

Bill of materials
Table 1. X-STM32MP-RBT01 bill of materials

Item	Q.ty	Ref.	Part/value	Description	Manufacturer	Order code
1	12	C1, C2, C3, C4, C5, C34, C35, C37, C39, C40, C41, C43	100nF	CAP CER 0.1UF 16V X7R 0603	KEMET	C0603C104K4RACTU
2	3	C6, C11, C23	0.1 µF	CAP CER 0.1UF 50V X7R 0603	YAGEO	AC0603KRX7R9BB104
3	1	C7	330uF 80V	Aluminium Electrolytic Capacitors - SMD 80VDC 330uF 20% SMD	Panasonic	EEEFK1K331AM
4	2	C9, C21	1uF	CAP CER 1UF 50V X7R 0603	Würth Elektronik	885012206126
5	3	C10, C22, C36	220nF	CAP CER 0.22UF 50V X7R 0603, CAP CER 0.22UF 16V X7R 0603	YAGEO, Walsin Technology Corporation	AC0603KRX7R9BB224, 0603B224K160CT
6	4	C12, C13, C24, C25	470nF	CAP CER 0.47UF 50V X7R 0805	Würth Elektronik	885012207102
7	10	C14, C26, C45, C46, C47, C48, C49, C50, C51, C52	1nF	CAP CER 1000PF 50V X7R 0603	Würth Elektronik	885012206083
8	4	C15, C16, C27, C28	10nF	CAP CER 10000PF 50V X7R 0603	Würth Elektronik	885012206089
9	4	C19, C20, C31, C32	100pF	CAP CER 100PF 50V X7R 0603	Würth Elektronik	885012206077
10	2	C33, C38	10uF	CAP CER 10UF 16V X5R 0603	Murata Electronics	ZRB18AR61C106ME01L
11	1	C42	4.7uF	CAP CER 4.7UF 16V X5R 0603	Murata Electronics	GRM188R61C475ME11D
12	1	CN2	Header 20X2_female	CONN RCPT 40POS 0.1 TIN PCB	Samtec Inc.	SSQ-120-03-T-D
13	1	CN3	MORSV-508-2P_s crew	TERM BLOCK HDR 2POS VERT 5.08MM	Würth Elektronik	691311500002
14	2	CN4, CN5	MORSV-508-4P_s crew	TERM BLOCK HDR 4POS VERT 5.08MM	Würth Elektronik	691311500004
15	1	D1	1.5KE62A, DO-201AA	TVS D5.4X7.5 300V 1500W UNIDIR	ST	1.5KE62A
16	4	D10, D12, D13, D14	LED GREEN	LED GREEN CLEAR 0603 SMD	Würth Elektronik	150060GS75000

Item	Q.ty	Ref.	Part/value	Description	Manufacturer	Order code
17	1	D11	LED RED	LED RED CLEAR 0603 SMD	Würth Elektronik	150060RS75000
18	1	F1	CB61F15A-TR1	Surface Mount Fuses 125Vac 15A FA SMD Brick	Eaton	CB61F15A-TR1
19	1	J1	SHUNT 2.54mm	CONN HEADER VERT 3POS 2.54MM	Samtec Inc.	TSW-103-07-F-S
20	4	J2, J3, J4, J5	Mouting hole_3.2mm drill	Hex Standoff Threaded M3x0.5 Nylon 0.472" (12.00mm) Natural	Essentra	36M30MF012
21	6	J6, J7, J8, J11, J12, J13	3POS 1.27MM	CONN HEADER VERT 3POS 1.27MM	Samtec Inc.	TMS-103-01-G-S
22	1	J14	61300711121	WR-PHD Pin Header, THT, Vertical, pitch 2.54mm, 1 Row, 7P	Würth Elektronik	61300711121
23	1	J15	613007143121	WR-PHD Pin Header, THT, Right Angle pitch 2.54mm, 1 Row, 7P	Würth Elektronik	613007143121
24	8	R1, R2, R44, R65, R99, R100, R101, R102	1K	RES SMD 1K OHM 1% 1/10W 0603, RES SMD 1K OHM 0.1% 1/10W 0603	Vishay Dale, YAGEO	CRCW06031K00FKEA, RT0603BRB071KL
25	2	R3, R4	3.9K	RES SMD 3.9K OHM 1% 1/10W 0603	YAGEO	RT0603FRE073K9L
26	3	R5, R6, R7	22K/NM	RES SMD 22K OHM 5% 1/10W 0603 (not mounted)	Vishay Dale	CRCW060322K0JNEA
27	29	R8, R9, R10, R11, R12, R13, R14, R15, R16, R17, R18, R19, R20, R21, R22, R23, R24, R25, R26, R27, R28, R29, R30, R31, R32, R33, R34, R35, R83	0	RES SMD 0 OHM JUMPER 1/10W 0603	TE Connectivity Passive Product	CRG0603ZR
28	2	R40, R61	22K	RES SMD 22K OHM 1% 1/10W 0603	Bourns Inc.	CR0603-FX-2202ELF
29	4	R41, R42, R62, R63	39k	RES SMD 39K OHM 1% 1/10W 0603	YAGEO	RT0603FRE0739KL
30	4	R43, R49, R64, R70	0.05R 3W	RES 0.05 OHM 1% 3W 2512	Bourns Inc.	CRA2512-FZ-R050ELF

