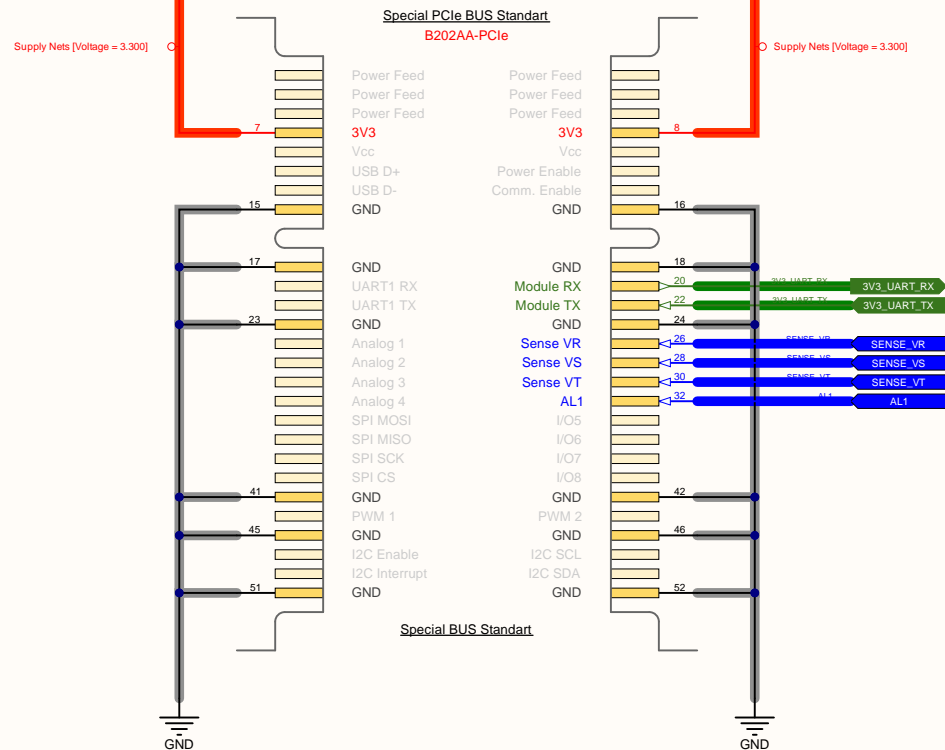

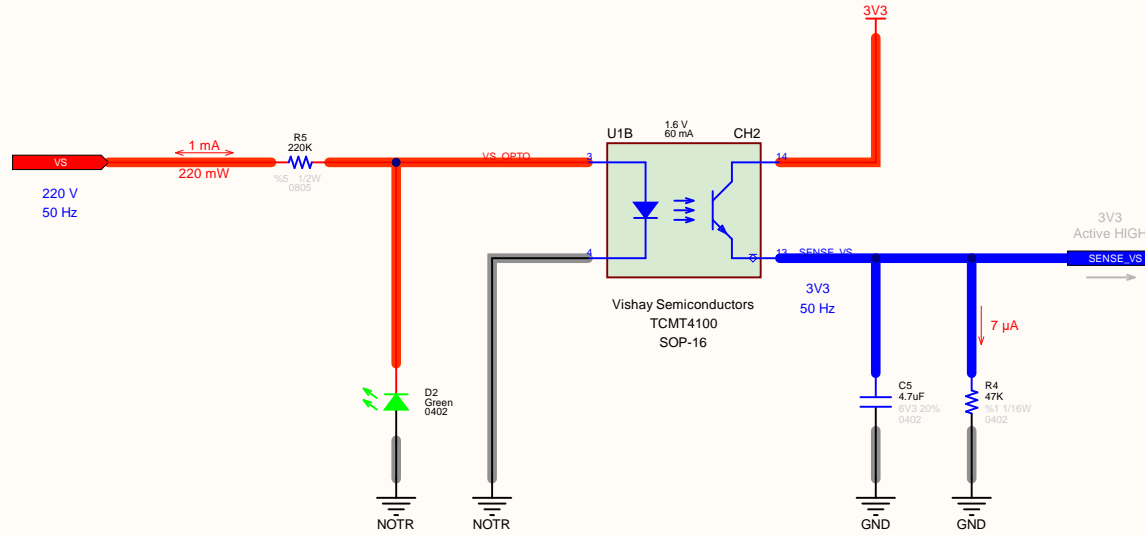



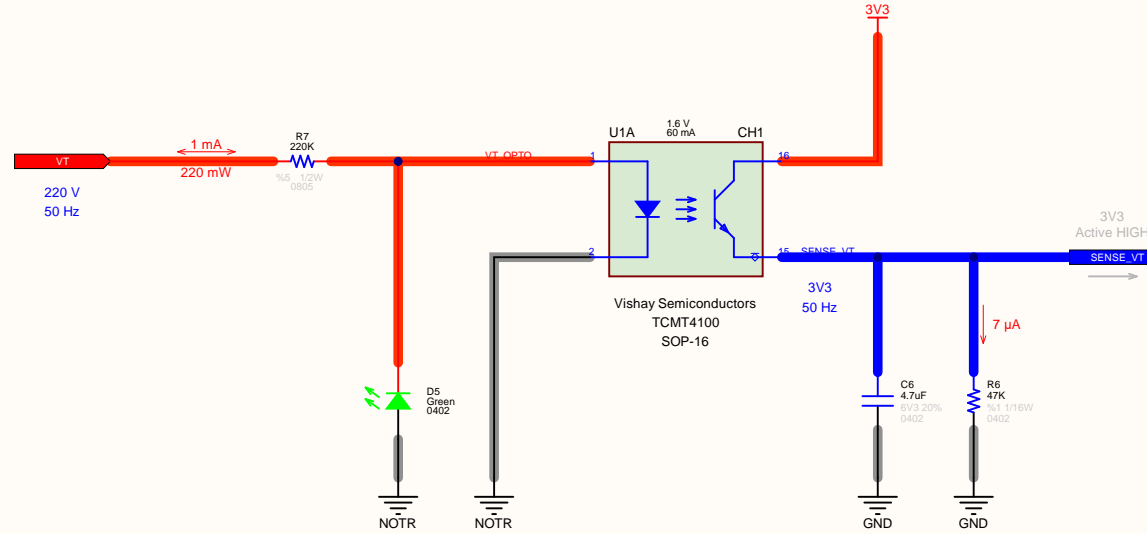
J1
Bus Type : Mini PCI Express
Mating Connector : TE 2041262-1
Pitch : 0.8 mm
Number of Positions : 52




Card Edge Connector			Engineer : Gunce Akkoyun	- Buyuk Kayacik Mah. 4. OSB 103. Cad. No : 12 Selcuklu / Konya Türkiye	
			Customer : -		
Size : A4	Project : PollyPhase Energy Analyzer		Product ID : B202AA-PCle		
Date : 13.03.2023	Time : 16:29:04	Page : 2 / 12	Module ID : B202AA-PCle		
