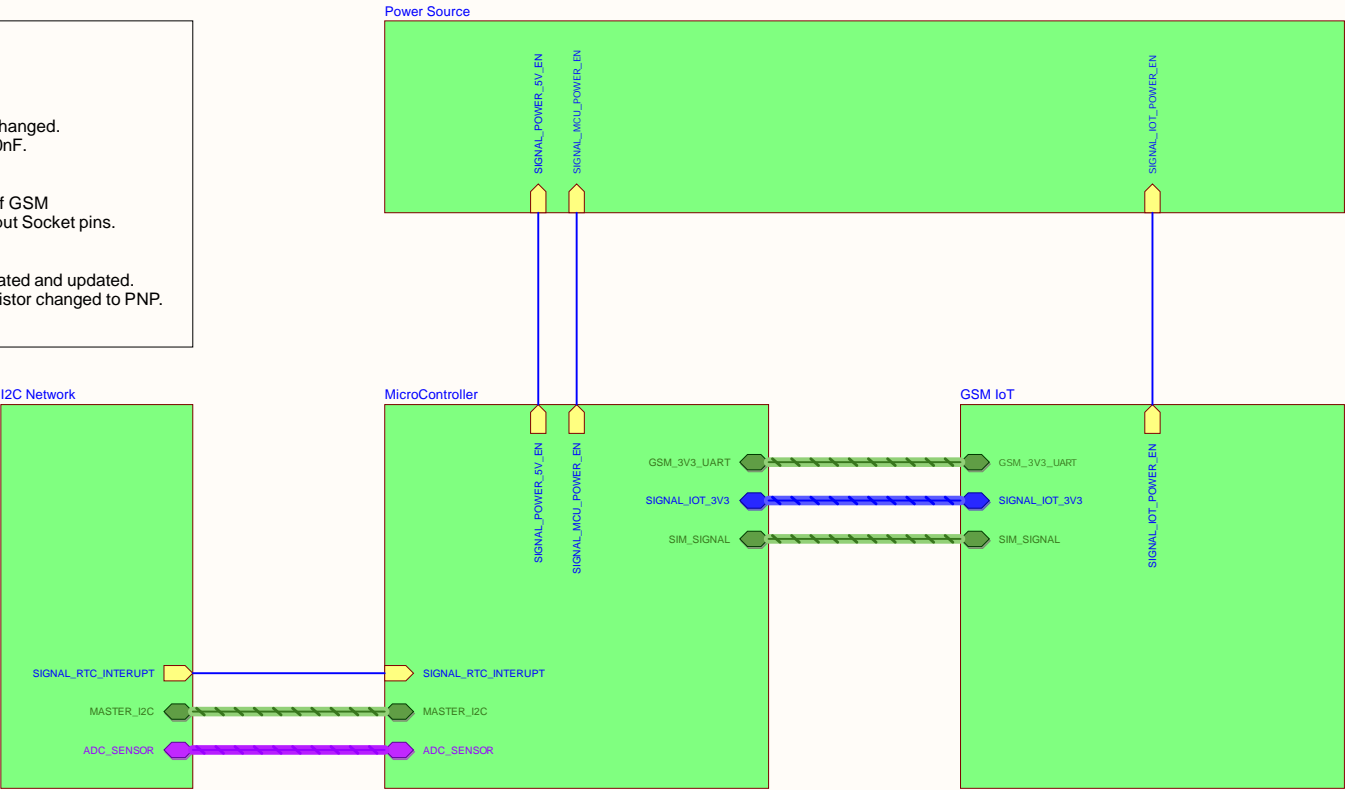


B100 - Master IoT MicroController

Revision History

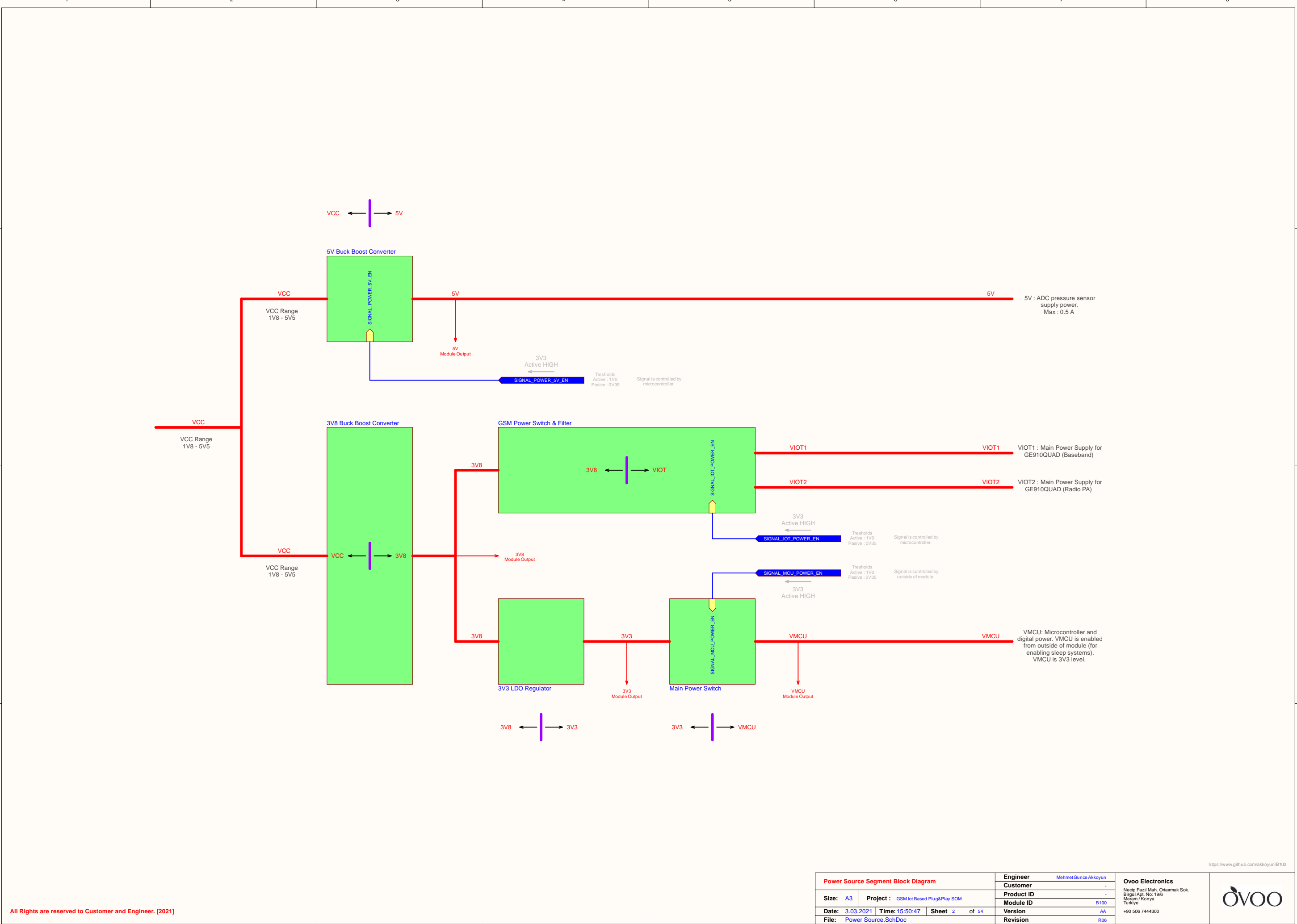
- AA001 (05.01.2021)
* Schematic creation.
- AA002 (11.01.2021)
* Bidirectional signal translator IC changed.
* SIM Vcc capacitor changed to 100nF.
- AA003 (19.01.2021)
* 33 pF capacitor added to VAUX of GSM
* 33 pF capacitors added to all Output Socket pins.
- AA004 (22.01.2021)
* GSM IoT LED resistors are calculated and updated.
* GSM IoT LED power enable transistor changed to PNP.



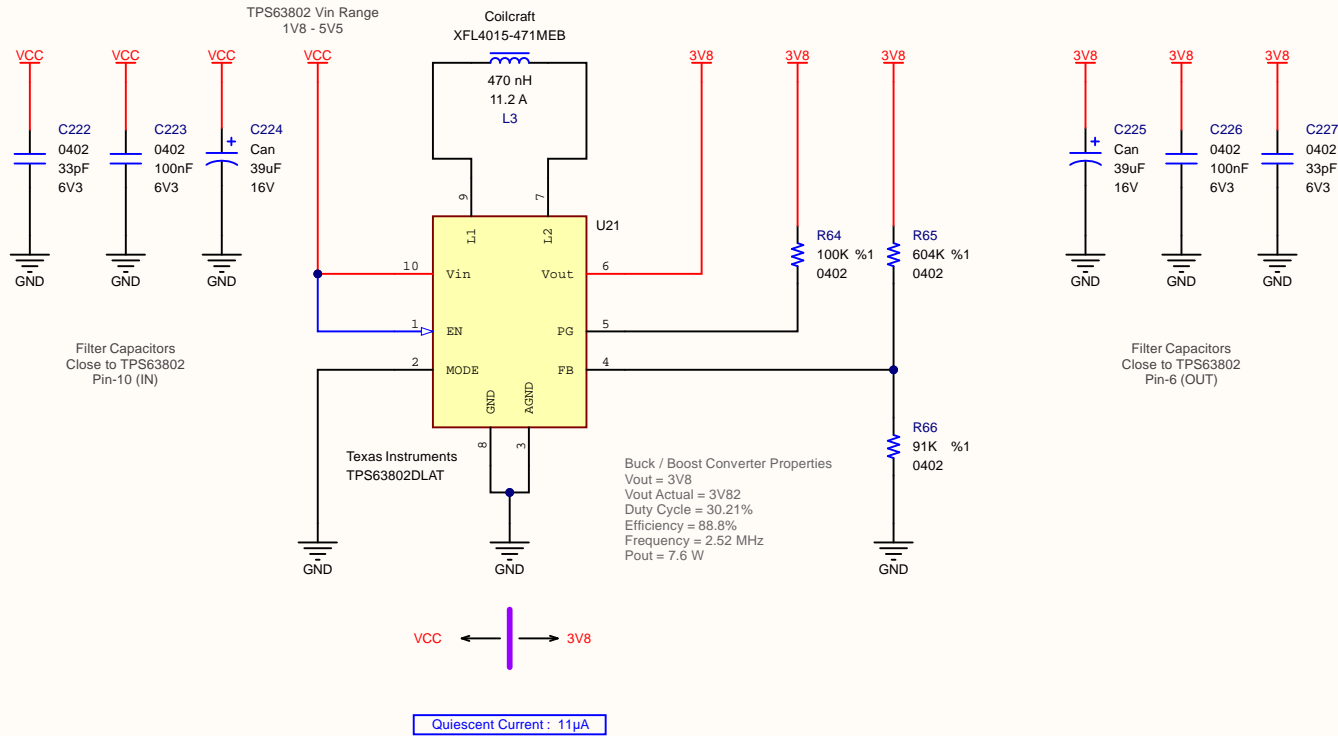
<https://www.github.com/akkoyun/B100>

Power Source Segment Block Diagram				Engineer	Mehmet Güneş Akkoyun	Ovoo Electronics	
Size:	A4	Project :	GSM Iot Based Plug&Play SOM	Customer	-	Necip Fazıl Mah. Ortam Sok. Bingül Apt. No: 19/6 Meram / Konya Türkiye +90 506 7444300	
Date:	3.03.2021	Time:	15:50:47	Product ID	-		
File:	B100 Block Diagram.SchDoc	Sheet	1 of 54	Module ID	B100		
				Version	AA		
				Revision	R06		

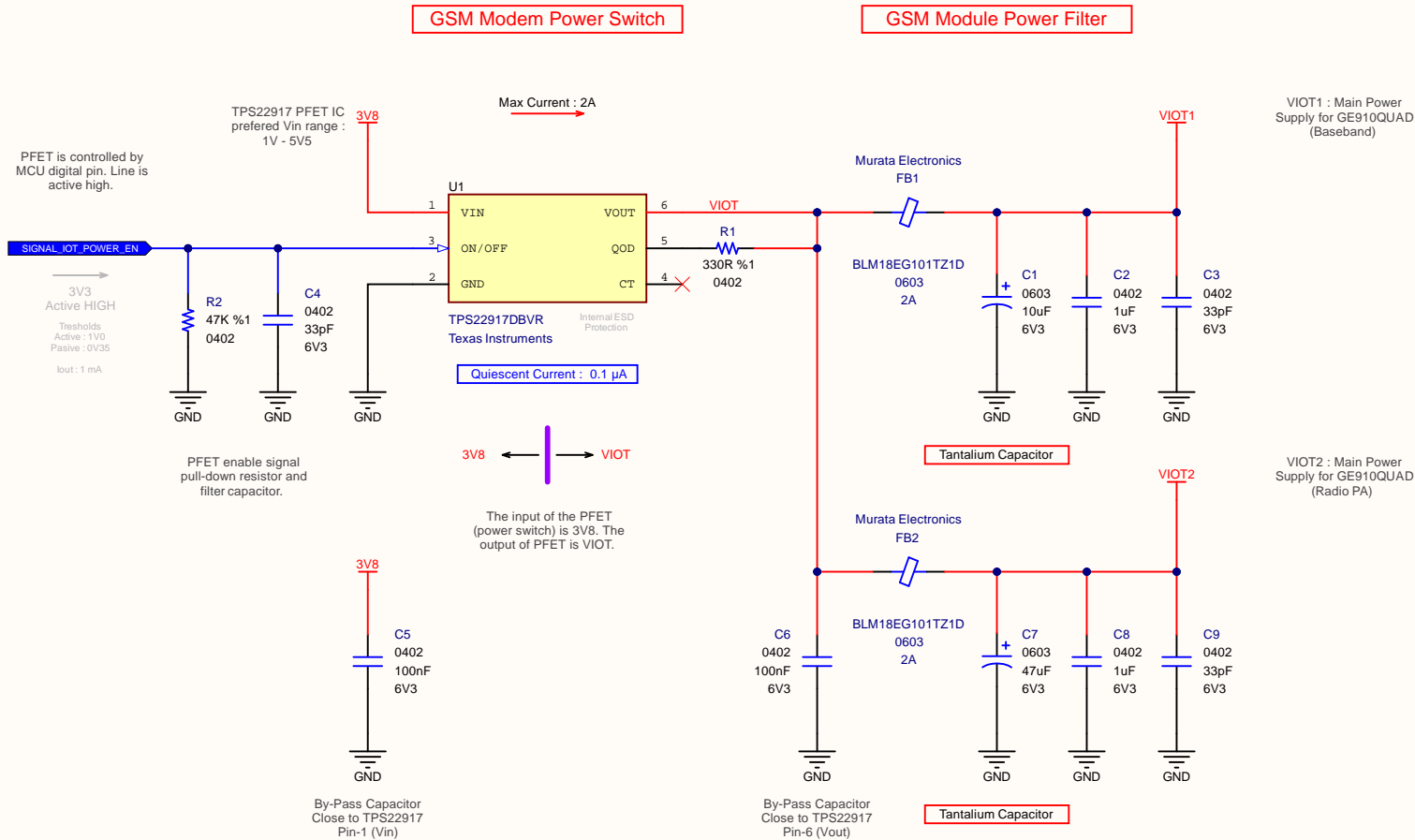





3V8 Buck Boost Converter

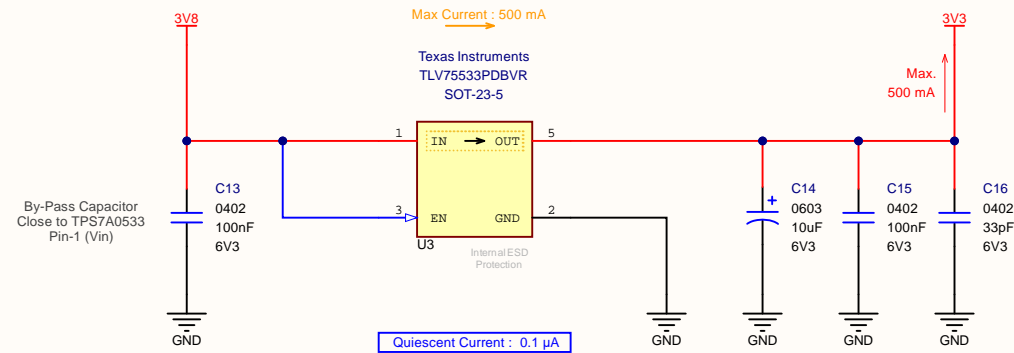


Power Source Segment Block Diagram				Engineer	Mehmet Güneş Akkoyun	Ovoo Electronics	
Size:	A4	Project :	GSM IoT Based Plug&Play SOM	Customer	-	Necip Fazıl Mah. Ortanmak Sok.	
Date:	3.03.2021	Time:	15:50:48	Product ID	-	Birgül Apt. No: 19/6	
File:	3V8 Buck Boost Converter.SchDoc	Sheet	3 of 54	Module ID	B100	Meram / Konya	
				Version	AA	Türkiye	
				Revision	R06	+90 506 7444300	

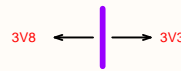
<https://www.github.com/akkoyun/B100>

Power Source Segment Block Diagram				Engineer	Mehmet Güneş Akkoyun	Ovoo Electronics Necip Fazıl Mah. Ortanmak Sok. Bingöl Apt. No: 19/6 Meram / Konya Türkiye +90 506 7444300	
Size:	A4	Project :	GSM Iot Based Plug&Play SOM	Customer	-		
Date:	3.03.2021	Time:	15:50:48	Product ID	-		
File:	GSM Power.SchDoc	Sheet	4 of 54	Module ID	B100		
		Version	AA	Revision	R06		


