

USB Solution

After some research I found that we can't use FTDI chip because the USB device class is not changeable.

<http://www.ftdichip.com/Support/FAQs.htm#General1>

Microcontroller based chip solution

We can also use microcontroller based USB chip. the advantage of this solution is that there is no need for usb core which is around (2000 LUTs) but they are quite expensive like.

<http://www.cypress.com/?id=193>

<http://ics.nxp.com/support/microcontrollers/usb/>

There is one chip which is around \$3 but this is a special offer, the usual price is also high for this chip.

<http://uk.farnell.com/oxford-semiconductor/oxu200-lqag/controller-usb-peripheral-100lqfp/dp/1581465>

One good solution can be based on NXP ISP1582 microcontroller which is a less then \$5

http://www.mouser.com/catalog/specsheets/ISP1582_6.pdf

USB PHY solution

I think one other possible solution is using USB PHY and my recommendation is to use the SMSC chip.

<http://www.smsc.com/index.php?tid=143&pid=26>

But we need the evaluation board. Which I can design for ATLYS board based on schematic and PCB available from SMSC.

<http://www.smsc.com/index.php?tid=143&pid=101&cid=&tab=2>

The following link is very good for comparing prices from multiple distributors.

<http://www.findchips.com>