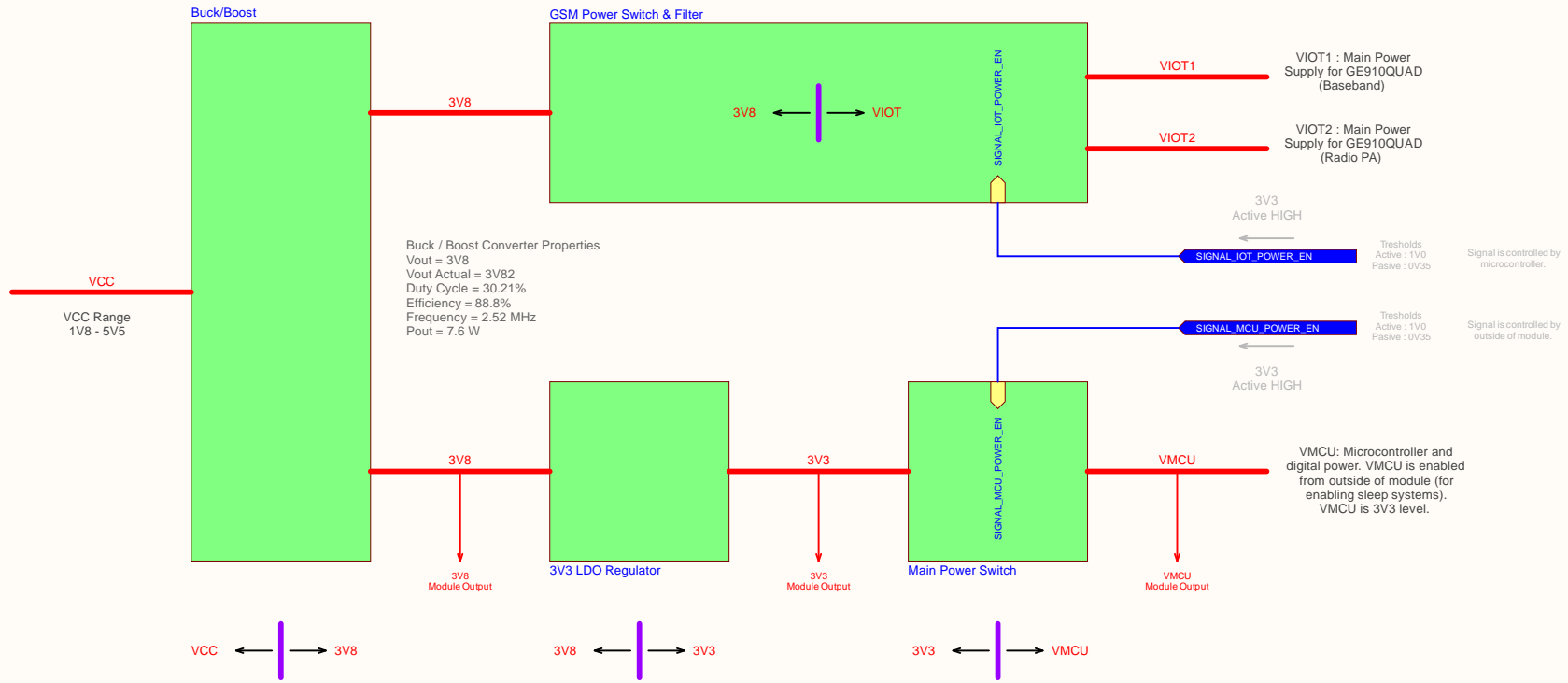
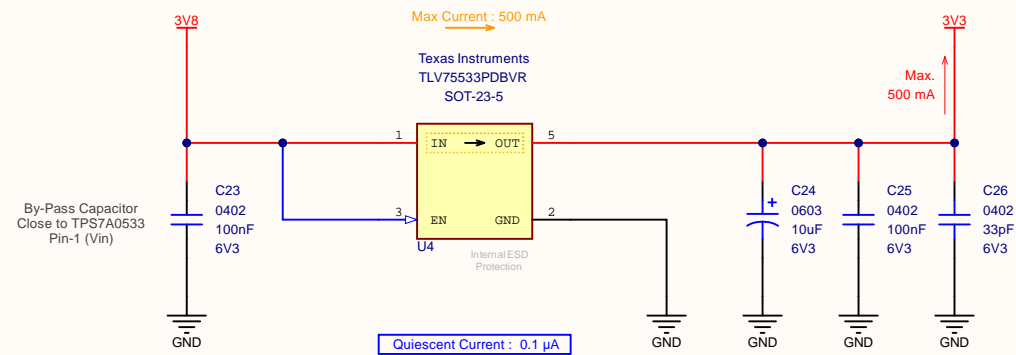



Power Architecture

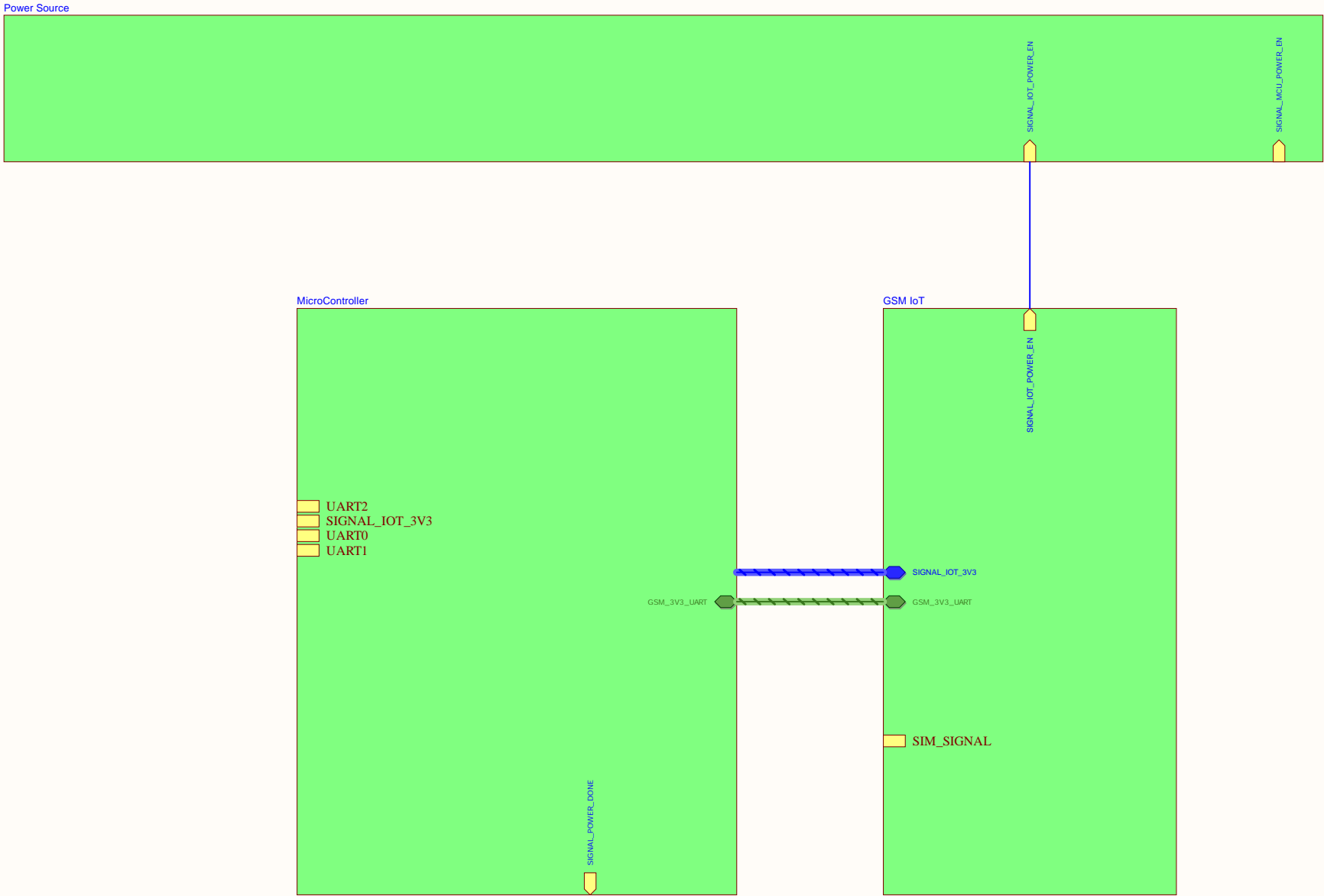




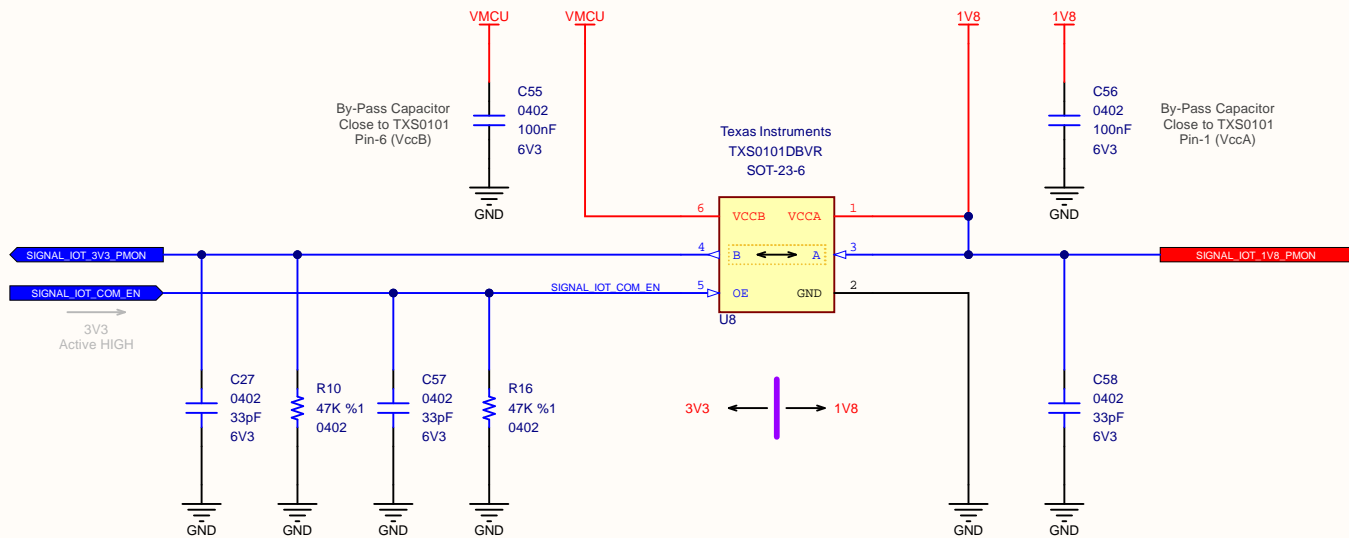
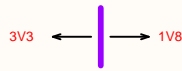
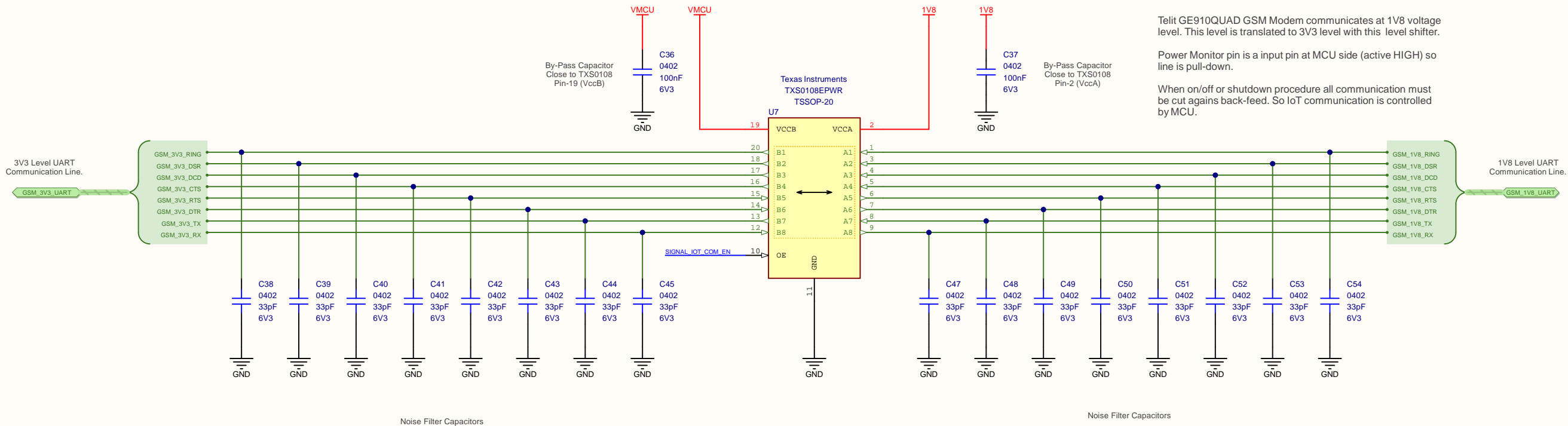
3V8 ← → 3V3