File : Card Edge Connector.SchDoc			Version : R1		
			Revision : 00.00.01		



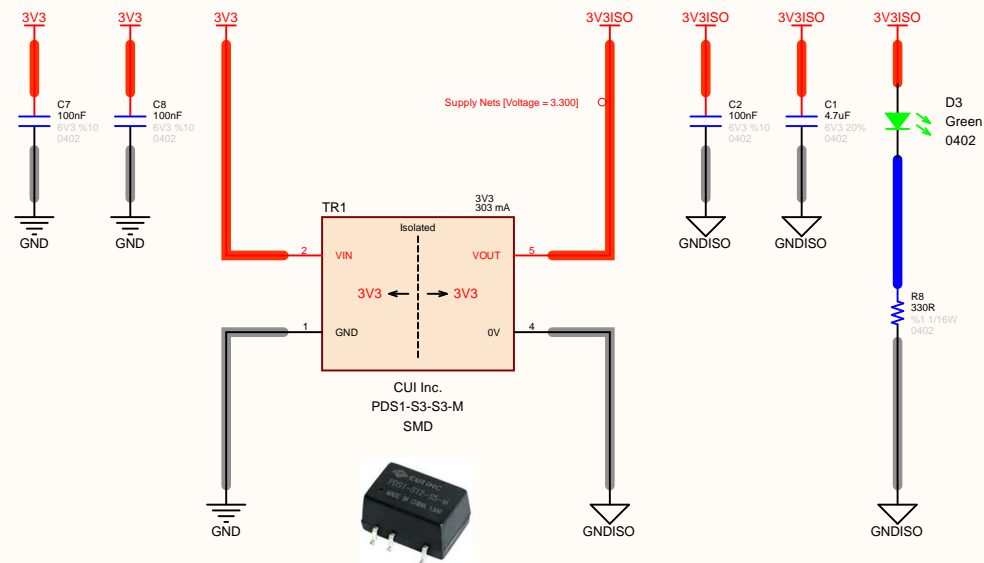
S Phase Sense Signal Isolation			Engineer : Gunce Akkoyun	- Buyuk Kayacik Mah. 4. OSB 103. Cad. No : 12 Selcuklu / Konya Türkiye	
Size : A4	Project : PollyPhase Energy Analyzer		Customer : -		
Date : 13.03.2023	Time : 16:29:04	Page : 4 / 12	Product ID : B202AA-PCle		
File : S Phase Sense Signal Isolation.SchDoc			Module ID : B202AA-PCle		
			Version : R1		
			Revision : 00.00.01		




