

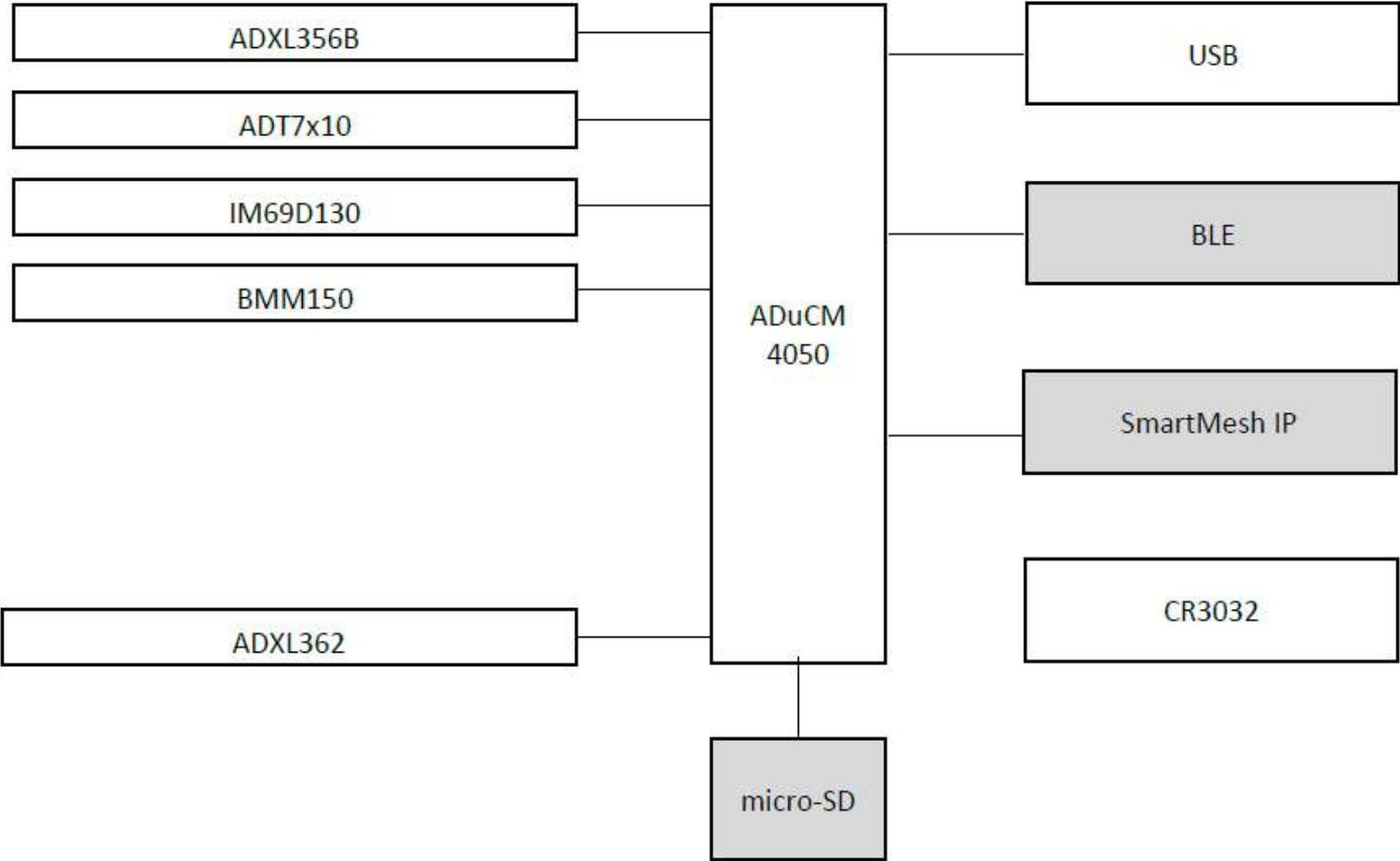
Schematics	Revision	Date	Release Information
CoMoX-Ver2	A	DEC 04 2018	first version release
	B	APR 25 2019	After First Prototype

