

Designator	Value	Package	Supplier part #	Qty.	Manufacturer part number
U1	512 KB Flash, 128 KB SRAM (-40 to 85 °C)	LPQFP-100	497-19476-ND	1	STM32G474VET6
U2	Input V (4; 40V). Max cur 450mA; 400mV - max dropout	8-SON (3x3)	296-45026-1-ND	1	TPS7A1901DRBT
U3	200 mV max dropout, 6.5 max Vin, 3.0 Vout	SOT-23-3	C140329	1	REF3330AIDBZR
U4	200 mV max dropout, 6.5 max Vin, 1.8 Vout	SOT-23-3	C115877	1	REF3318AIDBZR
U5	-	14 pin LGA	C124140	1	ICM-20600
U6	H-bridge up to 45V Vin, Current sense	VQFN-24	C114178	1	DRV8701P
U7	20V/V, bidirectional	8-TSSOP	C93965	1	INA240A1PWR
U8	Vsupl = 2.8 - 36 V, Iout = 600mA per channel	32-VFQFPN (5x5)	497-8493-1-ND	1	L2293QTR
X1	8 MHz, ±0.5%, 30pF	SMD-3213_3P	C110614	1	CSTNE8M00G55Z000R0
D1	Green	0805	C63855	1	17-21/GHC-XS1T2M/3T
D2-D33	Blue	0805	C72035	32	17-21/BHC-XL2M2TY/3T
Q1, Q2, Q3, Q4	20V 22A 1.9V @ 250uA 15mΩ @ 5A, 10V 2.5W	SON2X2	C412825	4	CSD15571Q2
R13	0.01 ±0.5% 1/2W ±75ppm/°C	0805	C236284	1	ERJ6CWDRO10V
R17, R18, R19, R20, R21, R22	100 ±5% 1/16W ±100ppm/°C	0402	C106233	6	RC0402JR
R2, R3, R4, R9, R10, R11, R12, R14, R15	10K ±1% 1/16W ±100ppm/°C	0402	C60490	8	RC0402FR-0710KL
R1	16k9	0402	C163488	1	RC0402FR-0716K9L
R16	510k	R0402		1	
RM1, RM2, RM3, RM4, RM5, RM6, RM7, RM8	10K ±1% 4 1/16W ±200ppm/°C	0603_x4	C107374	8	YC164-JR-0710KL
R5, R6, R7, R8	10K ±20%	Through Hole	C361173	4	RK09D1130C2P
C23	10nF, 16V, ±5%, X7R	0402	C400948	1	CL05B103JO5NNNC
C5, C10, C12, C13, C14, C15, C16, C17, C19, C20, C21, C24, C25, C26, C27, C31, C32, C37, C39, C42, C43, C44, C50	100nF ±10% 25V X7R	0402	C155422	23	CL05B104KA5NNNC
C18, C36, C40, C41	1uF ±10% 16V X7R	0603	C59782	4	CL10B105KO8NNNC
C6, C7, C8, C9, C11, C22	4.7uF, 6.3V, ±10%, X7R	0603	C107368	6	CL10B475KQ8NQNC
C1, C4, C30, C33, C38, C49	10uF ±10% 25V X7R	1206	C14860	6	CL31B106KAHNNNE
C2, C3, C28, C29, C34, C35, C45, C46, C47, C48	22uF ±10% 25V X7R	1210	C309062	10	CL32B226KAJNNNE
J1, J2, J5, J10, J11, J12, J13	3 pins	pitch 2mm	C131339	6	B3B-PH-K-S(LF)(SN)
J3	4 pins	pitch 2mm	C131334	1	B4B-PH-K-S(LF)(SN)
J4, J14	6 pins	pitch 2mm	C131342	2	B6B-PH-K-S(LF)(SN)
J6, J7, J8, J9	10 pins	pitch 2mm	C158038	4	B10B-PH-K-S(LF)(SN)
J15	JL301-4P	P=5.0 mm	C409137	1	JL301-50004U02
JP1, JP3, JP4, JP5, JP6, JP7	1 row 3 positions	pitch 2.4mm	C124376	6	C124376
JP2, JP8	1 row 6 positions	pitch 2.4mm	C124380	2	C124380
JP9	1 row 4 positions	pitch 2.4mm	C124378	1	C124378
SW1, SW2, SW3, SW4, SW5	50mA @ 24VDC	12.00mm x 12.00mm	C84931	5	B3F-4055