

Next Generation Intelligent LCD Panels

DPA-PCBUSB-2x Specification

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General Description

DPA-PCBRS232-2x is an interface board for connecting a color iLCD panel with 20/24-pin FFC cable to the USB port. Input voltage is 5V. A mini-speaker for signalling is included.

Connectors and Jumpers



Control Connector (Control)

The DPA-PCBUSB-2x is connected with the iLCD panel via the corresponding FFC cable. Please note, that the 20/24-pin FFC cable enclosed with the DPA-PCBUSB-2x must be inserted with the contact surface upwards as the FFC connector is a top-contact model. The same is true for the FFC connector on the iLCD panel itself. As the board is intended to be used with the parts showing upwards when it is connected with the iLCD panel (display surface showing upwards as well), the FFC cable has the contact surface on the opposite sides on the two ends to accomplish a correct connection between DPA-PCBUSB-2x and iLCD panel.

The **DPA-PCBUSB-20** has a 20pin connector and is used for the following displays: DPP-CTS2432, DPP-CTS2440, DPP-CxP3224-2, DPP-CxP3224A, DPP-Cx4827, DPP-Cx3224-2, DPP-Cx6448

The **DPA-PCBUSB-24** has a 24pin connector and is used for the following displays: DPP-Cx8048, DPP-Cx1060, DPP-Cx1060A

USB Connector (USB)

This connector enables you to connect iLCD's USB port to a USB port on a PC via a standard USB cable.

Pin	Direc- tion	Description
1	-	Vcc +5V
2	In/Out	USB-
3	In/Out	USB+
4	-	Ground

Power Supply Configuration Connector (Vsel)

Only one jumper is allowed to be set to select the power source for the iLCD module as follows:

Jumper Location		Description
Pin	Pin	Description
1	2	Enables supplying the iLCD module via the power supply connector's pin 4 (V _{CCI})
2	3	Enables supplying the iLCD module via the USB port (5V only)

Please note, that the DPP-Cx8048, DPP-Cx1060 and DPP-Cx1060A iLCD panels cannot be supplied via the USB port, as the USB port allows to draw a maximum of 500 mA only, which is exceeded by the DPP-Cx8048, DPP-Cx1060 and DPP-Cx1060 iLCD panels. **Trying to draw more than 500 mA from a USB port can damage your PC under worst circumstances!**

Power Supply Connector (FDC)

This connector applies the 5V power supply to the iLCD module if there is no USB port connected to the module. The connector used for this connection is the same as the power supply connector for a 3 $\frac{1}{2}$ " floppy disk drive, and has the same pinning.

Please note, that all iLCD panels mentioned in this document are available in a 3/3.3V variant optionally as well. If you connect an iLCD panel with 3/3.3V supply to the DPA-PCBUSB-2x, you **must** use 3/3.3V instead of the 5V supply, otherwise the iLCD panel would be damaged! Supplying the board plus the iLCD panel via USB port is not possible in this case!

Pin	Description
1	Not connected
2	Ground
3	Ground
4	V _{CC} (+5V / +3/3.3V)

<u>Shematic</u>



Revision History

Date	Rev. #	Revision Details
January 31, 2013	1.0	First Issue

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