T Phase Sense Signal Isolation			Engineer : Gunce Akkoyun	-	Buyuk Kayacik Mah. 4. OSB 103. Cad. No : 12 Selcuklu / Konya Türkiye	
			Customer : -			
Size : A4		Project : PollyPhase Energy Analyzer	Product ID : B202AA-PCle			
			Module ID : B202AA-PCle			
Date : 13.03.2023		Time : 16:29:04	Page : 5 / 12			
File : T Phase Sense Signal Isolation.SchDoc			Version : R1			
			Revision : 00.00.01			

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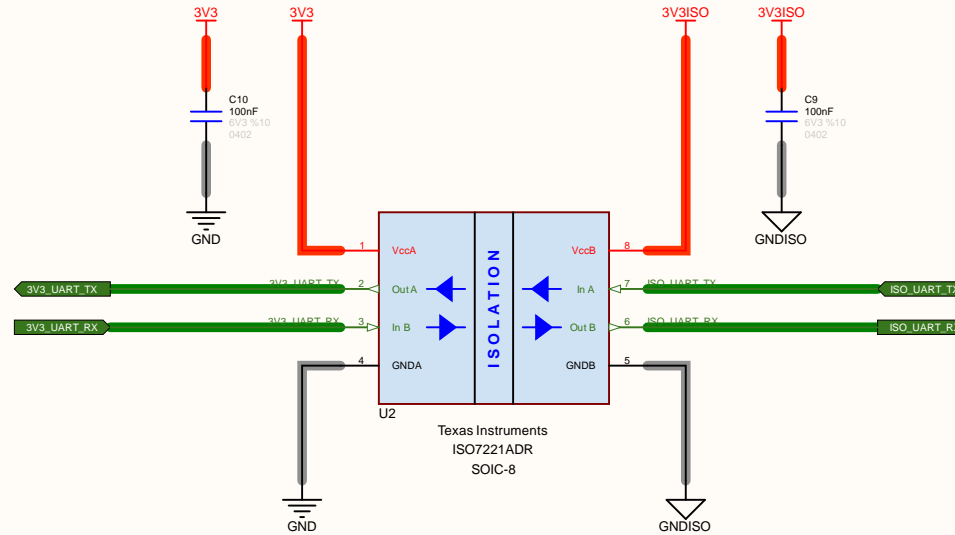


www.github.com/akkoyun/B202AA-PCle

Power Isolation				Engineer :	Gunce Akkoyun	- Buyuk Kayacik Mah. 4. OSB 103. Cad. No : 12 Selcuklu / Konya Türkiye	
				Customer :	-		
Size : A4		Project : PollyPhase Energy Analyzer		Product ID :	B202AA-PCle		
				Module ID :	B202AA-PCle		
Date : 13.03.2023		Time : 16:29:04		Version :	R1		
Page : 6 / 12				Revision :	00.00.01		
File : Power Isolation.SchDoc							

