

**N3ZI DDS VFO**  
**Basic Kit Closeout Bill of Materials**

<b>Designator</b>	<b>Part</b>	<b>Qty</b>	<b>Description / Appearance</b>	<b>Included in Closeout Kit?</b>	<b>Alt Source</b>	<b>Approx Cost?</b>
U1	Micro ATMEGA168	1	28 Pin Dip	YES		
U1	Socket	1	28Pin DIP socket	YES		
PCB	Circuit Board	1	N3ZI DDS	YES		
XTAL	13.44 MHz XTAL	1	Marked ECXR3392	YES		
U3	Oscillator	1	Metal can 50MHz	YES		
C1,C2,C3,C6	.01uF Capacitor	4	Yellow 103	YES		
C8, C10	0.05 Capacitor	2	Brown .05	YES		
C11, C12, C15	0.1uF Capacitor	3	Blue or Yellow 104	YES		
C13, C14	27pF Capacitor	2	Orange 27	YES		
C9	Electrolytic Cap	1	Black Radial	YES		
C4, C7	68pF Capacitor	2	Brown Square 68	YES		
C5	150pF Capacitor	1	Orange 151	YES		
L1,L2	1.5uH Inductor	2	Green body, with Brown, Green stripes	YES		
U4	Volt Reg	1	TO-220 7805	YES		
D1	Diode	1	Black epoxy	YES		
D2	Signal Diode	1	Glass	YES		
Q1,Q2	2N4124	2	To-92 2N4124	YES		
R2,R4	47K Resistor	2	Yellow, Purple, Orange	YES		
R3	4.7K Resistor	1	Yellow, Purple, Red	YES		
U2	DDS Chip AD5932	1	Tiny 16 pin TSSOP	NO	Analog Devices, Digikey	\$0.00
J5 LCD	LCD	1	KTM-S1201	NO	KTM-S1201 Sold on EBay, or Substitute any 44870 Type display sold on Ebay	\$5.00
R6	10K	1		NO	Can use Fixed 10K or Pot, depends on LCD	\$0.50
R5	Jumper			NO	Jumper	
R-ENC	Encoder	1		NO	Bourns PEC11-4020F-S0024 Works( Stocked at Mouser) But many others will also work	\$1.25
SW1,SW2	Pushbutton Switch	2		NO	Any	\$0.25
J1	RCA Jack	1		NO	Any	\$0.50

**For those who are considering the Basic Closeout kit, I am supplying this information as to the source of the other parts needed, suggested sources and estimated cost to you. Most of these parts are not very critical and substitutions can be made.**