DACB- HI SPD DAC TX Q-
DACB+ HI SPD DAC TX Q+
DACA+ HI SPD DAC TX I+
DACA- HI SPD DAC TX I-

AUX_DAC_C phase modulation of U23
AUX_DAC_B VCXO freq adjust of U9 (when using
VC-FXO-65F)
AUX_DAC_A PLL speedup at MAX2829

AUX_ADC_A1 1/2 supply voltage
AUX_ADC_A2 RSSI from MAX2829
AUX_ADC_B1 2G power detector of AWL6951
AUX_ADC_B2 5G power detector of AWL6951

ADCA+ HI SPD ADC RX I+
ADCA- HI SPD ADC RX I-
ADCB- HI SPD ADC RX Q-
ADCB+ HI SPD ADC RX Q+

RADIO_IO_1	MAX2829 /CS	(output)
RADIO_IO_2	U2 RCK	(output)
RADIO_IO_3	MAX2829 SCLK and U2 SCK	(output)
RADIO_IO_4	MAX2829 DIN and U2 SER	(output)
RADIO_IO_5	U3 switch (0 = straight, 1 = cross)	(output)
RADIO_IO_6	U4 switch (0 = straight, 1 = cross)	(output)
RADIO_IO_7	U5 switch (0 = straight, 1 = cross)	(output)
RADIO_IO_8	LD (lock detect = 1 = LED ON)	(input)

5G PA AWL6851 5GHz power amp enable
2G PA AWL6951 2GHz power amp enable
RXENA MAX2829 RX enable
TXENA MAX2829 TX enable
/SHDN MAX2829 SHUT DOWN

enable only one power amp at a time

as shown in schematic, four antennas have min.
coupling between antennas and freq. bands.
antennas can be arranged at angle for polarization.

JO50, 51, 52, 53 (use C82, 83, 84, 85)
give optional antenna diversity when used in conjunction with U2.
enables TX and RX to share one antenna yet
still have max spatial diversity (i.e. A01 and A04)

JO80, 81, 82, 83 are extra pads to
switch in D01:DIPLEXER_8PIN.
use C80, 81 to jumper JO80, 81

F70, 71, 72, 73 are footprints for one or two
Minicircuits LPCN filters or TDK filters.

F60, F61 are RF BPF from TDK
short with 0805 otherwise.

AUX_DAC_A, B, sR221,222,223 and sC222,221,224 and sD220,222
give a computer controlled ability to frequency modulate the carrier
through the voltage controlled oscillator when U9 = VC-FXO-65F.
install a short at sJS220 if using this capability.

VCXO spec:

V_C = 1.65 +/-1.5V, df = +/-80ppm

VCXO measured result:

V(AUX_DAC_B)	F(Hz)
0.1	39,998,778.2 +/-0.3
3.0	39,999,524

dV = 3.0, df = 1655 _ 550Hz/volt _ +/-100kHz @ 5.6 GHz

sU23 used with AUX_DAC_C and varactor C231 adjusts phase of 40 MHz clock,
so multiple boards can be phase adjusted as an array. check jumpers.

AUX_ADC_A, sR140,141,142, sC140,141,142 and D140,D141,D142
give a computer controlled ability to phase modulate/fast lock the carrier.

FREQ. REF

opt. PHASE ADJ.

ANTENNA/CONNECTOR

SWITCHES

FILTER/DIPLEXER

POWERAMP

TRANSCEIVER

Title	WiBo102
Size	D
Number	Orcad
Revision	
Date:	6/6/2006
Sheet	of
File:	C:\RTS\WINLAB\Wilbo103\WIBO103.SCHDOC
Drawn By:	