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

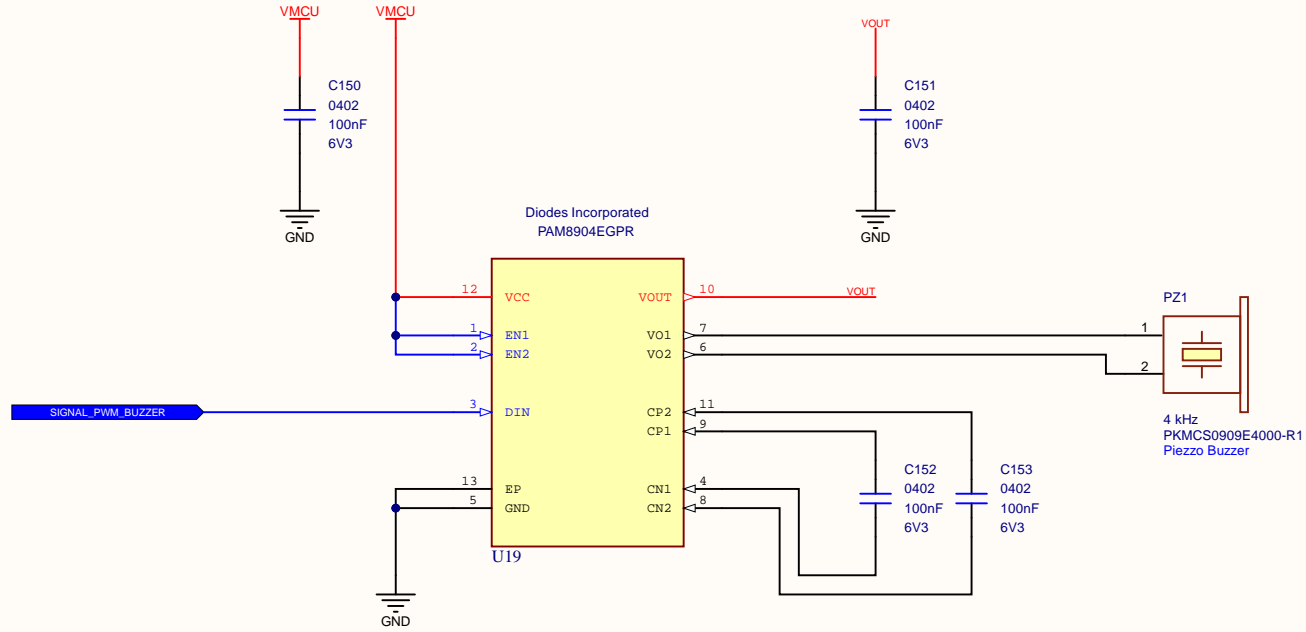
Title 3V3 LDO Regulator			Ovoo Electronics Necip Fazıl Mah. Ortarmak Sok. Bırgölü Apt. No: 19/B Meram / Konya Türkiye	
Size: A4	Number:	Revision: B100AA		
Date: 3.01.2021	Time: 18:47:40	Sheet * of 35		
File: C:\Altium Projects\B100\AA\Design Files\B100AA\Schematics\3V3 LDO Regulator.SchDoc				




BiDirectional Level Shifter



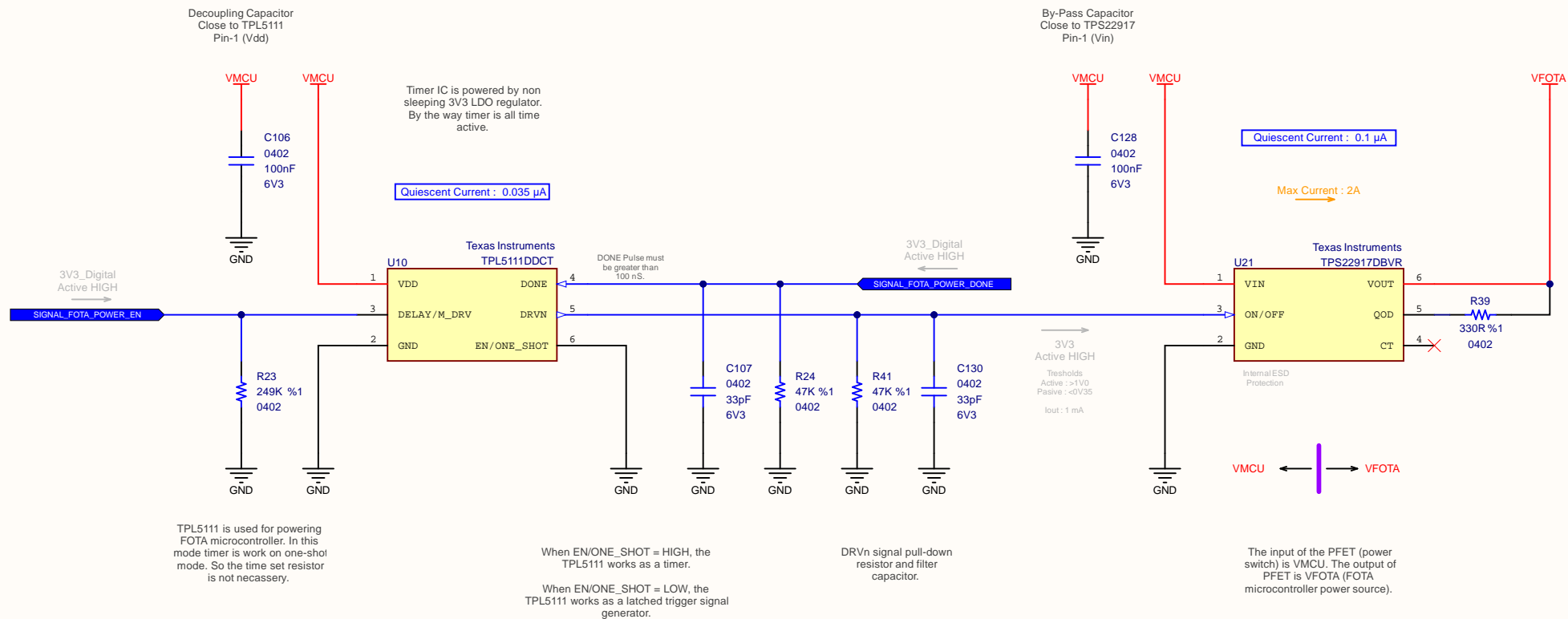
Piezzo Buzzer



Title Buzzer			Ovoo Electronics Necip Fazıl Mah. Ortarmak Sok. Bırgölü Apt. No: 19/6 Meram / Konya Türkiye		
Size: A4	Number:	Revision: B100AA			
Date: 3.01.2021	Time: 18:47:40	Sheet * of 35			
File: C:\Altium Projects\B100\AA\Design Files\B100AA\Schematics\Buzzer.SchDoc					