3V3 LDO Regulator

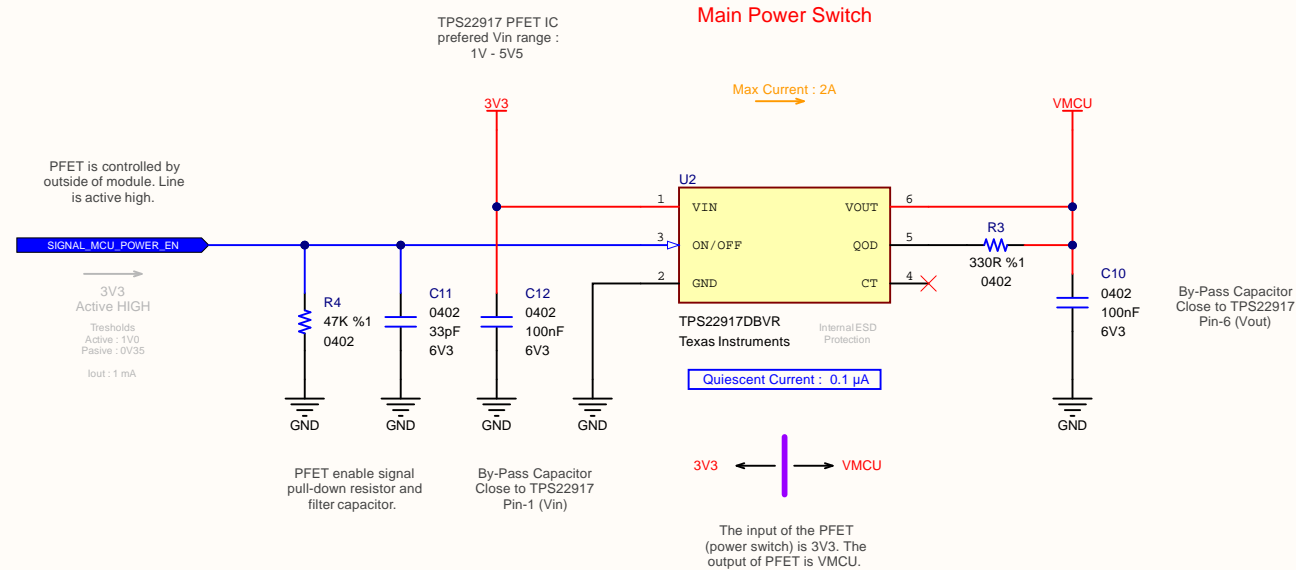



Quiescent Current : 0.1 μ A



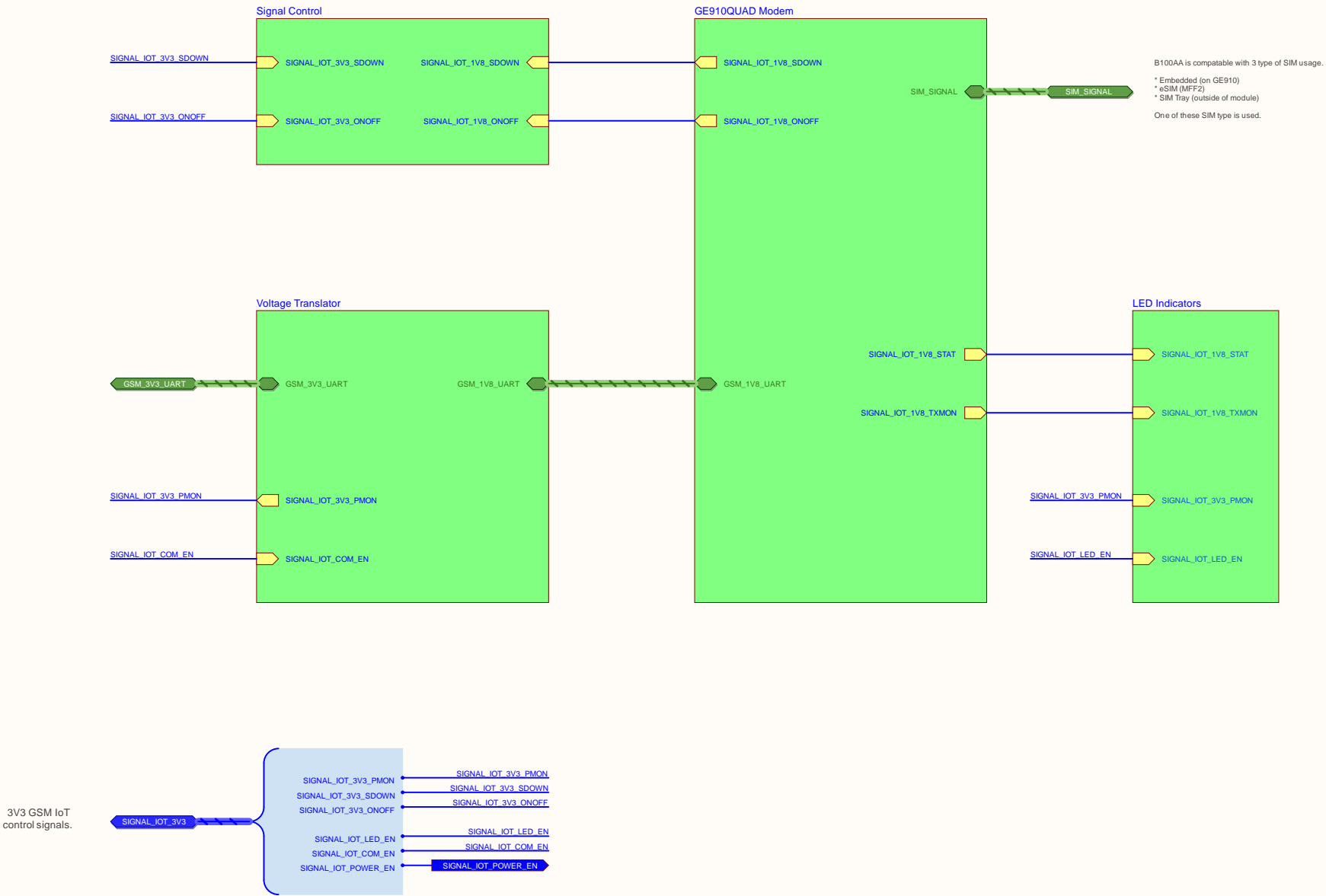
TLV75533 LDO is a 3V3 regulator. LDO is always enable.


Power Source Segment Block Diagram				Engineer	Mehmet Güneç Akkoyun	Ovoo Electronics Necip Fazıl Mah. Ortairmak Sok. Bırgül Apt. No: 19/6 Meram / Konya Türkiye +90 506 7444300	
Size: A4		Project : GSM Iot Based Plug&Play SOM		Customer	-		
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Date: 3.03.2021	Time: 15:50:48	Sheet 5	of 54	Version	AA		
File: 3V3 LDO Regulator.SchDoc				Revision	R06		

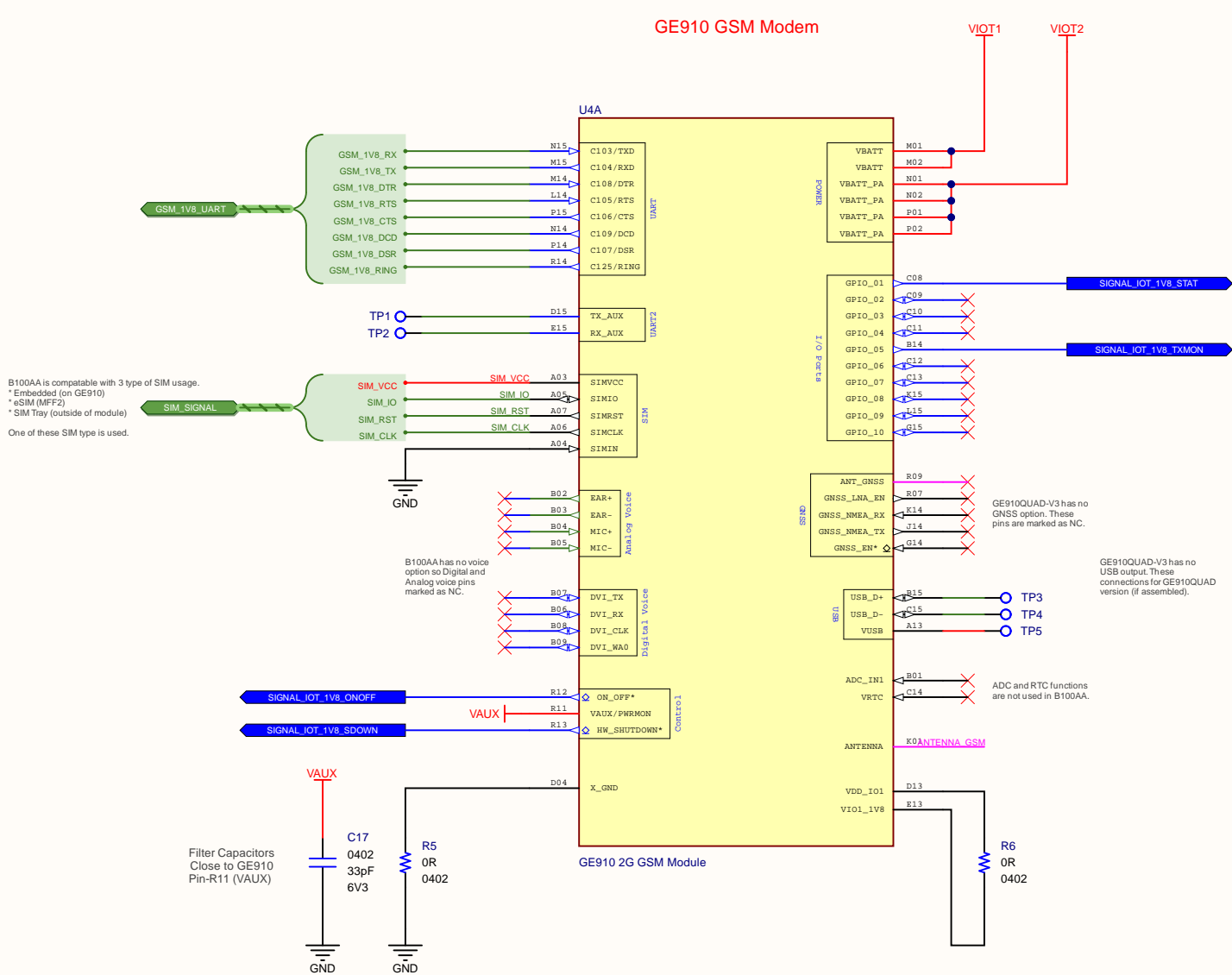
<https://www.github.com/akkoyun/B100>

Power Source Segment Block Diagram				Engineer	MehmetGünce Akkoyun	Ovoo Electronics Necip Fazıl Mah. Ortarmak Sok. Bingül Apt. No: 19/6 Meram / Konya Türkiye +90 506 7444300	
				Customer	-		
				Product ID	-		
				Module ID	B100		
				Version	AA		
File: Main Power Switch.SchDoc				Revision	R06		
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Date: 3.03.2021	Time: 15:50:48	Sheet 6	of 54				

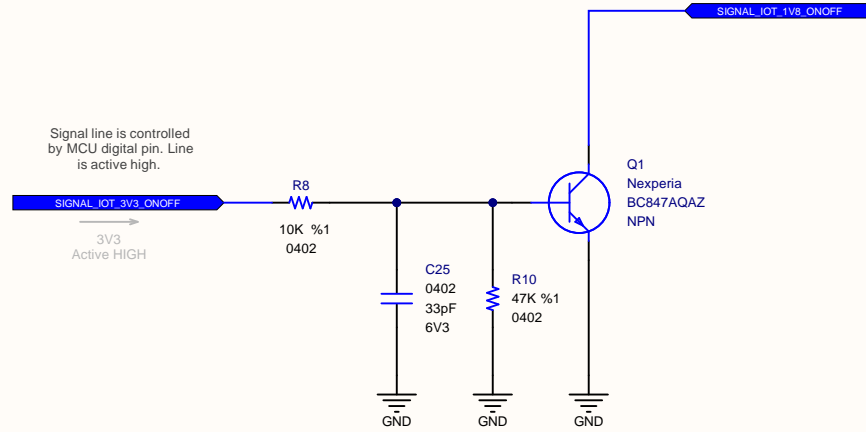
GSM IoT Communication Layer



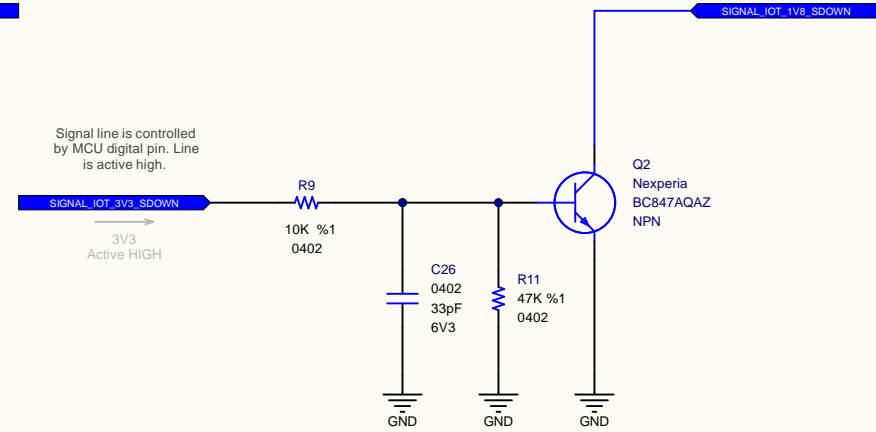
Power Source Segment Block Diagram				Engineer	Mehmet Günce Akkoyun	Ovoo Electronics Necip Fazıl Mah. Ortarmak Sok. Bırgöl Apt. No: 19/6 Meram / Konya Türkiye +90 506 7444300	
Size: A3		Project : GSM Iot Based Plug&Play SOM		Customer	-		
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Date: 3.03.2021		Time: 15:50:48		Module ID	B100		
File: GSM Iot.SchDoc		Sheet 8 of 54		Version	AA		
				Revision	R06		



GSM Module On/Off Signal

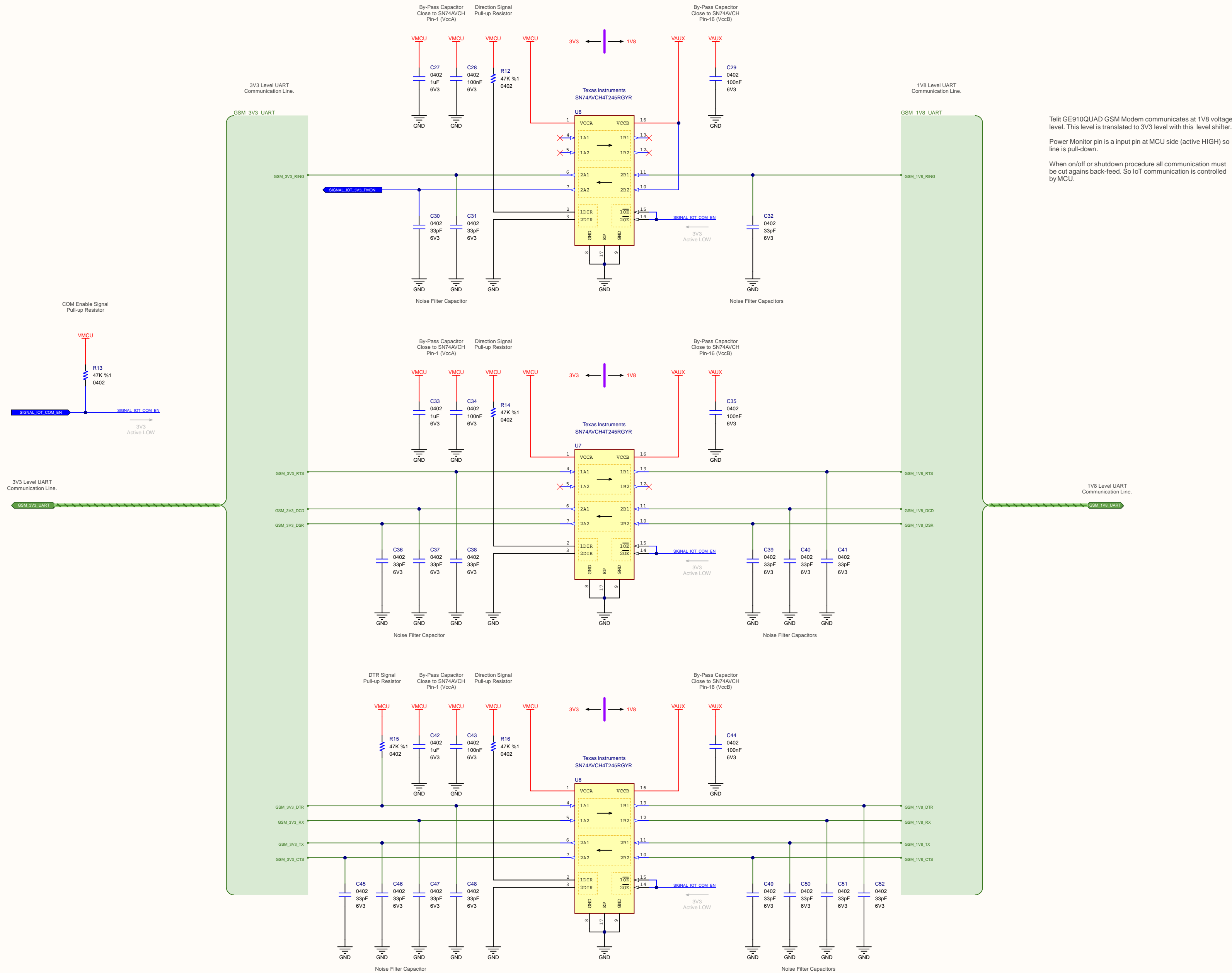


GSM Module Shut Down Signal

<https://www.github.com/akkoyun/B100>

Power Source Segment Block Diagram			Engineer	Mehmet Güneş Akkoyun	Ovoo Electronics Necip Fazıl Mah. Ortarmak Sok. Bingöl Apt. No: 19/6 Meram / Konya Türkiye +90 506 7444300	
Size:	A4	Project :	GSM Iot Based Plug&Play SOM	Customer	-	
Date:	3.03.2021	Time:	15:50:48	Product ID	-	
File:	GSM Signal Control.SchDoc	Sheet	10 of 54	Module ID	B100	
				Version	AA	
				Revision	R06	

BiDirectional Level Shifter

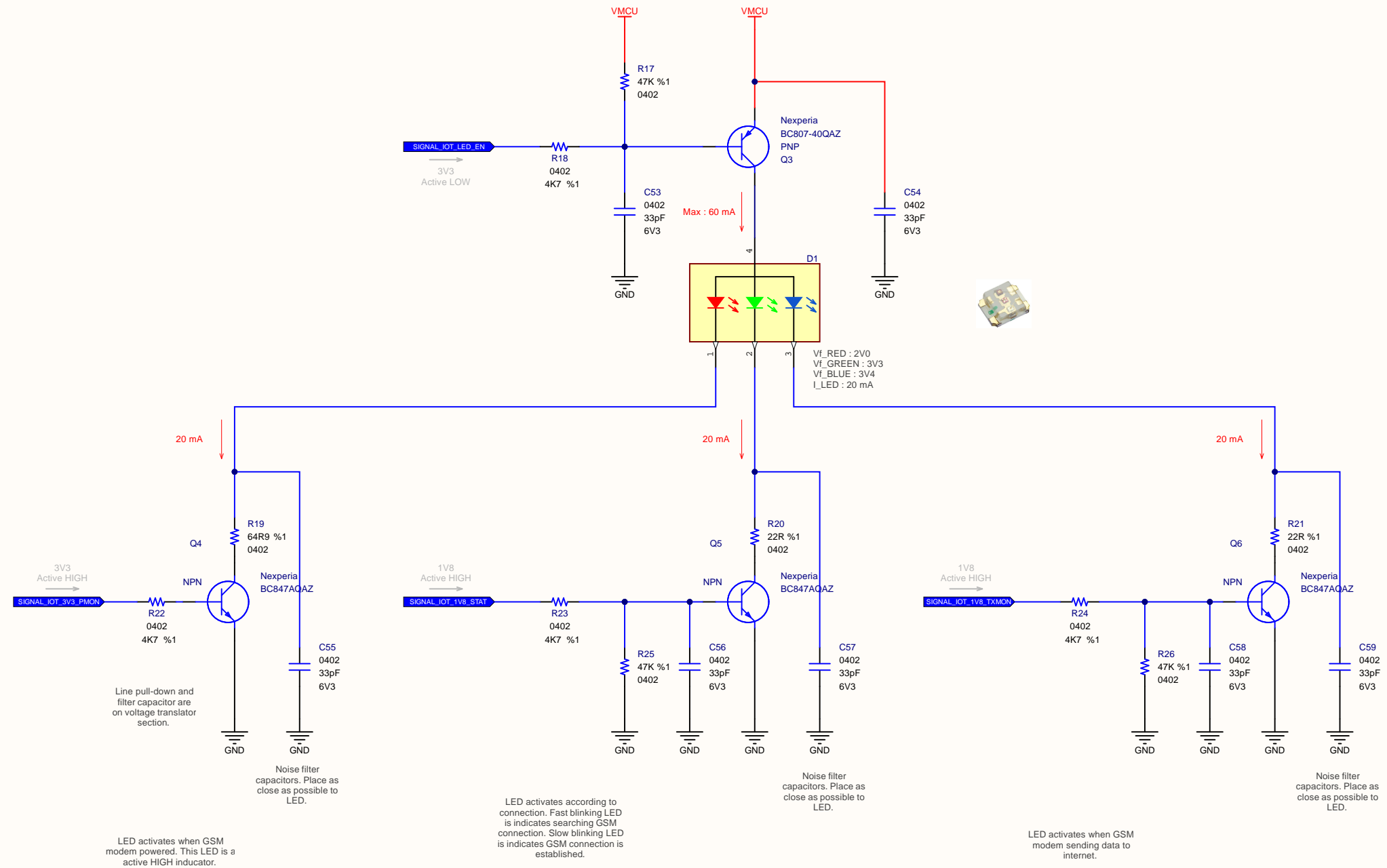


Telit GE910QUAD GSM Modem communicates at 1V8 voltage level. This level is translated to 3V3 level with this level shifter.


Power Monitor pin is a input pin at MCU side (active HIGH) so line is pull-down.

When on/off or shutdown procedure all communication must be cut agains back-feed. So IoT communication is controlled by MCU.

