

## TIDA-010266 REV A Bill of Materials

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
!PCB1	1		TIDA-010266	Any	Printed Circuit Board	
C1, C2, C3, C11, C12	5	4.7µF	GRM188R61C475KE11D	Murata	Chip Multilayer Ceramic Capacitors for General Purpose, 0603, 4.7uF, X5R, 15%, 10%, 16V	0603
C4	1	1100pF	GRM1885C1H112JA01D	MuRata	CAP, CERM, 1100 pF, 50 V, +/- 5%, C0G/NP0, 0603	0603
C5	1	1uF	GCM21BR71H105KA03K	MuRata	CAP, CERM, 1 µF, 50 V,+/- 10%, X7R, AEC-Q200 Grade 1, 0805	0805
C6	1	10uF	GRM188R61A106ME69D	MuRata	CAP, CERM, 10 uF, 10 V, +/- 20%, X5R, 0603	0603
C7, C13, C15, C16	4	100nF	GRM155R71E104KE14J	Murata	Chip Multilayer Ceramic Capacitors for General Purpose, 0402, 0.10uF, X7R, 15%, 10%, 25V	0402
C8	1	0.47uF	GRM155C80J474KE19D	MuRata	CAP, CERM, 0.47 uF, 6.3 V, +/- 10%, X6S, 0402	0402
C9, C10	2	100nF	GCJ188R71E104KA12D	Murata	Cap Ceramic 0.1uF 25V X7R 10% Pad SMD 0603 Soft Termination +125°C Automotive T/R	0603
C14	1	22uF	CL10A226MO7JZNC	Samsung	CAP, CERM, 22 µF, 16 V,+/- 20%, X5R, 0603	0603
C17, C18	2	100pF	GCM1885C2A101JA16J	Murata	Ceramic Capacitor for Automotive 100pF ±5% 100VDC C0G 0603 Paper T/R	0603
H1, H2, H3, H4	4		NY PMS 440 0025 PH	B&F Fastener Supply	Machine Screw, Round, #4-40 x 1/4, Nylon, Philips panhead	Screw
H5, H6, H7, H8	4		1902C	Keystone	Standoff, Hex, 0.5"L #4-40 Nylon	Standoff
J1	1		691 101 710 002	Würth Elektronik	Terminal Block, 5 mm, 2x1, Tin, TH	Terminal Block, 5 mm, 2x1, TH
J2	1		FTSH-105-01-L-DV-K	Samtec	Header(Shrouded), 1.27mm, 5x2, Gold, SMT	Header(Shrouded), 1.27mm, 5x2, SMT
J3	1		90121-0766	Molex	Header, 2.54mm, 6x1, Gold, R/A, TH	Header, 2.54mm, 6x1, R/A, TH
J4	1		61300211121	Würth Elektronik	Header, 2.54 mm, 2x1, Gold, TH	Header, 2.54mm, 2x1, TH
J5, J6, J8, J10	4		61300311121	Würth Elektronik	Header, 2.54 mm, 3x1, Gold, TH	Header, 2.54mm, 3x1, TH
J7	1		TSW-110-08-G-S	Samtec	Header, 2.54mm, 10x1, Gold, TH	Header, 2.54mm, 10x1, TH
J9	1		M22-5330405	Harwin	Header, 2mm, 4x1, Gold, Black, R/A, SMT	Header, 2mm, 4x1, R/A, SMT
R1, R5	2	27	CRCW060327R0JNEA	Vishay-Dale	RES, 27, 5%, 0.1 W, 0603	0603
R2	1	47.0k	CRCW060347K0FKEA	Vishay-Dale	RES, 47.0 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R3	1	330	CRCW0603330RFKEA	Vishay	RES Thick Film, 330Ω, 1%, 0.1W, 100ppm/°C, 0603	0603
R4, R6, R7, R8	4	10.0k	CRCW060310K0FKEA	Vishay-Dale	RES, 10.0 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R9, R10	2	270k	CRCW0603270KFKEA	Vishay	RES Thick Film, 270kΩ, 1%, 0.1W, 100ppm/°C, 0603	0603
R11, R13, R14, R16, R17	5	20.0k	CRCW060320K0FKEA	Vishay-Dale	RES, 20.0 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R12, R15	2	499	CRCW0603499RFKEAC	Vishay-Dale	RES, 499, 1%, 0.1 W, 0603	0603
R18	1	45.3k	CRCW060345K3FKEA	Vishay-Dale	RES, 45.3 k, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603