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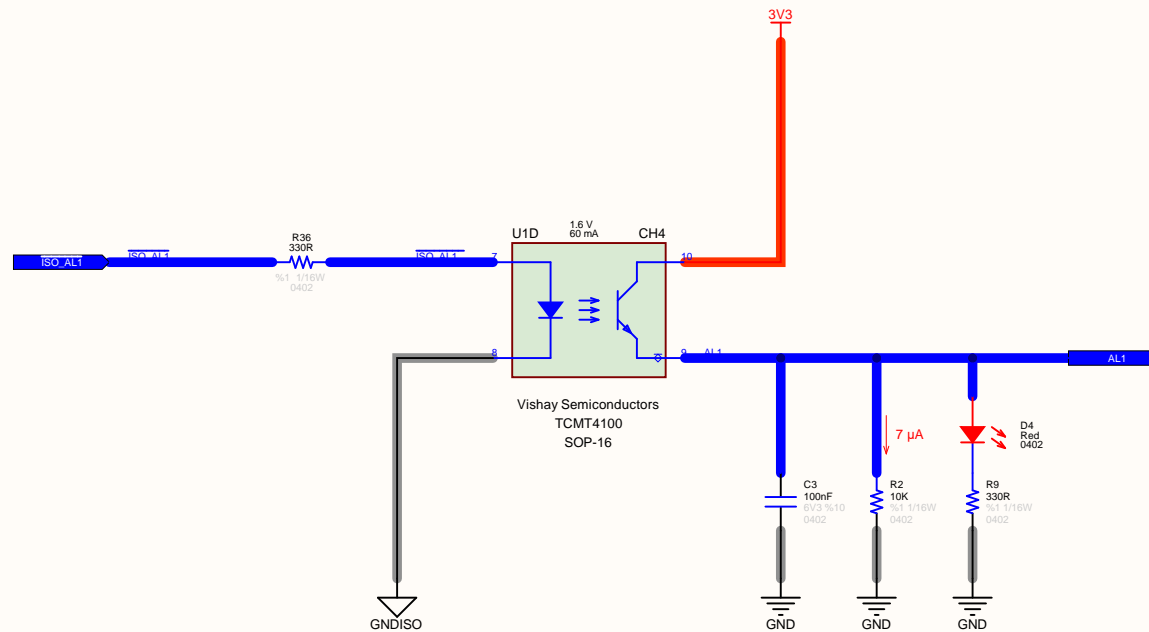


www.github.com/akkoyun/B202AA-PCle


UART Isolation			Engineer : Güne Akkoyun	-	<div>Buyuk Kayacik Mah. 4. OSB 103. Cad. No : 12 Selcuklu / Konya Türkiye</div> <div>stf</div>
Size : A4	Project : PollyPhase Energy Analyzer		Customer : -		
Date : 13.03.2023	Time : 16:29:04	Page : 7 / 12	Product ID : B202AA-PCle		
File : UART Comm Isolation.SchDoc			Module ID : B202AA-PCle		
			Version : R1		
			Revision : 00.00.01		

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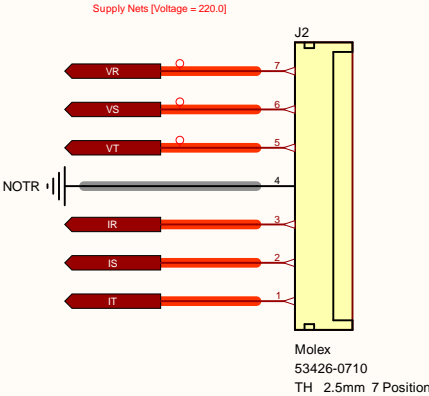


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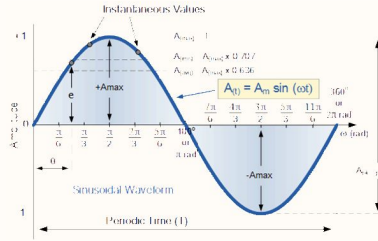
AL1 Signal Isolation				Engineer : Gunce Akkoyun	- Buyuk Kayacik Mah. 4. OSB 103. Cad. No : 12 Selcuklu / Konya Türkiye	
Size : A4		Project : PollyPhase Energy Analyzer		Customer : -		
Date : 13.03.2023		Time : 16:29:04	Page : 8 / 12	Product ID : B202AA-PCle		
File : AL1 Signal Isolation.SchDoc			Module ID : B202AA-PCle			
			Version : R1			
				Revision : 00.00.01		

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Energy Inputs			Engineer : Günc Akkoyun	- Buyuk Kayacık Mah. 4. OSB 103. Cad. No : 12 Selcuklu / Konya Türkiye	
Size : A4			Customer : -		
Project : PollyPhase Energy Analyzer			Product ID : B202AA-PCle		
Date : 13.03.2023			Module ID : B202AA-PCle		
Time : 16:29:04			Version : R1		
Page : 9 / 12			File : Energy Inputs.SchDoc	Revision : 00.00.01	



$V_{rms} = 220V$
 $V_{max} = V_{rms} / 0.707 = 312V$
 $V_{pk-pk} = 624V$

$V_{max} = 312V$
 $R1 = 2000K$
 $R2 = 750R$
 $V_{out} = (V_{in} \times R2) / (R1 + R2)$
 $V_{out} = (312 \times 750) / (2000000 + 750)$
 $V_{out} = 0V117$

max : 160 μA
max : 48.65 mW

$V_{out_max} = 117mV$

MAX78630 Vin Range = -250mV - + 250mV
Module Max Input Range = 667V pk-pk
Module Max Input Range = 471Vrms


