AN206 Reference Design Bill of Materials

Designator	Description
C1	Capacitor, 0.1uF, 25V, XR7
C2	Capacitor, 0.1uF, 25V, XR7
C3	Capacitor, 0.1uF, 25V, XR7
C4	Capacitor, 27pF, 50V, COG
C5	Capacitor, 27pF, 50V, COG
C6	Capacitor, 1uF, 10V, XR5
C7	Capacitor, 1uF, 10V, XR5
C8	Capacitor, 1uF, 10V, XR5
C9	Capacitor, 1uF, 10V, XR5
D1	Schottky Diode, 1A, 20V
JP1	Header Pin Connector, 2-rows of 8-pins, connector can be replaced with equivalent connector, or omitted if circuit is integrated directly into application. Remember to provide a way to isolate RB6, RB7, VCC, and MCLR for in-circuit programming the PIC if desired
JP2	Header Pin Connector, 2-rows of 8-pins, Connector Can Be Replaced With Equivalent Connector, or omitted if circuit is integrated directly into application. Remember to provide a way to isolate RB6, RB7, VCC, and MCLR for in-circuit programming the PIC if desired
JP3	DB9 Connector
Q1	NMOS 400mA DC, 60V
R1	Resistor, 2.2kOhm, 1/10W, 5%
R2	Resistor, 4.7kOhm, 1/10W, 5%
R3	Resistor, 4.7kOhm, 1/10W, 5%
U1	PIC16LF628, Industrial Temperature Range
U2	MAX3223, RS-232 Transceiver, Industrial Temperature Range
X1	Crystal, 3.6864 MHz, replace C4 and C5 if required for proper operation of crystal

Note: Although footprints have not been suggested for the referenced design, it should be noted that the a TSSOP footprint for the PIC16LF628 has been assumed in the schematic. All of the resistors and capacitors that have been used are available in 0805 surface mount packages. Both through-hole and SM versions of the crystal are available, and the MAX3223 comes in 3-different packages. A 2N7002 NMOS was the transistor used, and it is available in a SOT-23 package. An equivalent NMOS should not be a problem.