Designator	Quantity	Value	PartNumber	Manufacturer	Description	PackageReference
R19, R20	2	200	CRCW0603200RFKEA	Vishay-Dale	RES, 200, 1%, 0.1 W, AEC-Q200 Grade 0, 0603	0603
R21	1	4.99k	CRCW06034K99FKEAC	Vishay-Dale	RES, 4.99 k, 1%, 0.1 W, 0603	0603
R22	1	2.49k	RT0603BRD072K49L	Yageo America	RES, 2.49 k, 0.1%, 0.1 W, 0603	0603
S1	1		EVQ-21505R	Panasonic	Switch, Tactile, SPST-NO, 0.02A, 15V, TH	6.0x5.0x6mm
SH-J1, SH-J2, SH-J3, SH-J4, SH-J5	5	1x2	SNT-100-BK-G	Samtec	Shunt, 100mil, Gold plated, Black	Shunt
TP1, TP3, TP4	3		5000	Keystone	Test Point, Miniature, Red, TH	Red Miniature Testpoint
TP2, TP5	2		5117	Keystone	Test Point, Miniature, Blue, TH	Blue Miniature Testpoint
TP6, TP7	2		5001	Keystone	Test Point, Miniature, Black, TH	Black Miniature Testpoint
U1	1		TPS7A2433DBVR	Texas Instruments	200-mA, 18-V, ultra-low-IQ, low-dropout (LDO) voltage regulator with enable 5-SOT-23 -40 to 125	SOT23-5
U2	1		LMV324AIPWR	Texas Instruments	Quad, 5.5-V, 1-MHz, 4-mV offset voltage, RRO operational amplifier 14-TSSOP -40 to 125	TSSOP14
U3	1		ATL431LIBIDBZR	Texas Instruments	High Bandwidth Low-Iq Programmable Shunt Regulator, DBZ0003A (SOT-23-3)	DBZ0003A
U4	1		MSPM0L1306SRHB	Texas Instruments	MSPM0L130x Mixed-Signal Microcontrollers	VQFN32
U5	1		INA350CDSIDSGR	Texas Instruments	Cost and Size Optimized, Low Power, 1.8-V to 5.5-V Selectable Gain Instrumentation Amplifier	WSO8
U6	1		DRV8210DSGR	Texas Instruments	11V, 1A H-bridge motor driver, PWM, PH/EN, ½ bridge control, with low power sleep mode	WSO8
U7	1		2SMPP03	Omron Electronics Inc-EMC D	Pressure Sensor ±7.25PSI (±50kPa) Compound Male - 0.1" (2.59mm) Tube -43 mV ~ 42 mV 6-SMD Module	SMD6
FID1, FID2, FID3	0		N/A	N/A	Fiducial mark. There is nothing to buy or mount.	N/A
R23	0	0	RC0402FR-070RL	Yageo	Jumper 0.063W, 1/16W Chip Resistor 0402 (1005 Metric) Moisture Resistant Thick Film	0402

## IMPORTANT NOTICE AND DISCLAIMER

TI PROVIDES TECHNICAL AND RELIABILITY DATA (INCLUDING DATA SHEETS), DESIGN RESOURCES (INCLUDING REFERENCE DESIGNS), APPLICATION OR OTHER DESIGN ADVICE, WEB TOOLS, SAFETY INFORMATION, AND OTHER RESOURCES "AS IS" AND WITH ALL FAULTS, AND DISCLAIMS ALL WARRANTIES, EXPRESS AND IMPLIED, INCLUDING WITHOUT LIMITATION ANY IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR NON-INFRINGEMENT OF THIRD PARTY INTELLECTUAL PROPERTY RIGHTS.

These resources are intended for skilled developers designing with TI products. You are solely responsible for (1) selecting the appropriate TI products for your application, (2) designing, validating and testing your application, and (3) ensuring your application meets applicable standards, and any other safety, security, regulatory or other requirements.

These resources are subject to change without notice. TI grants you permission to use these resources only for development of an application that uses the TI products described in the resource. Other reproduction and display of these resources is prohibited. No license is granted to any other TI intellectual property right or to any third party intellectual property right. TI disclaims responsibility for, and you will fully indemnify TI and its representatives against, any claims, damages, costs, losses, and liabilities arising out of your use of these resources.

TI's products are provided subject to [TI's Terms of Sale](#) or other applicable terms available either on [ti.com](https://www.ti.com) or provided in conjunction with such TI products. TI's provision of these resources does not expand or otherwise alter TI's applicable warranties or warranty disclaimers for TI products.

TI objects to and rejects any additional or different terms you may have proposed.

Mailing Address: Texas Instruments, Post Office Box 655303, Dallas, Texas 75265  
Copyright © 2023, Texas Instruments Incorporated