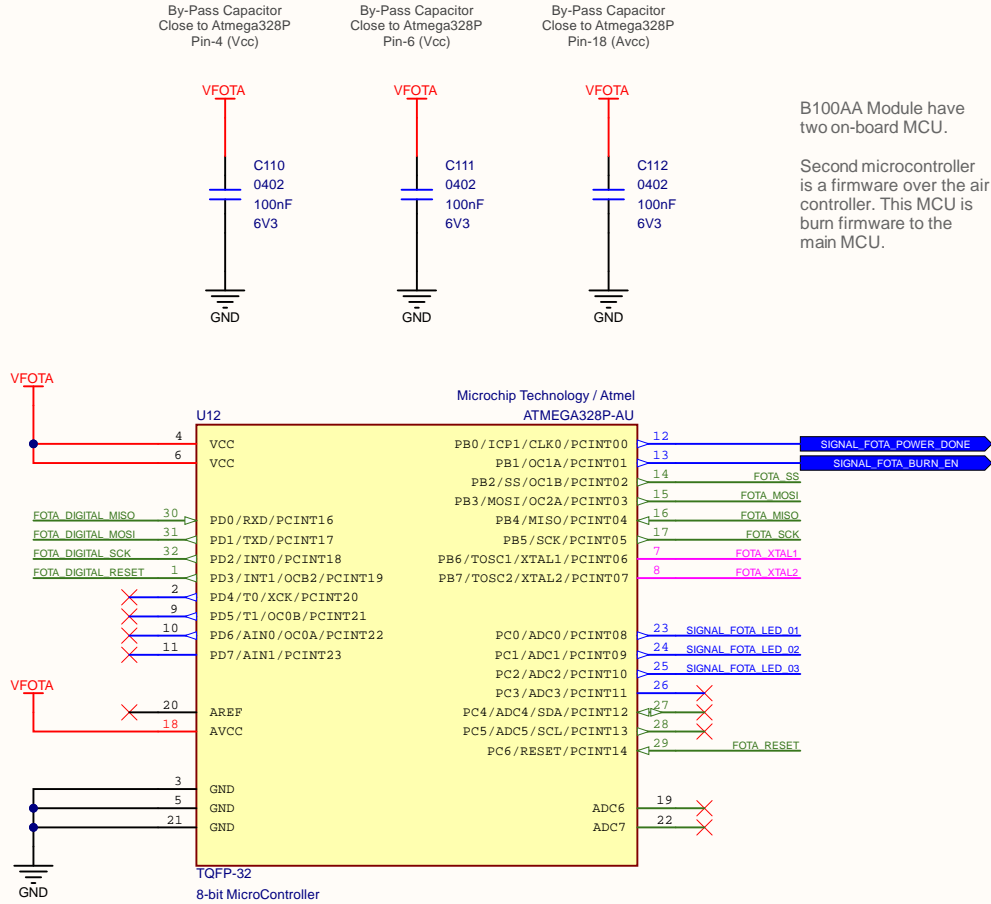
Power Trigger

Power Switch



Title FOTA MicroController Latched Power Trigger			Ovoo Electronics Necip Fazıl Mah. Ortarmak Sok. Bırgölü Apt. No: 19/6 Meram / Konya Türkiye
Size: A4	Number:	Revision: B100AA	
Date: 3.01.2021	Time: 18:47:40	Sheet * of 35	
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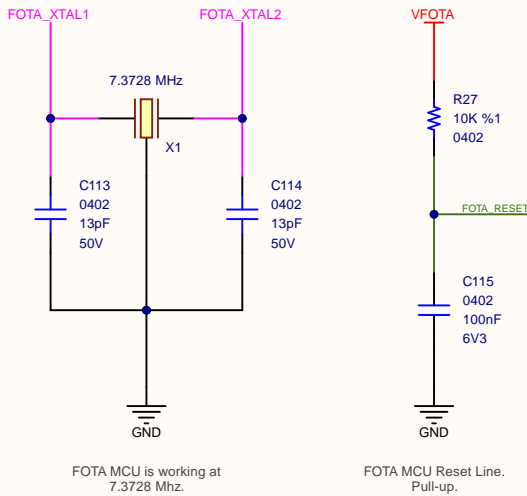
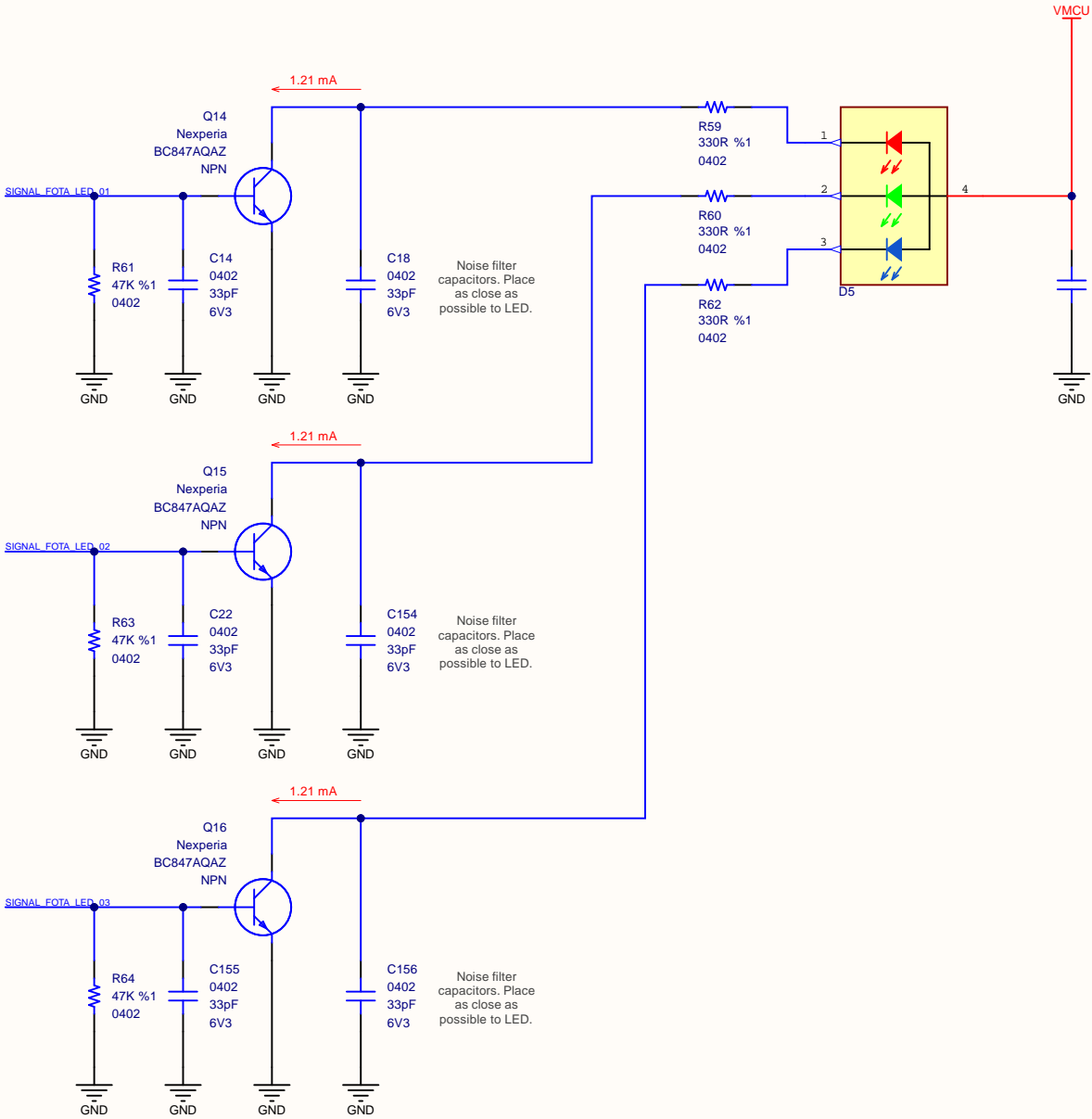
FOTA Micro Controller



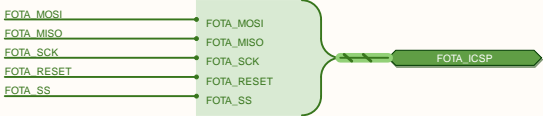
B100AA Module have two on-board MCU.

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

FOTA Status LED Indicators



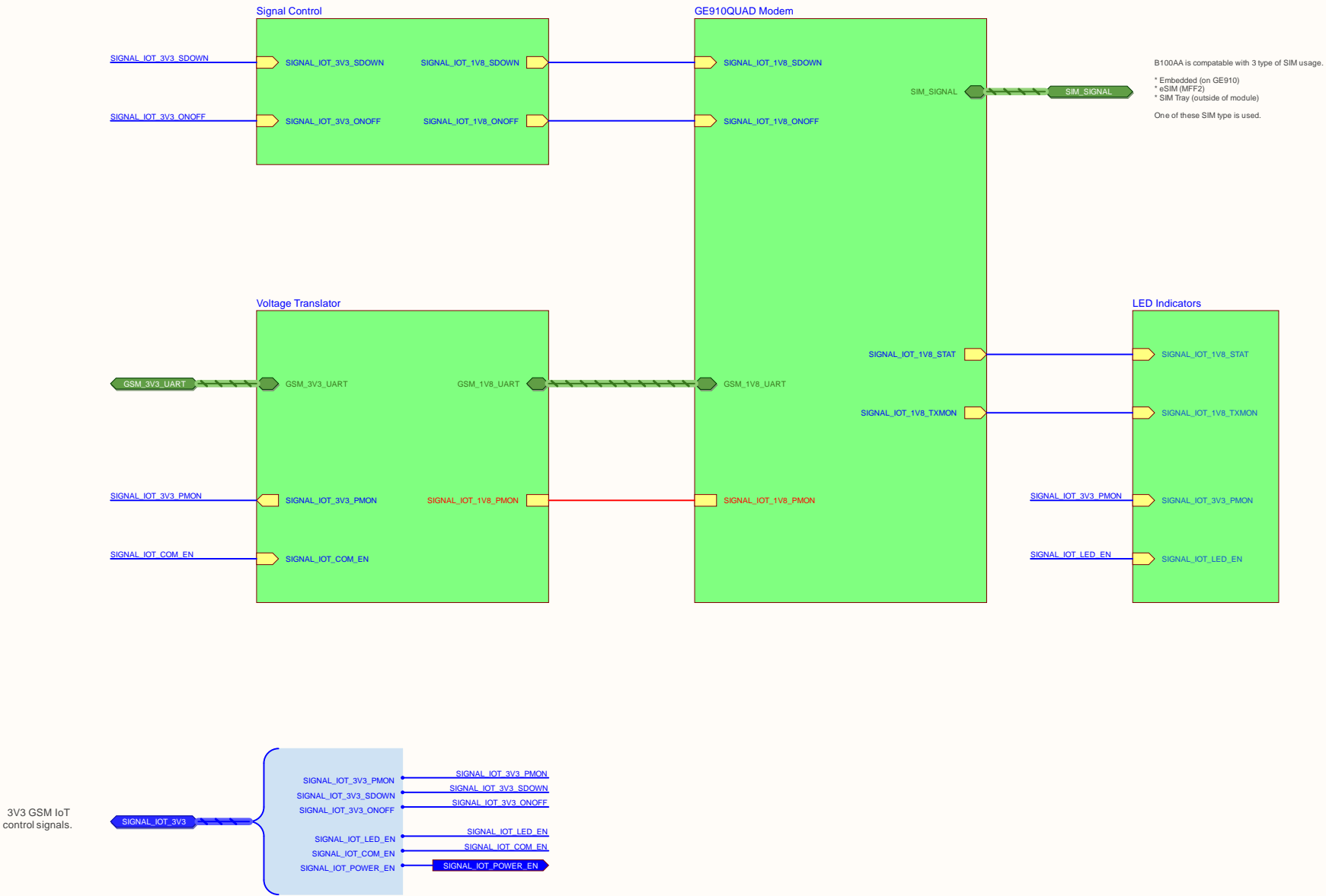
FOTA Micro Controller ICSP



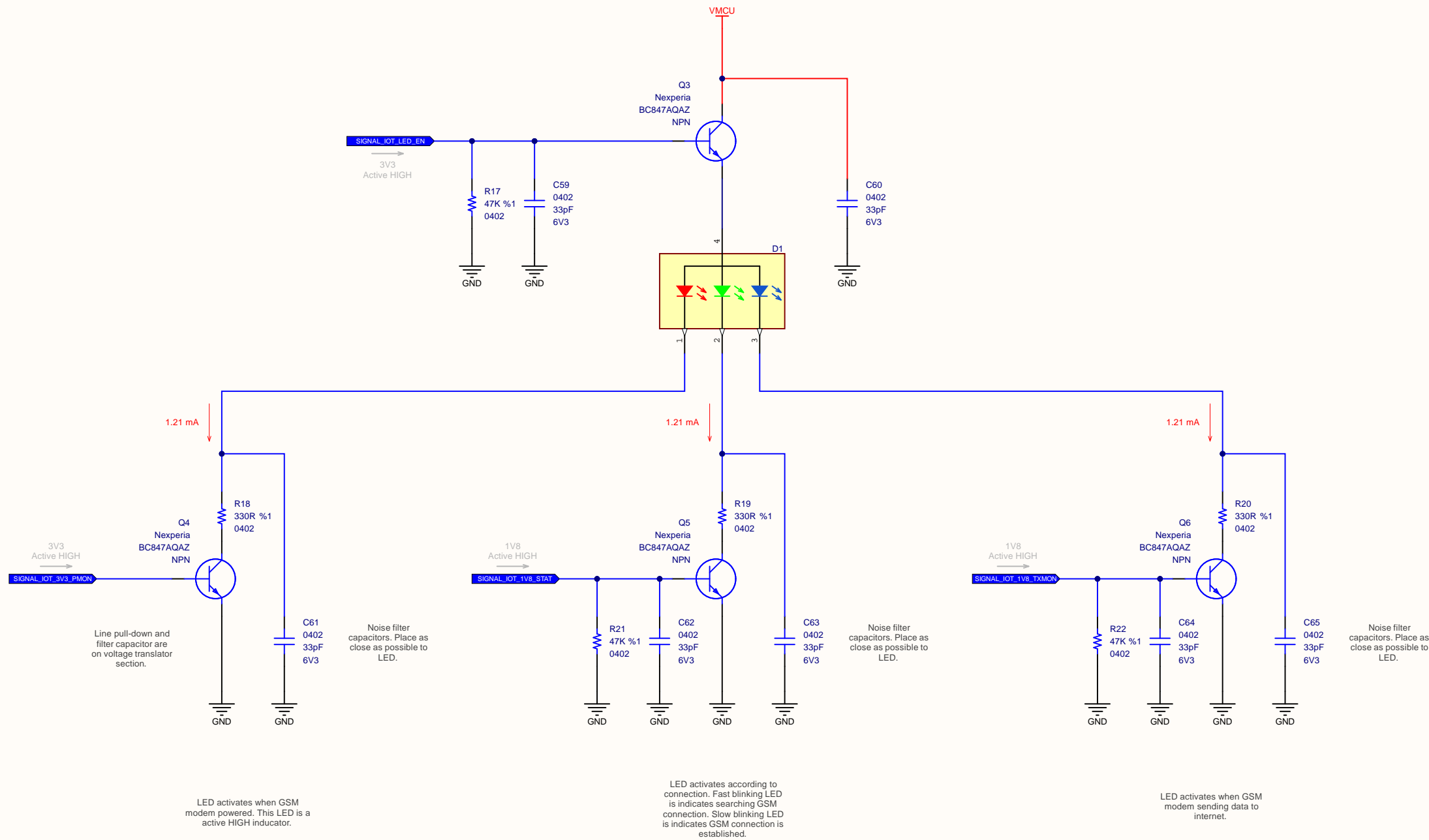
FOTA Digital ICSP (Main MCU Burn)