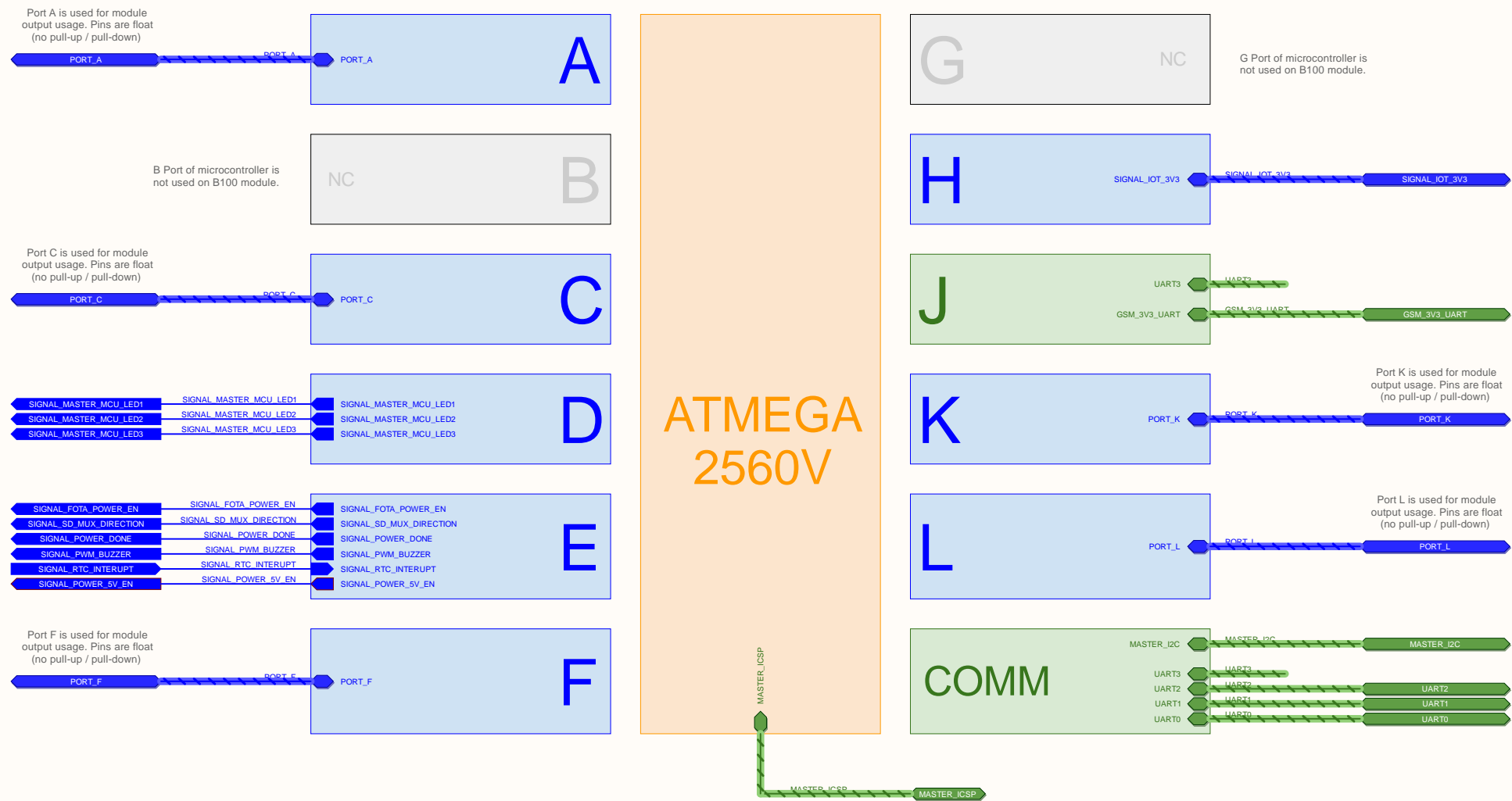
GSM IoT LED Indicators



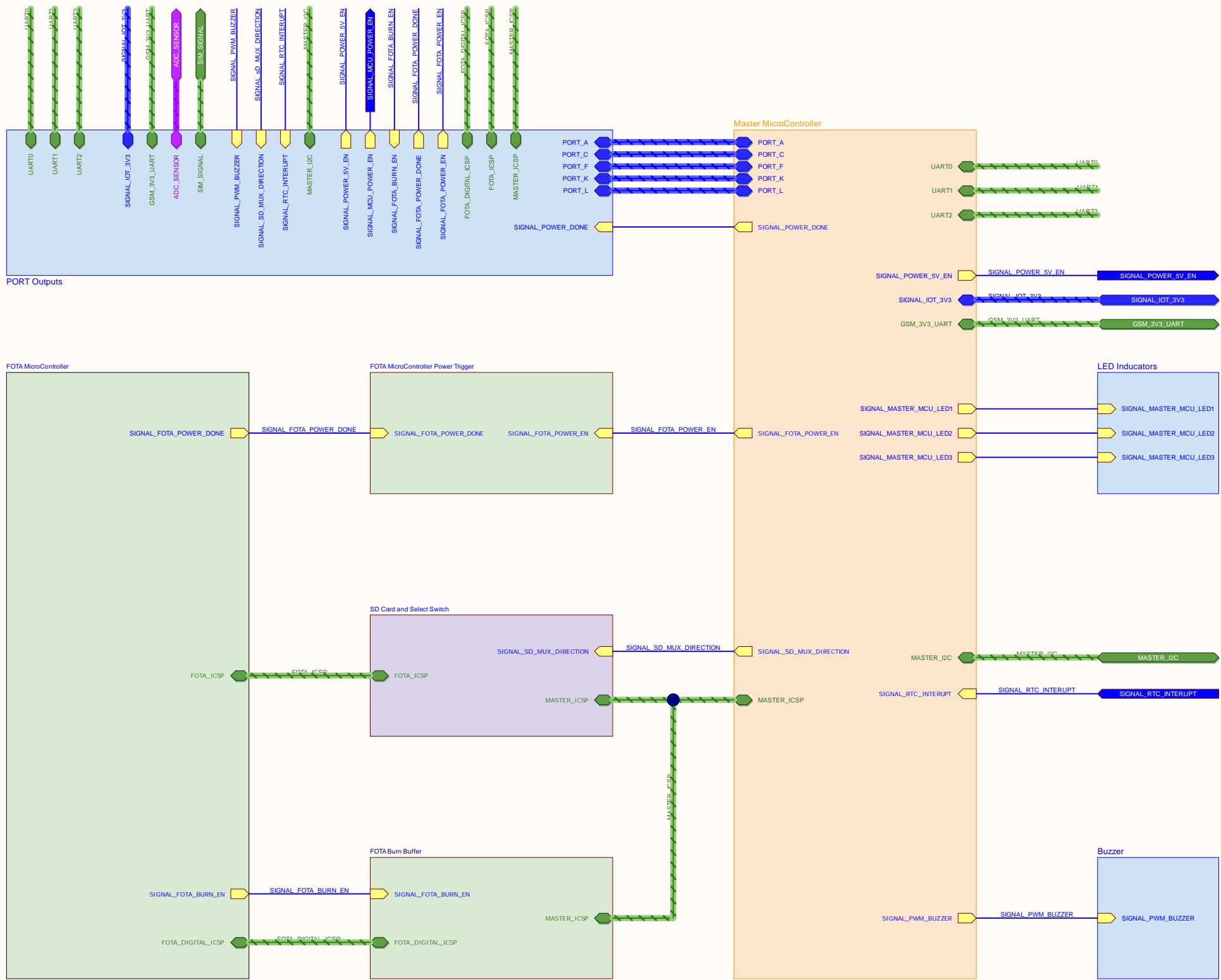
All Rights are reserved to Customer and Engineer. [2021]


Power Source Segment Block Diagram				Engineer Mehmet Günce Akkoyun	Ovoo Electronics Necip Fazıl Mah. Otarmak Sok. Birgül Apt. No: 19/6 Meram / Konya Türkiye +90 506 7444300	
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				Module ID B100		
				Version AA		
Size: A3	Project : GSM Iot Based Plug&Play SOM			Revision R06		
Date: 3.03.2021	Time: 15:50:48	Sheet 12	of 54			
File: GSM LED Indicators.SchDoc						

Master MicroController



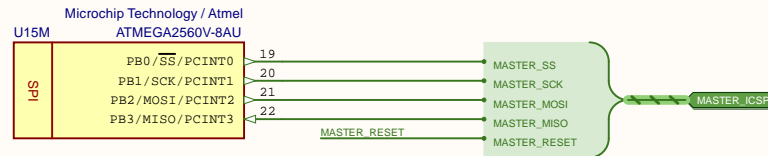
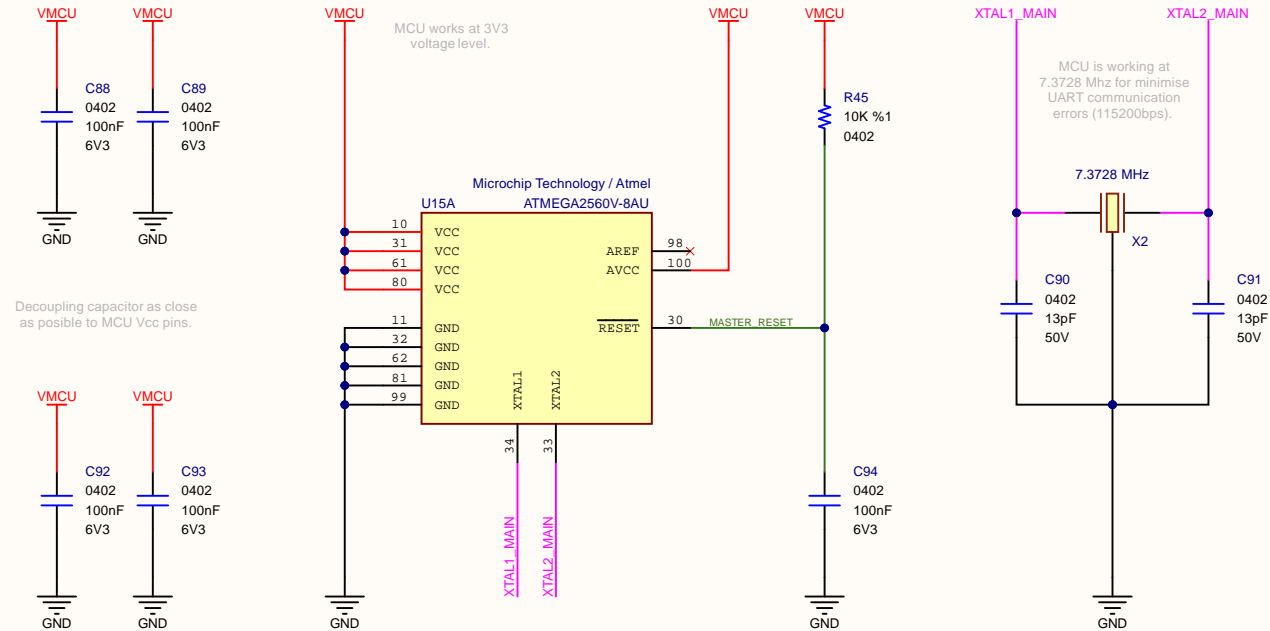
B100 MicroController



Power Source Segment Block Diagram				Engineer	Mehmet Güneç Akkoyun	<div>Ovoo Electronics</div> <div>Necip Fazıl Mah. Ortarmak Sok. Bırgöl Apt. No: 19/6 Meram / Konya Türkiye</div> <div>+90 506 7444300</div> <div></div>
				Customer	-	
Size: A3	Project : GSM IoT Based Plug&Play SOM		Product ID	-		
			Module ID	B100		
			Version	AA		
			Revision	R06		
Date: 3.03.2021	Time: 15:50:49	Sheet 14 of 54				
File: MicroController.SchDoc						


MicroController

Crystal Oscillator

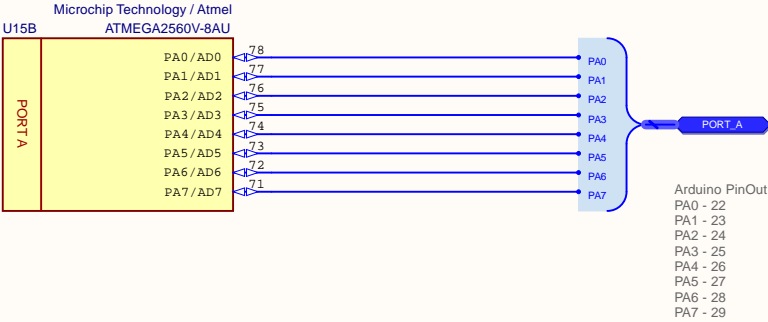



Master MicroController ICSP

<https://www.github.com/akkoyun/B100>

Power Source Segment Block Diagram				Engineer	Mehmet Güneç Akkoyun	Ovoo Electronics Necip Fazıl Mah. Ortanmak Sok. Bingöl Apt. No: 19/6 Meram / Konya Türkiye +90 506 7444300	
Size: A4		Project : GSM IoT Based Plug&Play SOM		Customer	-		
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				Module ID	B100		
Date: 3.03.2021	Time: 15:50:49	Sheet 15	of 54	Version	AA		
File: Master MicroController Core.SchDoc				Revision	R06		

Master MicroController A Port



Power Source Segment Block Diagram				Engineer	Mehmet Güneç Akkoyun	Ovoo Electronics Necip Fazıl Mah. Ortarmak Sok. Bırgül Apt. No: 19/6 Meram / Konya Türkiye +90 506 7444300	
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Size: A4	Project : GSM İot Based Plug&Play SOM	Product ID	-				
		Module ID	B100				
		Version	AA				
Date: 3.03.2021	Time: 15:50:49	Sheet 16 of 54	File: Master MicroController Port A.SchDoc	Revision	R06		

A

B

C

D

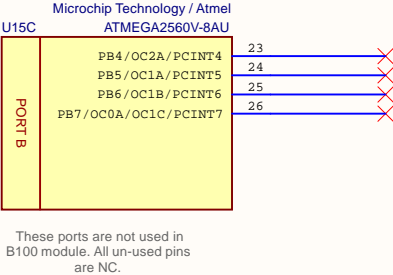
A


B

C

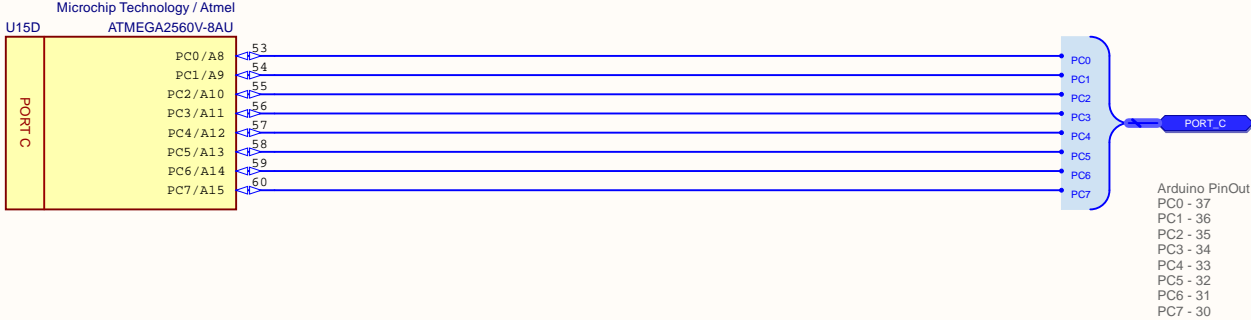
D


Master MicroController B Port



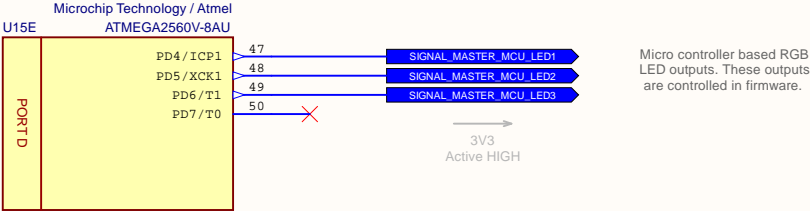
Power Source Segment Block Diagram				Engineer	Mehmet Güneş Akkoyun	Ovoo Electronics Necip Fazıl Mah, Ortairmak Sok. Bırgıld Apt. No: 19/6 Meram / Konya Türkiye +90 506 7444300	
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Date: 3.03.2021		Time: 15:50:49		Product ID	-		
File: Master MicroController Port B.SchDoc		Sheet 17 of 54		Module ID	B100		
				Version	AA		
				Revision	R06		


Master MicroController C Port



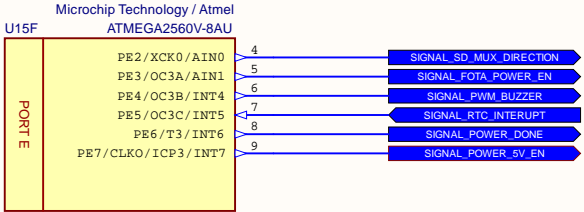
Power Source Segment Block Diagram				Engineer	MehmetGünce Akkoyun	Ovoo Electronics Necip Fazıl Mah. Ortarmak Sok. Bırgül Apt. No: 19/6 Meram / Konya Türkiye +90 506 7444300	
Size: A4		Project : GSM Iot Based Plug&Play SOM		Customer	-		
Date: 3.03.2021		Time: 15:50:49		Product ID	-		
File: Master MicroController Port C.SchDoc		Sheet 18 of 54		Module ID	B100		
				Version	AA		
				Revision	R06		


Master MicroController D Port



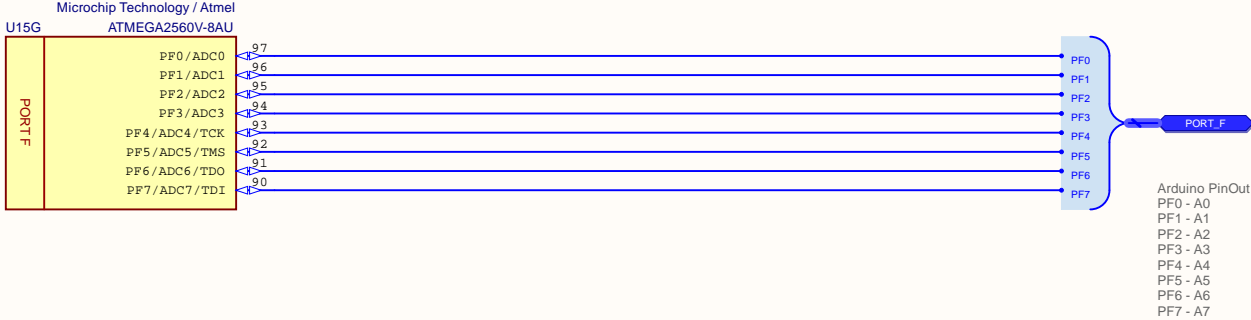
Power Source Segment Block Diagram				Engineer	MehmetGünce Akkoyun	Ovoo Electronics Necip Fazıl Mah. Ortarmak Sok. Bırgül Apt. No: 19/6 Meram / Konya Türkiye +90 506 7444300	
Size: A4		Project : GSM Iot Based Plug&Play SOM		Customer	-		
Date: 3.03.2021		Time: 15:50:49		Product ID	-		
File: Master MicroController Port D.SchDoc		Sheet 19 of 54		Module ID	B100		
				Version	AA		
				Revision	R06		


Master MicroController E Port



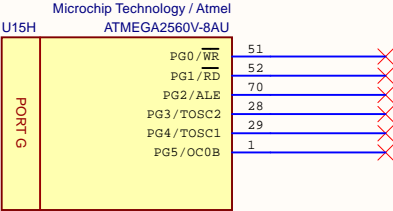
Power Source Segment Block Diagram				Engineer	Mehmet Güneç Akkoyun	Ovoo Electronics Necip Fazıl Mah. Ortarmak Sok. Bırgül Apt. No: 19/6 Meram / Konya Türkiye +90 506 7444300			
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Date: 3.03.2021				Time: 15:50:49	Sheet 20 of 54			Module ID	B100
File: Master MicroController Port E.SchDoc								Version	AA
						Revision		R06	

Master MicroController F Port




Power Source Segment Block Diagram			Engineer	Mehmet Güneş Akkoyun	Ovoo Electronics Necip Fazıl Mah. Ortairmak Sok. Bingül Apt. No: 19/6 Meram / Konya Türkiye +90 506 7444300	
Size: A4		Project : GSM İot Based Plug&Play SOM		Customer		
Date: 3.03.2021		Time: 15:50:49		Product ID		
File: Master MicroController Port F.SchDoc		Sheet 21 of 54		Module ID		
				Version		
				Revision	R06	

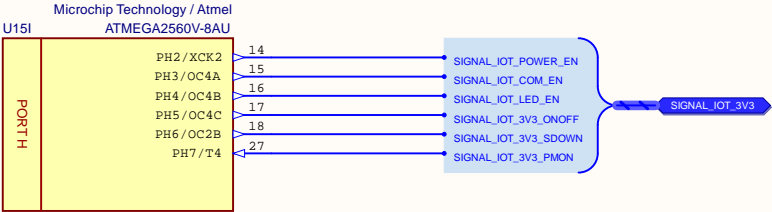
Master MicroController G Port




These ports are not used in B100 module. All un-used pins are NC.

