

Qty	Item Number	Item Description	Reference Designator
1	044-039-147	LAUNDRY WIRELESS INTERFACE PWB	PWB
SURFACE MOUNT PARTS ON TOP SIDE OF PWA			
1	044-026-011	13.00 MHz SMT CRYSTAL	Y2
1	044-026-012	26.00 MHz SMT CRYSTAL	Y1
1	044-201-011	LM2672M-ADJ SWITCHING REGULATOR	U12
1	044-201-034	MAX3232E (NARROW)	U9
2	044-201-037	LM317L VOLTAGE REGULATOR	U1, U2
1	044-201-045	MAX3483 RS-485 2-WIRE TRANSCEIVER	U10
4	044-201-050	2:1 MULTIPLEXER ANALOG SWITCH	U4, U6, U7, U8
1	044-201-058	LPC2138 MICROCONTROLLER	U11
1	044-201-057	CC1100 WIRELESS TRANSCEIVER	U5
1	044-202-010	3.16K OHM RES, 0805, 1%	R32
1	044-202-011	220 OHM RES, 0805, 1%	R24
2	044-202-014	0 OHM RES, 0603	R17, R31
1	044-202-018	1K OHM RES, 0603, 1%	R33
8	044-202-020	2.21K OHM RES, 0603, 1%	R20, R22, R23, R25, R28, R29, R30, R34
2	044-202-026	4 X 4.7K OHM RPACK, 5%	RP1, RP2
4	044-202-037	3.32K OHM RES, 1206, 1%	R1, R2, R7, R11
3	044-202-040	10 OHM RES, 1206, 1%	R21, R26, R27
5	044-202-041	100 OHM RES, 1206, 1%	R3, R4, R12, R13, R16
8	044-202-042	10K OHM RES, 0603, 1%	R5, R6, R8, R9, R10, R14, R18, R19
1	044-202-047	56K OHM RES, 0603, 1%	R15
3	044-203-002	0.1uF/50V CAP, 0805, X7R, 10%	C7, C8, C41
5	044-203-012	0.01uF/50V CAP, 0603, X7R, 10%	C15, C27, C32, C36, C42
19	044-203-013	0.1uF/16V CAP, 0603, X7R, 10%	C11, C12, C13, C16, C18, C19, C20, C21, C22, C23, C25, C26, C29, C30, C31, C34, C35, C37, C40
1	044-203-015	47uF/50V CAP, 8mm X 10mm CAN	C38
3	044-203-016	10uF/10V CAP, A, 20%	C4, C24, C33
1	044-203-003	100uF/10V CAP, D 20%	C28
1	044-203-014	1uF/16V CAP, 1206, X7R, 10%	C3
1	044-203-027	1.0pf/50V CAP, 0402, C0G, +/-0.25pf	C10
2	044-203-028	1.5pf/50V CAP, 0402, C0G, +/-0.25pf	C5, C9
1	044-203-029	1.8pf/50V CAP, 0402, C0G, +/-0.25pf	C2
4	044-203-030	15pf/50V CAP, 0402, C0G, 5%	C14, C17, C39, C43
2	044-203-031	100pf/50V CAP, 0402, C0G, 5%	C1, C6
6	044-204-001	BSS123LT1	Q1, Q2, Q3, Q4, Q5, Q6
2	044-205-002	20V SMA TRANSZORB	D6, D7
3	044-205-003	5V SMA TRANSZORB	D3, D8, D9
1	044-205-006	MBRS360T3	D14
4	044-205-007	10MQ060N RECTIFIER	D10, D11, D12, D13

5	044-205-009	DUAL RECTIFIER	D1, D2, D4, D5, D15
1	044-209-002	68uH INDUCTOR	L6
1	044-209-007	6.2nH +/-0.3nH INDUCTOR, 0402	L1
2	044-209-008	12nH 5% INDUCTOR, 0402	L4, L5
2	044-209-009	18nH 5% INDUCTOR, 0402	L2, L3
2	044-210-003	LP3985-3.3 VOLTAGE REGULATOR	U3, U13
Qty	Item Number	Item Description	Reference Designator
THROUGH-HOLE PARTS ON TOP SIDE OF PWA			
1	044-006-078	2 X 11 CONNECTOR - .165	J1
1	044-007-161	2 X 4 HEADER - .100	J3
1	044-011-013	LED 5MM GREEN DIFFUSED	DS1
2	044-011-014	LED 5MM RED DIFFUSED	DS2, DS3
1	046-061-275	RF SHIELD	
3"	n/a	18 AWG INSULATED STRANDED WIRE	
NOT INSTALLED			
1		GRN 1206 LED	DS11
1		RED 1206 LED	DS12, DS13
1		SMA CONNECTOR	SMA1
1		1 X 6 HEADER - .100	J2

Qty	Item Description	Reference Designator	Circuit Function
1	LM2672M-ADJ SWITCHING REGULATOR	U12	Switching regulator to convert Input Voltage to +5 VDC
1	MAX3232E (NARROW)	U9	Level Shifter transceiver for RS-232
2	LM317L VOLTAGE REGULATOR	U1, U2	Laundry Machine Interface circuit
1	MAX3483 RS-485 2-WIRE TRANSCEIVER	U10	Transceiver Driver for RS-485
4	2:1 MULTIPLEXER ANALOG SWITCH	U4, U6, U7, U8	Analog Multiplexer to configure circuit for supporting different Laundry Machine types
1	LPC2138 MICROCONTROLLER	U11	Microcontroller
1	CC1100 WIRELESS TRANSCEIVER	U5	RF Transceiver
2	LP3985-3.3 VOLTAGE REGULATOR	U3, U13	Linear regulator for +3.3V and partitions microcontroller and RF transceiver



Tune Up or Alignment Procedures

There are no Tune-up or Alignment procedures for the LWI30xx. The circuit board is installed within an ABS plastic cup. A metal shield covers the RF transceiver and associated circuitry. The antenna consists of an 18 AWG wire soldered directly into the board. The output power level of the RF transceiver is controlled in software and is adjusted based on the Bit-Error-Rate. The device was set to its maximum level during FCC compliance testing.