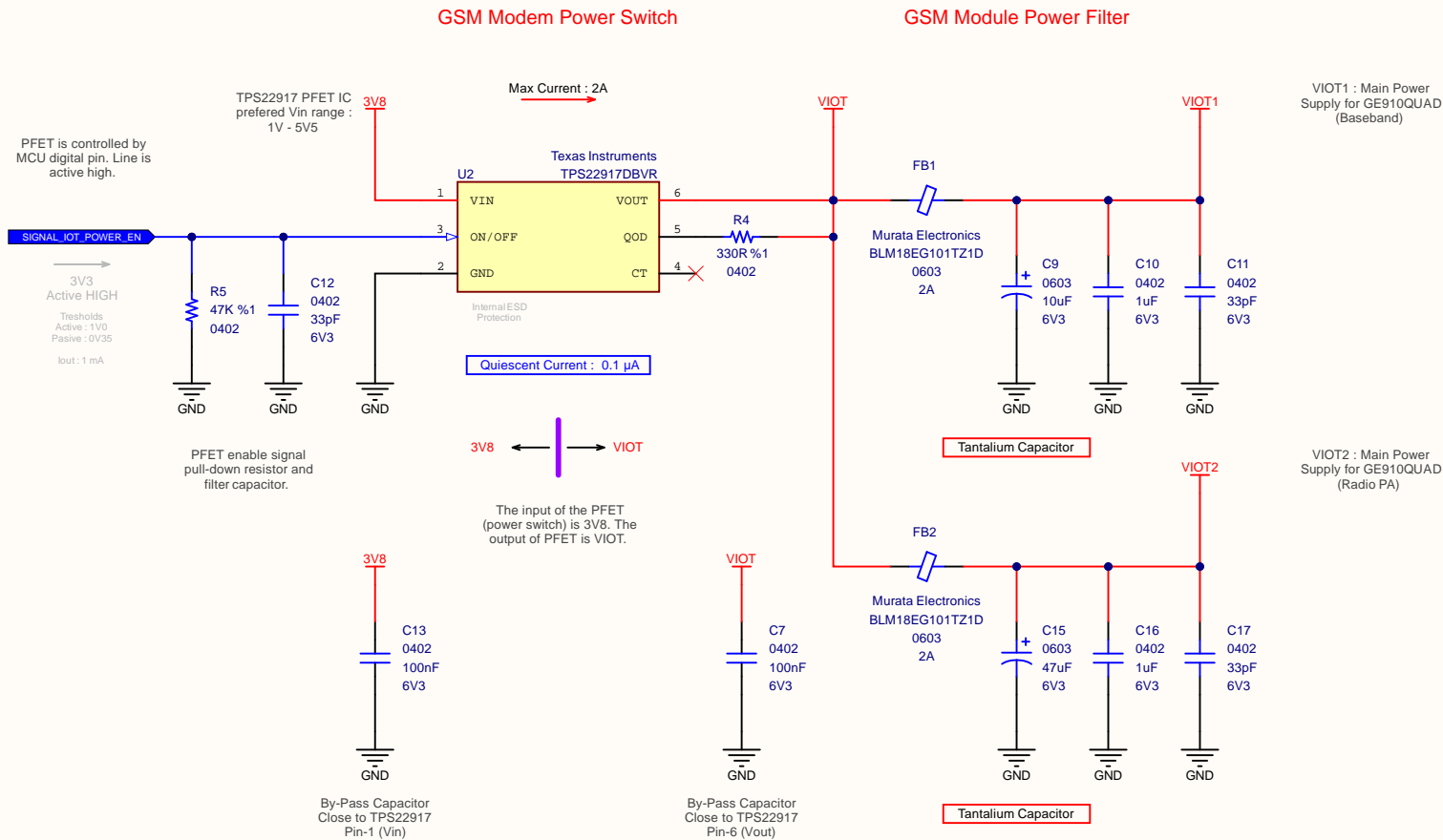



GSM IoT Communication Layer



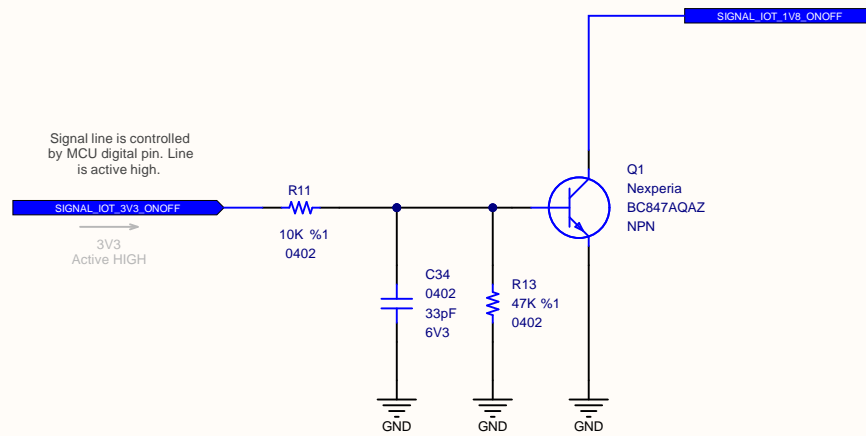
GSM IoT LED Indicators



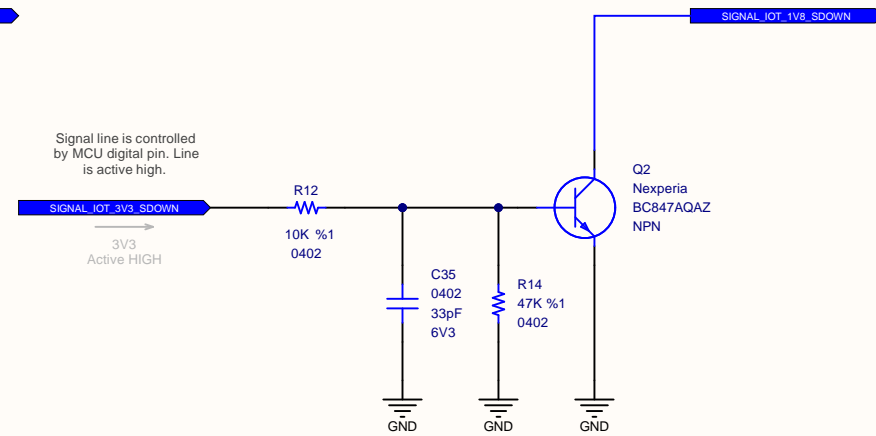


Title GSM Power Switch and Filter			Ovoo Electronics Necip Fazıl Mah. Ortarmak Sok. Birgül Apt. No: 19/6 Meram / Konya Türkiye		
Size: A4	Number:	Revision: B100AA			
Date: 3.01.2021	Time: 18:47:41	Sheet * of 35			
File: C:\Altium Projects\B100\AA\Design Files\B100AA\Schematics\GSM Power.SchDoc					

GSM Module On/Off Signal



GSM Module Shut Down Signal



Title GSM Control Signal Management

Size: A4

Number:

Revision: B100AA

Date: 3.01.2021

Time: 18:47:41

Sheet * of 35

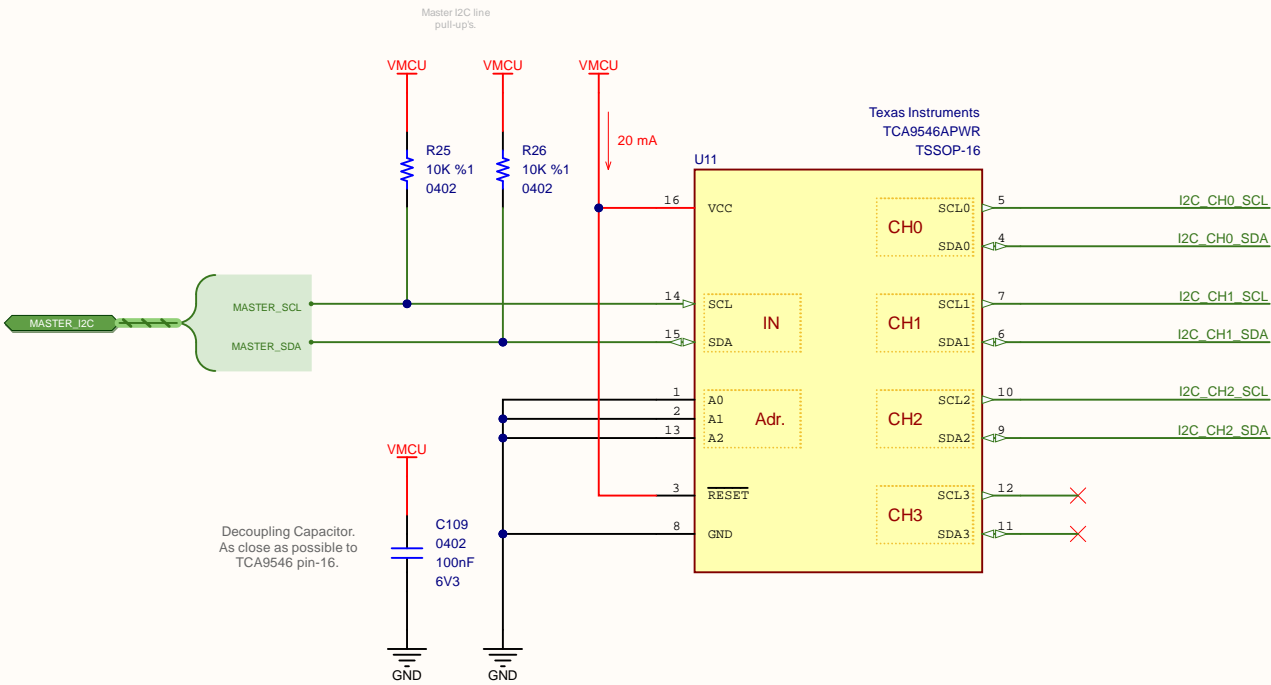
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Ovoo Electronics

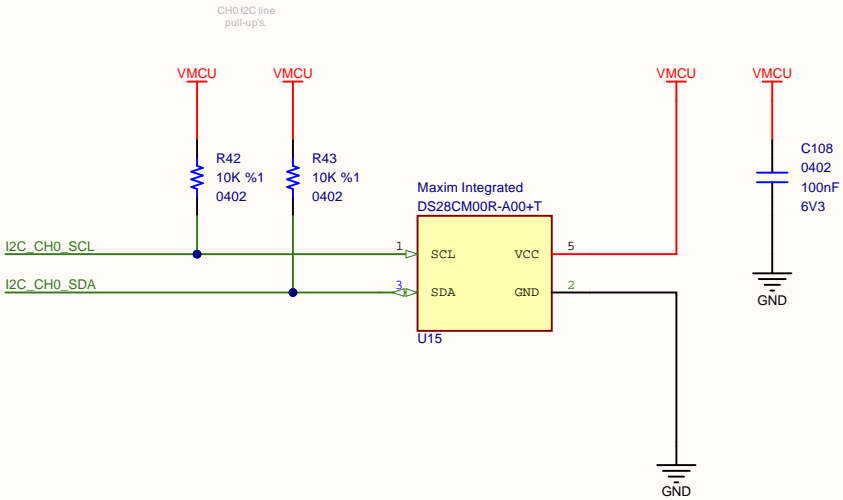
Necip Fazıl Mah. Ortarmak Sok.
Bırgölü Apt. No: 19/6
Meram / Konya
Türkiye

