

Bill of materials

Table 1. X-STM32MP-GNSS2 bill of materials

Item	Q.ty	Ref.	Part/value	Description	Manufacturer	Order code
1	1	B1	S8421-45R	Battery Holder (Open) Coin, 20.0mm 1 Cell SMD (SMT) Tab	Harwin Inc.	S8421-45R
2	12	C1 C2 C3 C4 C5 C13 C14 C15 C16 C18 C19 C22	100nF	CAP CER 0.1UF 16V X7R 0603	Würth Elektronik	885012206046
3	2	C6 C10	100nF	CAP CER 0.1UF 16V X7R 0603	Würth Elektronik	885012206046
4	1	C7	10uF	CAP CER 10UF 25V X5R 0603	Würth Elektronik	885012106031
5	2	C8 C9	100nF	CAP CER 0.1UF 16V X7R 0603	Würth Elektronik	885012206046
6	1	C11	1uF	CAP CER 1UF 16V X7R 0603	Würth Elektronik	885012206052
7	2	C12 C20	10uF	CAP CER 10UF 25V X5R 0603	Würth Elektronik	885012106031
8	1	C17	10nF	CAP CER 10000PF 50V X7R 0603	Würth Elektronik	885012206089
9	1	C21	220nF	CAP CER 0.22UF 16V X7R 0603	Würth Elektronik	885012206048
10	1	CN2	Header 20X2_female	Double Row_Vertical_.10 0" Extended Tail Connector	Samtec	SSQ-120-03-T-D
11	1	CN3	SMA_HRZ	50 Ohm SMA Jack, Edge Mount	Samtec	SMA-J-P-H-ST-EM1
12	1	CN4	U.FL-R-SMT-1(10)	CONN U.FL RCPT STR 50 OHM SMD	Hirose Electric Co Ltd	U.FL-R-SMT-1(10)
13	1	D1	ESDARF02-1BU2 CK, ST0201	TVS DIODE 3.6VWM 12VC 0201	ST	ESDARF02-1BU2CK
14	1	D2	STPS0530Z, SOD-123	Surface mount SCHOTTKY RECTIFIERS	ST	STPS0530Z
15	2	D3 D4	ESDALC5-1BM2, SOD-882	TVS DIODE 5VWM SOD882	ST	ESDALC5-1BM2
16	1	D5	LED GREEN	LED GREEN CLEAR 0603 SMD	Würth Elektronik	150060GS75000
17	1	D6	LED RED	LED RED CLEAR 0603 SMD	Würth Elektronik	150060RS75000