### Changes From REV 1

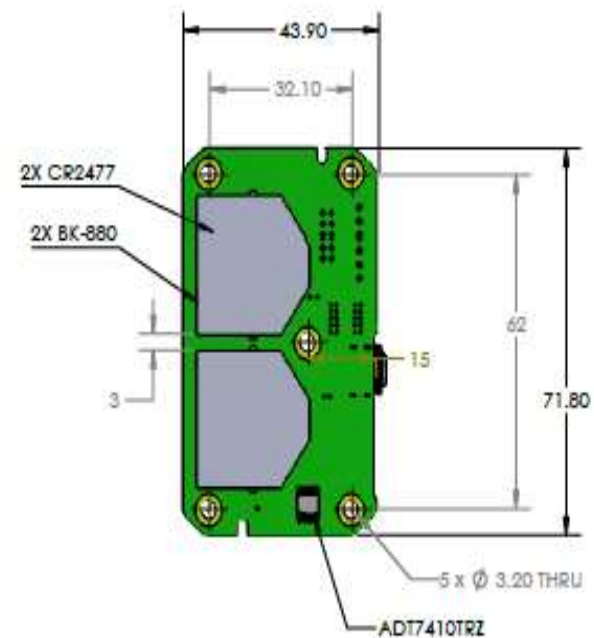
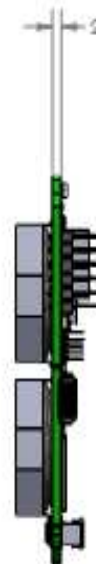
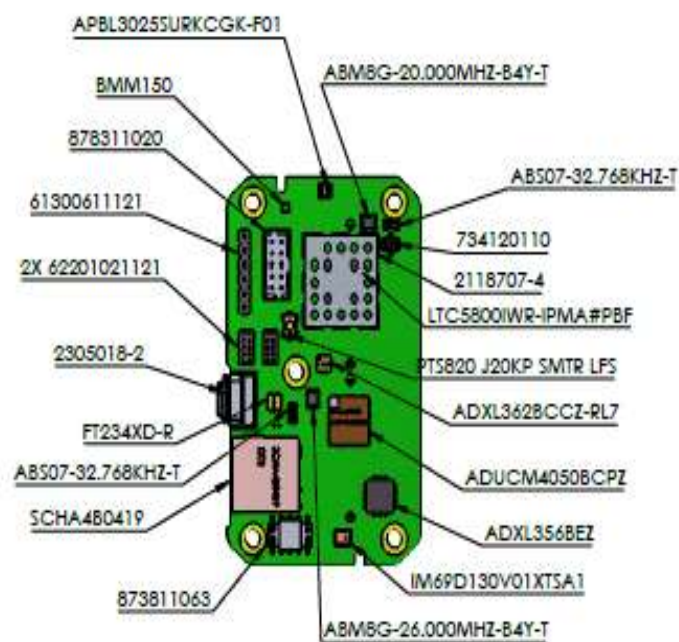
1. PAGE 03 - Change DXF (Larger in 2mm)
2. PAGE 05 - Added LDO for USB Input Power Option
3. PAGE 05 - Add On/Off Power Switch
4. PAGE 06 - Remove J10 Expection Connector
5. PAGE 06 - Change CPU Pinout (Flash, J10 Removal
6. PAGE 06 - Power EN Signals Removal,IM69D130V01XTSA1
7. PAGE 06 - Power EN Signals Removal,BMM150
8. PAGE 06 - Power EN Signals Removal,SD\_CARD\_POWER\_EN)
9. PAGE 06 - Change D3 LED to Stright
10. PAGE 06 - J3 - Mirrored, Add Vibrator Option
11. PAGE 07 - X1 Changed to USBC Connector
12. PAGE 07 - Added 128M SPI FLASH To SPI2
13. PAGE 09 - Remove Power EN from IM69D130V01XTSA1,BMM150
14. PAGE 09 - Remove J4, Add ADAU7002ACBZ-R7 For MIC
15. PAGE 10 - Smart Mash Fix Antenna Network
16. PAGE 10 - Add Power EN to Smart Mash Chip
17. PAGE 12 - Remove Power EN  
from SD CARD

01	Revision History
02	Block Diagram
03	DXF
04	Stack Up
05	Power + Battery
06	ADuCM4050 - MCU
07	ADuCM4050 - MCU - MISC
08	Sensors - 1
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10	Smart Mesh
11	BLE
12	SD-CARD

