

**Wi-Ex RF Repeater, YX400P**

040-00106

Revision: X1

| Item | Qty | Reference                                                                                                             | Value                  | Description                          | Manufacturer   |
|------|-----|-----------------------------------------------------------------------------------------------------------------------|------------------------|--------------------------------------|----------------|
| 1    | 19  | C1,C2,C3,C4,C5,C7,C9,C11,C55,C57,C59,C60,C62,C103,C109,C111,C132,C150,C158                                            | 0.1uF                  | Cap, ceramic, 0402, >=10V, 10%       |                |
| 2    | 5   | C6,C58,C61,C110,C120                                                                                                  | 4.7UF                  | Cap, ceramic, 0805, >=10V, 10%       |                |
| 3    | 19  | C8,C15,C19,C35,C37,C40,C43,C54,C66,C68,C84,C87,C88,C92,C101,C113,C115,C124,C133                                       | 1UF                    | Cap, ceramic, 0805, >=10V, 10%       |                |
| 4    | 27  | C10,C13,C23,C27,C30,C31,C39,C45,C47,C64,C75,C78,C79,C90,C93,C95,C97,C106,C136,C157,C159,C161,C163,C164,C166,C168,C500 | NLC                    | No Load Capacitor                    |                |
| 5    | 25  | C12,C18,C36,C42,C44,C51,C56,C63,C86,C94,C98,C105,C108,C122,C126,C129,C134,C137,C138,C139,C141,C142,C147,C149,C154     | 39pF                   | Cap, ceramic, 0402, >=10V, 10%       |                |
| 6    | 8   | C14,C21,C25,C52,C53,C65,C71,C73                                                                                       | 33nF                   | Cap, ceramic, 0402, >=10V, 10%       |                |
| 7    | 21  | C16,C17,C26,C32,C49,C69,C70,C74,C80,C82,C99,C117,C118,C119,C121,C125,C140,C143,C170,C171,C501                         | 1nF                    | Cap, ceramic, 0402, >=10V, 10%       |                |
| 8    | 4   | C20,C50,C155,C156                                                                                                     | 1.5pF                  | Cap, ceramic, 0402, >=10V, 10%       |                |
| 9    | 6   | C22,C33,C34,C46,C83,C96                                                                                               | 1.2pF                  | Cap, ceramic, 0402, >=10V, 10%       |                |
| 10   | 1   | C24                                                                                                                   | 18pF                   | Cap, ceramic, 0402, >=10V, 10%       |                |
| 11   | 4   | C28,C72,C76,C81                                                                                                       | 1pF                    | Cap, ceramic, 0402, >=10V, 10%       |                |
| 12   | 2   | C29,C77                                                                                                               | 3.9pF                  | Cap, ceramic, 0402, >=10V, 10%       |                |
| 13   | 2   | C38,C85                                                                                                               | 3pF                    | Cap, ceramic, 0402, >=10V, 10%       |                |
| 14   | 2   | C41,C89                                                                                                               | 47UF                   | Cap, tant, 1210, 6.3V, 10%           |                |
| 15   | 1   | C48                                                                                                                   | 10pF                   | Cap, ceramic, 0402, >=10V, 10%       |                |
| 16   | 3   | C67,C112,C114                                                                                                         | 33pF                   | Cap, ceramic, 0402, >=10V, 10%       |                |
| 17   | 3   | C91,C100,C102                                                                                                         | 15pF                   | Cap, ceramic, 0402, >=10V, 10%       |                |
| 18   | 2   | C104,C116                                                                                                             | 2pF                    | Cap, ceramic, 0402, >=10V, 10%       |                |
| 19   | 4   | C107,C151,C160,C162                                                                                                   | 10nF                   | Cap, ceramic, 0402, >=10V, 10%       |                |
| 20   | 8   | C123,C131,C144,C145,C146,C148,C152,C153                                                                               | 10UF                   | Cap, tant, 1210, >=10V, 10%          |                |
| 21   | 1   | C127                                                                                                                  | 220pF                  | Cap, ceramic, 0402, >=10V, 10%       |                |
| 22   | 1   | C128                                                                                                                  | 1.2nF                  | Cap, ceramic, 0603, >=10V, 10%       |                |
| 23   | 1   | C130                                                                                                                  | 12nF                   | Cap, ceramic, 0603, >=10V, 10%       |                |
| 24   | 1   | C135                                                                                                                  | 100nF                  | Cap, ceramic, 0402, >=10V, 10%       |                |
| 25   | 3   | C165,C167,C169                                                                                                        | 12pF                   | Cap, ceramic, 0402, >=10V, 10%       |                |
| 26   | 1   | J1                                                                                                                    | RS-232 (mini-USB)      | Conn - mini USB, surface mount       |                |
| 27   | 1   | J2                                                                                                                    | CON12B                 | Conn - 6x2,male                      |                |
| 28   | 1   | J3                                                                                                                    | PROGRAM/DEBUGGER       | No Load Connector                    |                |
| 29   | 2   | J4,J6                                                                                                                 | ANT                    | Shield Clip, SMT,0.017"-0.021" thick | Autosplice     |
| 30   | 2   | J5,J7                                                                                                                 | RF Switching Connector | RF switch connector                  | ITT Industries |
| 31   | 1   | J8                                                                                                                    | DC_Conn                | DC jack, surface mount               |                |
| 32   | 7   | L1,L15,L17,L22,L32,L36,L37                                                                                            | 2.2nH                  | Inductor, ww, 0603, 5%               |                |
| 33   | 3   | L2,L8,L9                                                                                                              | NLI                    | No Load Inductor                     |                |
| 34   | 2   | L3,L25                                                                                                                | 1.8nH                  | Inductor, ww, 0603, 5%               |                |
| 35   | 5   | L4,L19,L20,L39,L40                                                                                                    | 47nH                   | Inductor, ww, 0603, 5%               |                |
| 36   | 5   | L5,L6,L28,L42,L43                                                                                                     | 100nH                  | Inductor, ww, 0603, 5%               |                |
| 37   | 2   | L7,L26                                                                                                                | 68nH                   | Inductor, ww, 0603, 5%               |                |
| 38   | 1   | L10                                                                                                                   | 15nH                   | Inductor, ww, 0603, 5%               |                |
| 39   | 1   | L11                                                                                                                   | 3.6nH                  | Inductor, ww, 0603, 5%               |                |
| 40   | 2   | L12,L33                                                                                                               | 110nH                  | Inductor, ww, 0603, 5%               |                |
| 41   | 2   | L14,L34                                                                                                               | 3.9nH                  | Inductor, ww, 0603, 5%               |                |
| 42   | 2   | L16,L35                                                                                                               | 390nH                  | Inductor, ww, 0603, 5%               |                |
| 43   | 2   | L18,L38                                                                                                               | 4.7nH                  | Inductor, ww, 0603, 5%               |                |
| 44   | 1   | L24                                                                                                                   | 82nH                   | Inductor, ww, 0603, 5%               |                |