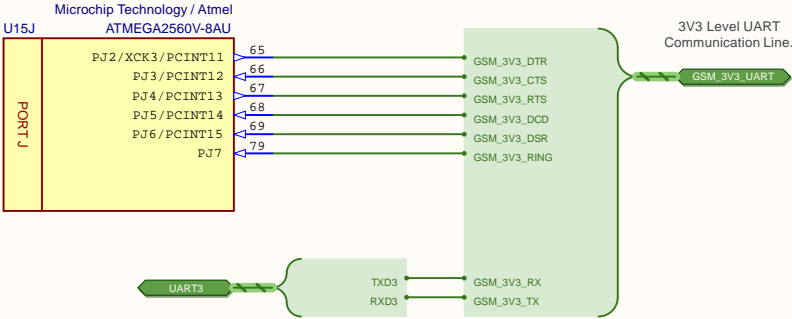
Power Source Segment Block Diagram				Engineer	Mehmet Güneç Akkoyun	Ovoo Electronics Necip Fazıl Mah. Ortairmak Sok. Bingül Apt. No: 19/6 Meram / Konya Türkiye +90 506 7444300	
Size: A4		Project : GSM Iot Based Plug&Play SOM		Customer	-		
Date: 3.03.2021		Time: 15:50:49		Product ID	-		
File: Master MicroController Port G.SchDoc		Sheet 22 of 54		Module ID	B100		
				Version	AA		
				Revision	R06		

Master MicroController H Port




Power Source Segment Block Diagram				Engineer	MehmetGünce Akkoyun	Ovoo Electronics Necip Fazıl Mah. Ortarmak Sok. Bırgıl Apt. No: 19/6 Meram / Konya Türkiye +90 506 7444300	
Size: A4		Project : GSM Iot Based Plug&Play SOM		Customer	-		
Date: 3.03.2021		Time: 15:50:49		Product ID	-		
File: Master MicroController Port H.SchDoc		Sheet 23 of 54		Module ID	B100		
				Version	AA		
				Revision	R06		

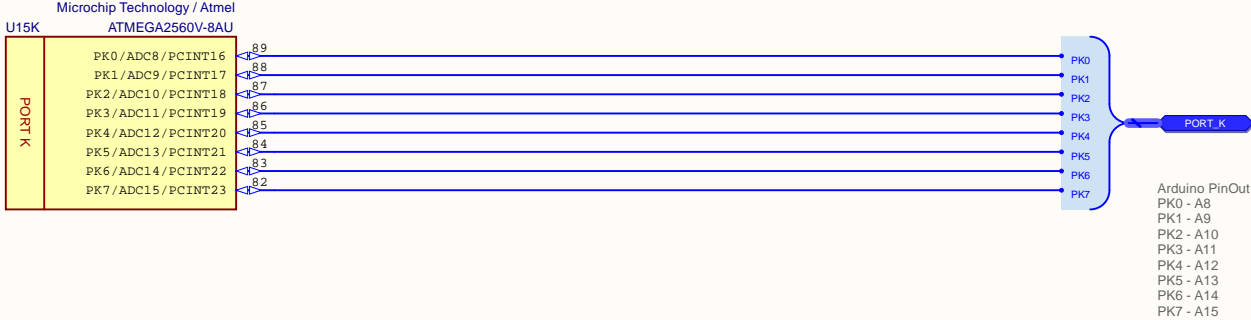
GSM IoT Communication Pins




<https://www.github.com/akkoyun/B100>

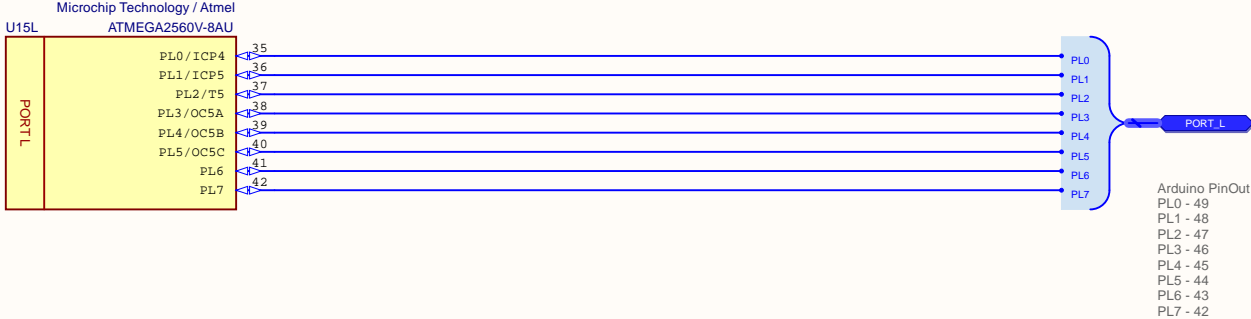
Power Source Segment Block Diagram				Engineer	Mehmet Güneş Akkoyun	<div>Ovoo Electronics</div> <div>Necip Fazıl Mah. Ortarmak Sok. Birgül Apt. No: 19/6 Meram / Konya Türkiye</div> <div>+90 506 7444300</div> <div></div>
				Customer	-	
Size: A4	Project : GSM Iot Based Plug&Play SOM	Product ID	-			
		Module ID	B100			
		Version	AA			
Date: 3.03.2021	Time: 15:50:49	Sheet 24 of 54	Revision	R06		
File: Master MicroController Port J.SchDoc						


Master MicroController K Port



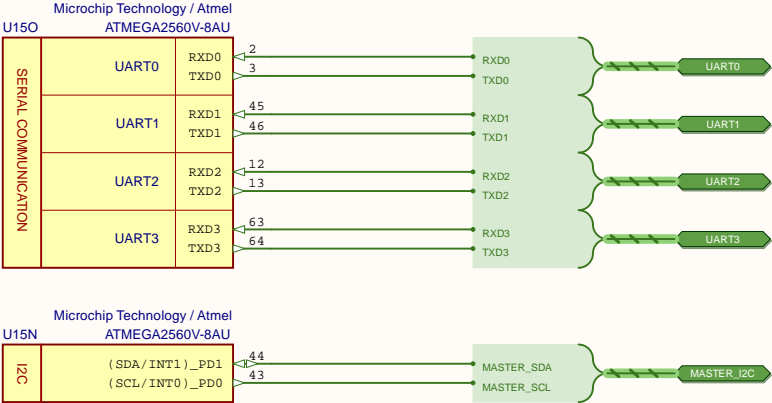
Power Source Segment Block Diagram				Engineer	Mehmet Güneç Akkoyun	Ovoo Electronics Necip Fazıl Mah. Ortairmak Sok. Bingül Apt. No: 19/6 Meram / Konya Türkiye +90 506 7444300	
Size: A4		Project : GSM Iot Based Plug&Play SOM		Customer	-		
Date: 3.03.2021		Time: 15:50:49		Product ID	-		
File: Master MicroController Port K.SchDoc		Sheet 25 of 54		Module ID	B100		
				Version	AA		
				Revision	R06		


Master MicroController L Port



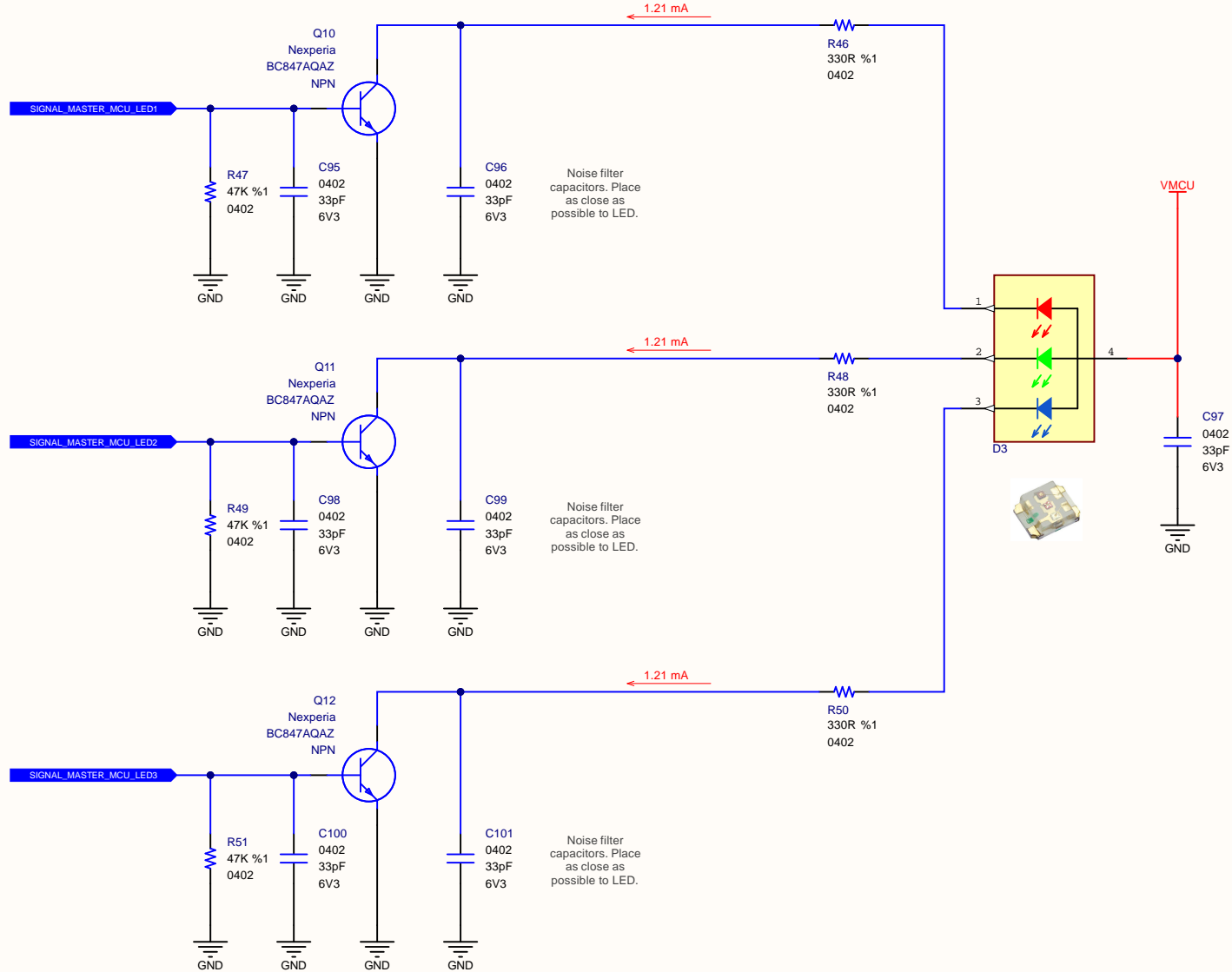
Power Source Segment Block Diagram				Engineer		Mehmet Güneş Akkoyun		Ovoo Electronics Necip Fazıl Mah. Ortarmak Sok. Bırgül Apt. No: 19/6 Meram / Konya Türkiye +90 506 7444300		
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Size:	A4	Project :	GSM İot Based Plug&Play SOM		Product ID		-			
					Module ID		B100			
					Version		AA			
Date:	3.03.2021	Time:	15:50:49	Sheet	26	of 54		Revision		
File:	Master MicroController Port L.SchDoc									

Communication Ports




Power Source Segment Block Diagram				Engineer	Mehmet Güneş Akkoyun	Ovoo Electronics Necip Fazıl Mah. Ortanmak Sok. Bingül Apt. No: 19/6 Meram / Konya Turkey +90 506 7444300		
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Size:	A4	Project :	GSM Iot Based Plug&Play SOM	Product ID	-			
				Module ID	B100			
Date:	3.03.2021	Time:	15:50:49	Sheet	27 of 54			Version
File:	Master MicroController Serial Communication Port.SchDoc				Revision	R06		

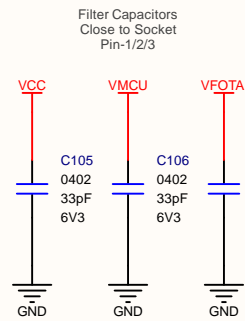
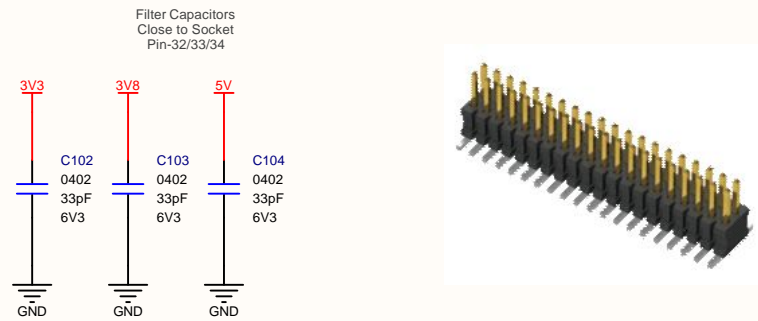
Main Microcontroller Status LED Indicators



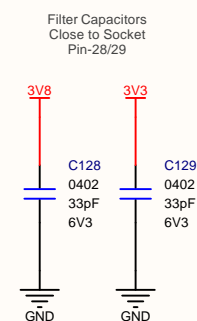
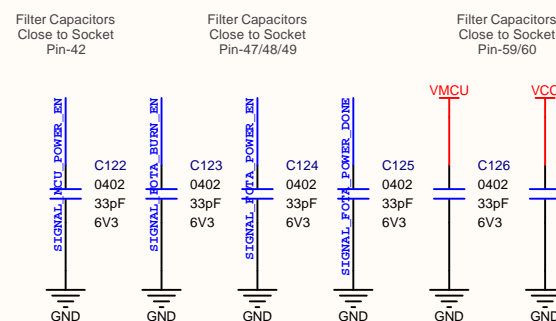
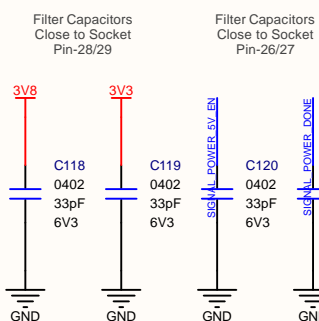
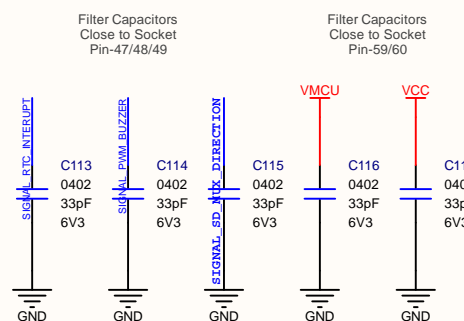
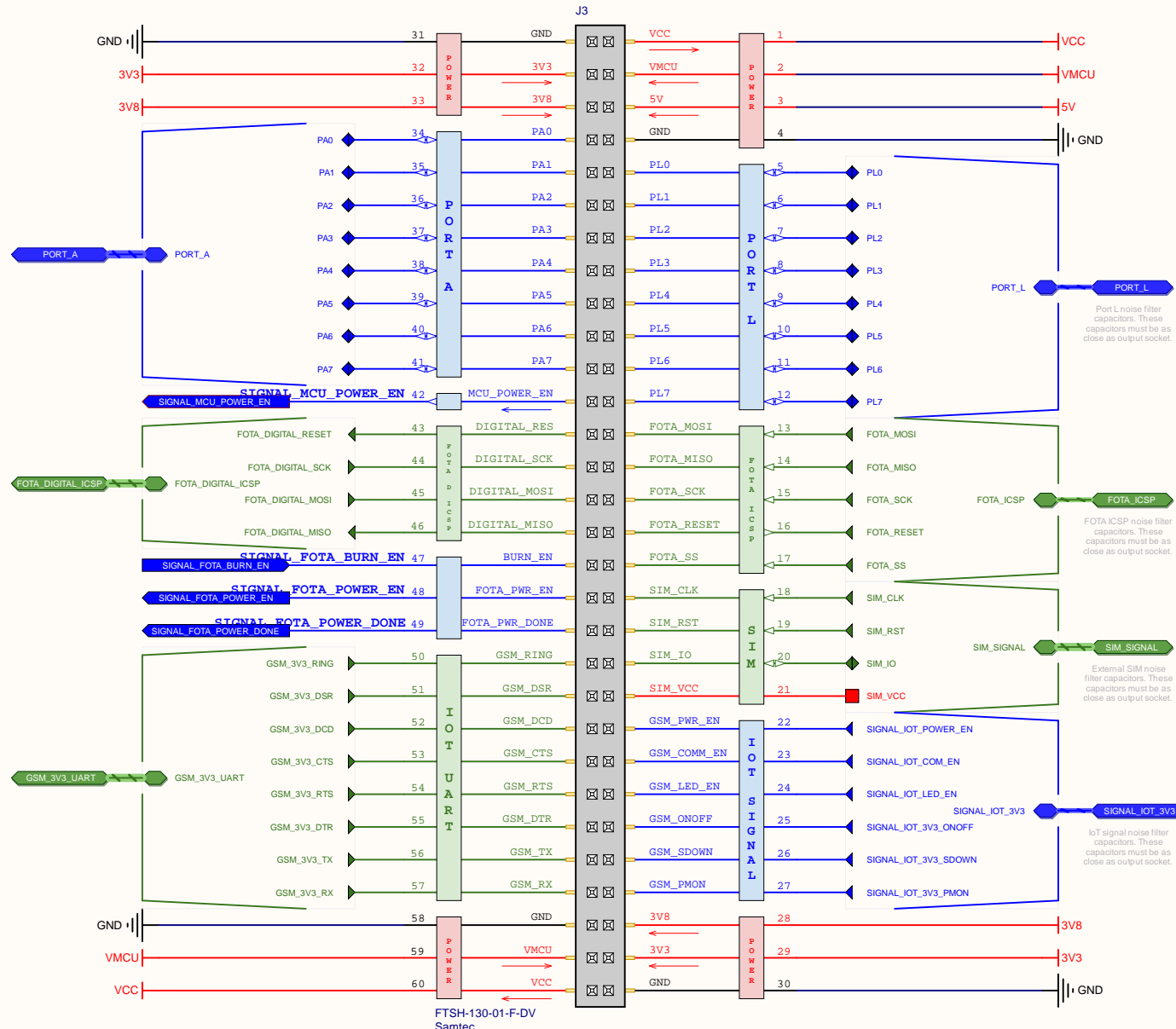
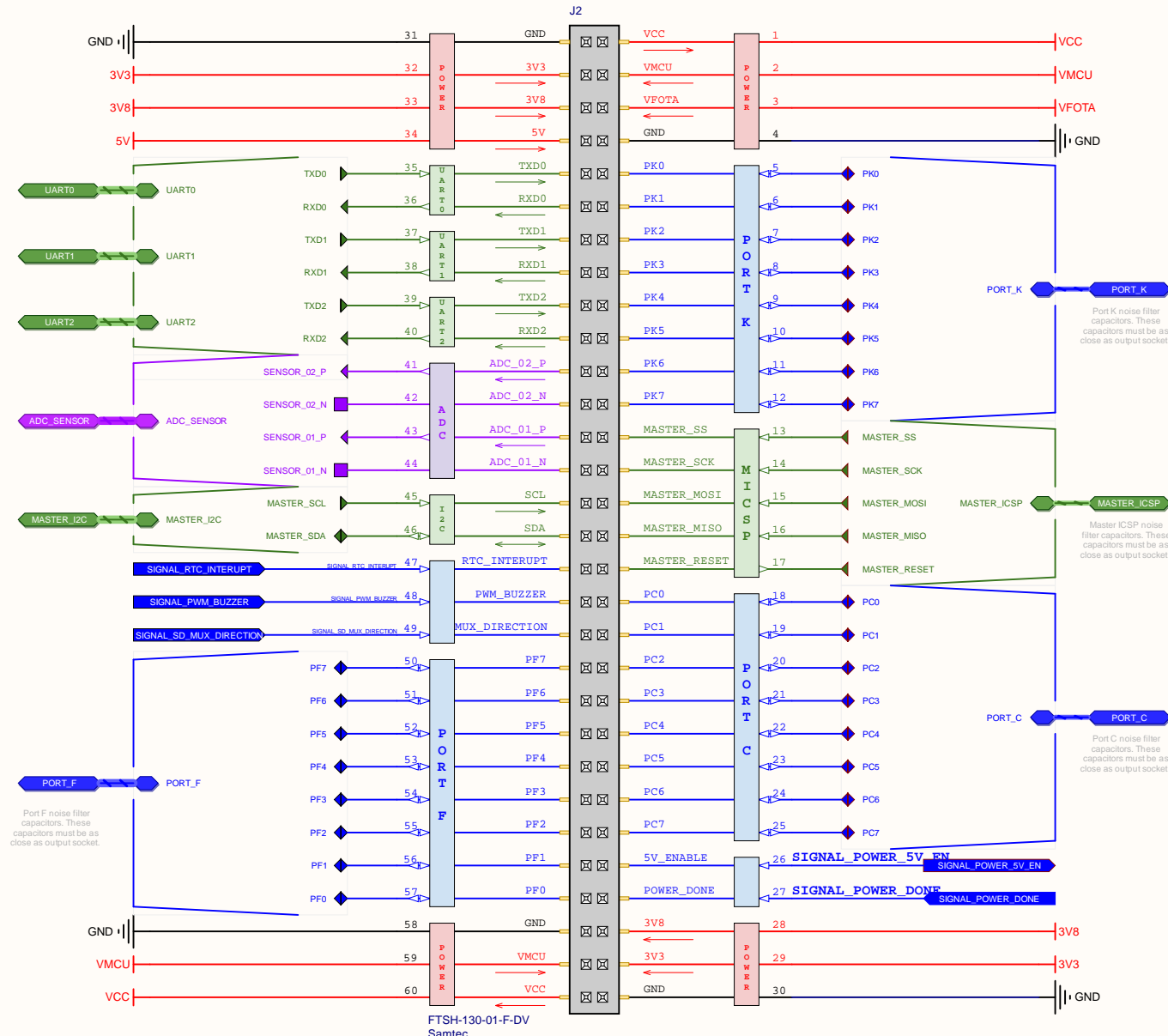
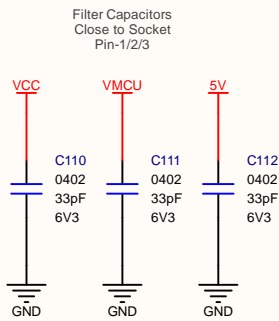
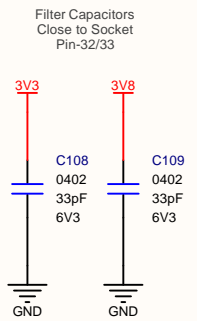
<https://www.github.com/akkoyun/B100>