Shiratech Solutions	Revision History			
	CoMoX-Ver2			
Drawn By Ishay Kokavka	Size A3	CAGE Code <Cage Code>	DWG NO A	Rev B
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Shiratech Solutions	Block Diagram			
	CoMoX-Ver2			
Drawn By Ishay Kokavka	Size A3	CAGE Code <Cage Code>	DWG NO B	Rev A
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Shiratech Solutions	DXF			
	CoMoX-Ver2			
Drawn By Ishay Kokavka	Size A3	CAGE Code <Cage Code>	DWG NO A	Rev B
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layer	name	cu thickness (mil)	dielectric thickness (mil)	line width base (mil)	gnd separation(mil)	differential space (mil)	er	Zo (ohms)	Zdiff (ohms)
cores- Date: 31/12/2018 Customer: maagalim Boardname:comox v1									
1 (ref. plane)	rf	2.1		17	17		3.8	50.20339773	
core glass epoxy (tg 180)			10	9	8		6 3.8		89.97674622
2 (ref. plane)	gnd	1.4							
pp glass epoxy (tg 180)			6						
3 (offset stripline)	sig	0.7		5			3.8	49.89475386	
core glass epoxy (tg 180)			5						
4 (ref. plane)	gnd	1.4							
pp glass epoxy (tg 180)			25						
5 (ref. plane)	pwr	1.4							
core glass epoxy (tg 180)			5						
6 (offset stripline)	sig	0.7		5			3.8	49.89475386	
pp glass epoxy (tg 180)			6						
7 (ref. plane)	gnd	1.4							
core glass epoxy (tg 180)			10						
8 (coated microstrip)	rf	2.1		9	8		6 3.8	142.5316069	89.97674622
				17	17		3.8	50.20339773	
		0.30448	1.7018						
total thickness (including plating and solder mask) +/- 10%			2.00628						
impedance on the manufactured boards will be within +/- 10% of the values calculated above									

**Shiratech  
Solutions**

Stack Up

CoMoX-Ver2

Drawn By Ishay Kokavka

Size  
A3

CAGE Code  
<Cage Code>

DWG NO  
A

Rev  
B

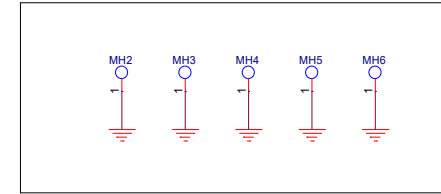
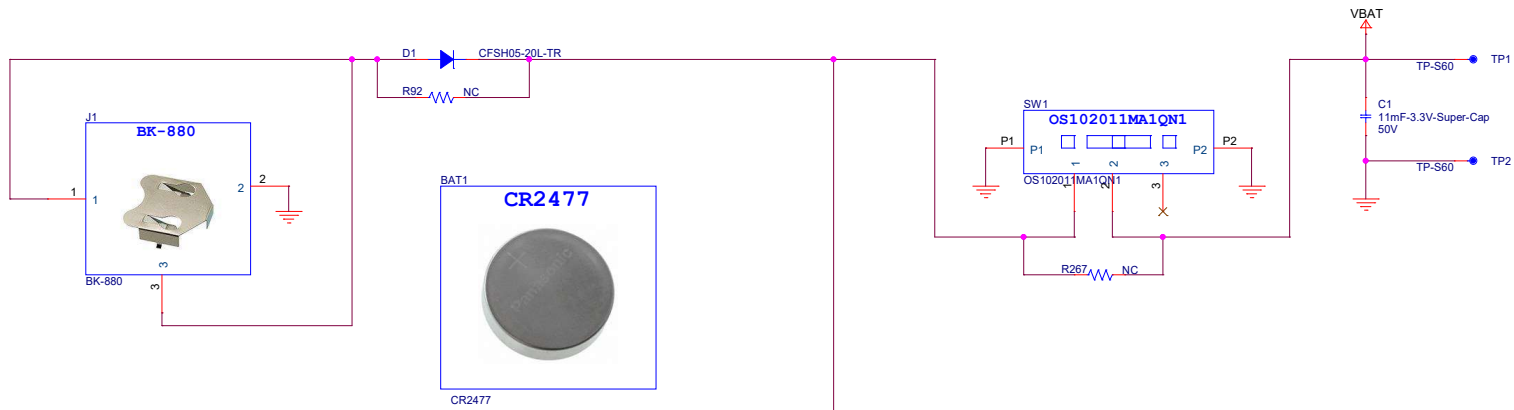
Monday, May 13, 2019