|    |    |                                                      |                    |                                     |                |
|----|----|------------------------------------------------------|--------------------|-------------------------------------|----------------|
| 45 | 1  | L29                                                  | 18nH               | Inductor, ww, 0603, 5%              |                |
| 46 | 1  | L30                                                  | 36nH               | Inductor, ww, 0603, 5%              |                |
| 47 | 1  | L31                                                  | 8.2nH              | Inductor, ww, 0603, 5%              |                |
| 48 | 1  | L41                                                  | 1.6nH              | Inductor, ww, 0603, 5%              |                |
| 49 | 3  | L45,L46,L47                                          | 10nH               | Inductor, ww, 0603, 5%              |                |
| 50 | 3  | Q1,Q2,Q3                                             | PUMH9              | Trans,pack,NPN (A982614-101)        |                |
| 51 | 10 | R1,R2,R7,R8,R10,R12,R18,R24,R79,R82                  | 10K                | Res, 0402, mf, 63mW, 50V, 5%        |                |
| 52 | 7  | R3,R4,R28,R44,R69,R70,R71                            | 51K                | Res, 0402, mf, 63mW, 50V, 5%        |                |
| 53 | 6  | R5,R6,R61,R78,R85,R89                                | 1K                 | Res, 0402, mf, 63mW, 50V, 5%        |                |
| 54 | 13 | R9,R30,R45,R52,R53,R56,R58,R72,R86,R87,R88,R500,R511 | NLR                | Res, 0402, mf, 63mW, 50V, 5%        |                |
| 55 | 4  | R11,R62,R63,R76                                      | 10                 | Res, 0402, mf, 63mW, 50V, 5%        |                |
| 56 | 6  | R13,R14,R46,R73,R75,R77                              | 100                | Res, 0402, mf, 63mW, 50V, 5%        |                |
| 57 | 10 | R15,R16,R17,R19,R20,R21,R22,R23,R25,R26              | 200                | Res, 0402, mf, 63mW, 50V, 5%        |                |
| 58 | 7  | R27,R32,R43,R49,R65,R66,R68                          | 27K                | Res, 0402, mf, 63mW, 50V, 5%        |                |
| 59 | 2  | R31,R48                                              | 8.2K               | Res, 0402, mf, 63mW, 50V, 5%        |                |
| 60 | 2  | R33,R47                                              | 30                 | Res, 0402, mf, 63mW, 50V, 5%        |                |
| 61 | 1  | R34                                                  | 18                 | Res, 0402, mf, 63mW, 50V, 5%        |                |
| 62 | 2  | R36,R37                                              | 300                | Res, 0402, mf, 63mW, 50V, 5%        |                |
| 63 | 2  | R39,R55                                              | 470                | Res, 0402, mf, 63mW, 50V, 5%        |                |
| 64 | 3  | R41,R57,R83                                          | 100, 1%            | Res, 0402, mf, 63mW, 50V, 1%        |                |
| 65 | 1  | R42                                                  | 432, 1%            | Res, 0402, mf, 63mW, 50V, 1%        |                |
| 66 | 3  | R51,R501,R510                                        | 0                  | Res, 0402, mf, 63mW, 50V, 5%        |                |
| 67 | 1  | R59                                                  | 432, 1%            | Res, 0402, mf, 63mW, 50V, 1%        |                |
| 68 | 1  | R64                                                  | 12K                | Res, 0402, mf, 63mW, 50V, 5%        |                |
| 69 | 1  | R67                                                  | 2.7K               | Res, 0402, mf, 63mW, 50V, 5%        |                |
