WB2REM-G4CDY

ULTIMATE LINKING INTERFACE

ULI

BOARD CONNECTIONS

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CONNECTORS

J1

COS (Carrier Operated Squelch) Input. Analogue input over the range 0 to 6.5V.
Normally connected to squelch output of radio. Can also be used on AGC,RSSI or s-meter
Input impedance approximate 20kohms.
Threshold can be set by ULI SETUP software.

J3

Auxiliary radio audio input. Mixed with all other audio sources and output to both radio and soundcard.
Nominal level in 0.5v RMS

J5

Main receiver audio, over-rides audio fom RJ45 connector.
Nominal level in 0.5v RMS

J6

Audio from soundcard speaker

J7

Local microphone mixes with receivers and soundcard.
Nominal 50kohm impedance with DC bias for electret microphones

J10

RJ45 connector carrying all audio, squelch and PTT connections

Pin1	NC
Pin2	NC
Pin3	AF from RX
Pin4	PTT- goes to GND on TX
Pin5	GND
Pin6	AF to TX MIC INPUT
Pin7	ALT AF FROM RX
Pin8	COS from radio.

J11

PTT contacts, floating, not connected to GND

JP1

Local PTT for internet.
Normal operation, short pins 2 & 3 to over-ride RX squelch
If invert selected on SET UP short 2 & 1 to over-ride squelch
In echolink CD RX control must be selected.

J15

Radio PTT- over.

JP2

PC Boot output. Can be used to restart computer if application program or windows crashes. Optically couples output that will sink about 5mA. Pin 1 +ve.
Wire to reset switch on PC motherboard or use to control relay to turn off PC power.
This output must not be connected to mains voltage.

J14

CAT/General purpose output.
Optically isolated but with provision to link to a pull up resistor and ground.

Pin1	10Kohm pull up to +5V
Pin2	Collector of opto isolator
Pin3	Emitter of opto isolator
Pin4	Board ground

Note' For operation with ICOM CV-I link pins 1 & 2 together and wire to the tip of a 1/8" jack plug and link 3 & 4 to the plug ring.

CON2

Speaker

J4

External speaker 3 ohms 1Watt max.

J12

If shorted allows DTMF tones from radio to go to internet

J8

DC input 9-15VDC . Polarity is unimportant!

LOCATION OF
CONNECTORS ON
THE ULI BOARD

CONNECTOR DB9
MAX202C
PIC16F628-04/P
MT8870/HT9170
LM386
LM358
LM358
LTV827
RX PTT
HEADER 3
COR IN
AUX RX
MAIN RX
FROM SC
LOCAL MIC
PHONEJACK
LOCAL MIC GAIN
100k VAR TC76Z-104-ND
ICOM or KENWOOD MIC RJ45
RJ45
PTT
RELAY DPDT
POWER
TX CAT
ACTIVITY
LED
MON LEVEL
10k VAR P3Q61003-ND
MIC LEVEL
10k VAR P3Q61003-ND
INT SPKR
EXT SPKR
TO SC
TX MIC
VIN 9-15V
POWER SKT
BRIDGE
7805
PC BOOT
HEADER 2
OPTO ISOLATOR
BC337, 2N2222 or any NPN
4 HEADER
CAT INTERFACE
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