OVOO

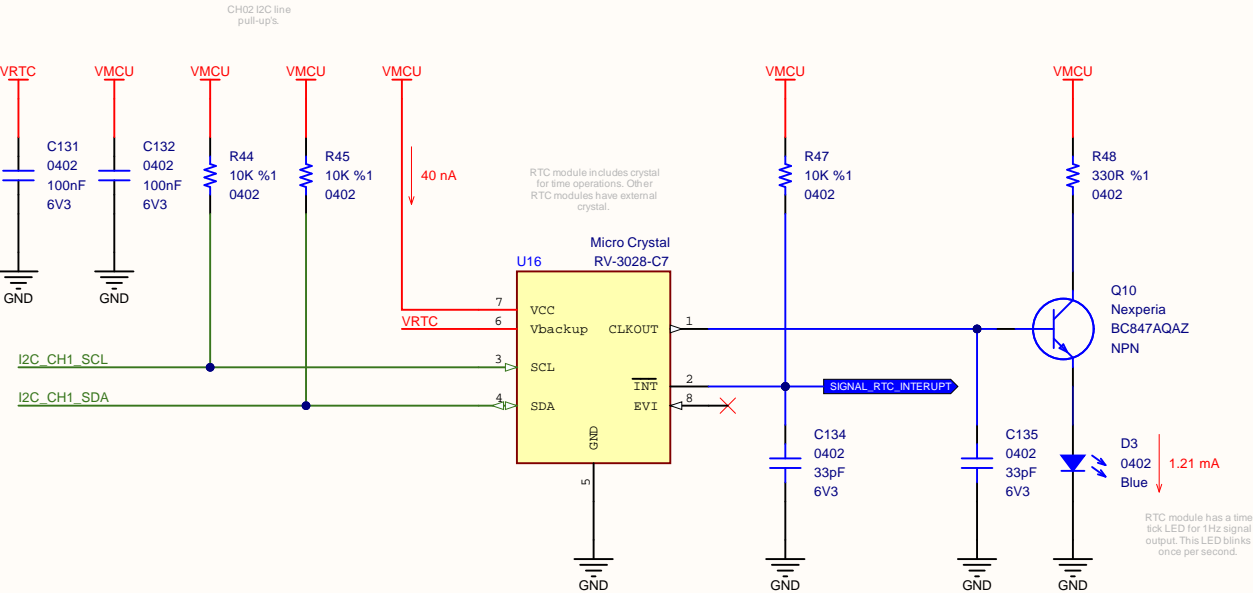
I2C Serial ID EEPROM



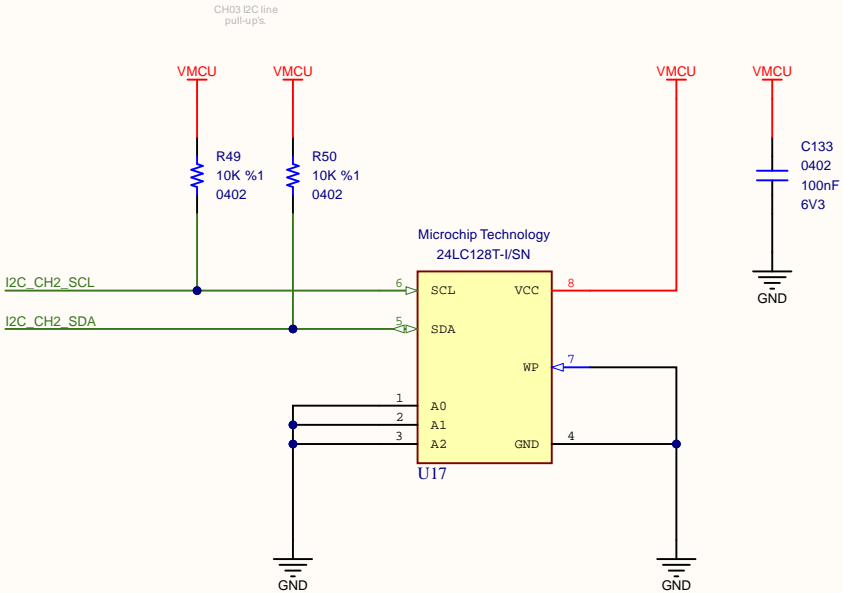
I2C Serial ID EEPROM



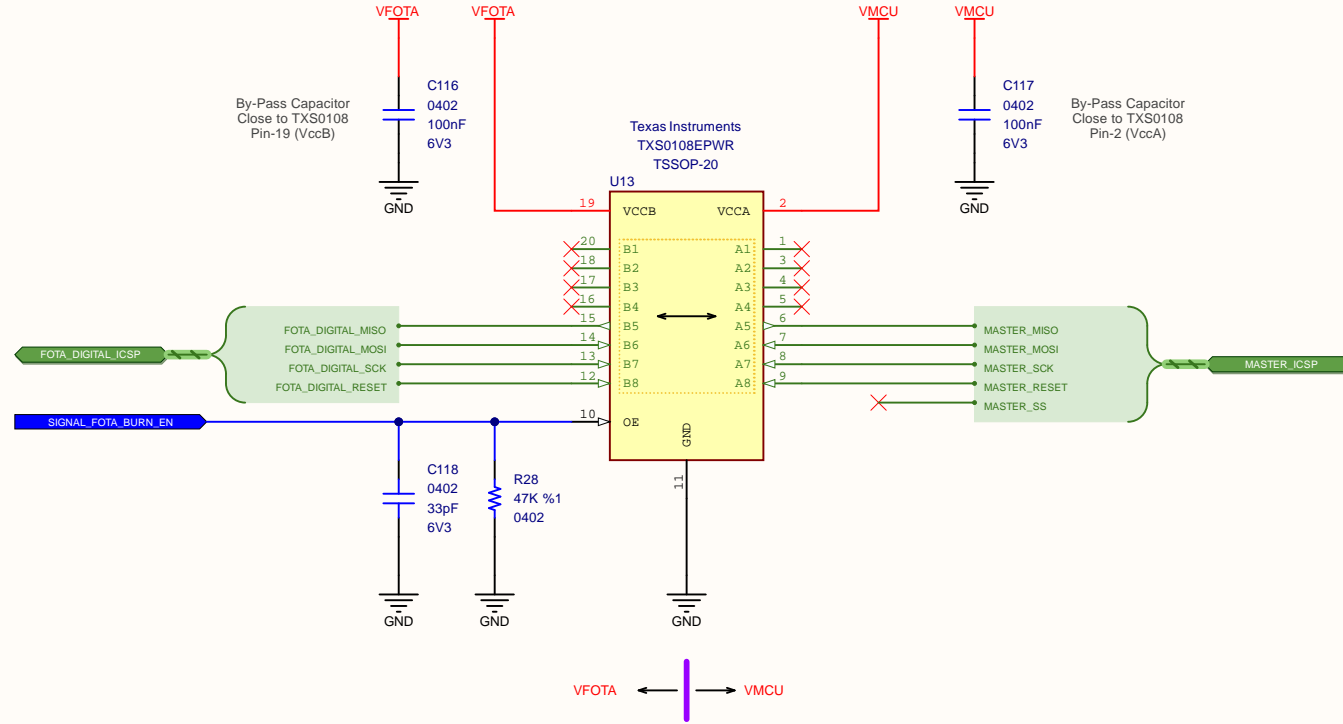
Real Time Clock



EEPROM



ICSP Burn Buffer



Title **FOTA Burn Buffer**

Size: **A4**

Number:

Revision: **B100AA**

Date: **3.01.2021**

Time: **18:47:41**

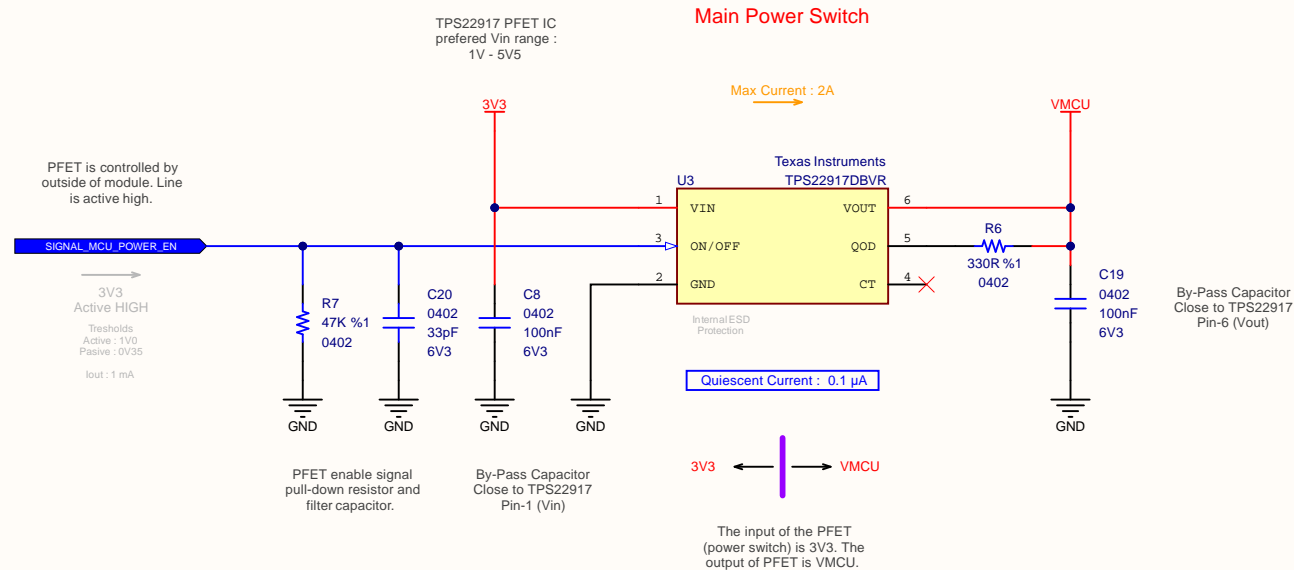
Sheet ***** of **35**

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Ovoo Electronics

Necip Fazıl Mah. Ortarmak Sok.
Bırgölü Apt. No: 19/6
Meram / Konya
Türkiye

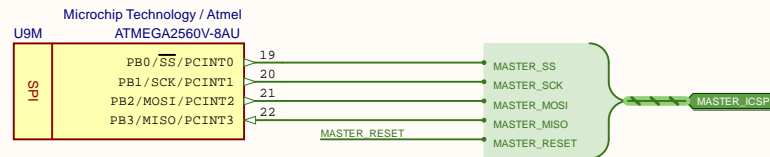
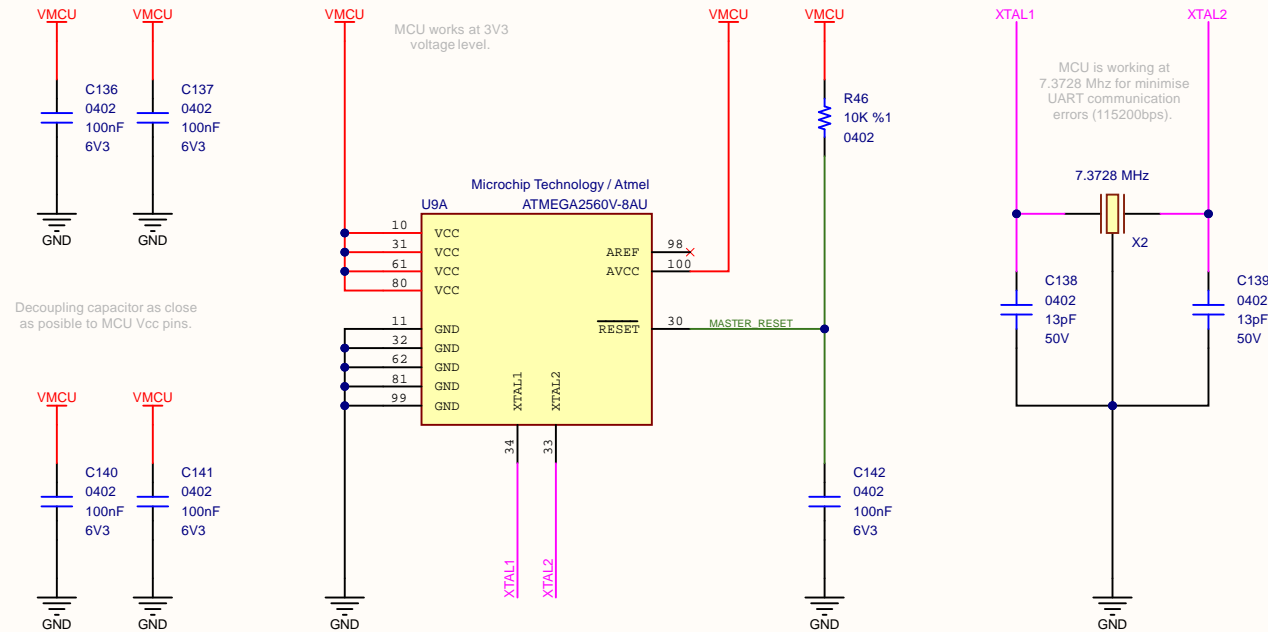





Title Main Power Switch			Ovoo Electronics Necip Fazil Mah. Ortarmak Bırgölü Apt. No: 19/6 Meram / Konya Türkiye
Size: A4	Number:	Revision: B100AA	
Date: 3.01.2021	Time: 18:47:41	Sheet * of 35	
File: C:\Altium Projects\B100\AA\Design Files\B100AA\Schematics\Main Power Switch.SchDoc			