Scale

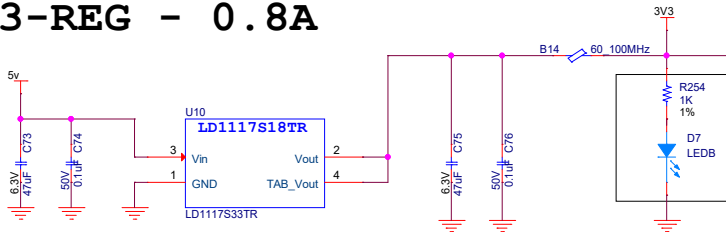
Sheet

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05



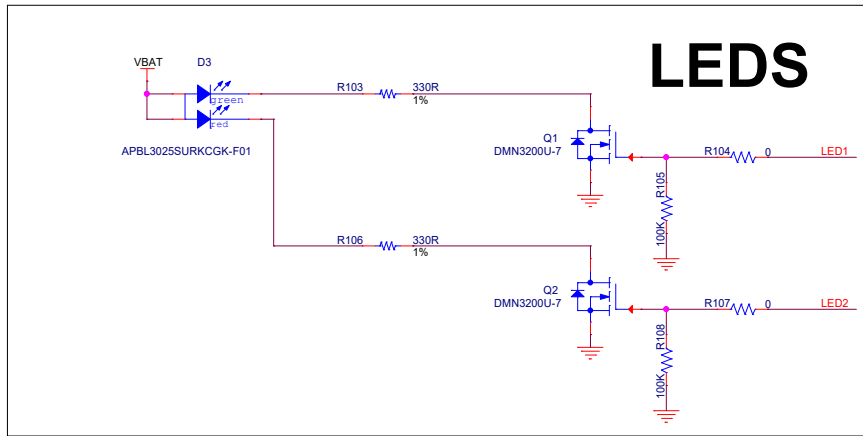
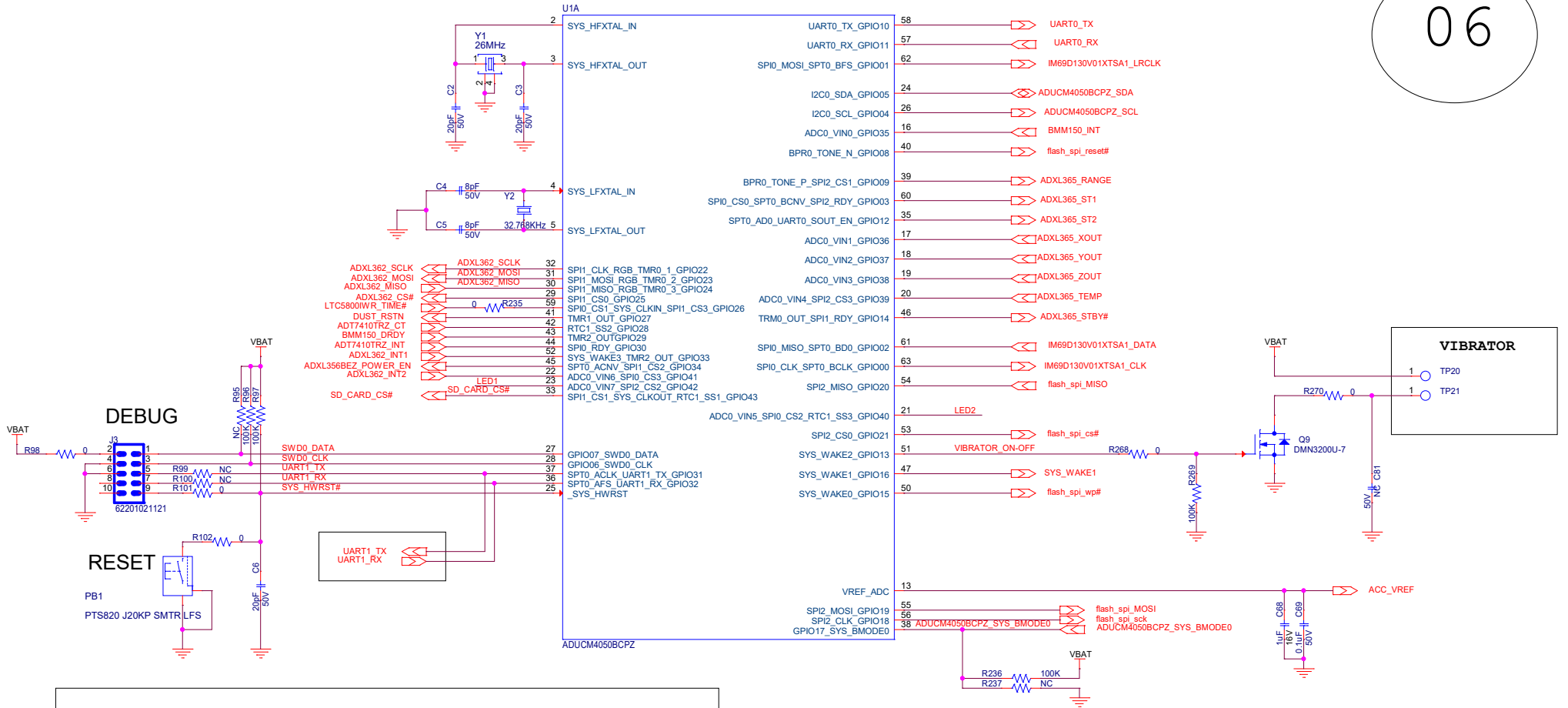
## 3V3-REG - 0.8A