Voltage Divider Resistors

Filter Capacitors

Filter Capacitors

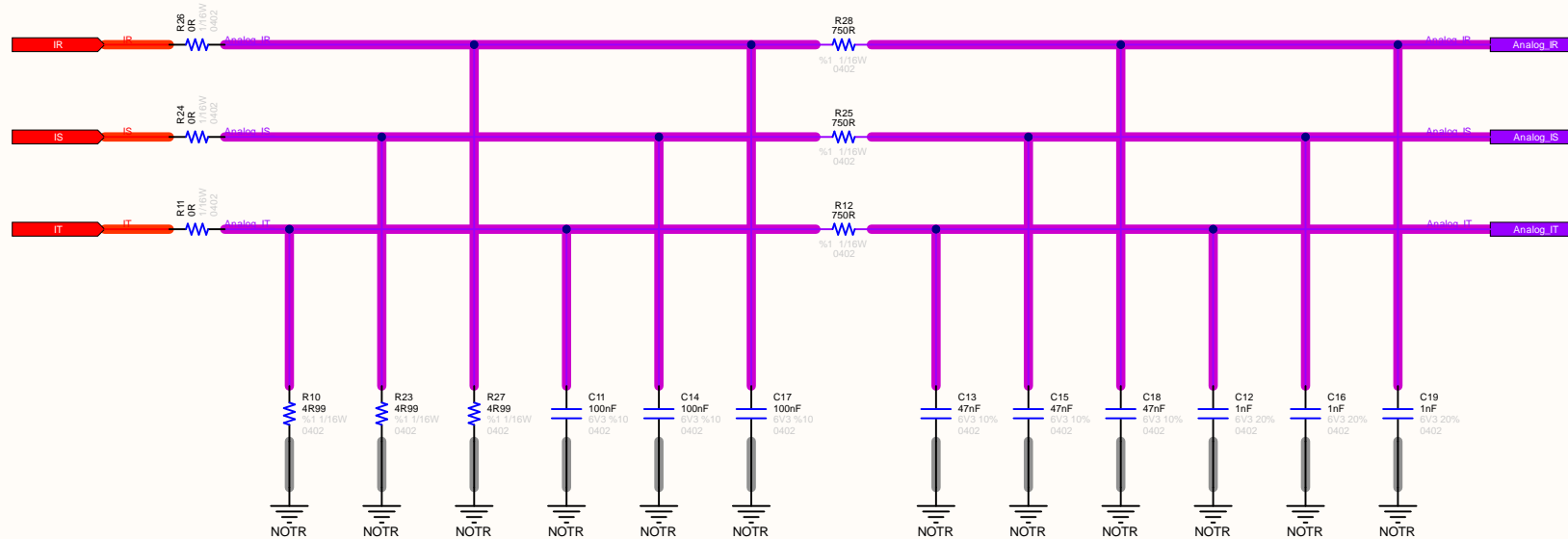
$F = 50Hz$
Impedance = 31831R
 $I_{c_max} : 3.68 \mu A$

$F = 50Hz$
Impedance = 3183099R
 $I_{c_max} : 0.0368 \mu A$


3 Phase Voltage Dividers			Engineer : Guncce Akkoyun	- Buyuk Kayacik Mah. 4. OSB 103. Cad. No : 12 Selcuklu / Konya Türkiye	
			Customer : -		
Size : A4			Product ID : B202AA-PCle		
Project : PollyPhase Energy Analyzer			Module ID : B202AA-PCle		
Date : 13.03.2023			Version : R1		
Time : 16:29:05			Revision : 00.00.01		
Page : 10 / 12					
File : Phase Voltage Dividers.SchDoc					

