

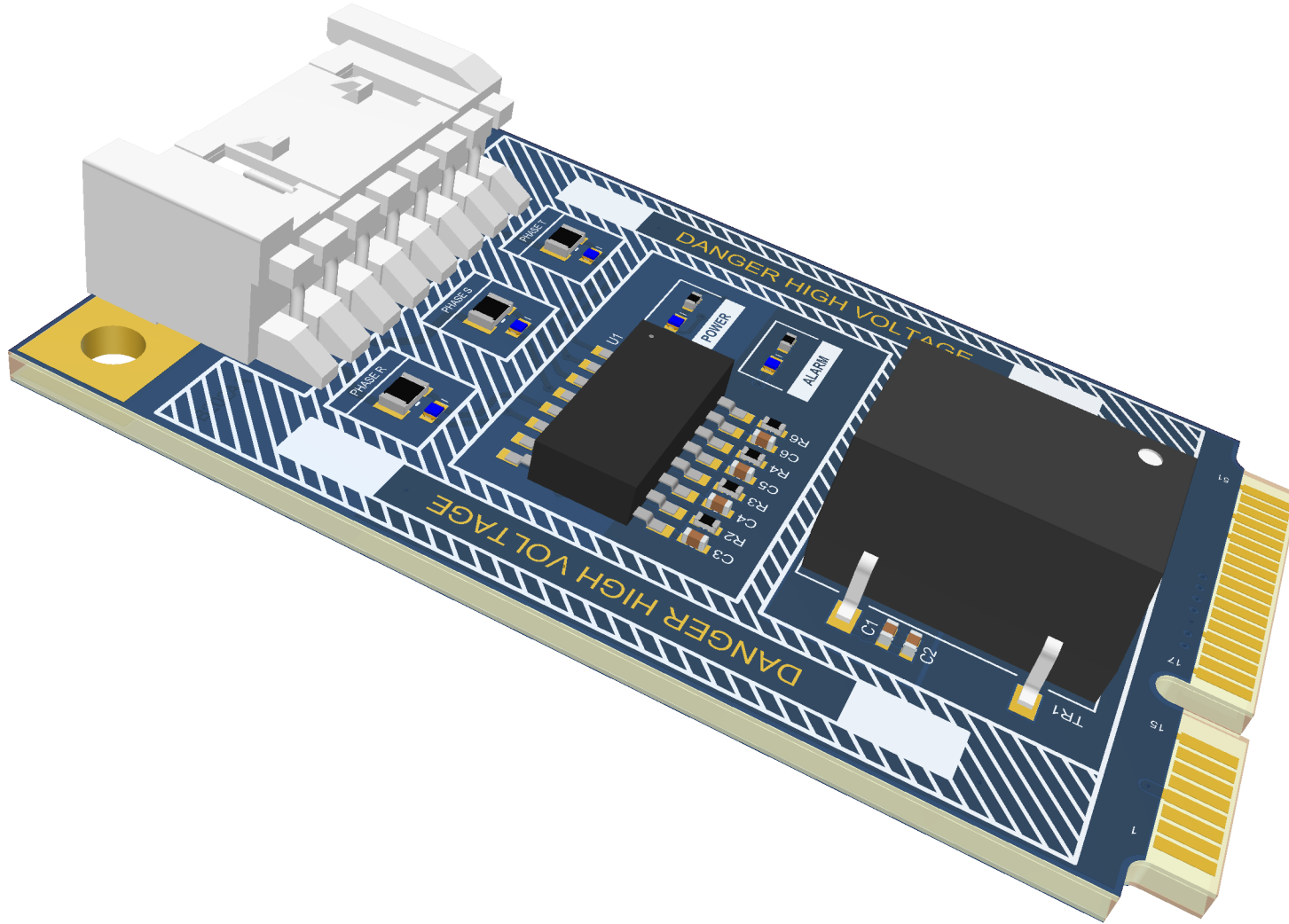
B202AA-PCle module is an energy measurement module (EMM) for poly phase power monitoring systems. It is designed for real-time monitoring for a variety of typical three-phase configurations in industrial applications. It is available in a mini PCIe size PCB module.

The B202AA-PCle provides up to six analog inputs for interfacing to voltage and current sensors. Scaled voltages from the sensors are fed to the single converter front-end utilizing a high-resolution delta-sigma converter. Supported current sensors include current transformers (CT), Rogowski coils, and resistive shunts.