MicroController


Crystal Oscillator



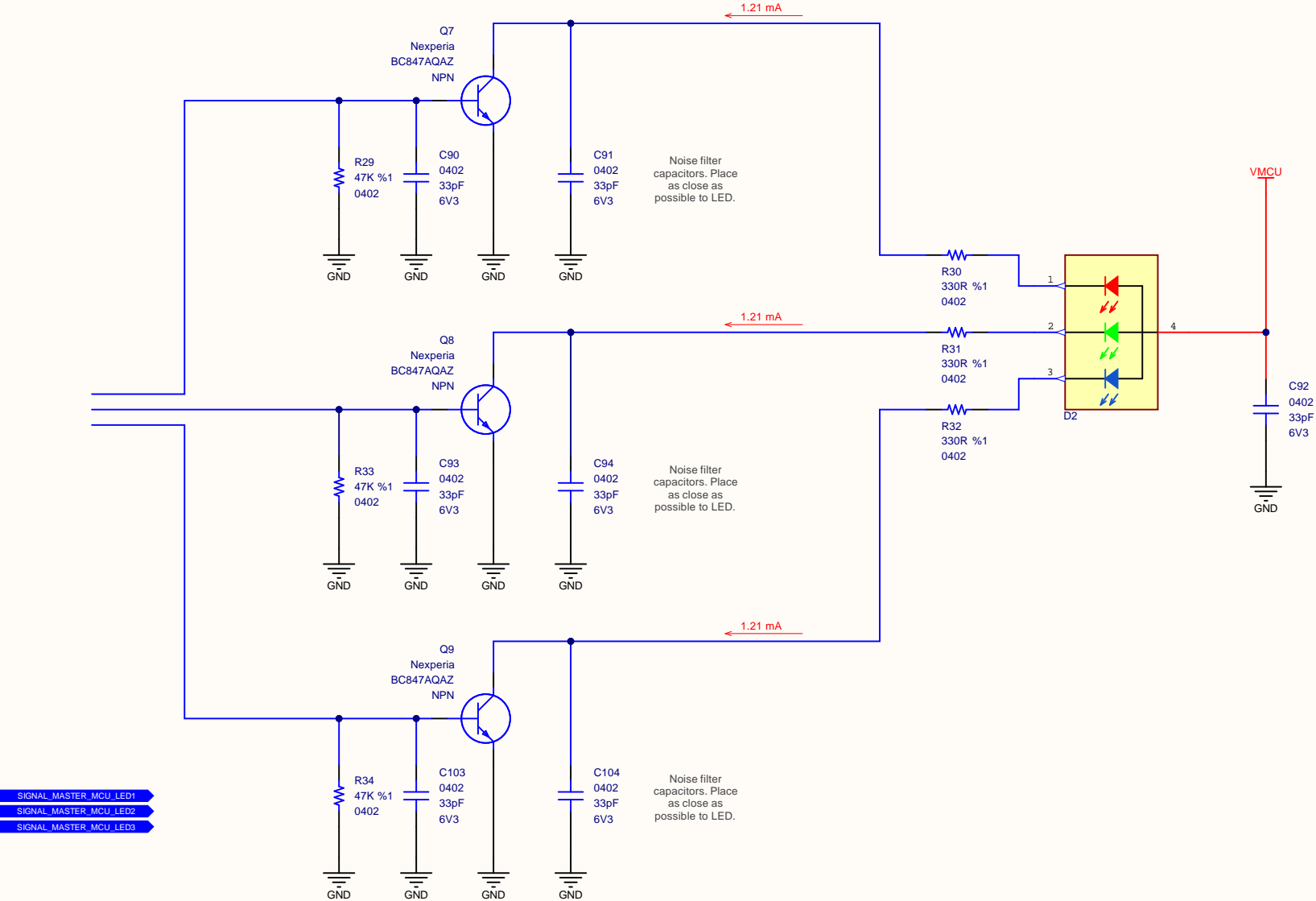
Master MicroController ICSP

Title Master MicroController Core			Ovoo Electronics Necip Fazıl Mah. Ortarmak Sok. Bırgölü Apt. No: 19/6 Meram / Konya Türkiye		
Date: A4	Number:	Revision: B100AA			
Date: 3.01.2021	Time: 18:47:41	Sheet * of 35			
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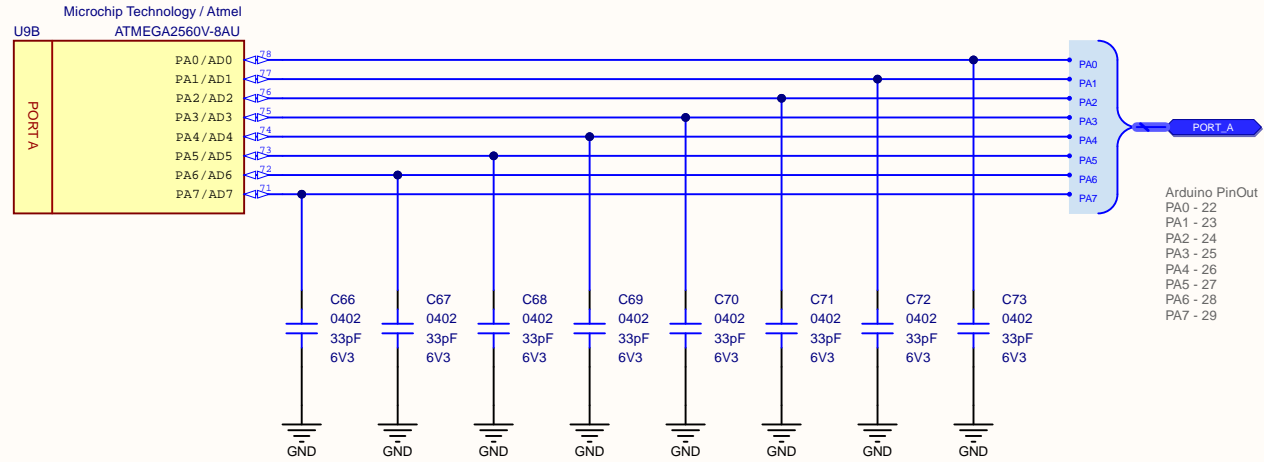



Title Master MicroController I2C Communication Port			Ovoo Electronics		
Size: A4	Number:	Revision: B100AA	Necip Fazıl Mah. Ortarmak Sok. Bırgölü Apt. No: 19/6 Meram / Konya Türkiye		
Date: 3.01.2021	Time: 18:47:41	Sheet * of 35			
File: C:\Altium Projects\B100\AA\Design Files\B100AA\Schematics\Master MicroController I2C Communication Port.SchDoc					

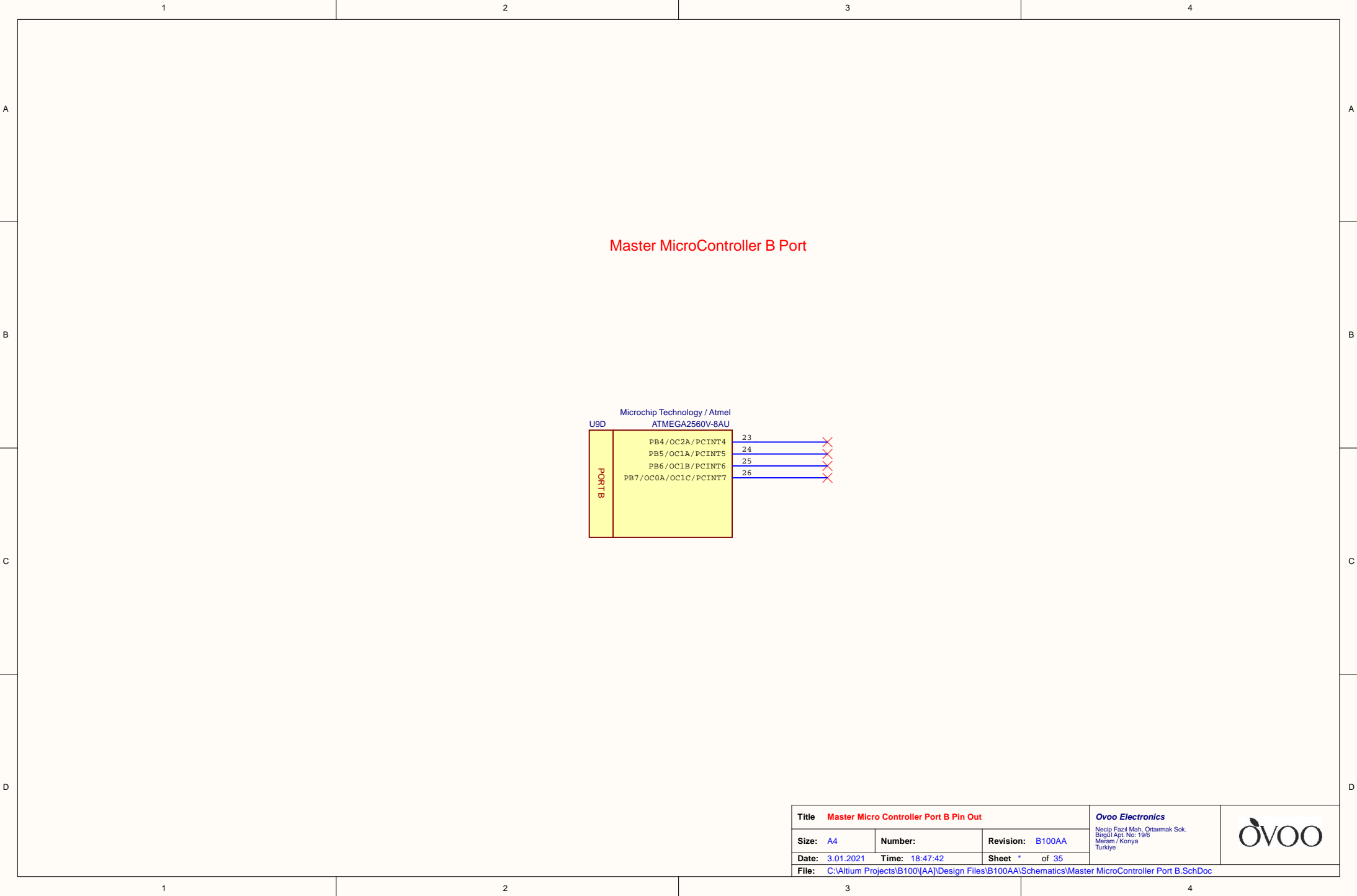
Main Microcontroller Status LED Indicators



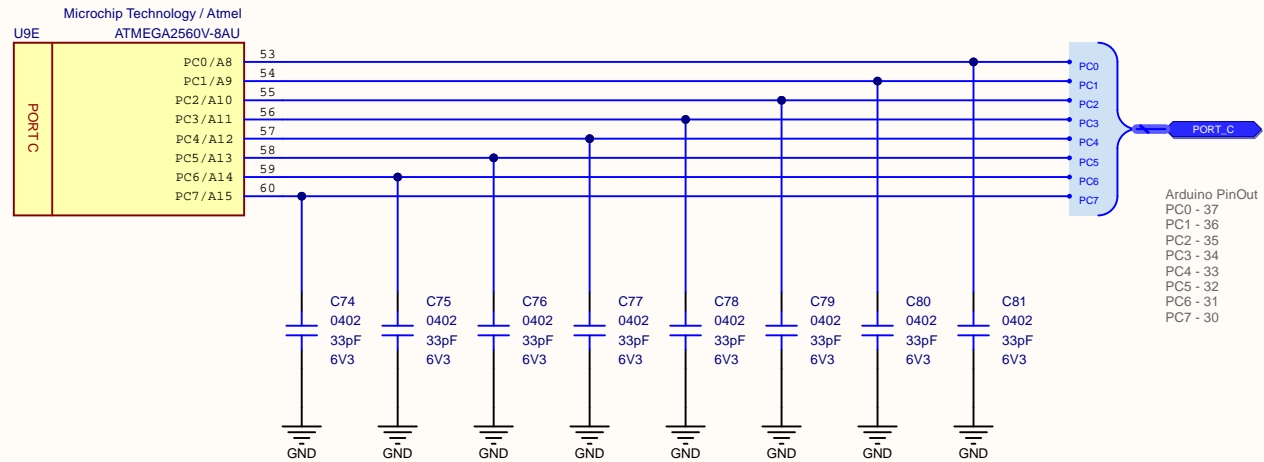
Master MicroController A Port




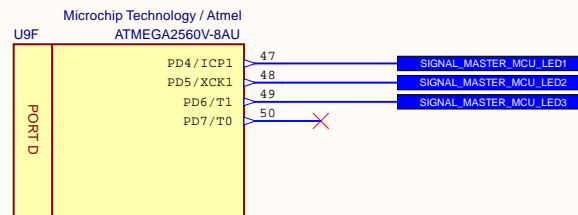
Title Master Micro Controller Port A Pin Out			Ovoo Electronics Necip Fazıl Mah. Ortarmak Sok. Bırgölü Apt. No: 19/6 Meram / Konya Türkiye	
Size: A4	Number:	Revision: B100AA		
Date: 3.01.2021	Time: 18:47:42	Sheet * of 35		
File: C:\Altium Projects\B100\AA\Design Files\B100AA\Schematics\Master MicroController Port A.SchDoc				