Shiratech Solutions	Power + Battery			
	CoMoX-Ver2			
Drawn By Ishay Kokavka	Size A3	CAGE Code <Cage Code>	DWG NO A	Rev B
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# MCU

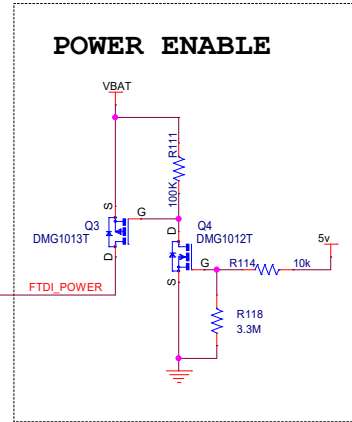
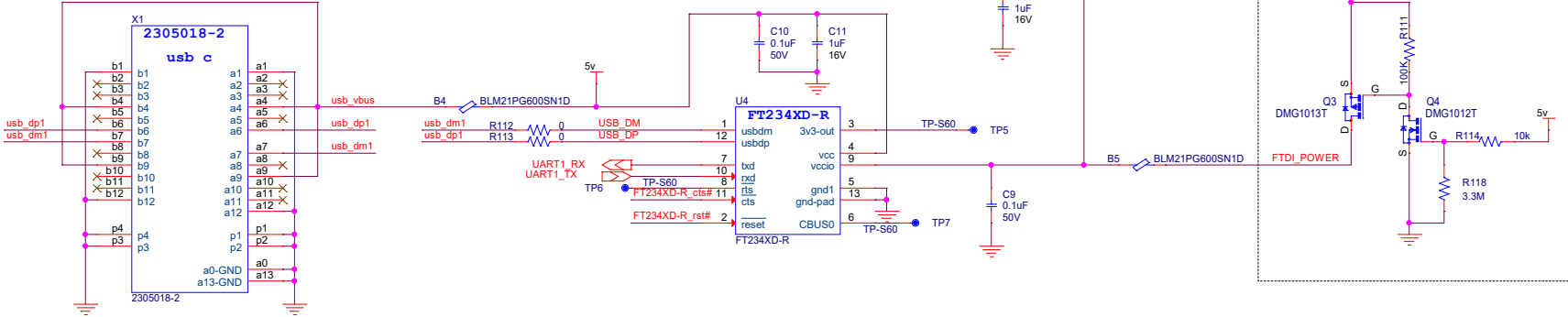
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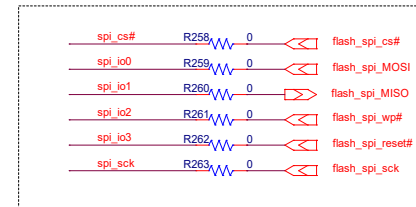
