

JCAT USB 3.0 host controller

The JCAT board uses a NEC uDP720201 USB controller. The board has two USB 3.0 connectors supporting the following data rates: Low Speed (1.5 Mbps), Full-Speed (12 Mbps), Hi-Speed (480 Mbps) and Super-Speed (5 Gbps).

The driver for Windows XP and 7 can be downloaded from the Adnaco website by clicking on the following link <http://www.adnaco.com/doc/USB3-201-202-DR-WIN-20120928.zip> (link is case sensitive).

For Windows 8 and 8.1 use the Microsoft built-in driver

The 5V voltage for USB connectors can be supplied from the computer connecting the J6 LP4 to the computer's power supply – see the attached diagram. If clean 5V power is required then an external power supply can be connected via the J3 power jack. The jack is 2.1/5.5 mm. The card itself does not use 5V power so for self-powered USB devices the 5V power supply is not required. For noise sensitive applications the 5V voltage can be additionally filtered by low noise LDOs on the JCAT board. The power selection configuration is described in Table 1.

Table 1 USB connectors power source selection

USB connector	Connector	Description
J1	J5	Selects 5V power source for J1 connector 1-2 – 5V from J3 power jack 2-3 – 5V from J5 LP4 For self-powered devices is not needed
	J4	1-2 – low noise LDO is used to filter noise from selected 5V power supply (max 900mA) 2-3 – selected 5V is connected directly to J1
J2	J7	Selects 5V power source for J2 connector 1-2 – 5V from J3 power jack 2-3 – 5V from J5 LP4 For self-powered devices is not needed
	J8	1-2 – low noise LDO is used to filter noise from selected 5V power supply (max 900mA) 2-3 – selected 5V is connected directly to J2