Item	Q.ty	Ref.	Part/value	Description	Manufacturer	Order code
31	5	R45, R66, R85, R97, R98	2.2K	RES 2.2K OHM 0.5% 1/10W 0603, RES 2.2K OHM 1% 1/10W 0603, SMD 2.2k Ohms 100mW 0603 0.5%	YAGEO, Stackpole Electronics Inc	RT0603DRE102K2L, RMCF0603FT2K20, Yageo
32	2	R46, R67	5.6k	RES SMD 5.6K OHM 0.1% 1/10W 0603	YAGEO	RT0603BRC075K6L
33	6	R47, R48, R50, R68, R69, R73	10K	RES SMD 10K OHM 1% 1/10W 0603	Bourns Inc.	CR0603-FX-1002ELF
34	4	R51, R55, R71, R76	3314G-1-103E	Resistor	Bourns Inc.	3314G-1-103E
35	4	R52, R56, R72, R77	3.3k	RES 3.3K OHM 0.1% 1/10W 0603	YAGEO	RP0603BRD073K3L
36	6	R53, R54, R74, R75, R82, R84	4.7K	RES 4.7K OHM 5% 1/10W 0603, RES 4.7K OHM 1% 1/10W 0603	YAGEO	RC0603JR-074K7L, RC0603FR-074K7P
37	3	R78, R79, R80	1.5K	RES SMD 1.5K OHM 1% 1/10W 0603	TE Connectivity Passive Product	CRG0603F1K5, TE Connectivity Passive Product
38	1	R81	1.5K/NM	RES SMD 1.5K OHM 1% 1/10W 0603 (not mounted)	TE Connectivity Passive Product	CRG0603F1K5
39	3	R86, R87, R88	47K	RES 47K OHM 1% 1/10W 0603	Yageo	RC0603FR-0747KL
40	1	R89	3K	RES 3K OHM 1% 1/10W 0603	YAGEO	RC0603FR-073KL
41	5	R90, R91, R92, R93, R94	300R	RES SMD 300 OHM 1% 1/16W 0402	YAGEO	AC0402FR-07300RL
42	3	SB1, SB2, SB3	0/NM	RES 0 OHM JUMPER 1/10W 0603 (not mounted)	Rohm Semiconductor	SFR03EZPJ000
43	2	SB4, SB5	0 Ohms	RES 0 OHM JUMPER 1/10W 0603	Rohm Semiconductor	SFR03EZPJ000
44	2	SW1, SW2	ROT-SWITCH	SWITCH ROTARY DIP SP4T 100MA 16V	Nidec Components Corporation	CS-4-14NTB
45	14	TP1, TP2, TP3, TP4, TP5, TP6, TP8, TP9, TP10, TP11, TP12, TP13, TP16, TP17	TP-SMD-S2761-46R	PC TEST POINT NATURAL	HARWIN	S2761-46R
46	1	U1	M24C32-RMN6TP, 8-SOIC	IC EEPROM 32KBIT I2C 1MHZ 8SOIC	ST	M24C32-RMN6TP
47	2	U2, U3	STSPIN948, VFQFPN 7 x 7 x 1 - 48 L	Scalable 4.5 A dual full-bridge driver for brushed DC motors	ST	STSPIN948

Item	Q.ty	Ref.	Part/value	Description	Manufacturer	Order code
48	1	U4	ISM330DHCXTR, 14-VFLGA Module	INEMO INERTIAL MODULE: ALWAYS-ON	ST	ISM330DHCXTR
49	1	U5	IIS2MDC, 12- WFLGA	SENSOR MR I2C/SPI 12LGA	ST	IIS2MDCTR
50	1	U6	LPS22HH, 10- WFLGA	SENSOR 18.27PSIA 24BIT 10HLGA	ST	LPS22HHTR
51	1	U7	VL53L5CX, Optical LGA16	SENSOR OPTICAL 4M I2C	ST	VL53L5CXV0GC/1
52	6	JR1	1.27 mm	JUMPER	Harwin Inc.	M50-1900005
53	1	JR1	2.54 mm	JUMPER	Würth Elektronik	60900213421
54	4	Nut		M3x0.5 Hex Nut 0.217" (5.50mm) Nylon	Würth Elektronik	709940300
55	2	TERM BLOCK PLUG 4POS 5.08MM	5.08mm	4 Position Terminal Block Plug, Female Sockets 0.200" (5.08mm) 180° Free Hanging (In- Line)	Würth Elektronik	691351500004
56	1	TERM BLOCK PLUG 2POS 5.08MM	5.08mm	2 Position Terminal Block Plug, Female Sockets 0.200" (5.08mm) 180° Free Hanging (In- Line)	Würth Elektronik	691351500002
57	4	Spacer		Hex Standoff Threaded M3x0.5 Nylon 0.472" (12.00mm) Natural	Essentra	36M30MF012

IMPORTANT NOTICE – READ CAREFULLY

STMicroelectronics NV and its subsidiaries (“ST”) reserve the right to make changes, corrections, enhancements, modifications, and improvements to ST products and/or to this document at any time without notice. Purchasers should obtain the latest relevant information on ST products before placing orders. ST products are sold pursuant to ST’s terms and conditions of sale in place at the time of order acknowledgment.

Purchasers are solely responsible for the choice, selection, and use of ST products and ST assumes no liability for application assistance or the design of purchasers’ products.

No license, express or implied, to any intellectual property right is granted by ST herein.

Resale of ST products with provisions different from the information set forth herein shall void any warranty granted by ST for such product.

ST and the ST logo are trademarks of ST. For additional information about ST trademarks, refer to www.st.com/trademarks. All other product or service names are the property of their respective owners.

Information in this document supersedes and replaces information previously supplied in any prior versions of this document.

© 2025 STMicroelectronics – All rights reserved