An embedded 24-bit measurement processor and firmware perform all necessary computations and data formatting for accurate reporting to the host. With integrated flash memory for storing nonvolatile calibration coefficients and device configuration settings, the B202 is capable of being a completely autonomous solution.

www.github.com/akkoyun/B202AA-PCle

B202AA-PCle			Engineer : Guncce Akkoyun	- Buyuk Kayacak Mah. 4. OSB 103. Cad. No : 12 Selcuklu / Konya/Türkiye	
Size : A4	Project :PolyPhase Energy Analyzer		Customer :		
Date : 13.03.2023	Time : 13:55	Page : 1 / 6	Product ID : B202AA-PCle		
File : B202AA-PCle.PCBDwf			Module ID : B202AA-PCle		
			Version : R1		
			Revision : 00.00.01		



Layer Stack Legend

Material	Layer	Thickness	Dielectric Material	Type	Gerber
	Top Overlay			Legend	GTO
Surface Material	Top Solder	0.03mm	SM-001	Solder Mask	GTS
Nickel, Gold	Top Copper Plating	0.02mm		Surface Finish	
CF-004	Top Layer	0.04mm		Signal	GTL
Prepreg		0.21mm	PP-022	Dielectric	
CF-004	Int1	0.04mm		Signal	G1
Core		0.99mm	Core-042	Dielectric	
CF-004	Int2	0.04mm		Signal	G2
Prepreg		0.21mm	PP-022	Dielectric	
CF-004	Bottom Layer	0.04mm		Signal	GBL
Nickel, Gold	Bottom Copper Plating	0.02mm		Surface Finish	
Surface Material	Bottom Solder	0.03mm	SM-001	Solder Mask	GBS
	Bottom Overlay			Legend	GBO

Total thickness: 1.64mm


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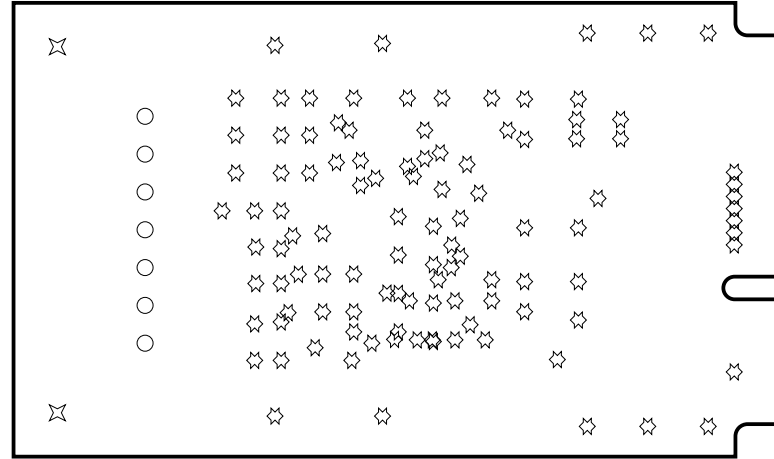
Property of-

Bill Of Materials

Designator	Quantity	Manufacturer Name	Manufacturer Part Number
C1, C4, C5, C6	4	KEMET	C0402C475M9PACTU
C2, C3, C7, C8, C9, C10, C11, C14, C17, C23, C24, C26, C27, C28, C29	15	AVX	04026D104KAT4A
C12, C16, C19, C22, C25, C30	6	AVX	04026C102MAT2A
C13, C15, C18	3	AVX	04026C473KAT2A
C20, C21	2	KYOCERA AVX	04025A8R0CAT2A
D1, D2, D3, D5	4	ROHM Semiconductor	SML-P12MTT86R
D4	1	ROHM Semiconductor	SML-P12VTT86R
J2	1	Molex	53426-0710
R1, R5, R7	3	Vishay Dale	CRCW0805220KJNEAHP
R2, R13, R14, R15, R16, R17, R18, R19, R20, R21, R33, R34, R35, R37, R38	15	Vishay	CRCW040210K0FKED
R3, R4, R6	3	Vishay	CRCW040247K0FKED
R8, R9, R36	3	Vishay	CRCW0402330RFKED
R10, R23, R27	3	Bourns	CRT0402-FZ-4R99GLF
R11, R22, R24, R26	4	Vishay	CRCW04020000Z0ED
R12, R25, R28	3	Vishay	CRCW0402750RFKED
R29, R31, R39	3	Vishay	MCU0805MD2004BP500
R30, R32, R40	3	Vishay	MCS04020D7500BE000
TR1	1	CUI Inc.	PDS1-S3-S3-M
U1	1	Vishay Semiconductors	TCMT4100
U2	1	Texas Instruments	ISO7221ADR
U3	1	Silergy	MAX78630+PPM/D00
X1	1	Kyocera Electronic Components	CX2016DB20000D0GPSC1

