

JCAT USB CARD FEMTO – QUICK START GUIDE

Introduction

Thank you for purchasing the JCAT USB Card FEMTO. This Quick Start Guide is designed to guide you through installation.

Package Content

- JCAT USB Card FEMTO
- Low-profile PCI Express bracket (the card comes with the full-height bracket installed)

Installation Requirements

- PC with one free x1-x16 lane PCI Express 2.0 slot
- Optional: 5V/1A linear power supply (recommended for best results)

System Requirements

- Linux or Microsoft Windows (all editions)
- Optional driver package required for Windows XP & 7 (for Linux, Windows 8 or later, driver is loaded automatically):
<https://jcat.eu/RENESAS-USB3-Host-Driver-30230-setup.exe>

Installation

- The 5V voltage for USB connectors and for the USB chipset & clock can be supplied from the computer connecting the J6 LP4 to the computer's power supply. However, it is highly recommended to connect a clean 5V/1A external power supply via the J3 power jack (The jack is 2.1/5.5 mm) – this is recommended even if a USB DAC/USB DDC doesn't require 5V via USB port. The 5V voltage is additionally filtered by low noise LDOs on the JCAT board and only clean voltages are applied to the USB controller & clock. The power selection configuration is described in Table 1. The jumpers on the card are configured to use external PSU by default. If a USB DAC/USB DDC does not require 5V via USB ports, it is recommended to remove all jumpers from the card for best performance.

Table 1 USB connectors power source selection

USB connector	Connector	Description
J1	J5	Selects 5V power source for J1 USB connector 1-2 - 5V from J3 power jack 2-3 - 5V from J6 LP4
	J4	1-2 - low noise LDO is used to filter noise from selected 5V power supply (max 900mA) to J1 USB connector 2-3 - selected 5V is connected directly to J1 USB connector
J2	J7	Selects 5V power source for J2 USB connector 1-2 - 5V from J3 power jack 2-3 - 5V from J6 LP4
	J8	1-2 - low noise LDO is used to filter noise from selected 5V power supply (max 900mA) to J2 USB connector 2-3 - selected 5V is connected directly to J2 USB connector

- Optional: mount low-profile PCI Express bracket.
- Disconnect the power and remove your PC's cover.
- Look for a free PCI Express slot. Depending on the model, your motherboard may have a variety of different slots to choose from. The JCAT USB Card FEMTO can be installed in any PCI Express Gen 2 slot: x1, x2, x4, x8 and x16.
- Once you have decided which slot you are going to use, you might have to remove the blank (thin piece of metal attached that covers the hole in the chassis).
- Align the JCAT USB Card FEMTO with the slot and gently, but firmly push the card into position. Once the JCAT USB Card FEMTO is seated firmly into place, insert fixing screw.
- Optional: connect 5V/1A power supply either via LP4 molex or 2.1/5.5mm center positive DC jack connector
- Check to make sure nothing has been loosened during installation and then replace the case cover and connect your USB device.
- Reconnect the power.