Power Source Segment Block Diagram				Engineer Mehtmet Günce Akkoyun		Ovoo Electronics Necip Fazıl Mah. Ortarmak Sok. Bırgıld Apt. No: 19/6 Meram / Konya Türkiye +90 506 7444300	
Size: A4		Project : GSM İot Based Plug&Play SOM		Customer -			
				Product ID -			
Date: 3.03.2021		Time: 15:50:49		Module ID B100			
Sheet 28		of 54		Version AA			
File: Master MicroController LED.SchDoc				Revision R06			

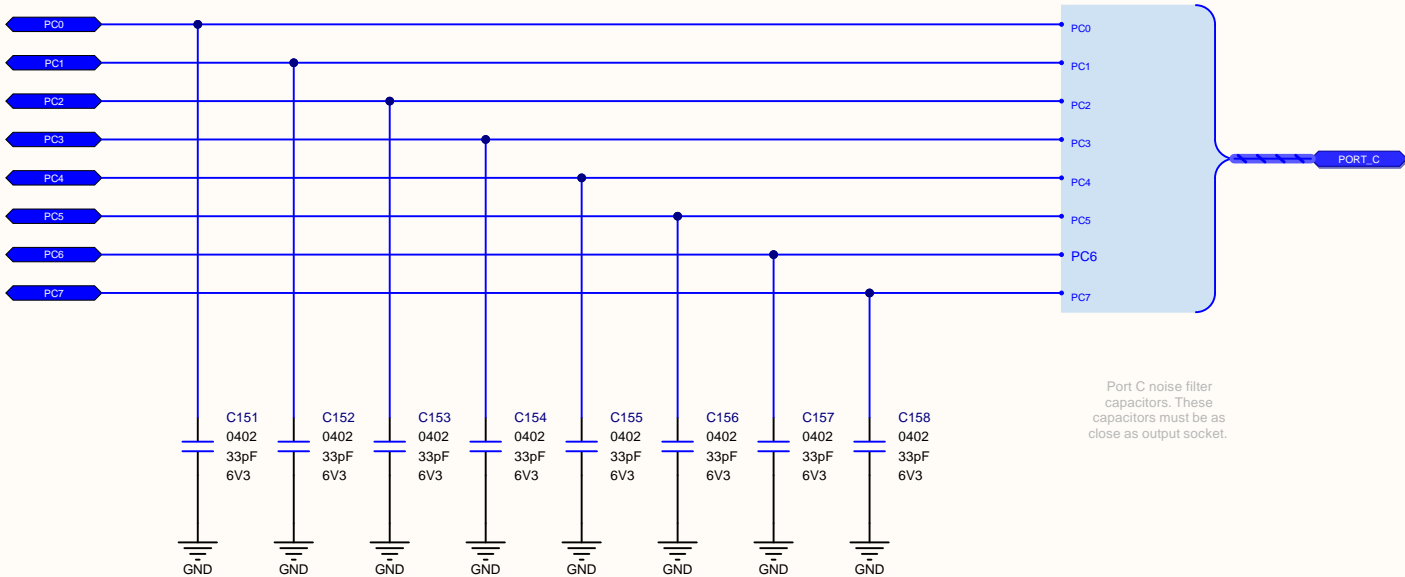
Module Output Socket A



Module Output Socket B




Port C Output Socket Noise Capacitors

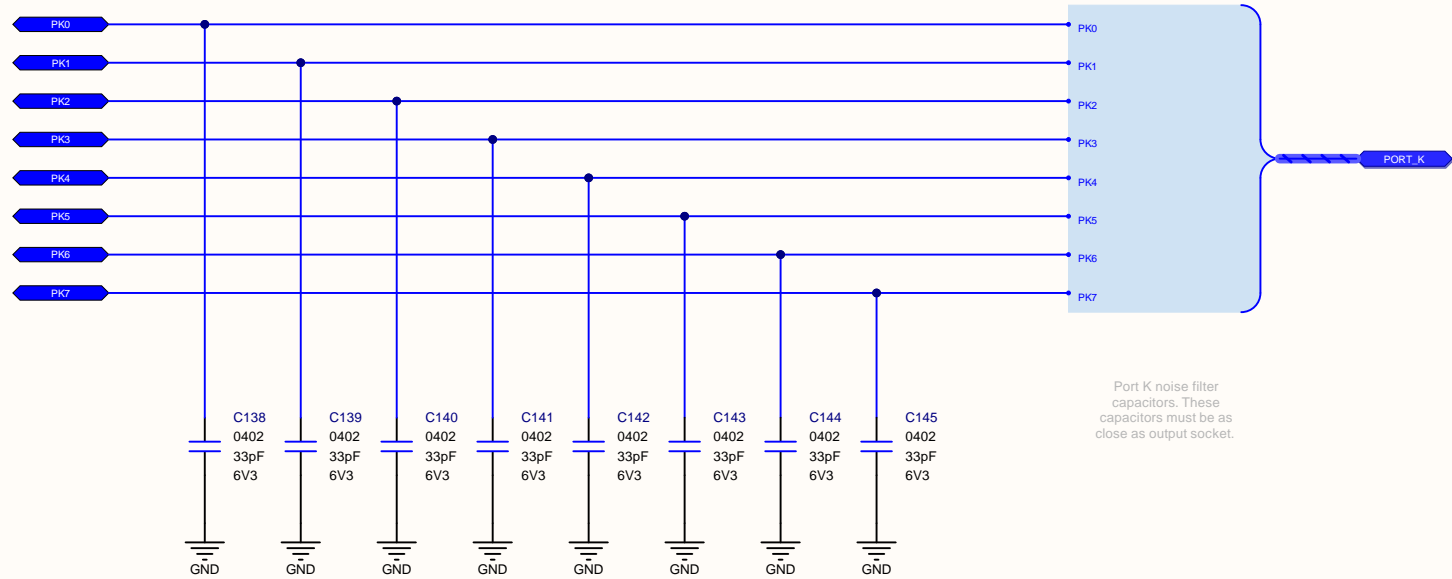


Port C noise filter capacitors. These capacitors must be as close as output socket.


<https://www.github.com/akkoyun/B100>

Power Source Segment Block Diagram				Engineer	Mehmet Güneç Akkoyun	Ovoo Electronics Necip Fazıl Mah. Ortarmak Sok. Bırgül Apt. No: 19/6 Meram / Konya Türkiye +90 506 7444300	
				Customer	-		
Size: A4				Product ID	-		
Project : GSM Iot Based Plug&Play SOM				Module ID	B100		
Date: 3.03.2021				Version	AA		
Time: 15:50:50				Revision	R06		
Sheet 30 of 54							
File: Filter Capacitors - Port C.SchDoc							

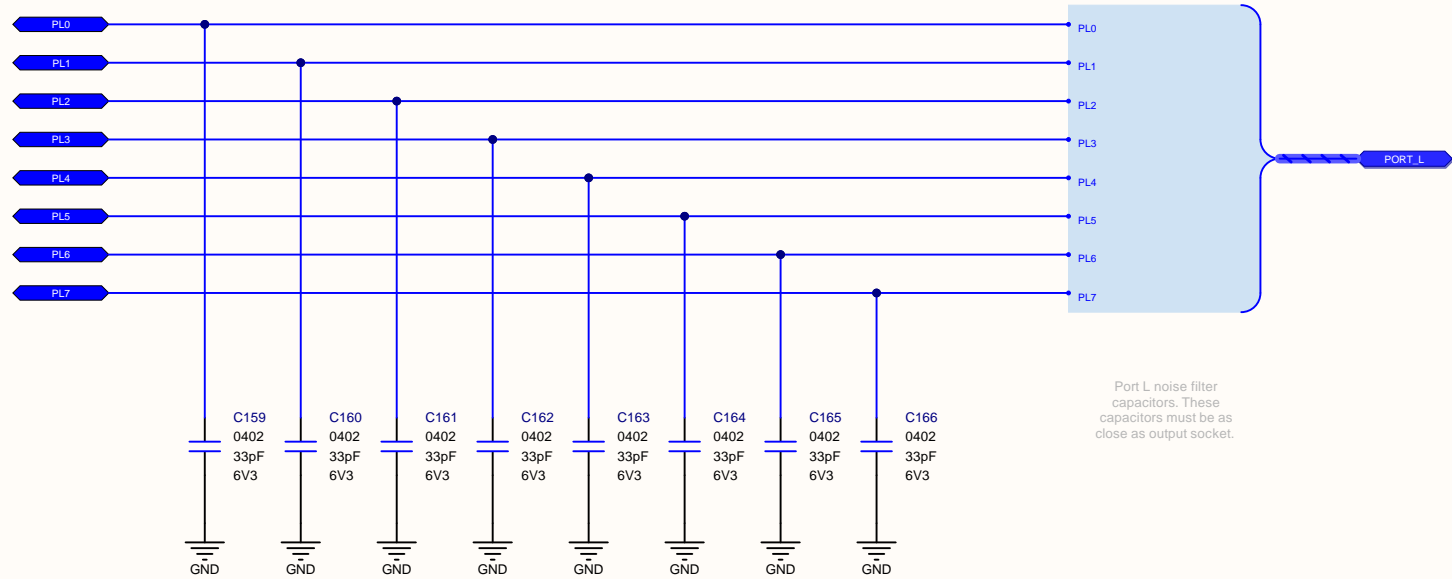
Port K Output Socket Noise Capacitors




<https://www.github.com/akkoyun/B100>

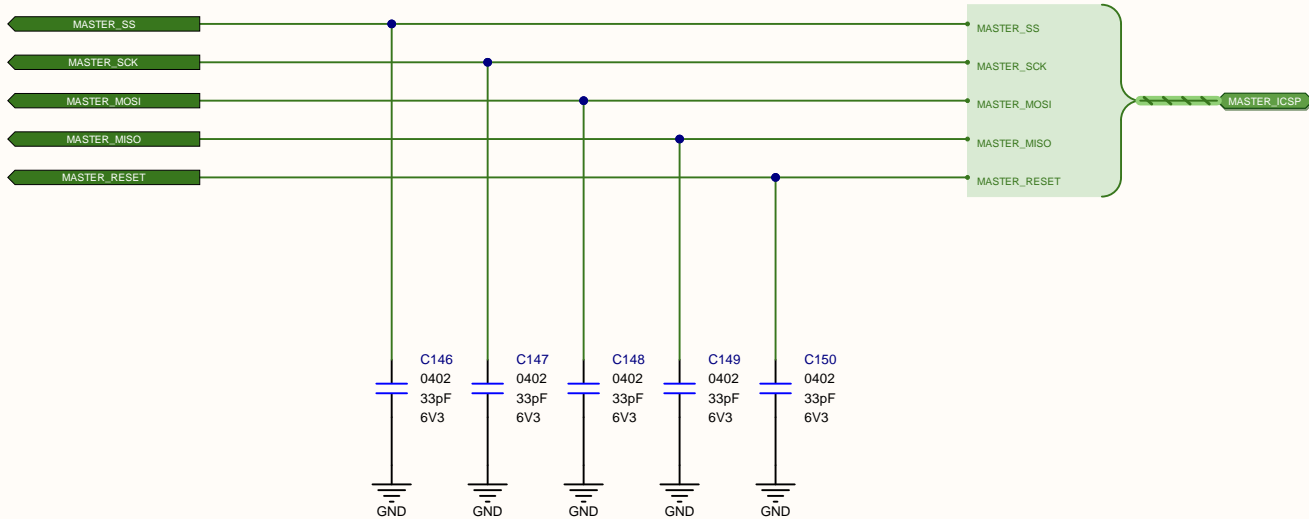
Power Source Segment Block Diagram				Engineer	Mehmet Güneş Akkoyun	Ovoo Electronics Necip Fazıl Mah. Ortarmak Sok. Birgül Apt. No: 19/6 Meram / Konya Türkiye +90 506 7444300	
Size:	A4	Project :	GSM Iot Based Plug&Play SOM	Customer	-		
Date:	3.03.2021	Time:	15:50:50	Product ID	-		
File:	Filter Capacitors - Port K.SchDoc	Sheet	31 of 54	Module ID	B100		
		Version	AA	Revision	R06		


Port L Output Socket Noise Capacitors

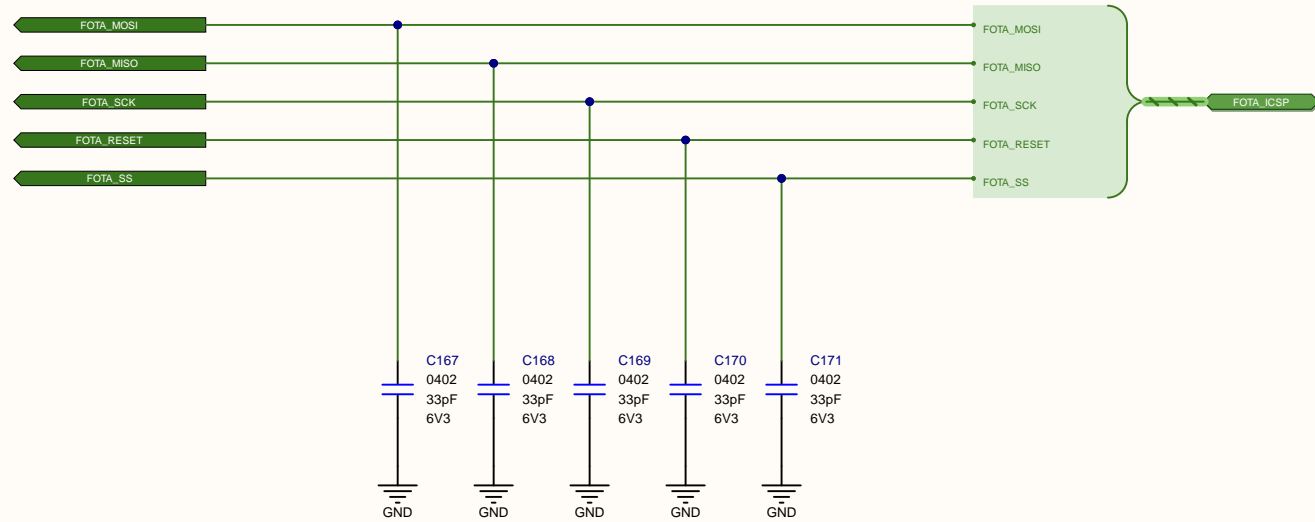


<https://www.github.com/akkoyun/B100>


Power Source Segment Block Diagram				Engineer	Mehmet Güneç Akkoyun	Ovoo Electronics Necip Fazıl Mah. Ortarmak Sok. Birgül Apt. No: 19/6 Meram / Konya Türkiye +90 506 7444300	
				Customer	-		
Size:	A4	Project : GSM Iot Based Plug&Play SOM		Product ID	-		
Date:	3.03.2021	Time:	15:50:50	Module ID	B100		
File:	Filter Capacitors - Port L.SchDoc			Version	AA		
				Revision	R06		



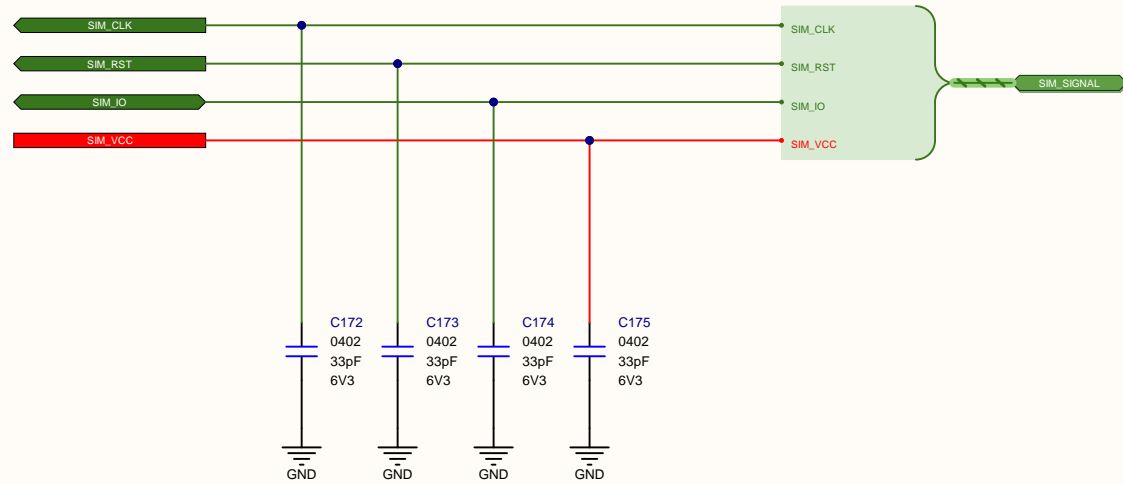
Power Source Segment Block Diagram				Engineer	Mehmet Güneç Akkoyun	Ovoo Electronics Necip Fazıl Mah. Ortarmak Sok. Bırgül Apt. No: 19/6 Meram / Konya Türkiye +90 506 7444300	
				Customer	-		
Size: A4		Project : GSM IoT Based Plug&Play SOM		Product ID	-		
				Module ID	B100		
Date: 3.03.2021		Time: 15:50:50		Version	AA		
File: Filter Capacitors - Master ICSP.SchDoc				Revision	R06		
Sheet 33 of 54							




<https://www.github.com/akkoyun/B100>

Power Source Segment Block Diagram				Engineer	Mehmet Günce Akkoyun	Ovoo Electronics Necip Fazıl Mah. Ortarmak Sok. Birgül Apt. No: 19/6 Meram / Konya Türkiye +90 506 7444300	
				Customer	-		
Size:	A4	Project :	GSM Iot Based Plug&Play SOM	Product ID	-		
				Module ID	B100		
Date:	3.03.2021	Time:	15:50:50	Sheet	34 of 54		
File:	Filter Capacitors - FOTA ICSP.SchDoc			Version	AA		
				Revision	R06		

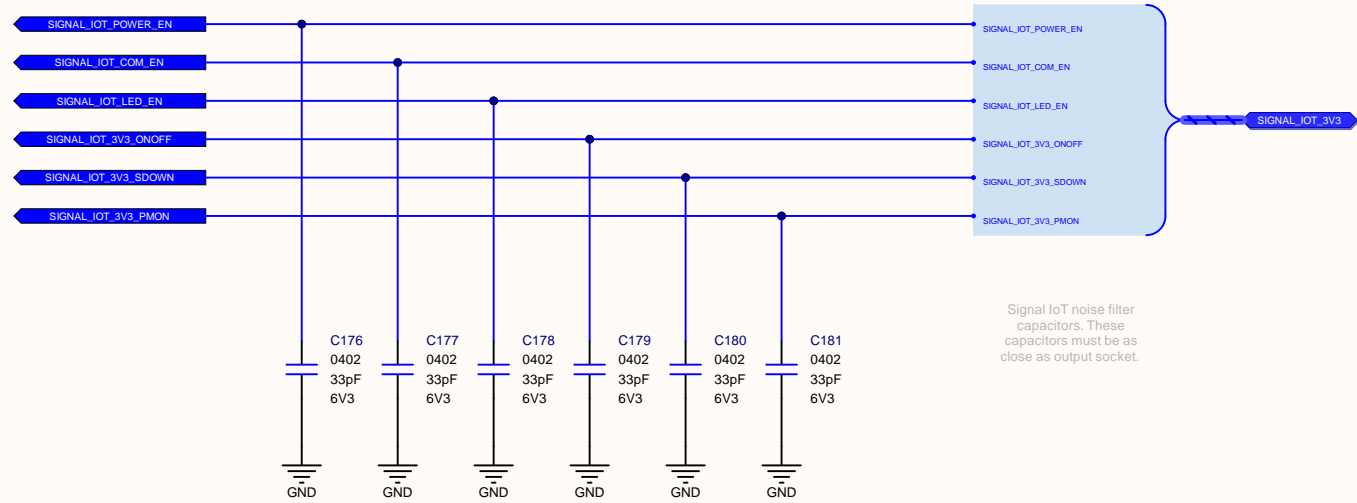





<https://www.github.com/akkoyun/B100>

Power Source Segment Block Diagram				<div>Engineer<div>Mehmet Günce Akkoyun</div></div> <div>Customer<div>-</div></div> <div>Product ID<div>-</div></div> <div>Module ID<div>B100</div></div> <div>Version<div>AA</div></div> <div>Revision<div>R06</div></div>		<div>Ovoo Electronics</div> <div>Necip Fazıl Mah. Ortairmak Sok. Birgül Apt. No: 19/6 Meram / Konya Türkiye</div> <div>+90 506 7444300</div>		<div></div>
Size:	A4	Project : GSM Iot Based Plug&Play SOM						
Date:	3.03.2021	Time:	15:50:50	Sheet	35	of	54	
File: Filter Capacitors - External SIM.SchDoc								

