

Label	Item	Package	Manufacturer	Manufacturer part	Supplier	Supplier part	Quantity	Note
C1 C2								(2) C1 = C2 = 1000 / f0
C3 C5	10pF	0805	AVX	08055C100KAT2A	Mouser	581-08055C100KAT2A	2	
C4 C7	1uF 100V X7R	1210	AVX	12101C105KAT2A	Mouser	581-12101C105KAT2A	2	
C6								(11) slicer 2nd option
C8								(3) 50/100pF for measurement only, 0R0 for final application
C9								(9) 3rd overtone crystal only
R1	220K 1/10W	0805	Susumu	RR1220P-224-D	Mouser	754-RR1220P-224D	1	
R2								(1) Adjust for 18-20 mA without crystal
R3 R4								(11) slicer 2nd option
R5								(11) slicer 2nd option
R6 R7 R8 R10								(4) Quantity dependent on used outputs
R9								(12) slicer 1st option 50% duty cycle
L1 L2 L3	22uH	1210	Taiyo Yuden	CBC3225T220MR	Mouser	963-CBC3225T220MR	3	
L4								(10) 3rd overtone crystal only
X1								(5) Select for desired clock frequency
D1	BAT81	DO-35	Vishay Semiconductor	BAT81S-TR	Mouser	78-BAT81S	1	
Q1	J310	SOT-23	On Semiconductor	MMBFJ310LT1G	Mouser	863-MMBFJ310LT1G	1	
U1								(6) Select for desired output voltage
J1 J2								(7) Quantity dependent on used outputs
J5								(8) Header output
J6	SMA connector	-	Molex	73391-0070	Mouser	538-73391-0070	1	SMA output
	Crystal insulator		Bivar	CI-192-028	Mouser	749-CI-192-028	1	
(1)								
Starting value	56R 1/10W	0805	Susumu	RR1220Q-560-D	Mouser	754-RR1220Q-560D	1	
(2)								
11.2896 MHz	100pF X7R	0805	AVX	08051C101JAT2A	Mouser	581-08051C101JAT2A	2	
12.288 MHz	100pF X7R	0805	AVX	08051C101JAT2A	Mouser	581-08051C101JAT2A	2	
22.5792 MHz	50pF X7R	0805	Syfer	0805J2500472KXT	Mouser	843-0805J2500472KX	2	
24.576 MHz	50pF X7R	0805	Syfer	0805J2500472KXT	Mouser	843-0805J2500472KX	2	
5.6448 MHz	200pF C0G/NP0	0805	AVX	08051A201JAT2A	Mouser	581-08051A201JAT2A	2	
6.144 MHz	200pF C0G/NP0	0805	AVX	08051A201JAT2A	Mouser	581-08051A201JAT2A	2	
16.9344 MHz	68pF X7R	0805	Kemet	C0805C680JCR	Mouser	80-C0805C680JCR	2	
33.8688 MHz	33pF X7R	0805	AVX	08055C330JAT2A	Mouser	581-08055C330JAT2A	2	
45.1584 MHz	22pF X7R	0805	AVX	08055C220JAT2A	Mouser	581-08055C220JAT2A	2	
49.152 MHz	22pF X7R	0805	AVX	08055C220JAT2A	Mouser	581-08055C220JAT2A	2	
90.3168 MHz	12pF C0G/NP0	0805	AVX	08051A120FAT2A	Mouser	581-08051A120FAT2A	2	
98.304 MHz	12pF C0G/NP0	0805	AVX	08051A120FAT2A	Mouser	581-08051A120FAT2A	2	
(3)								
Measurement	50pF	0603	AVX	06035A500JAT2A	Mouser	581-06035A500JAT2A	1	
Final app.	0R0	0603	Vishay/Beishlag	MCT06030Z0000ZP500	Mouser	594-MCT06030Z0000ZP5	1	
(4)								
1 output	33R 1/10W	0805	Susumu	RR1220Q-330-D	Mouser	754-RR1220Q-330D	1	
2 outputs	33R 1/10W	0805	Susumu	RR1220Q-330-D	Mouser	754-RR1220Q-330D	2	
