**Bill of materials**

**Transmitter Module**

**REF. VALUE MANUFACTURER MANUFACTURER’S CODE NOTES**

ANT 315MHz ANTENNA FACTOR ANT-315-PW-LP Short ¼ - wavelength monopole

C1 10µF/16v MULTICOMP MCTAR16V106KC Tantalum

C2 3.3µF/100v Generic - Electrolytic

C3 0.1µF/50v MULTICOMP MC0805B104K500A2.54MM Ceramic

C4 0.1µF/50v MULTICOMP MC0805B104K500A2.54MM Ceramic

C5 0.1µF/50v MULTICOMP MC0805B104K500A2.54MM Ceramic

C6 0.1µF/50v MULTICOMP MC0805B104K500A2.54MM Ceramic

C7 10µF/6.3v VISHAY SPRAGUE 293D106X96R3B2TE3 Tantalum SMD

J2 3-pin MOLEX 22-28-8360 Cut from 1 row/36 contacts

J3 16-pin MOLEX 22-28-8360 Cut from 1 row/36 contacts

R1 4.7kΩ - 1/8w Generic - Carbon film, 5%

R2 10Ω - 1/8w Generic - Carbon film, 5%

R3 0Ω Generic - Wire jumper

R4 1kΩ - 1/8w Generic - Carbon film, 5%

R5 680Ω - 1/8w Generic - Carbon film, 5%

R6 1kΩ - 1/8w Generic - Carbon film, 5%

U1 315MHZ TX LINX TECHNOLOGIES TXM-315-LR-S Hybrid SMD Module

U2 3v REG TEXAS INSTRUMENTS LP2950-30LPR Fixed 3v Regulator

U3 PIC16F628A MICROCHIP PIC16F628A-I/P Mounted on an 18-pin socket

U4 20MHz Xtal TXC 9B-20.000MAAJ-B Metal Can, Low Profile

PCB 2.22in x 1.50in EVER-MUSE GD1525 (cut to dimensions) Double-sided Positive Presensitized

**Receiver Module**

**REF. VALUE MANUFACTURER MANUFACTURER’S CODE NOTES**

ANT 315MHz ANTENNA FACTOR ANT-315-PW-LP Short ¼ - wavelength monopole

C1 0.1µF/50v MULTICOMP MC0805B104K500A2.54MM Ceramic

C2 0.1µF/50v MULTICOMP MC0805B104K500A2.54MM Ceramic

C3 10µF/6.3v VISHAY SPRAGUE 293D106X96R3B2TE3 Tantalum SMD

C4 3.3µF/100v Generic - Electrolytic

C5 10µF/16v MULTICOMP MCTAR16V106KC Tantalum

C6 0.1µF/50v MULTICOMP MC0805B104K500A2.54MM Ceramic

C7 0.1µF/50v MULTICOMP MC0805B104K500A2.54MM Ceramic

J2 3-pin MOLEX 22-28-8360 Cut from 1 row/36 contacts

J3 16-pin MOLEX 22-28-8360 Cut from 1 row/36 contacts

LED1 3mm Red LED Generic - 3mm Red LED, Vf = 1.7v

Q1 BC547C FAIRCHILD BC547C NPN Transistor

Q2 BC547C FAIRCHILD BC547C NPN Transistor

R1 180Ω - 1/8w Generic - Carbon film, 5%

R2 10Ω - 1/8w Generic - Carbon film, 5%

R3 1kΩ - 1/8w Generic - Carbon film, 5%

R4 10kΩ - 1/8w Generic - Carbon film, 5%

R5 1kΩ - 1/8w Generic - Carbon film, 5%

R6 10kΩ - 1/8w Generic - Carbon film, 5%

R7 1kΩ - 1/8w Generic - Carbon film, 5%

U1 3v REG TEXAS INSTRUMENTS LP2950-30LPR Fixed 3v Regulator

U2 315MHZ RX LINX TECHNOLOGIES RXM-315-LR-S Hybrid SMD Module

U3 PIC16F628A MICROCHIP PIC16F628A-I/P Mounted on an 18-pin socket

U4 20MHz Xtal TXC 9B-20.000MAAJ-B Metal Can, Low Profile

PCB 2.78in x 1.50in EVER-MUSE GD1525 (cut to dimensions) Double-sided Positive Presensitized