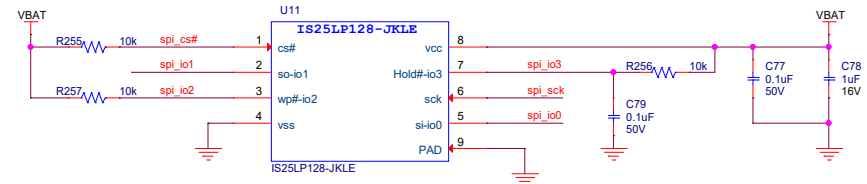
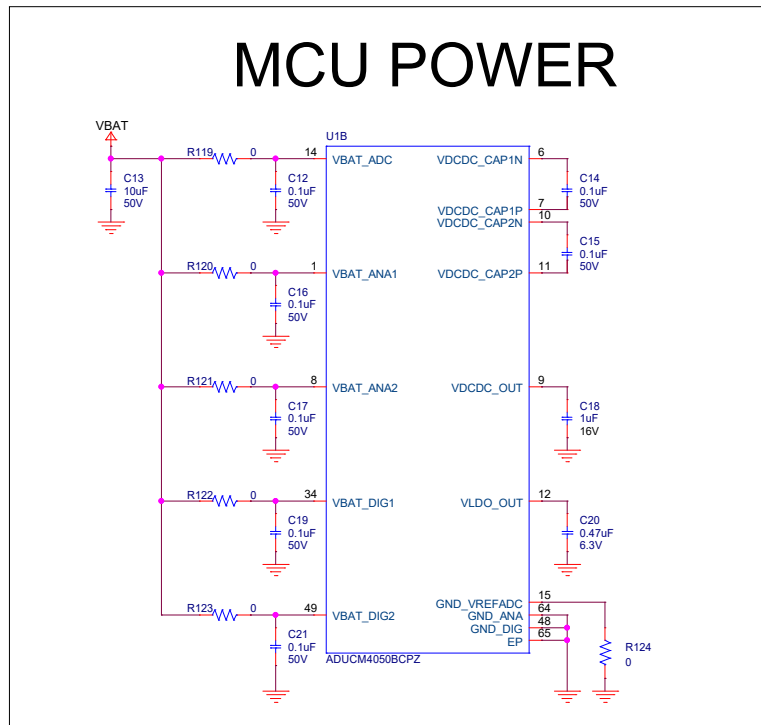
Shiratech Solutions		ADuCM4050 - MCU			
		CoMoX-Ver2			
Drawn By Ishay Kokavka		Size A3	CAGE Code <Cage Code>	DWG NO A	Rev B
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# USBC Interface

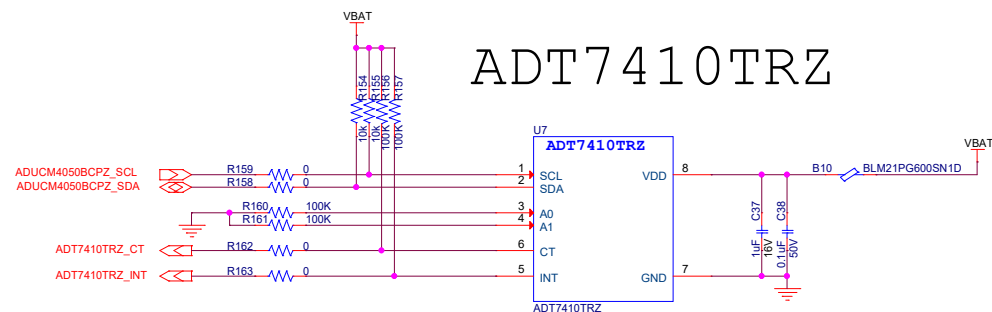
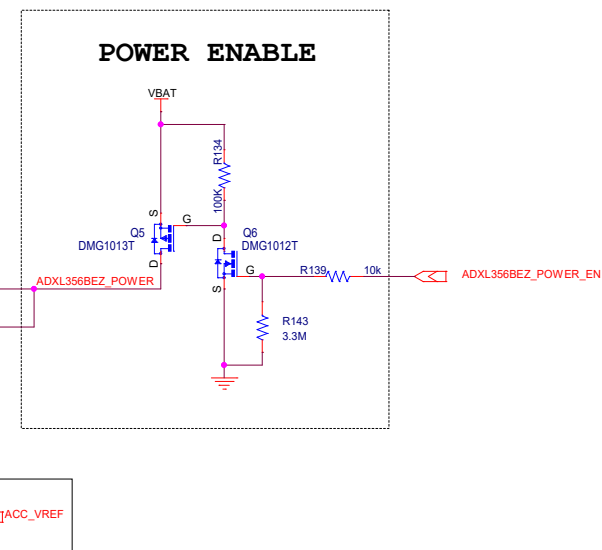
07



