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Ashling Product Brief APB185

Ashling Smart Card Probe-Adapter Connections

For use with Ashling's Smart Card Emulators, Ashling supplies a Smart Card Probe-Adapter, part number IN-CLA7816USB, that contains ISO7816-format Card Contacts, a Contactless Antenna and access points to Smart Card USB pins. The Smart Card Probe-Adapter is supplied with a DB15 cable. The pin connections on the DB15 fixed male plug on the IN-CLA7816USB board are as follows:

<i>IN-CLA7816USB DB15 pin</i>	<i>ISO7816 Contact</i>	<i>Function</i>
1	C5	GND/VSS
2	C1	VCC/VDD
3	C2	RESET
4	C3	CLK
5	C8 (via link)	IO2
6	C4 or C8 (via link)	USB DM (Data-)
7		(not used)
8		Antenna LA
9	C4 (via link)	IO3
10	C5	GND/VSS
11		(not used)
12	C7	IO1
13	C4 or C8 (via link)	USB DP (Data+)
14		(not used)
15		Antenna LB

Note 1: ISO7816 pads C4 and C5 connect to the DB15 fixed plug if the appropriate Link on the IN-CLA7816USB board is closed.

Note 2: Pins 8 and 15 on the DB15 connector connect to the Contactless loop antenna on the IN-CLA7816USB board or to the USB Data + and – pins on the Smart Card, as appropriate.

The probe-adapter board contains a 15-way D-Type right-angled fixed plug; for example, ITW McMurdo SDAX15PNTD.

The 15-way cable connects, in turn, to the appropriate Ashling PRU-series Smart Card Bondout Probe board (part of the Ultra-series emulators). The pin connections on the Bondout Probe Board are as follows:

<i>PRU-series Probe Pins</i>	<i>ISO7816 Contact</i>	<i>Function</i>
1	C5	GND/VSS
2	C1	VCC/VDD
3	C2	RESET*
4	C3	CLK
5	C8	IO2
6		(not used)
7		(not used)
8		Antenna LA
9		IO3
10	C5	GND/VSS
11		(not used)
12	C7	IO1
13		(not used)
14		(not used)
15		Antenna LB