Signal IoT Output Socket Noise Capacitors

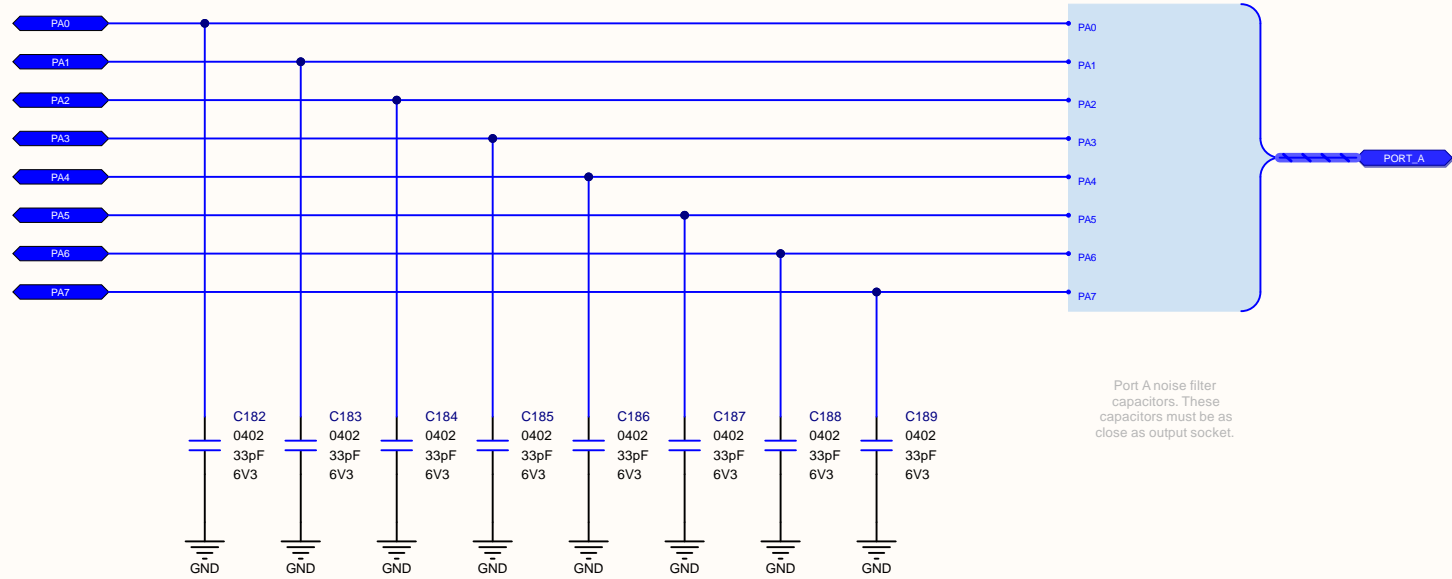


<https://www.github.com/akkoyun/B100>


Power Source Segment Block Diagram				Engineer MehmetGünce Akkoyun		Ovoo Electronics Necip Fazıl Mah. Ortarmak Sok. Bırgıl Apt. No: 19/6 Meram / Konya Türkiye +90 506 7444300			
				Customer -					
				Product ID -					
				Module ID B100					
				Version AA					
Size: A4		Project : GSM Iot Based Plug&Play SOM				Revision R06			
Date: 3.03.2021		Time: 15:50:50		Sheet 36 of 54					
File: Filter Capacitors - Signal IoT.SchDoc									

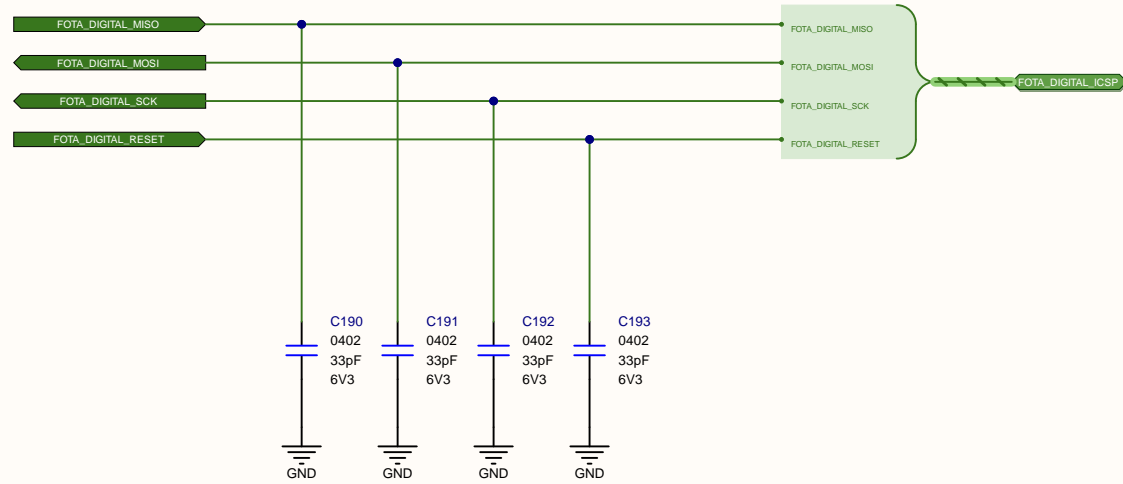


Port A Output Socket Noise Capacitors




<https://www.github.com/akkoyun/B100>

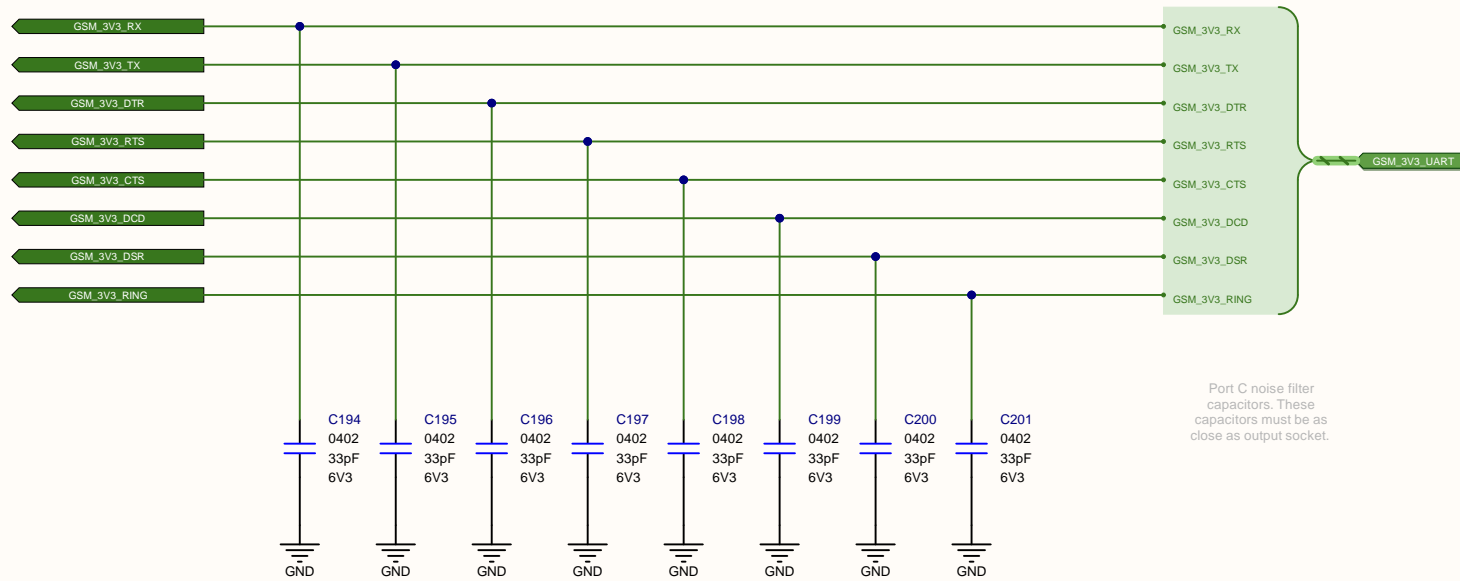
Power Source Segment Block Diagram				Engineer	Mehmet Güneç Akkoyun	Ovoo Electronics Necip Fazıl Mah. Ortarmak Sok. Bırgılı Apt. No: 19/6 Meram / Konya Türkiye +90 506 7444300	
Size: A4		Project : GSM Iot Based Plug&Play SOM		Customer	-		
				Product ID	-		
Date: 3.03.2021		Time: 15:50:50		Module ID	B100		
File: Filter Capacitors - Port A.SchDoc		Sheet 37 of 54		Version	AA		
				Revision	R06		




<https://www.github.com/akkoyun/B100>

Power Source Segment Block Diagram				<div>Engineer<div>Mehmet Günce Akkoyun</div></div> <div>Customer<div>-</div></div> <div>Product ID<div>-</div></div> <div>Module ID<div>B100</div></div> <div>Version<div>AA</div></div> <div>Revision<div>R06</div></div>		<div>Ovoo Electronics</div> <div>Necip Fazıl Mah. Ortarmak Sok. Birgöl Apt. No: 19/6 Meram / Konya Türkiye</div> <div>+90 506 7444300</div>		<div></div>
Size:	A4	Project : GSM Iot Based Plug&Play SOM						
Date:	3.03.2021	Time:	15:50:50	Sheet	38	of	54	
File: Filter Capacitors - FOTA Digital ICSP.SchDoc								

IoT UART Output Socket Noise Capacitors

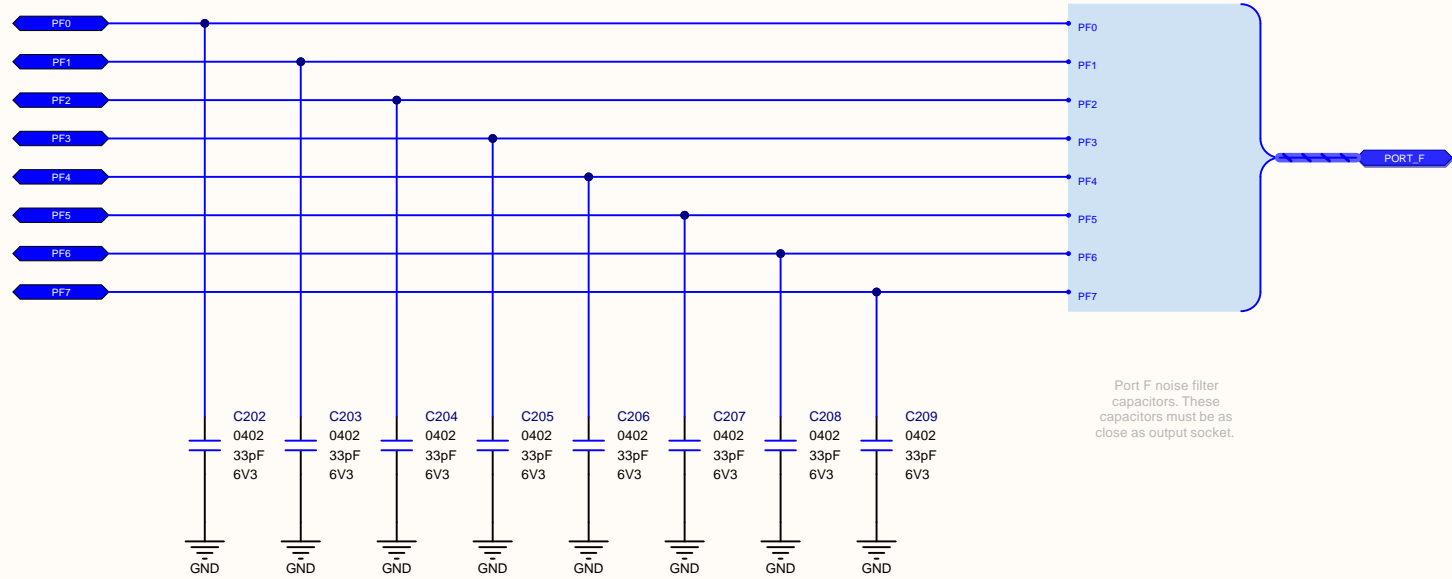


<https://www.github.com/akkoyun/B100>

Power Source Segment Block Diagram				Engineer	Mehmet Güneç Akkoyun	<div>Ovoo Electronics</div> <div>Necip Fazıl Mah. Ortarmak Sok. Birgüdü Apt. No: 19/6 Meram / Konya Türkiye</div> <div>+90 506 7444300</div> <div></div>
				Customer	-	
Size:	A4	Project :		Product ID	-	
				Module ID	B100	
Date:	3.03.2021	Time:	15:50:50	Version	AA	
File:	Filter Capacitors - IoT UART.SchDoc			Revision	R06	



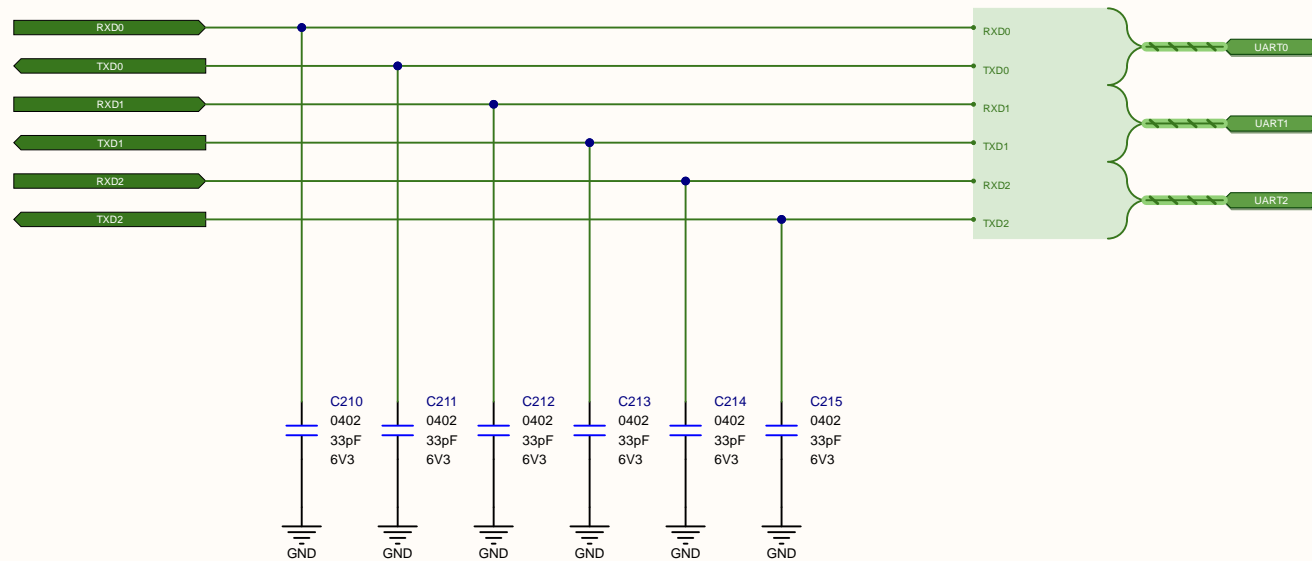
Port F Output Socket Noise Capacitors




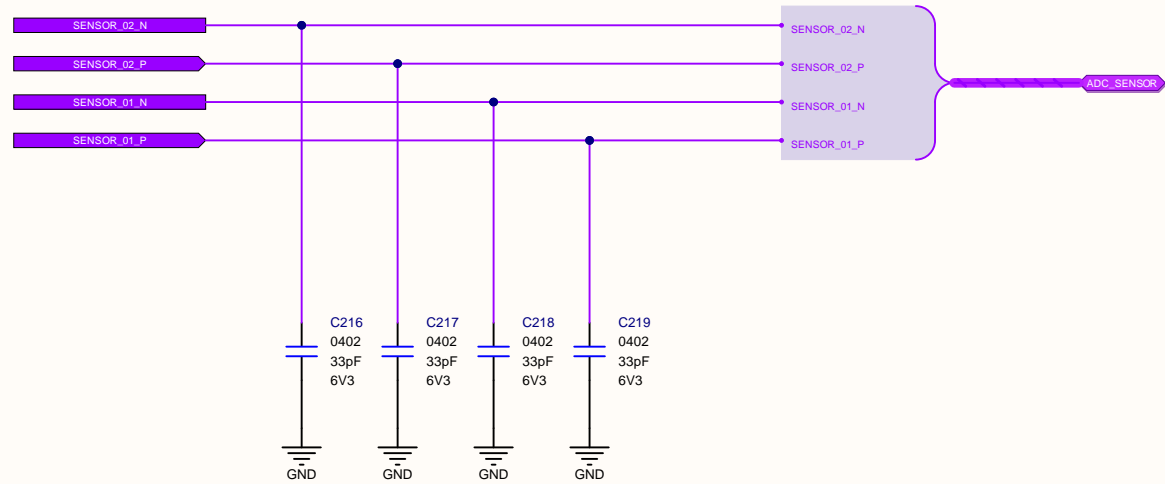
<https://www.github.com/akkoyun/B100>

Power Source Segment Block Diagram				Engineer	Mehmet Güneş Akkoyun	Ovoo Electronics	
Size:	A4	Project :	GSM Iot Based Plug&Play SOM	Customer	-	Necip Fazıl Mah. Ortarmak Sok. Bingül Apt. No: 19/6 Meram / Konya Türkiye +90 506 7444300	
Date:	3.03.2021	Time:	15:50:51	Product ID	-		
File:	Filter Capacitors - Port F.SchDoc	Sheet	40 of 54	Module ID	B100		
		Version	AA	Revision	R06		




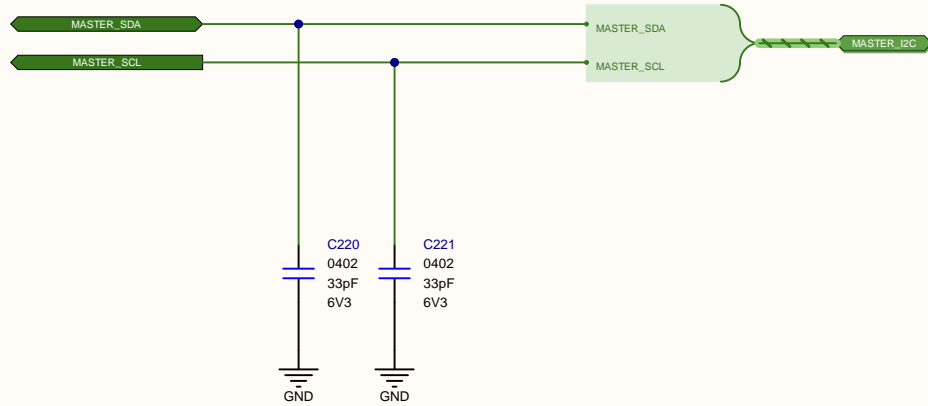
<https://www.github.com/akkoyun/B100>

Power Source Segment Block Diagram				Engineer	Mehmet Güneş Akkoyun	<div>Ovoo Electronics</div> <div>Necip Fazıl Mah. Ortanmak Sok. Bırgöl Apt. No: 19/B Meram / Konya Türkiye</div> <div>+90 506 7444300</div> <div></div>
Size: A4		Project : GSM IoT Based Plug&Play SOM		Customer	-	
				Product ID	-	
				Module ID	B100	
Date: 3.03.2021	Time: 15:50:51	Sheet 41	of 54	Version	AA	
File: Filter Capacitors - Serial Communication.SchDoc				Revision	R06	




<https://www.github.com/akkoyun/B100>

Power Source Segment Block Diagram				Engineer	Mehmet Günce Akkoyun	Ovoo Electronics Necip Fazıl Mah. Ortarmak Sok. Bırgöl Apt. No: 19/6 Meram / Konya Türkiye +90 506 7444300	
Size: A4		Project : GSM IoT Based Plug&Play SOM		Customer	-		
Date: 3.03.2021		Time: 15:50:51		Product ID	-		
File: Filter Capacitors - ADC Sensor.SchDoc		Sheet 42 of 54		Module ID	B100		
				Version	AA		
				Revision	R06		