# MCU POWER

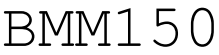


Shiratech Solutions	ADUCM4050 - MCU - MISC			
	CoMoX-Ver2			
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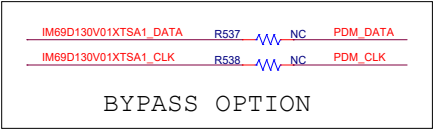


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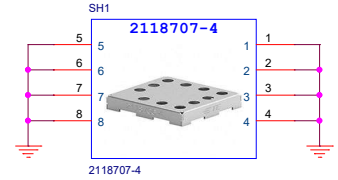
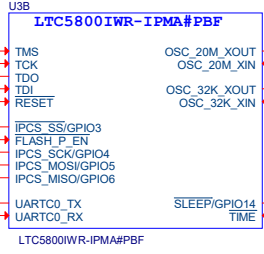
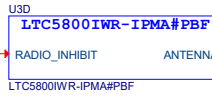
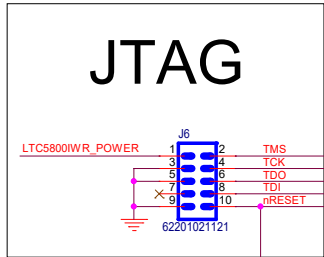




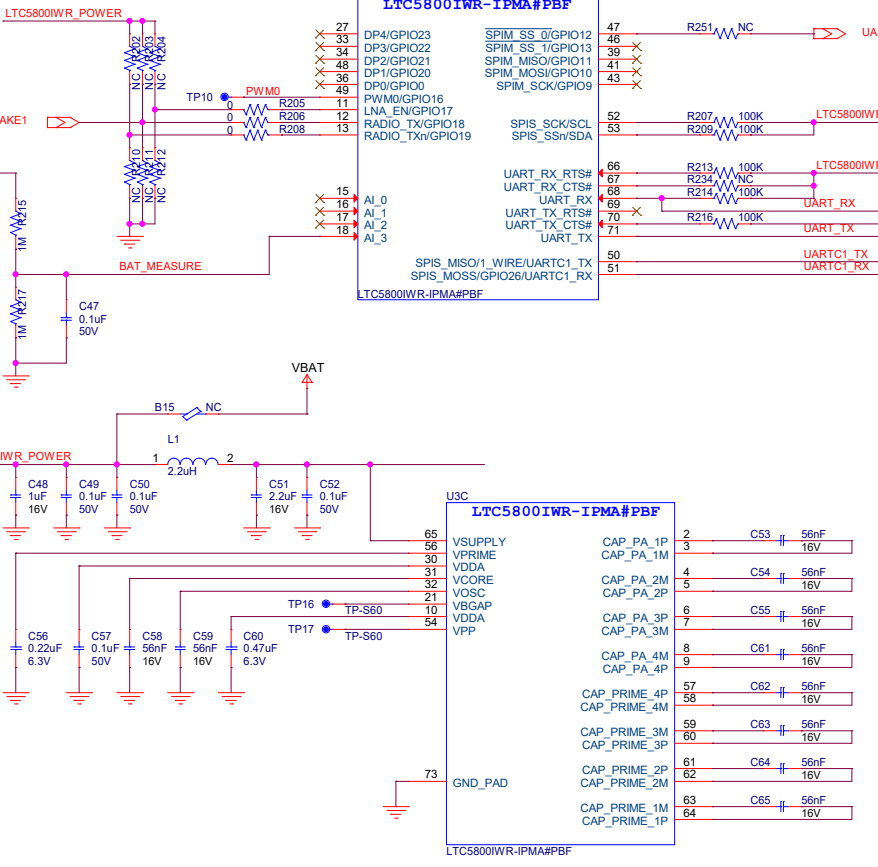
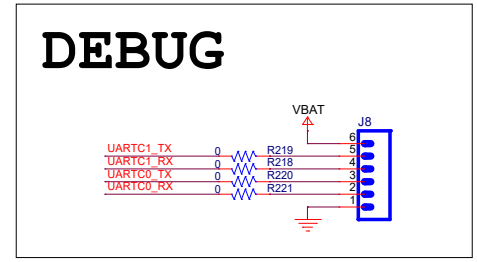
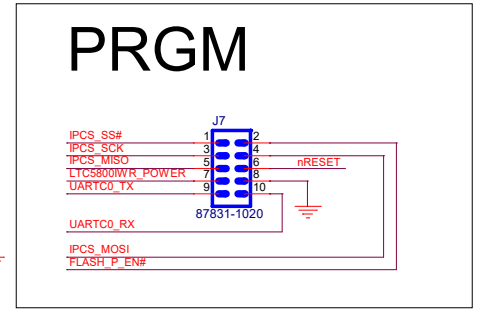
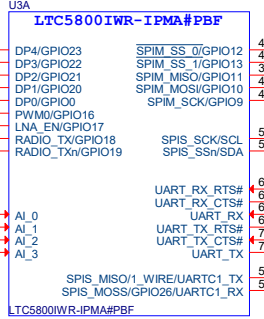
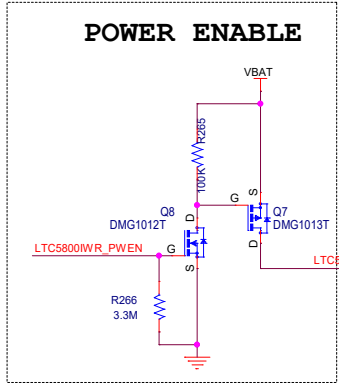