Master MicroController C Port



Title Master Micro Controller Port C Pin Out			Ovoo Electronics Necip Fazıl Mah. Ortarmak Sok. Bırgölü Apt. No: 19/6 Meram / Konya Türkiye	
Size: A4	Number:	Revision: *		
Date: 3.01.2021	Time: 18:47:42	Sheet * of 35		
File: C:\Altium Projects\B100\AA\Design Files\B100AA\Schematics\Master MicroController Port C.SchDoc				



Title Master Micro Controller Port D Pin Out			Ovoo Electronics Necip Fazıl Mah. Ortarmak Sok. Bırgölü Apt. No: 19/6 Meram / Konya Türkiye	
Size: A4	Number:	Revision: B100AA		
Date: 3.01.2021	Time: 18:47:42	Sheet * of 35		
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A

B

C

D

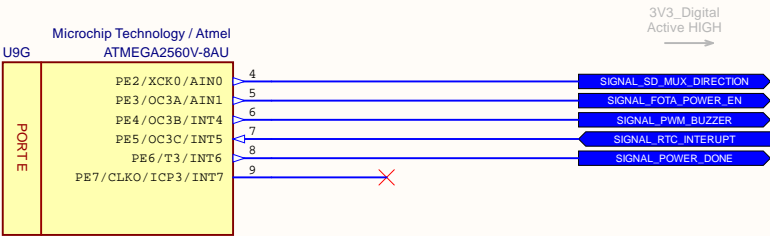
A


B

C

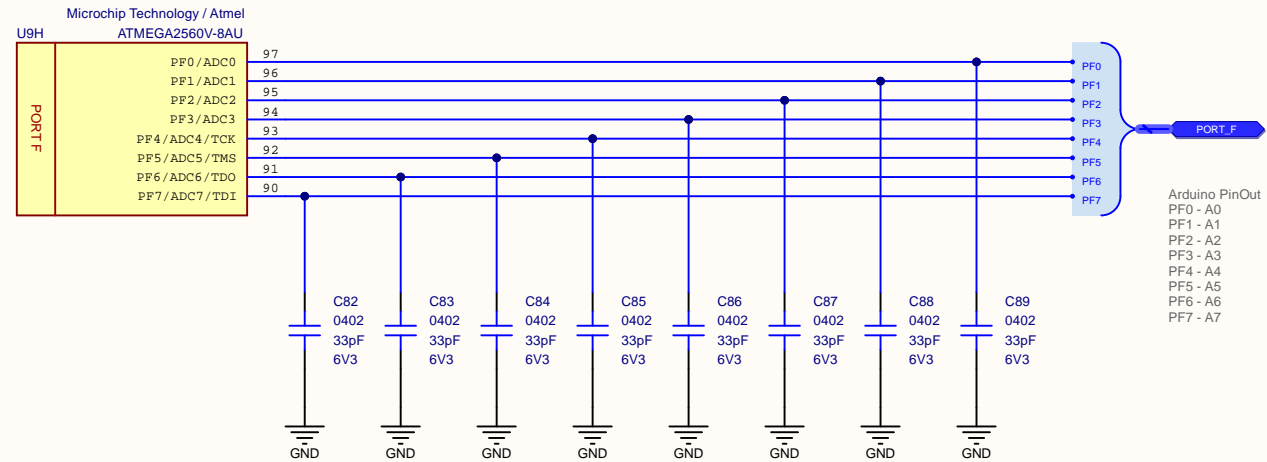
D


Master MicroController E Port



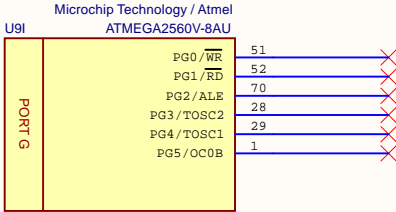
Title Master Micro Controller Port E Pin Out			Ovoo Electronics Necip Fazıl Mah. Ortairmak Sok. Bırgöl Apt. No: 19/6 Meram / Konya Türkiye	
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Date: 3.01.2021	Time: 18:47:42	Sheet * of 35		
File: C:\Altium Projects\B100\AA\Design Files\B100AA\Schematics\Master MicroController Port E.SchDoc				


Master MicroController F Port



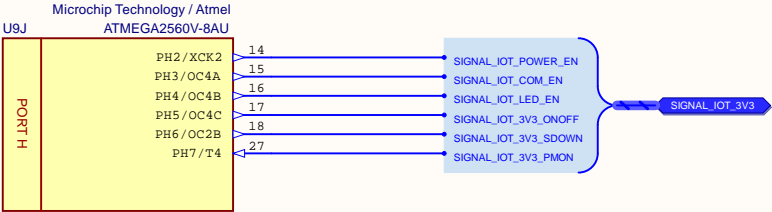
Title Master Micro Controller Port F Pin Out			Ovoo Electronics Necip Fazıl Mah. Ortarmak Sok. Bırgölü Apt. No: 19/6 Meram / Konya Türkiye	
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Date: 3.01.2021	Time: 18:47:42	Sheet * of 35		
File: C:\Altium Projects\B100\AA\Design Files\B100AA\Schematics\Master MicroController Port F.SchDoc				


Master MicroController G Port



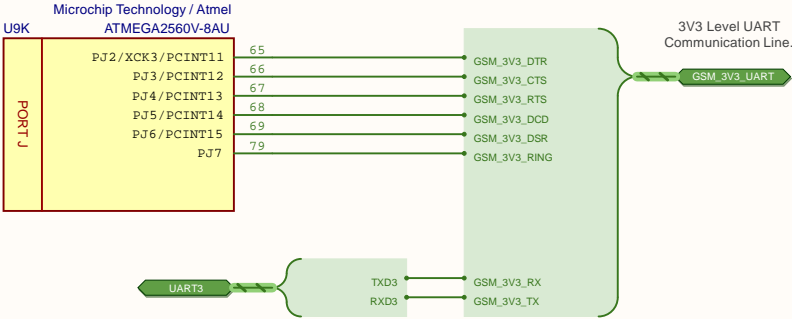
Title Master Micro Controller Port G Pin Out			<div>Ovoo Electronics</div> <div>Necip Fazıl Mah. Ortairmak Sok. Bırgöl Apt. No: 19/6 Meram / Konya Türkiye</div> <div></div>
Size: A4	Number:	Revision: B100AA	
Date: 3.01.2021	Time: 18:47:42	Sheet * of 35	
File: C:\Altium Projects\B100\AA\Design Files\B100AA\Schematics\Master MicroController Port G.SchDoc			


Master MicroController H Port



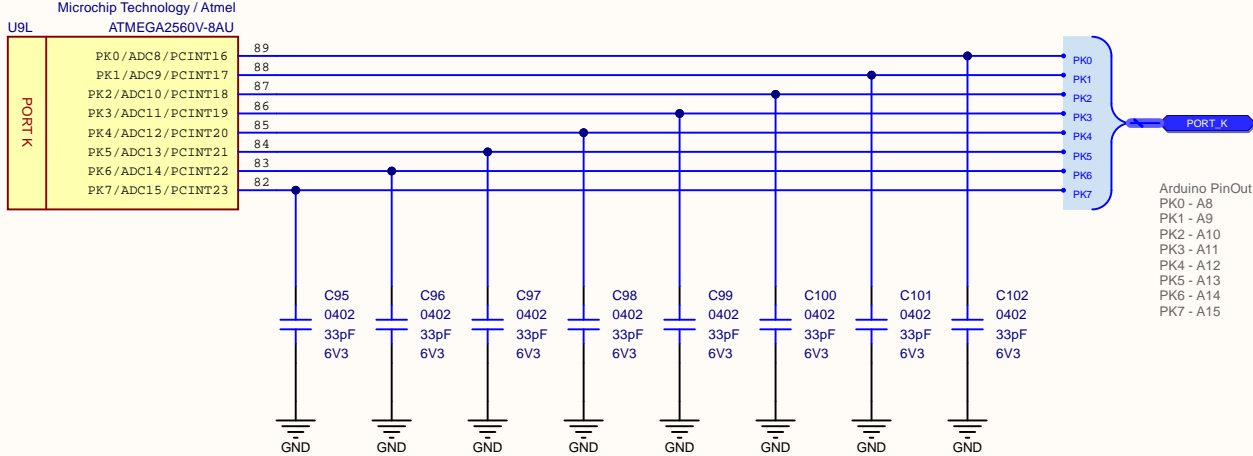
Title Master Micro Controller Port H Pin Out			Ovoo Electronics Necip Fazıl Mah. Ortairmak Sok. Bırgöl Apt. No: 19/6 Meram / Konya Türkiye	
Size: A4	Number:	Revision: B100AA		
Date: 3.01.2021	Time: 18:47:42	Sheet * of 35		
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GSM IoT Communication Pins

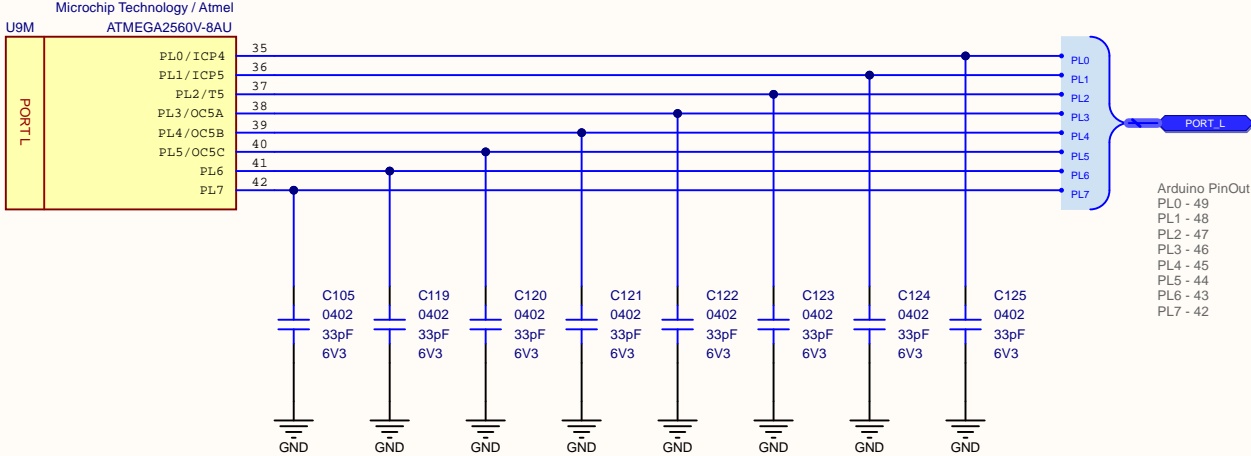


Title Master Micro Controller Port J Pin Out			Ovoo Electronics	
Size: A4	Number:	Revision: B100AA	Necip Fazıl Mah. Ortairmak Sok. Bırgöl Apt. No: 19/6 Meram / Konya Türkiye	
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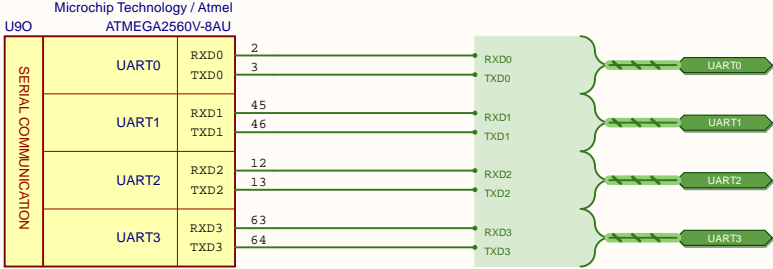
Master MicroController K Port