3 outputs	33R 1/10W	0805	Susumu	RR1220Q-330-D	Mouser	754-RR1220Q-330D	3	
4 outputs	33R 1/10W	0805	Susumu	RR1220Q-330-D	Mouser	754-RR1220Q-330D	4	
(5)								
11.2896 MHz	AT cut Crystal 11.2896 MHz	HC-43/U	Laptech	XT4117 LP4412	Custom	Custom	1	
12.288 MHz	AT cut Crystal 12.288 MHz	HC-43/U	Laptech		Custom	Custom	1	

Label	Item	Package	Manufacturer	Manufacturer part	Supplier	Supplier part	Quantity	Note
22.5792 MHz	AT cut Crystal 22.5792 MHz	HC-43/U	Laptech		Custom	Custom	1	
24.576 MHz	AT cut Crystal 24.576 MHz	HC-43/U	Laptech		Custom	Custom	1	
5.6448 MHz	AT cut Crystal 5.6448 MHz	HC-43/U	Laptech		Custom	Custom	1	
6.144 MHz	AT cut Crystal 6.144 MHz	HC-43/U	Laptech		Custom	Custom	1	
16.9344 MHz	AT cut Crystal 16.9344 MHz	HC-43/U	Laptech		Custom	Custom	1	
33.8688 MHz	AT cut Crystal 33.8688 MHz	HC-43/U	Laptech	XT4118 LP4412	Custom	Custom	1	3rd overtone
45.1584 MHz	AT cut Crystal 45.1584 MHz	HC-43/U	Laptech		Custom	Custom	1	3rd overtone
49.152 MHz	AT cut Crystal 49.152 MHz	HC-43/U	Laptech		Custom	Custom	1	3rd overtone
90.3168 MHz	AT cut Crystal 90.3168 MHz	HC-43/U	Laptech		Custom	Custom	1	3rd overtone
98.304 MHz	AT cut Crystal 98.304 MHz	HC-43/U	Laptech		Custom	Custom	1	3rd overtone
(6)								
5V	74HC04	SOIC-14	Texas Instruments	SN74HCU04D	Mouser	595-SN74HCU04D	1	
3V3	74LVC04	SOIC-14	NXP Semiconductor	74LVCU04AD,118	Mouser	771-LVCU04AD118	1	
3V3	74GU04	SOIC-14	Potato Semi	PO74GU04A	Potato	PO74GU04A	1	
(7)								
1 u.fl. Output	u.fl. Connector		Hirose	U.FL-R-SMT(10)	Mouser	798-U.FL-R-SMT10	1	
2 u.fl. Output	u.fl. Connector		Hirose	U.FL-R-SMT(10)	Mouser	798-U.FL-R-SMT10	2	
(8)								
Vertical	2 pin header right angle		AMP	826631-2	Mouser	571-826631-2	1	
Horizontal	2 pin header		AMP	826646-2	Mouser	571-826646-2	1	
(9)								
Fundamental	None	-	-	-	-	-	-	
3rd overtone	10nF X7R	0805	AVX	08055C103JAT2A	Mouser	581-08055C103J	1	
(10)								
Fundamental	None	-	-	-	-	-	-	
33.8688 MHz	1.5uH	0805	TDK	MLZ2012N1R5L	Mouser	810-MLZ2012N1R5L	1	
45.1584 MHz	1.2uH	0805	TDK	MLF2012A1R2M	Mouser	810-MLF2012A1R2M	1	
49.152 MHz	1uH	0805	TDK	MLF2012A1R0M	Mouser	810-MLF2012A1R0M	1	
90.3168 MHz	560nH	0805	TDK	MLF2012DR56MTD25	Mouser	810-MLF2012DR56MTD25	1	
98.304 MHz	470nH	0805	TDK	MLF2012DR47J	Mouser	810-MLF2012DR47J	1	
(11)								
C6	1uF 100V X7R	1210	AVX	12101C105KAT2A	Mouser	581-12101C105KAT2A	1	
R3 R4	220K 1/10W	0805	Susumu	RR1220P-224-D	Mouser	754-RR1220P-224D	2	
R5 - 5V	180K 1/10W	0805	Susumu	RR1220P-184-D	Mouser	754-RR1220P-184D	1	
R5 - 3V3	150K 1/10W	0805	Susumu	RR1220P-154-D	Mouser	754-RR1220P-154D	1	
(12)								
R9	560K 1/10W	0805	Susumu	RR1220P-564-D	Mouser	754-RR1220P-564D	1	