Item	Q.ty	Ref.	Part/value	Description	Manufacturer	Order code
18	1	D7	LED YELLOW	LED YELLOW CLEAR 0603 SMD	Würth Elektronik	150060YS75000
19	1	J1	3-pin Male Header	CONN HEADER .100 STR 3POS	Samtec Inc.	TSW-103-07-F-S
20	4	J6 J7 J8 J11	3-pin Male Header	CONN HEADER .100 STR 3POS	Samtec Inc.	TSW-103-07-F-S
21	1	J9	HEADER1x2	2.54 PIN HEADER SINGLE ROW 2 PIN	Würth Elektronik	61300211121
22	1	J10	HEADER1x4	CONN HEADER .100 STR 4POS	Samtec Inc.	TSW-104-07-F-S
23	4	JR1 JR2 JR3 JR4	2.54 mm	JUMPER	Würth Elektronik	60900213421
24	1	Q1	2STR1160	TRANS NPN 60V 1A SOT-23	STMicroelectronics	2STR1160
25	2	QV1 QV2	3-pin Header	CONN HEADER .100 STR 3POS	Samtec Inc.	TSW-103-07-F-S
26	9	R1 R2 R30 R32 R34 R35 R36 R43 R49	1K	RES SMD 1K OHM 1% 1/10W 0603	Vishay Dale	CRCW06031K00FKEA
27	2	R3 R4	3.9K	RES SMD 3.9K OHM 1% 1/10W 0603	Yageo	RT0603FRE073K9L
28	3	R5 R6 R7	22K	RES SMD 22K OHM 5% 1/10W 0603	Vishay Dale	CRCW060322K0JNEA
29	2	R8 R9	1.5k	RES SMD 1.5K OHM 1% 1/10W 0603	Yageo	RC0603FR-071K5P
30	21	R10 R11 R12 R13 R14 R15 R16 R17 R18 R19 R20 R21 R22 R23 R24 R25 R26 R27 R33 R39 R42	0	RES SMD 0 OHM JUMPER 1/10W 0603	TE Connectivity Passive Product	CRG0603ZR
31	3	R28 R38 R46	4.7K	RES SMD 4.7K OHM 1% 1/10W 0603	Yageo	RC0603FR-074K7P
32	1	R29	0	RES SMD 0 OHM JUMPER 1/10W 0603	TE Connectivity Passive Product	CRG0603ZR
33	1	R31	100	RES 100 OHM 1% 1/10W 0603	Stackpole Electronics Inc	RMCF0603FT100R
34	1	R37	1K	RES SMD 1K OHM 1% 1/10W 0603	Vishay Dale	CRCW06031K00FKEA
35	2	R40 R41	500	RES 499 OHM 1% 1/10W 0603	YAGEO	RC0603FR-07499RL
36	1	R44	22K	RES SMD 22K OHM 5% 1/10W 0603	Vishay Dale	CRCW060322K0JNEA
37	1	R45	0	RES SMD 0 OHM JUMPER 1/10W 0603	TE Connectivity Passive Product	CRG0603ZR

Item	Q.ty	Ref.	Part/value	Description	Manufacturer	Order code
38	2	R47 R48	300	RES 300 OHM 1% 1/10W 0603	Stackpole Electronics Inc.	RMCF0603FT300R
39	3	SB1 SB2 SB3	Open	RES 0 OHM JUMPER 1/10W 0603	Rohm Semiconductor	SFR03EZPJ000
40	3	SW1 SW2 SW3	Tact SW	SWITCH TACTILE SPST-NO 0.05A 24V	TE Connectivity ALCOSWITCH Switches	1437566-3
41	3	TP1 TP2 TP3	TEST POINT	PC TEST POINT	SMD Pads	SMD Pads
42	8	TP4 TP5 TP6 TP7 TP8 TP9 TP10 TP11	TEST POINT	PC TEST POINT NATURAL	Keystone Electronics	5000
43	1	U1	M24C32- RMN6TP, SO8	32 Kbit serial I2C bus EEPROM	ST	M24C32-RMN6TP
44	1	U2	LIV4F, 18LD LGA 9.7X10.1X2.55MM PITCH	Tiny Dual-Band GNSS Low Power module	ST	TESEO-LIV4FTR
45	1	U3	ISM330DHCXTR, VFLGA2.5X3X.86 14L P.5 L.475X.25	INEMO INERTIAL MODULE: 3D digital accelerometer and 3D digital gyroscope	ST	ISM330DHCXTR
46	1	U4	ILPS22QSTR, HLGA 2X2X.8 10L EXP. SILIC .91SQ	CONSUMER MEMS	ST	ILPS22QSTR
47	1	U5	IIS2MDC, LGA2X2X0.7 12 LEADS	High accuracy, ultra-low-power ,3- axis digital output magnetometer	ST	IIS2MDCTR
Misc						
1	4	Nut		M3x0.5 Hex Nut 0.217" (5.50mm) Nylon	Würth Elektronik	709940300
2	4	Spacer		Hex Standoff Threaded M3x0.5 Nylon 0.472" (12.00mm) Natural	Essentra	36M30MF012
3	1	Antenna			Taoglas	Taoglas EAHP.50.01.0100D

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