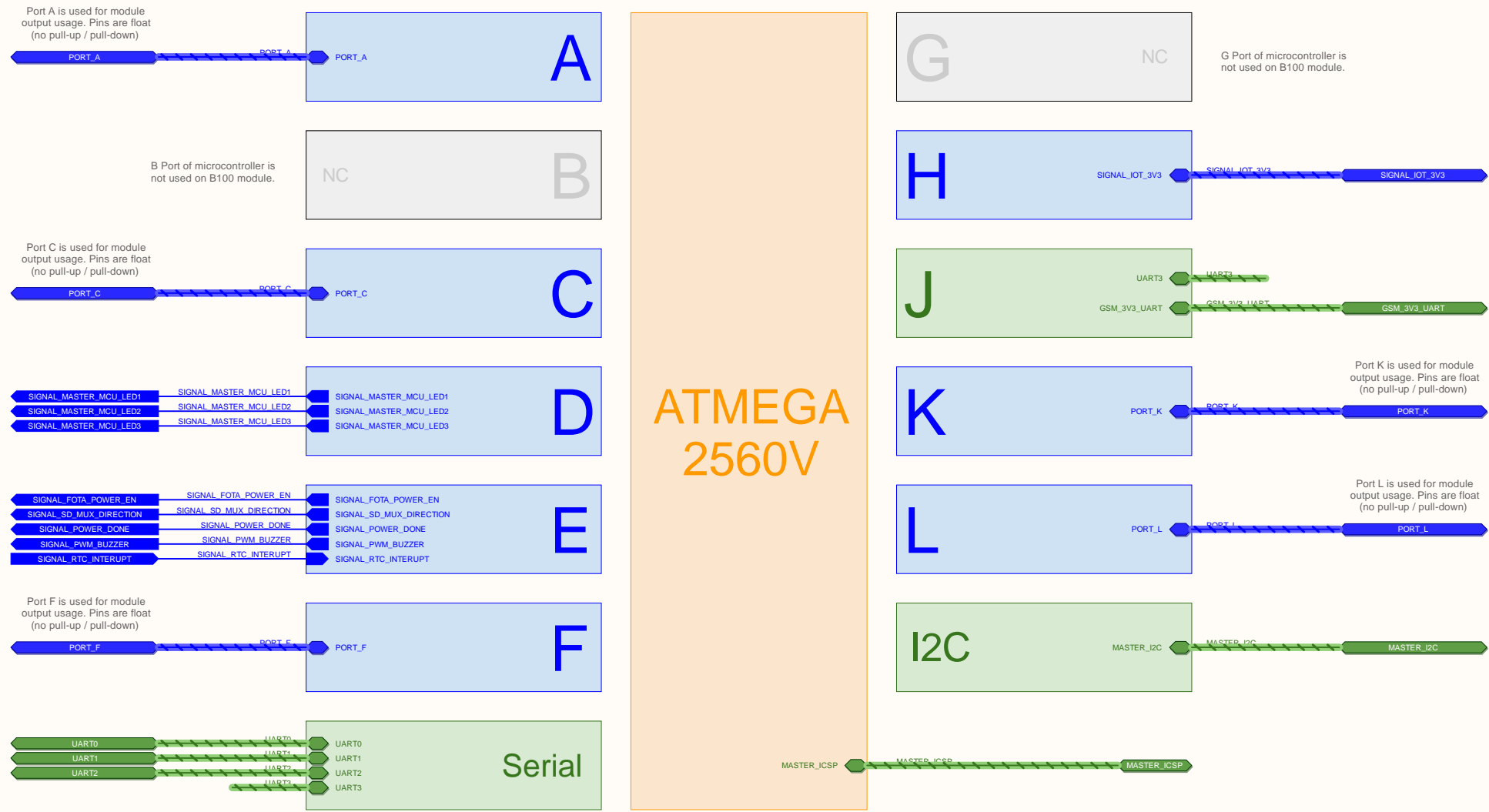
Master MicroController L Port



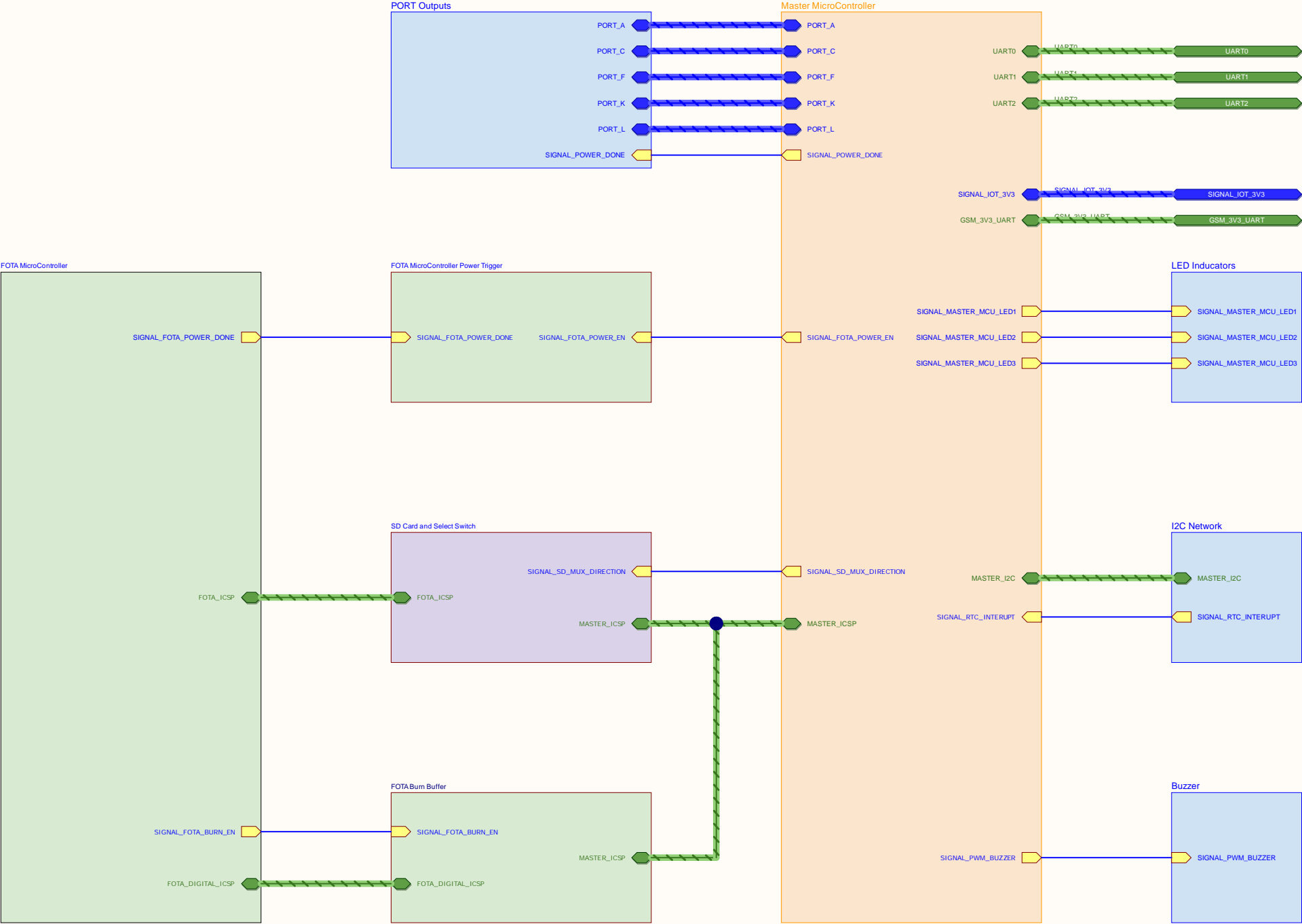
Communication Ports



Master MicroController



B100 MicroController



A

B

C

D

A

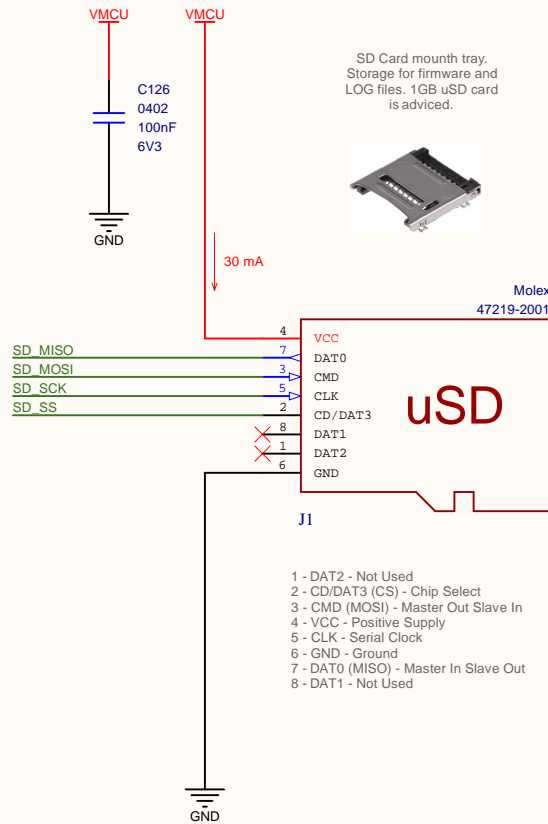
B

C

D

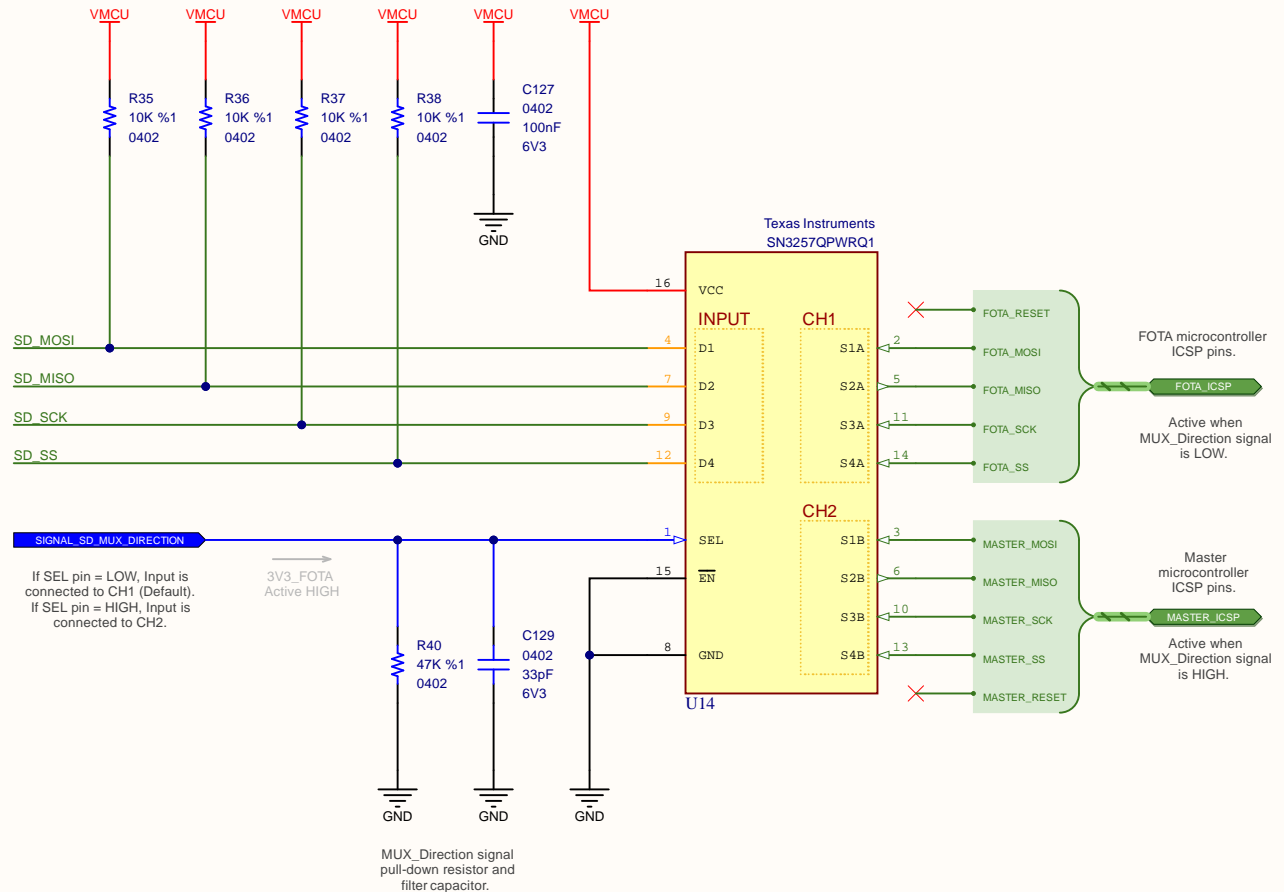
Decoupling Capacitor.
As close as possible to
uSD tray.

SD Card



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

SPI Selection Switch



Title SD Card & Select Switch

Size: A4

Number:

Revision: B100AA

Date: 3.01.2021

Time: 18:47:42

Sheet * of 35

File: C:\Altium Projects\B100\AA\Design Files\B100AA\Schematics\SD Card.SchDoc

Ovoo Electronics

Necip Fazıl Mah. Ortamak Sok.
Bırgölü Apt. No: 19/6
Meram / Konya
Türkiye

OVOO