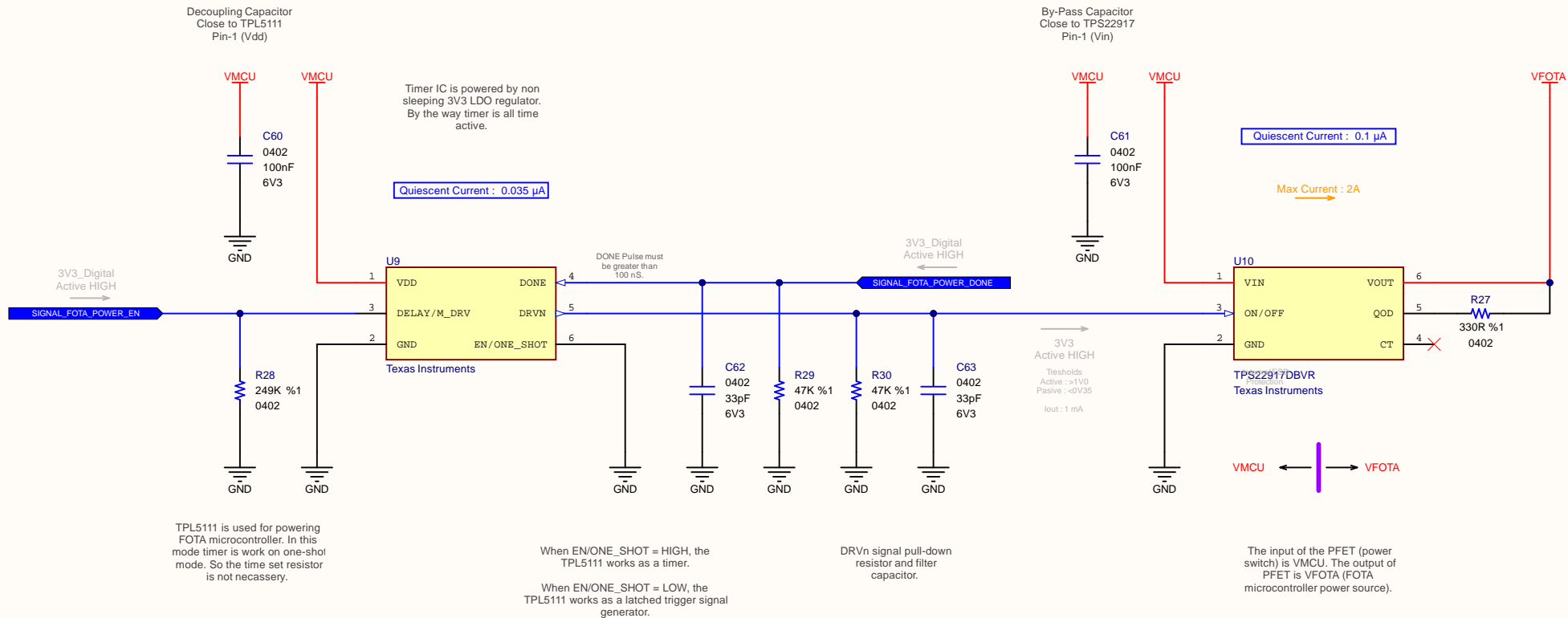



<https://www.github.com/akkoyun/B100>

Power Source Segment Block Diagram					Engineer Mehmet Güneç Akkoyun		<div>Ovoo Electronics</div> <div>Necip Fazıl Mah. Ortarmak Sok. Bırgöl Apt. No: 19/6 Meram / Konya Türkiye</div> <div>+90 506 7444300</div> <div></div>	
Size: A4		Project : GSM Iot Based Plug&Play SOM			Customer -			
					Product ID -			
					Module ID B100			
Date: 3.03.2021		Time: 15:50:51		Sheet 43 of 54		Version AA		
File: Filter Capacitors - I2C.SchDoc					Revision R06			

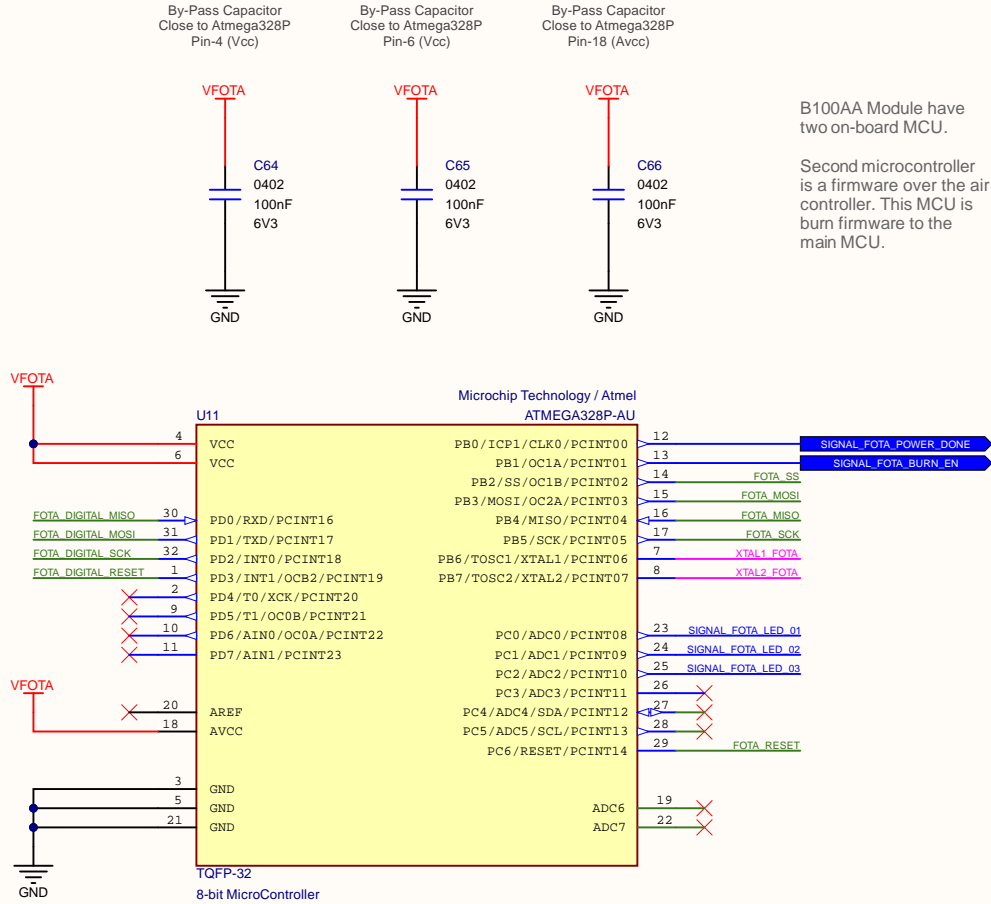
Power Trigger

Power Switch

<https://www.github.com/akkoyun/B100>

Power Source Segment Block Diagram				Engineer	Mehmet Güneç Akkoyun	Ovoo Electronics Necip Fazıl Mah. Ortanmak Sok. Bingül Apt. No: 19/6 Meram / Konya Türkiye +90 506 7444300			
				Customer	-				
Size:	A4	Project :	GSM IoT Based Plug&Play SOM	Product ID	-				
				Module ID	B100				
				Date:	3.03.2021			Time:	15:50:51
File:	FOTA MicroController Power Switch.SchDoc				Version			AA	
				Revision	R06				

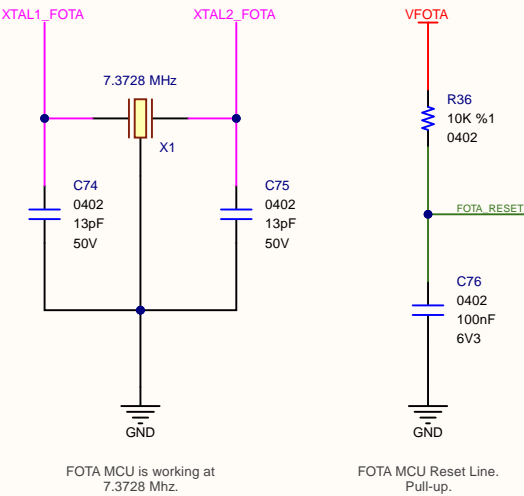
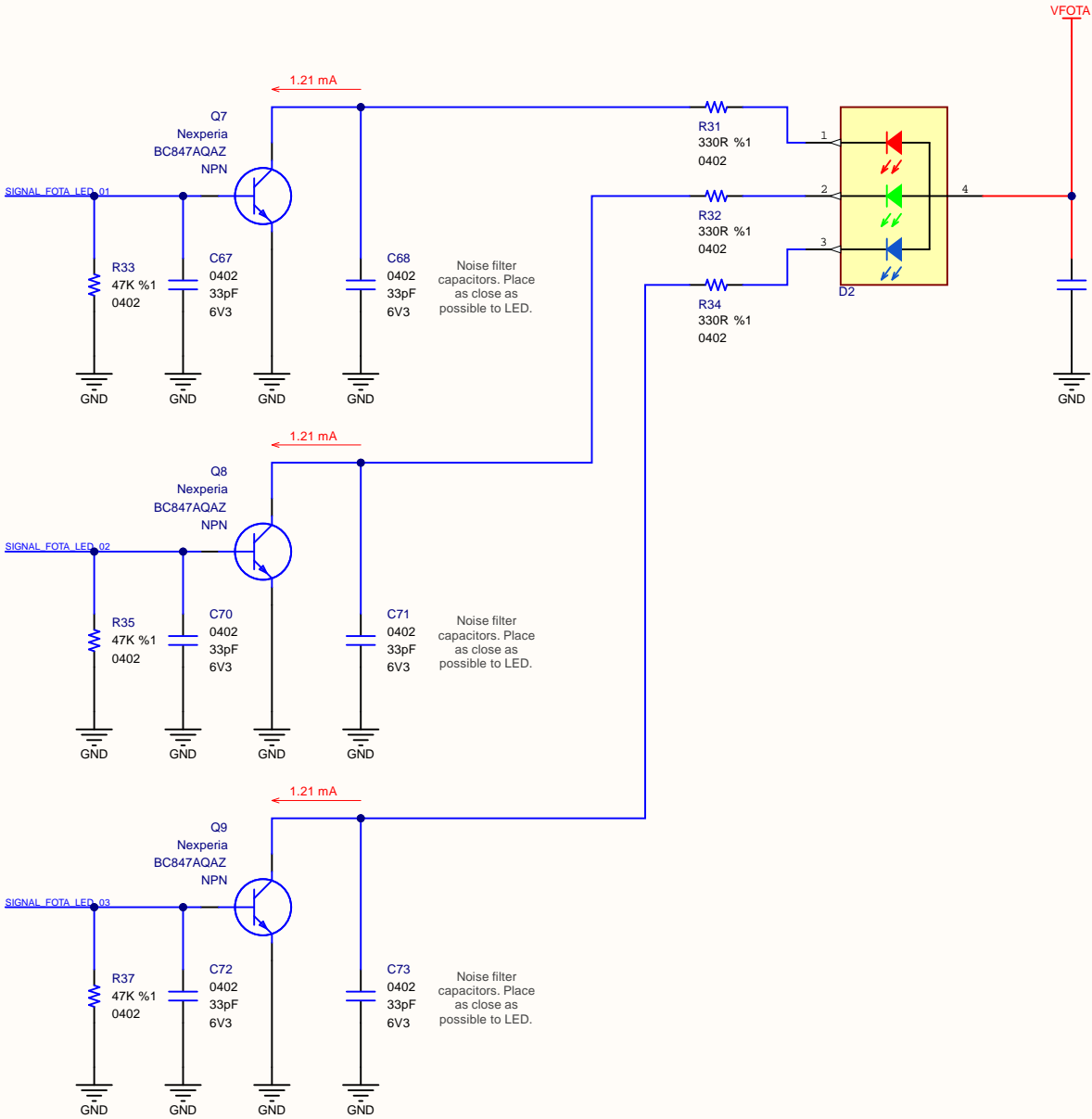
FOTA Micro Controller



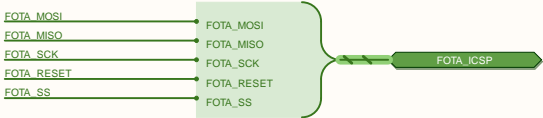
B100AA Module have two on-board MCU.

Second microcontroller is a firmware over the air controller. This MCU is burn firmware to the main MCU.

FOTA Status LED Indicators



FOTA Micro Controller ICSP



FOTA Digital ICSP (Main MCU Burn)

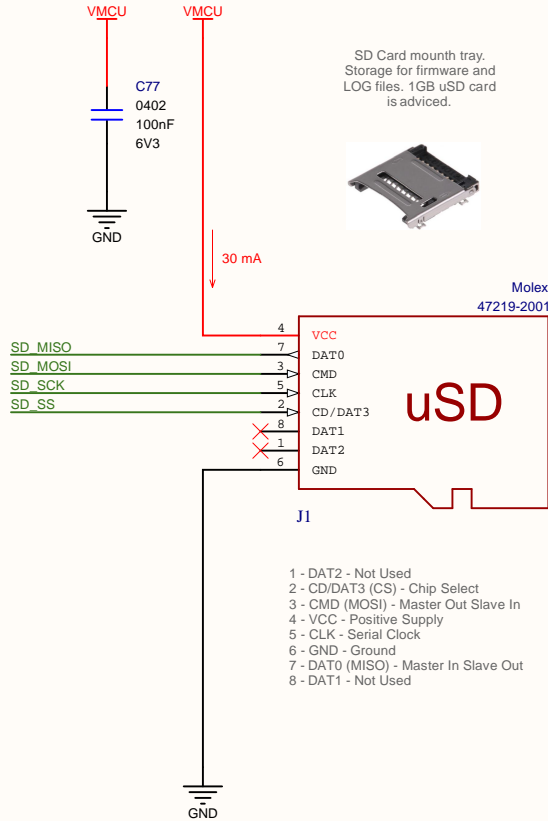


Power Source Segment Block Diagram				Engineer	Mehmet Günce Akkoyun
Size: A3		Project : GSM IoT Based Plug&Play SOM		Customer	-
Date: 3.03.2021		Time: 15:50:51		Product ID	-
File: FOTA MicroController.SchDoc		Sheet 45 of 54		Module ID	B100
				Version	AA
				Revision	R06

Ovoo Electronics	
Necip Fazıl Mah. Ortam Sok. Bırgöl Apt. No: 19/6 Meram / Konya Türkiye	
+90 506 7444300	

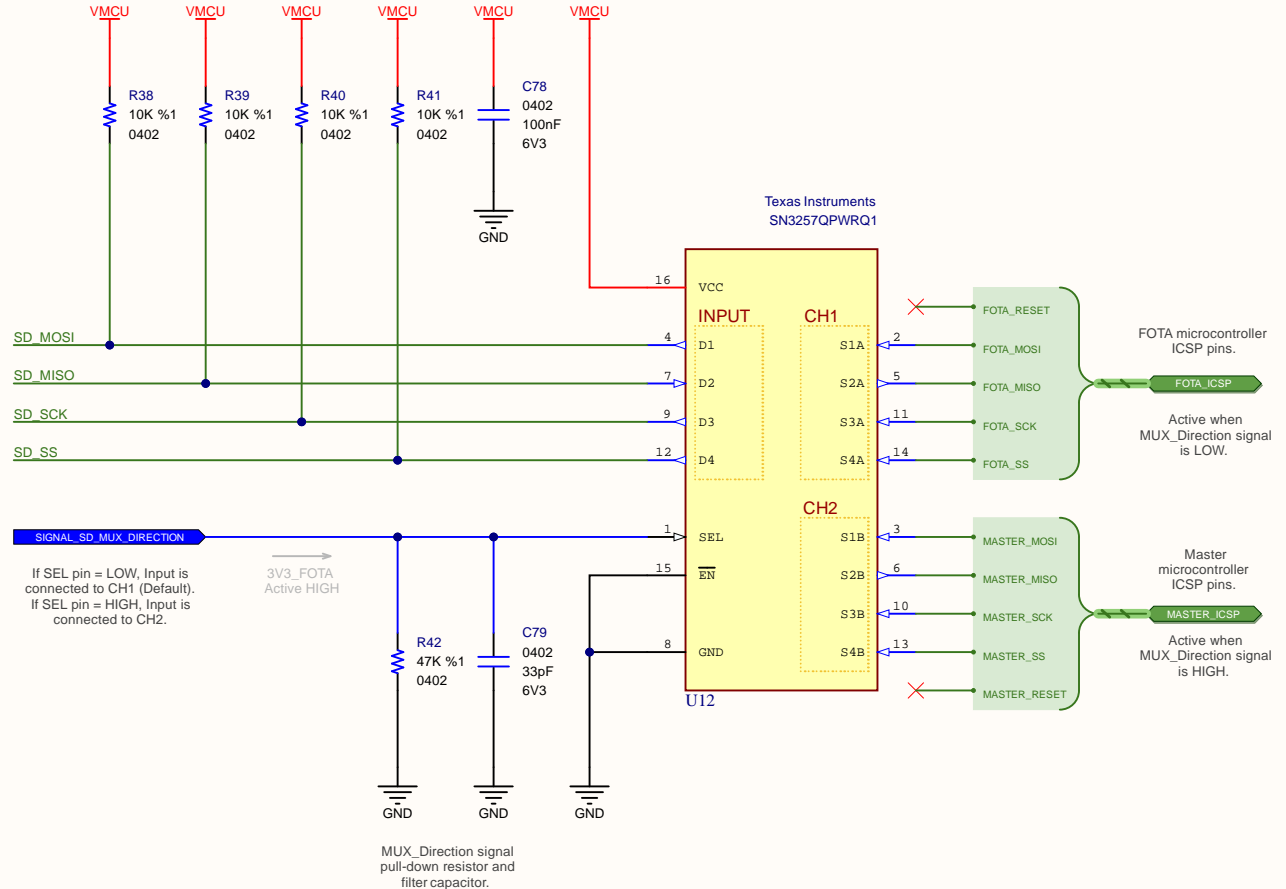
Decoupling Capacitor.
As close as possible to
uSD tray.

