

	B	C	D
1	Connector	Function	Settings
2			
3	J18	Power Connector	13 to 16v @ 1A
4			
5	J4	External 10MHz reference input	2v <= input RMS >= 200mV
6			
7	J6	50 ohm termination for external 10MHz reference	Fit jumper to terminate
8			
9	J11	User I/O Pin	
10			1 PTT input - connect to 0v to activate PTT
11			2 Line level AF in - Left
12			3 Phones level AF out - Right
13			4 Dash - connect to 0V to activate
14			5 Dot - connect to 0V to activate
15			6 Analogue Input 4 - 3v max
16			7 Analogue Input 2 - 3v max
17			8 Digital input 1 - connect to 0V to activate
18			9 Open collector output 0
19			10 Open collector output 2
20			11 Open collector output 4
21			12 Open collector output 6
22			13 Open collector PTT out, connects to 0v when active, 30v @ 100mA max load
23			14 0v
24			15 Line level AF in - Right
25			16 Phones level AF out - Left
26			17 Digital input 2 - connect to 0V to activate
27			18 Digital input 3 - connect to 0V to activate
28			19 Analogue Input 3 - 3v max
29			20 Line level AF out - Right
30			21 0v
31			22 Open collector output 1
32			23 Open collector output 3
33			24 Open collector output 5

	B	C	D
34			25 Open collector reference
35			
36	JP1	FPGA boot selection	Jumper pins 1 & 2 for load from USB
37	JP2	FPGA boot selection	Jumper pins 2 & 3 for load from USB
38	JP3	FPGA boot selection	Jumper pins 3 & 4 for load from USB
39			
40	JP5	Microphone Bias	No jumper = no bias Jumper pins 1 & 2 for bias on ring Jumper pins 2 & 3 for bias on tip
41			
42	JP4	Mic audio	Jumper pins 1 & 2 for ring Jumper pins 2 & 3 for tip
43			
44	JP6	PTT select	Jumper pins 1 & 2 for ring Jumper pins 2 & 3 for tip
45			
46	J2	Amplifier pass through	Pin 1 = 0v, pin 2 = FWD Power (0 - 3v max), pin 3 = REV Power (0 - 3v max) pin 4 = 12v (from J18 power connector via 1A PTC fuse)
47			
48	J1	Apollo/Alex interface	
49			
50	J17	Apollo interface	
51			
52	J16	Left Speaker	Pin 1 = +, Pin 2 = -, Pin 3 = 0v
53			
54	J15	Right Speaker	Pin 1 = +, Pin 2 = -, Pin 3 = 0v
55			
56	J23	Speakers	Top, Right Speaker, tip = +, ring = -, sleeve = 0v Bottom, Left Speaker, tip = +, ring = -, sleeve = 0v
57			
58	J8		
59	J10	Mic input	Tip or ring = live, sleeve = 0v
60	J7	RF input	
61	J12	RF output	

	B	C	D
62			
63	J13	Transverter Output	Low level output for transverters etc. Uses sets level via selection of R67 & R71
64			
65	J14	I2C interface to Apollo and user devices	Pins 1,3,5,9,10 = 0v, pins 7,8 = +5v, pin 2 = SCL, pin 4 = SDA
66			
67	J5	10MHz reference select	Link pins 1&3 for on board 10MHz TCXO. Link pins 2 & 4 for external
68			
69	Jx	Enable on board 10MHz reference	Remove jumper to disable (on next PCB revision)
70			
71	J19	Float external reference ground	Remove jumper to isolate grounds