| 70 | 1  | R80                                                  | 150, 1%            | Res, 0402, mf, 63mW, 50V, 1%        |                |
| 71 | 1  | R81                                                  | 309, 1%            | Res, 0402, mf, 63mW, 50V, 1%        |                |
| 72 | 1  | R84                                                  | 140, 1%            | Res, 0402, mf, 63mW, 50V, 1%        |                |
| 73 | 2  | R502,R509                                            | 0, 0603            | Res, 0603, mf, 63mW, 50V, 5%        |                |
| 74 | 2  | R503,R506                                            | 36                 | Res, 0402, mf, 63mW, 50V, 5%        |                |
| 75 | 4  | R504,R505,R507,R508                                  | 150                | Res, 0402, mf, 63mW, 50V, 5%        |                |
| 76 | 3  | SW1,SW2,U31                                          | LMV221             | RF power detector                   | National Semi  |
| 79 | 1  | U1                                                   | LM358AD            | OpAmp,Dual,LM358AD,SO8              | ST             |
| 80 | 1  | U2                                                   | uPD78F0511GB-UES-A | CPU, 8-bit,16K flash,768 RAM,44-pin | NEC            |
| 81 | 2  | U3,U13                                               | RF2860             | RX LNA+Mixer                        | RFMD           |
| 82 | 4  | U4,U14,U22,U23                                       | AD8353             | Amplifier                           | ANALOG DEVICES |
| 83 | 2  | U5,U11                                               | DMJ1880EGA         | Samtronics Duplexer                 | Samtronics     |
| 84 | 1  | U6                                                   | SF0299B1           | IF SAW FILTER 299MHz, 5MHz BW       | SAWTRON        |
| 85 | 2  | U7,U17                                               | uPC8172TB          | UP CONVERTER                        | NEC            |
| 86 | 2  | U8,U10                                               | SAFEB1G88KA0F00R0S | RF SAW FILTER (1850-1910)           | MURATA         |
| 87 | 2  | U9,U19                                               | RF2377             | RF amplifier with AGC               | RFMD           |
| 88 | 1  | U12                                                  | TQM763022          | power amplifier (1850-1910)         | TriQuint       |
| 89 | 1  | U15                                                  | SF0380B1           | IF SAW FILTER 380MHz, 5MHz BW       | SAWTRON        |
| 90 | 1  | U16                                                  | TCP-2-10+          | Power divider                       | Mini Circuits  |
| 91 | 2  | U18,U20                                              | SAFEB1G96KA0F00R1S | RF SAW FILTER (1930-1990)           | MURATA         |
| 92 | 1  | U21                                                  | TQM7M6001          | Power amplifier (1930-1990)         | TriQuint       |
| 93 | 1  | U24                                                  | LMX2346            | 2GHz single Synthesizer             | National Semi  |
| 94 | 1  | U25                                                  | MAPDCC0003         | 2 Way Power Splitter                | MACOM          |
| 95 | 1  | U26                                                  | TV0125A            | VCO (1520 - 1620MHz)                | SAWTRON        |
| 96 | 1  | U27                                                  | TX0161A            | VC_TCXO                             | SAWTRON        |
| 97 | 1  | U28                                                  | SP1086V1-L         | 1.5 Amp Adjustable LDO              | Sipex          |
| 98 | 1  | U29                                                  | SP6222EK-L-3-0     | 50 mA LDO                           | Sipex          |
| 99 | 1  | U30                                                  | SPX1117M3-L        | 800 mA ADJ LDO                      | Sipex          |