IM69D130V01XTSA1



<b>Shiratech Solutions</b>	Sensors - 2			
	CoMoX-Ver2			
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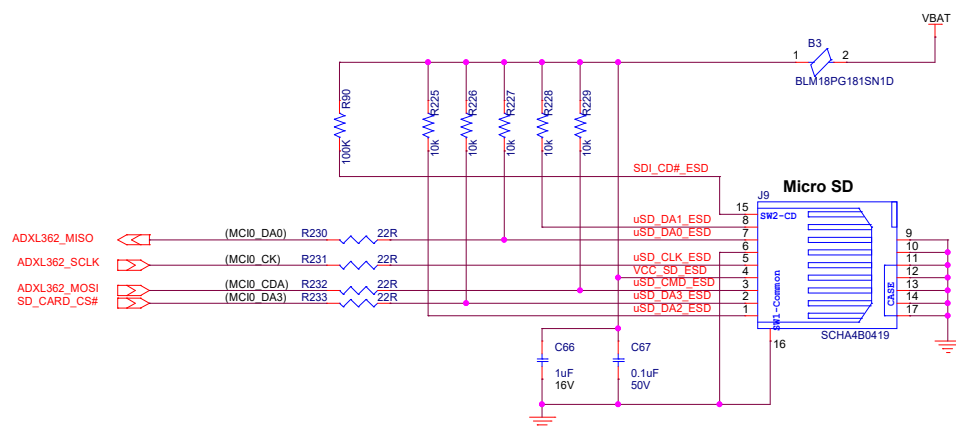
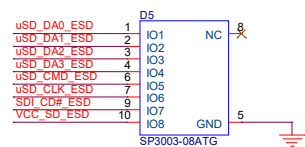


Shiratech Solutions		Sensors - 2	
		CoMoX-Ver1	
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# TBD BLE NORDIC MODULE - NO MASH VERSION

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	CoMoX-Ver2			
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**ESD PROTECTION  
CLOSE TO CONNECTOR**



<b>Shiratech Solutions</b>	SD-CARD			
	CoMoX-Ver2			
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