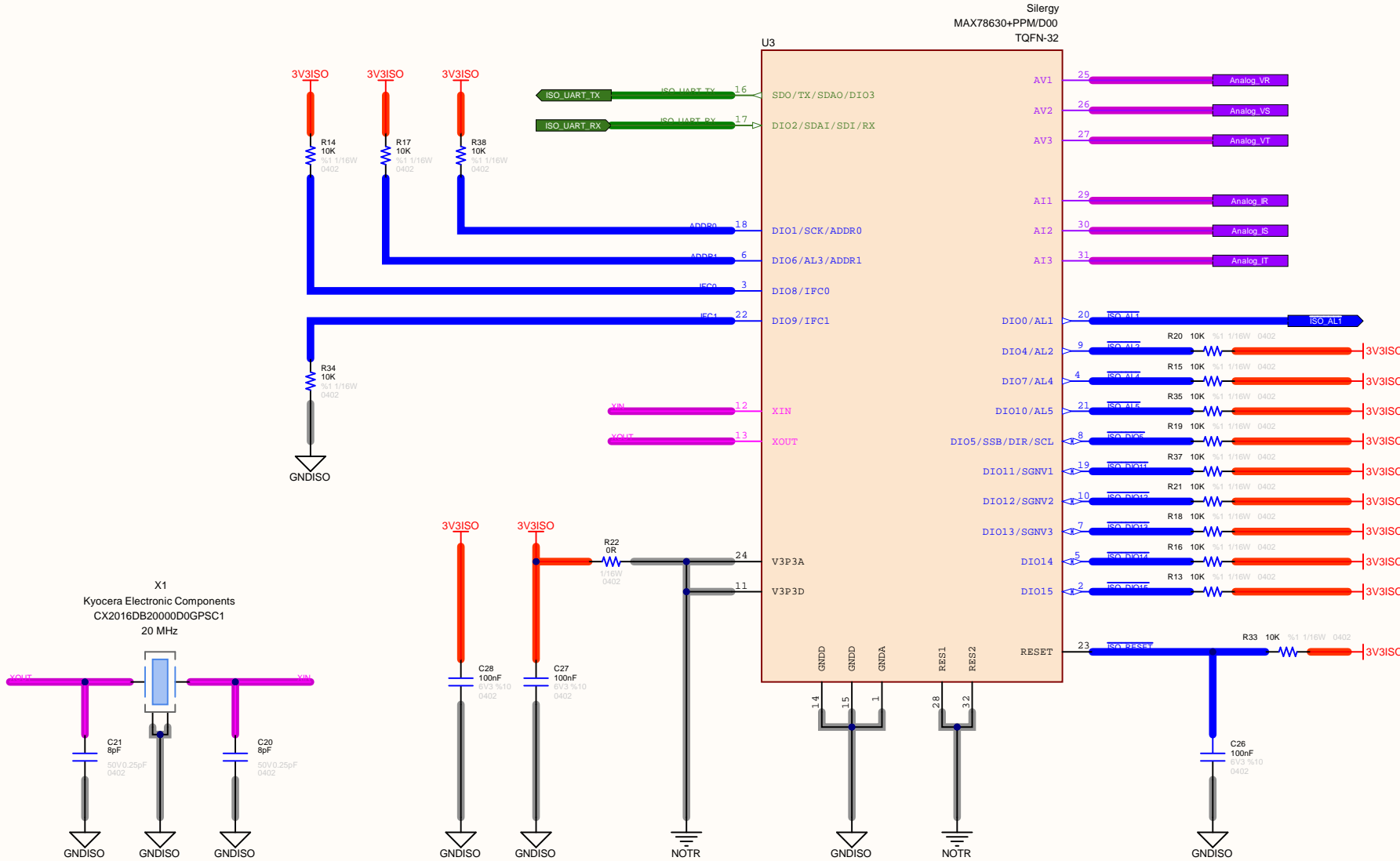
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3 Phase Current Voltage Dividers			Engineer : Gunce Akkoyun	- Buyuk Kayacik Mah. 4. OSB 103. Cad. No : 12 Selcuklu / Konya Türkiye	
			Customer : -		
Size : A4	Project : PollyPhase Energy Analyzer		Product ID : B202AA-PCle		
			Module ID : B202AA-PCle		
Date : 13.03.2023	Time : 16:29:05	Page : 11 / 12	Version : R1		
File : Current Voltage Dividers.SchDoc			Revision : 00.00.01		



MAX78630 SOC Core				Engineer : Gunce Akkoyun	<div>-</div> <div>Buyuk Kayacik Mah. 4. OSB</div> <div>103. Cad. No : 12</div> <div>Selcuklu / Konya Türkiye</div>	<div></div>
Size : A4		Project : PollyPhase Energy Analyzer		Customer : -		
Date : 13.03.2023		Time : 16:29:05		Product ID : B202AA-PCle		
		Page : 12 / 12		Module ID : B202AA-PCle		
File : MAX78630 SOC.SchDoc				Version : R1		
				Revision : 00.00.01		