SD Card




By-Pass Capacitor
Close to SN3257QPWRQ1
Pin-16 (Vcc)

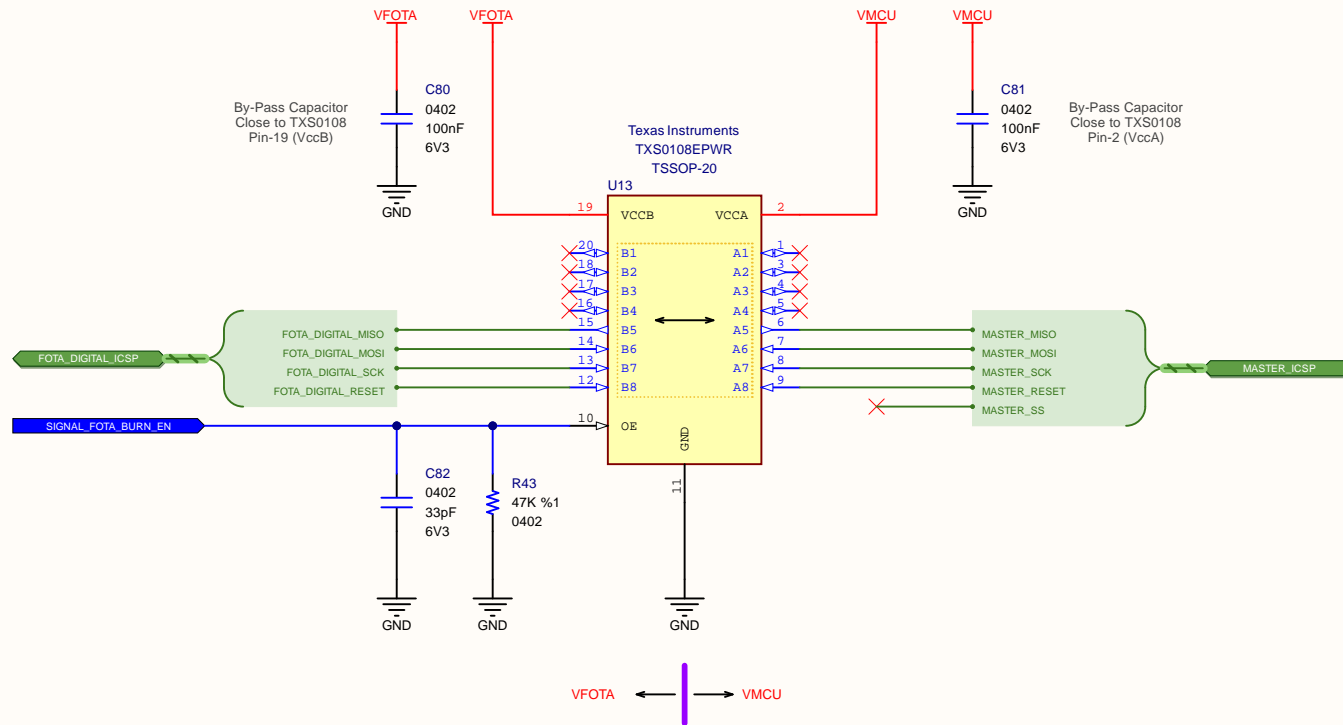
SPI Selection Switch




<https://www.github.com/akkoyun/B100>

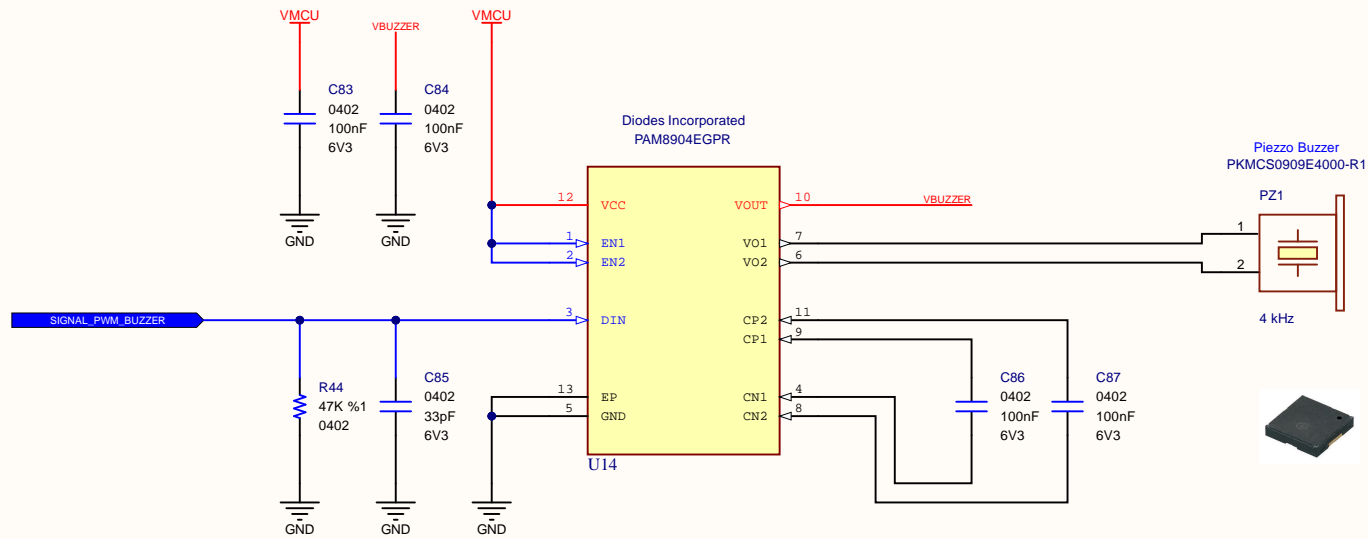
Power Source Segment Block Diagram					Engineer MehmetGünce Akkoyun		Ovoo Electronics Necip Fazıl Mah. Ortarmak Sok. Bingül Apt. No: 19/6 Meram / Konya Türkiye +90 506 7444300	
					Customer -			
Size: A4					Product ID -			
Project : GSM IoT based Plug&Play SOM					Module ID B100			
Date: 3.03.2021					Version AA			
Time: 15:50:51					Revision R06			
Sheet 46 of 54								
File: SD Card.SchDoc								

ICSP Burn Buffer


<https://www.github.com/akkoyun/B100>

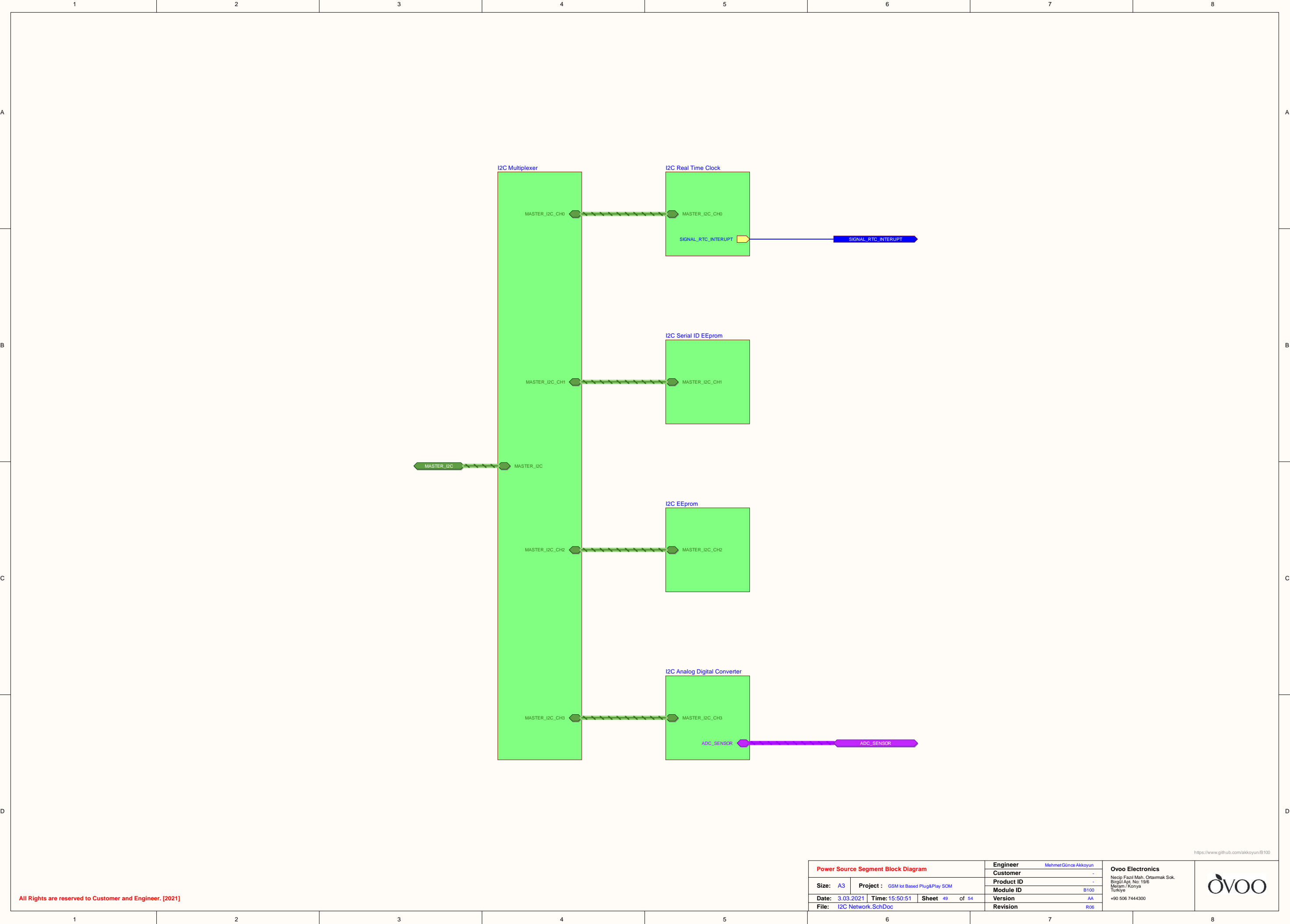
Power Source Segment Block Diagram				Engineer	Mehmet Güneş Akkoyun	Ovoo Electronics Necip Fazıl Mah. Ortarmak Sok. Bingöl Apt. No: 19/6 Meram / Konya Türkiye +90 506 7444300	
Size:	A4	Project :	GSM IoT Based Plug&Play SOM	Customer	-		
Date:	3.03.2021	Time:	15:50:51	Product ID	-		
File:	ICSP Burn Buffer.SchDoc	Sheet	47 of 54	Module ID	B100		
				Version	AA		
				Revision	R06		

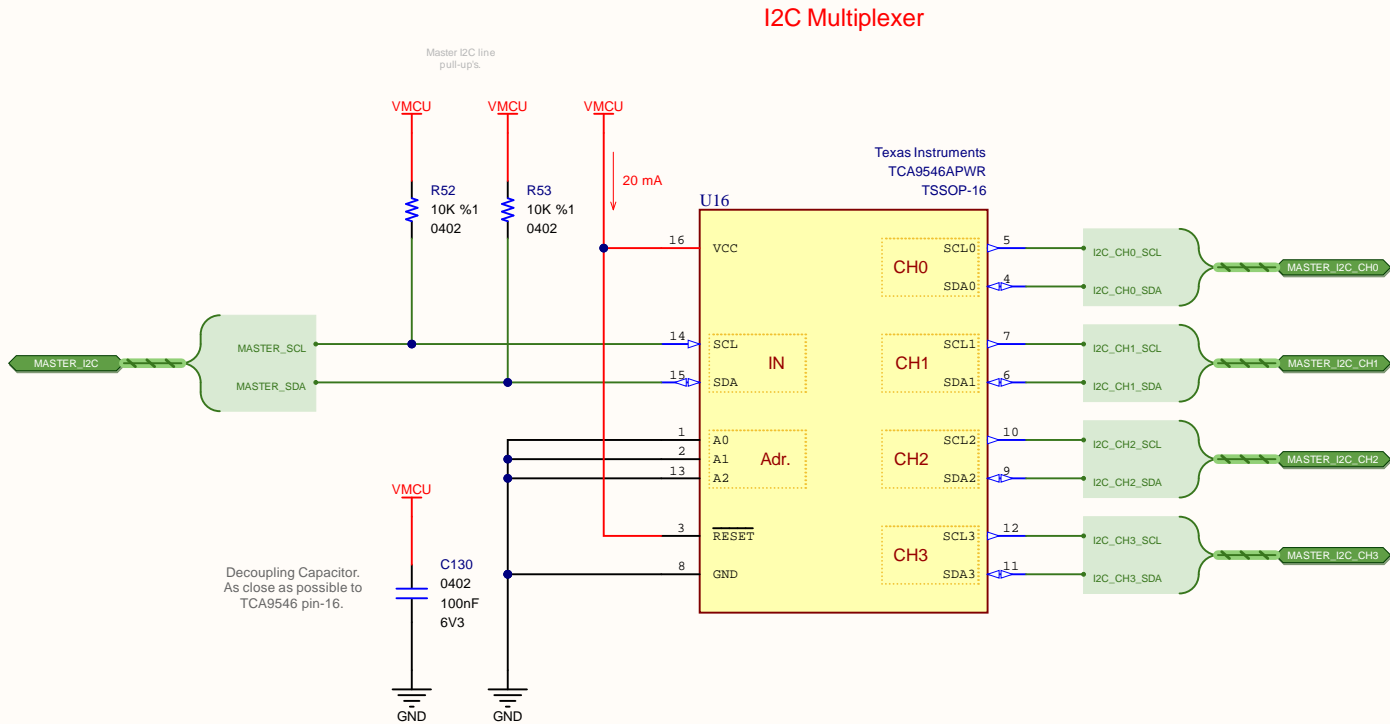
Piezzo Buzzer




<https://www.github.com/akkoyun/B100>

Power Source Segment Block Diagram				Engineer	Mehmet Güneş Akkoyun	Ovoo Electronics Necip Fazıl Mah. Ortarmak Sok. Bingül Apt. No: 19/6 Meram / Konya Türkiye +90 506 7444300	
Size:	A4	Project :	GSM Iot Based Plug&Play SOM	Customer	-		
Date:	3.03.2021	Time:	15:50:51	Product ID	-		
File:	Buzzer.SchDoc	Sheet	48 of 54	Module ID	B100		
		Version	AA	Revision	R06		

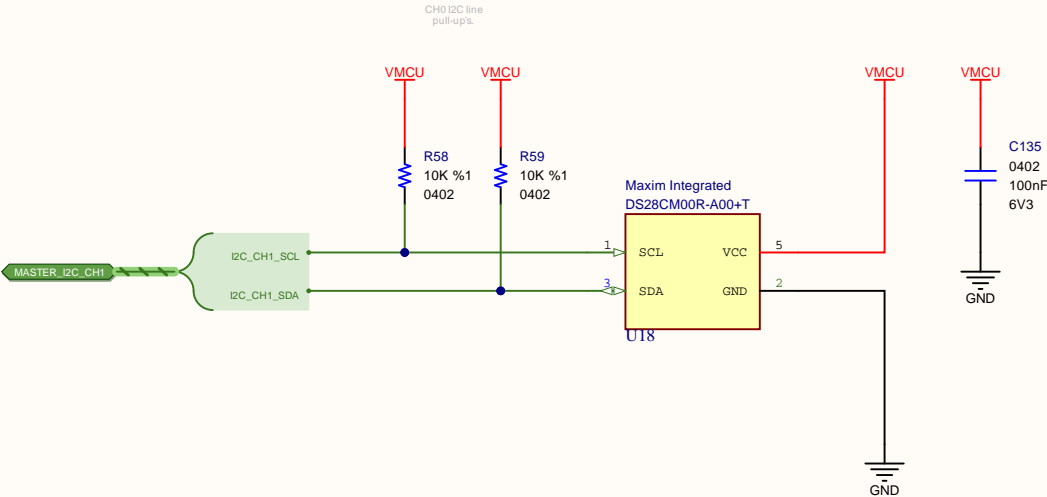





<https://www.github.com/akkoyun/B100>

Power Source Segment Block Diagram				Engineer Mehmet Günce Akkoyun		<div>Ovoo Electronics</div> <div>Necip Fazıl Mah. Ortarmak Sok. Bırgül Apt. No: 19/6 Meram / Konya Türkiye</div> <div>+90 506 7444300</div> <div></div>	
Size: A4		Project : GSM Iot Based Plug&Play SOM		Customer -			
Date: 3.03.2021		Time: 15:50:51		Product ID -			
File: I2C Multiplexer.SchDoc		Sheet 50 of 54		Module ID B100			
				Version AA			
				Revision R06			

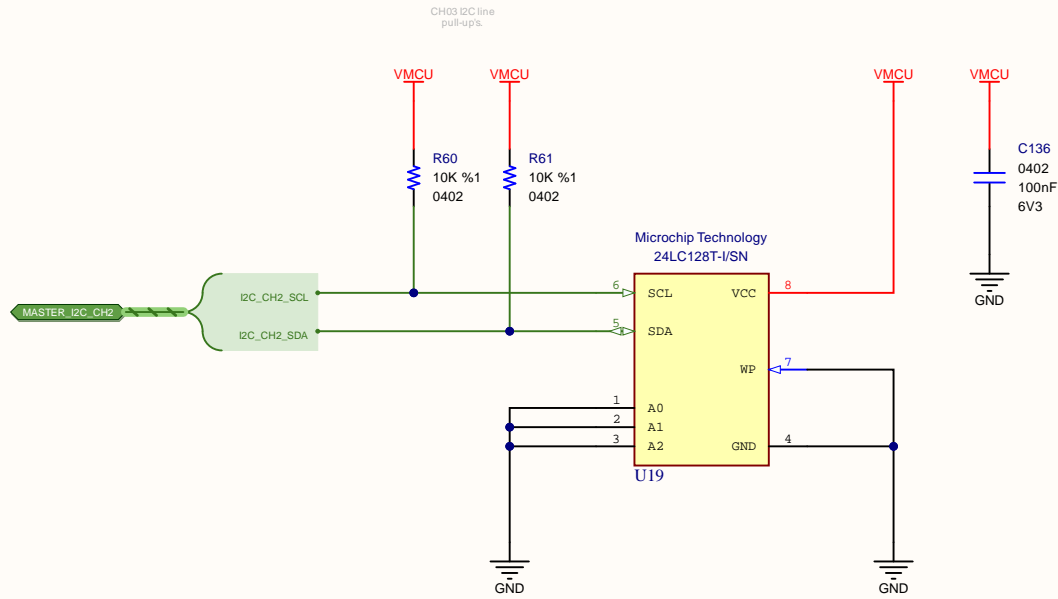
I2C Serial ID EEPROM




<https://www.github.com/akkoyun/B100>

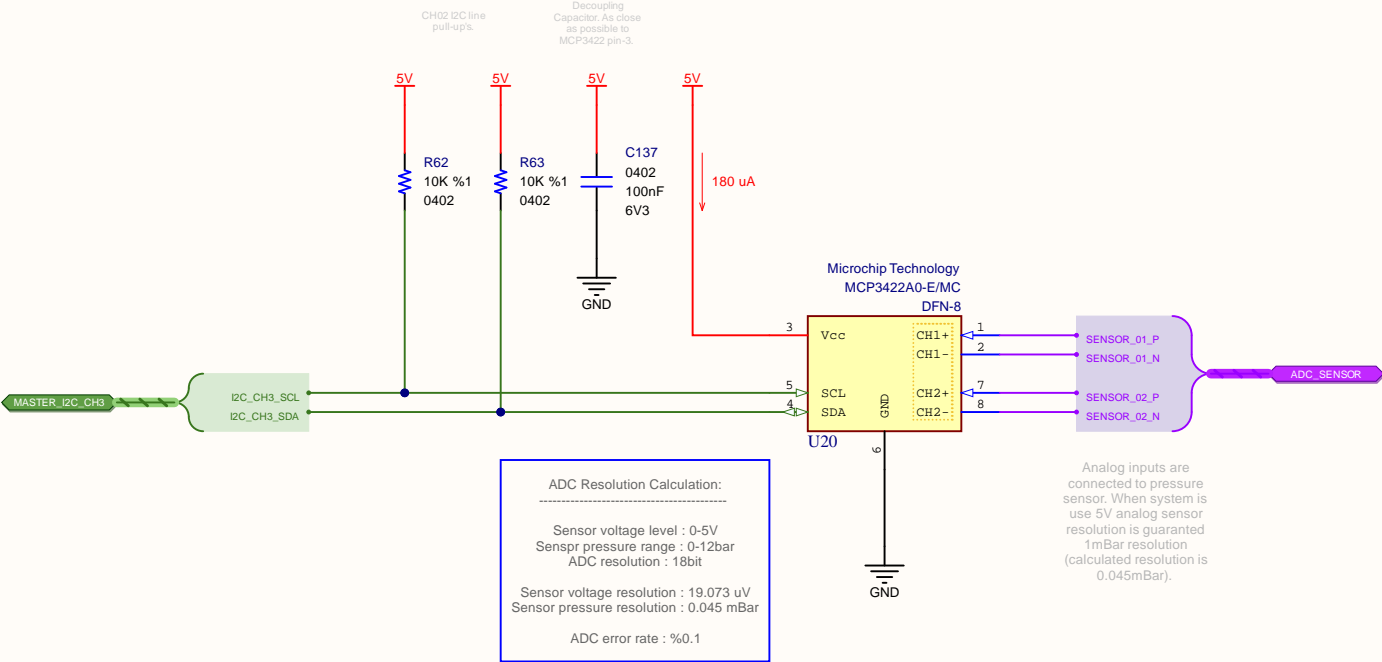
Power Source Segment Block Diagram				Engineer	Mehmet Güneş Akkoyun	Ovoo Electronics Necip Fazıl Mah. Ortarmak Sok. Bingül Apt. No: 19/6 Meram / Konya Türkiye +90 506 7444300	
Size:	A4	Project :	GSM IoT Based Plug&Play SOM	Customer	-		
Date:	3.03.2021	Time:	15:50:51	Product ID	-		
File:	Serial ID EEPROM.SchDoc	Sheet	52 of 54	Module ID	B100		
				Version	AA		
				Revision	R06		

EEPROM


<https://www.github.com/akkoyun/B100>

Power Source Segment Block Diagram				Engineer	Mehmet Güneş Akkoyun	Ovoo Electronics Necip Fazıl Mah. Ortarmak Sok. Bingül Apt. No: 19/6 Meram / Konya Türkiye +90 506 7444300	
Size:	A4	Project :	GSM Iot Based Plug&Play SOM	Customer	-		
Date:	3.03.2021	Time:	15:50:51	Product ID	-		
File:	EEPROM.SchDoc	Sheet	53 of 54	Module ID	B100		
				Version	AA		
				Revision	R06		

Analog Digital Converter



https://www.github.com/akkoyun/B100

Power Source Segment Block Diagram				Engineer	MehmetGünce Akkoyun	Ovoo Electronics Necip Fazıl Mah. Ortarmak Sok. Bırgöl Apt. No: 19/6 Meram / Konya Turkey +90 506 7444300	
Size: A4		Project : GSM Iot Based Plug&Play SOM		Customer	-		
Date: 3.03.2021		Time: 15:50:51		Product ID	-		
File: Analog Digital Converter.SchDoc		Sheet 54 of 54		Module ID	B100		
				Version	AA		
				Revision	R06		