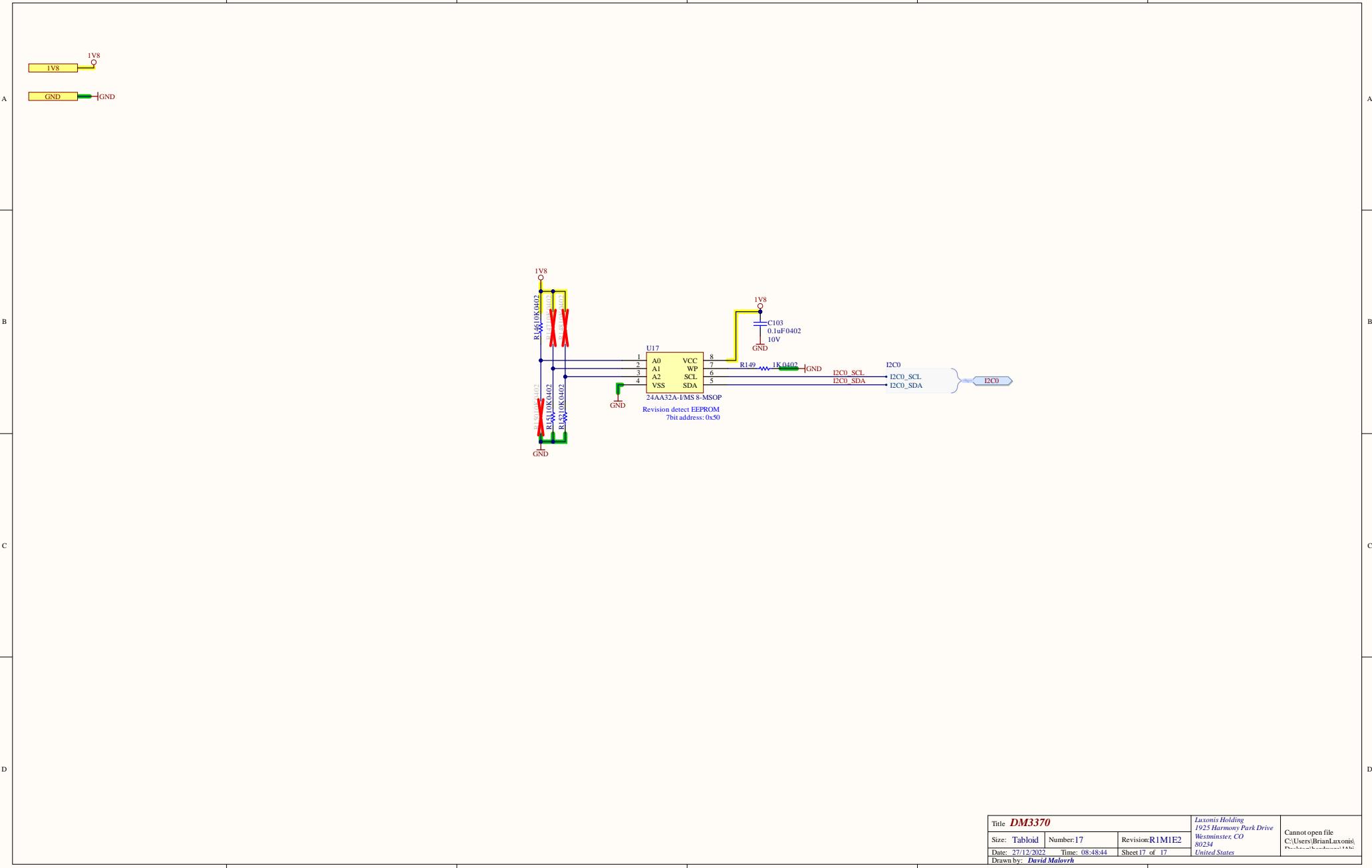
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Size: Tabloid	Number: 14	Revision: R1M1E2
Date: 27/12/2022	Time: 08:48:44	Sheet 14 of 17
Drawn by: David Malovrh		LUXONIS



C

Sensor Orientation (gravity vector $\vec{g}$ )	$\vec{g}$ up	$\vec{g}$ down	$\vec{g}$ left	$\vec{g}$ right	$\vec{g}$ upright	$\vec{g}$ upside
Output Signal X	0g / 0 LSB	1g / 8192 LSB	0g / 0 LSB	-1g / -8192 LSB	0g / 0 LSB	0g / 0 LSB
Output Signal Y	-1g / -8192 LSB	0g / 0 LSB	1g / 8192 LSB	0g / 0 LSB	0g / 0 LSB	0g / 0 LSB
Output Signal Z	0g / 0 LSB	0g / 0 LSB	0g / 0 LSB	0g / 0 LSB	1g / 8192 LSB	-1g / -8192 LSB



Title <b>DM3370</b>			Luxonis Holding 1925 Harmony Park Drive Westminster, CO 80234 United States
Size:	Tabloid	Number: 17	Revision: R1M1E2
Date:	27/12/2022	Time: 08:48:44	Sheet 17 of 17
Drawn by:	David Malovrh		