

12 pin Digilent connector to 10 pin ribbon cable connector v2

Description

The card is intended for the connection of lab modules with a 10 pin connector to Digilent cards that use a 12 pin connector.

The card is connected directly to the output connector on the Digilent cards. The output connector has a pin configuration according to *Figure 1* and this can also be seen in *Table 1*. Note that the Digilent cards only deliver 3.3 Volts, not 5 Volts.

The card is connected to lab modules using a 10 wire ribbon cable where the connector has a configuration according to *Figure 2* and *Table 2*.

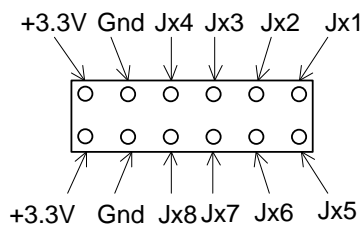


Figure 1 Digilent output connector J2

Connector pin	Name	Connector pin	Name
1	3.3 V	7	Jx3
2	3.3 V	8	Jx7
3	GND	9	Jx2
4	GND	10	Jx6
5	Jx4	11	Jx1
6	Jx8	12	Jx5

Table 1: Connector J2

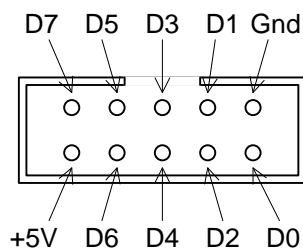


Figure 2 Ribbon cable connector J1

Connector pin	Name	Connector pin	Name
1	GND	6	D4
2	D0	7	D5
3	D1	8	D6
4	D2	9	D7
5	D3	10	+3.3 V

Table 2: Connector J1



The schematic of the connection card is shown in *Figure 2* while the PCB is given in *Figure 3*. The names of the connected pins are given in *Table 3* *Table 4* gives the component list for the card.

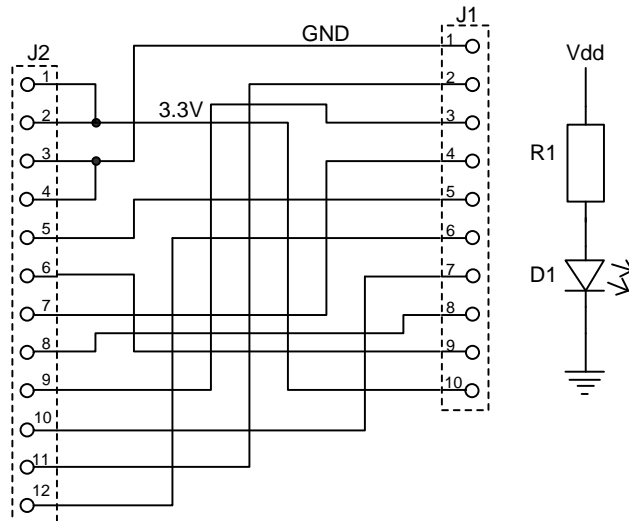


Figure 3: Schematic of the connection card

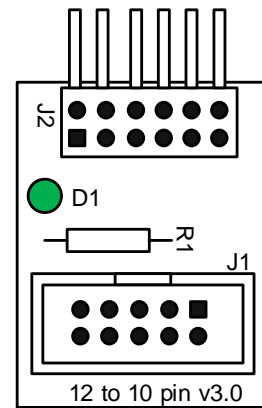


Figure 4: PCB layout for the connection card

Connector J1	Connector J2
GND	GND
J23.3 V	3.3 V
D0	Jx1
D1	Jx2
D2	Jx3
D3	Jx4
D4	Jx5
D5	Jx6
D6	Jx7
D7	Jx8

Table 3: Names of connected pins

RefDes	Component
J1	Vertical ribbon cable connector 2x5 pin
J2	Angled pin list 2x6 pin
R1	330 Ω
D1	LED green

Table 4: List of components