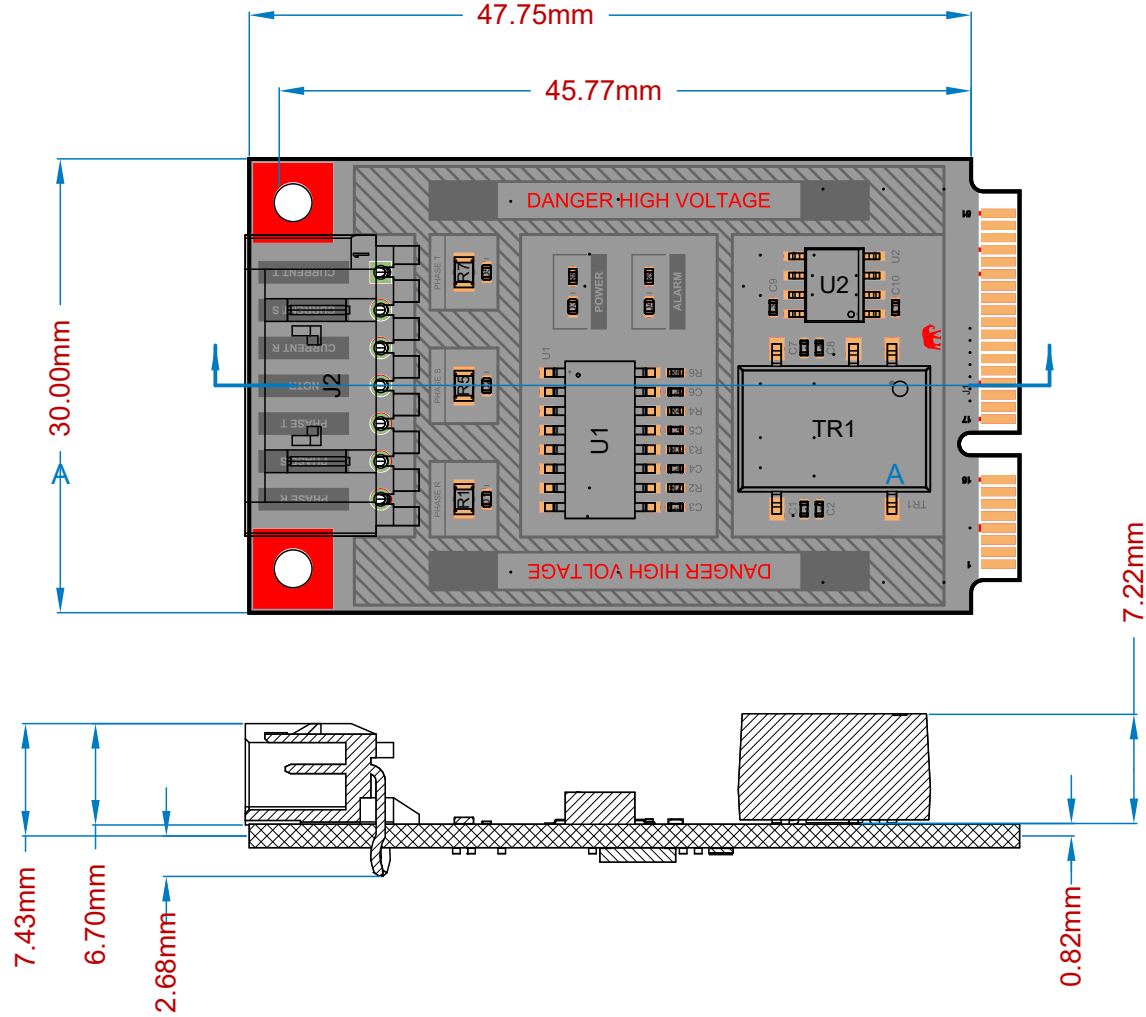
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B202AA-PCle			Engineer : Gunce Akkoyun	- Buyuk Kayacik Mah. 4. OSB 103. Cad. No : 12 Selcuklu / Konya Türkiye	
Size : A4		Project : PollyPhase Energy Analyzer	Customer : -		
Date : 13.03.2023		Time : 13:55	Product ID : B202AA-PCle		
File : B202AA-PCle.PCBDwf		Page : 4 / 6	Module ID : B202AA-PCle		
			Version : R1		
			Revision : 00.00.01		



Drill Table

Symbol	Count	Hole Size	Plated	Hole Tolerance
☆	108	0.20mm	Plated	
○	7	1.00mm	Plated	
✧	2	2.60mm	Plated	+/-0.05mm
	117 Total			



B202AA-PCle			Engineer : Gunce Akkoyun	<div>Buyuk Kayacik Mah. 4. OSB 103. Cad. No : 12 Selcuklu / Konya Türkiye</div>	
Size : A4	Project : PollyPhase Energy Analyzer		Customer : -		
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