

## Ordering Information for Constructing a Low Noise Amplifier for Observing the 1420 MHz Signal

- ☐ An LNA can be constructed according to the circuit diagram using small, surface-mount circuit elements and a pre-fabricated printed circuit board.
- ☐ The pre-fabricated printed circuit board designed for this LNA can be purchased from Oshpark at [https://oshpark.com/shared\\_projects/zvqWjxWi](https://oshpark.com/shared_projects/zvqWjxWi)
- ☐ Most of the circuit parts can be ordered from Digikey at digikey.com, as listed in the table below. The RF shield can be ordered from Leader Tech at leadertechinc.com.
- ☐ The amplifier chips, U1 – U5, can be obtained from Mini-Circuits at minicircuits.com. You can request free “samples” from the web page.
- ☐ The items are grouped by the part type on this page, and on the next page the items are listed by their circuit diagram label.

### LNA Circuit Parts Ordering Information

Circuit Diagram Part	Description	Digikey Part #	Quantity
C1, C5, C6	27 pF	712-1334-2-ND	3
C2, C3, C7, C8, C9, C10, C11, C12, C13, C14	330 pF	478-1181-2-ND	10
C4	4700 pF	399-14206-2-ND	1
C15	6.8 pF	712-1364-2-ND	1
C16	10 $\mu$ F	399-8153-1-ND	1
R1	33 k $\Omega$	311-33.0KHRTR-ND	1
R2	27 $\Omega$	P26.1HTR-ND	1
R3, R8	50 $\Omega$	RR08Q49.9DTR-ND	2
R4, R13	43 $\Omega$	311-43.0HRTR-ND	2
R5	4.7 k $\Omega$	541-4.70KHTR-ND	1
R6	17.4 $\Omega$	541-17.4HTR-ND	1
R7, R14	5.8 $\Omega$	311-5.76HRTR-ND	2
R9, R10	287 $\Omega$	541-287HTR-ND	2
R11, R12, R15, R16	870 $\Omega$	311-866HRTR-ND	4
L1, L3, L4, L5, L6	100 nH	490-5664-2-ND	5
L2	10 nH	490-5648-2-ND	1
IC1	LM2940 voltage regulator	LM2937IMPX-5.0/NOPBTR-ND	1
X1	CONN SMA RCPT STR 50 OHM PCB	WM5543-ND	1
X2	CONN SMA JACK R/A 50 OHM PCB	931-1361-ND	1
Other Manufacturers			
Circuit Diagram Part	Description	Manufacturer	Part No.
U1, U3	GALI 39+	Mini-Circuits	GALI 39+
U2	SAV-541+	Mini-Circuits	SAV-541+
U4, U5	BFCN-1445+	Mini-Circuits	BFCN-1445+
Circuit Board Shielding	RF shield for circuit board	Leader Tech	14R-CBSA-0.5X2.75X0.13