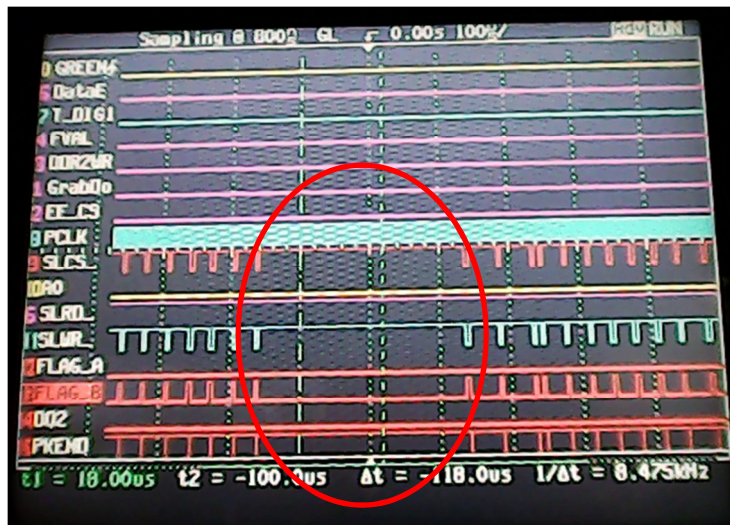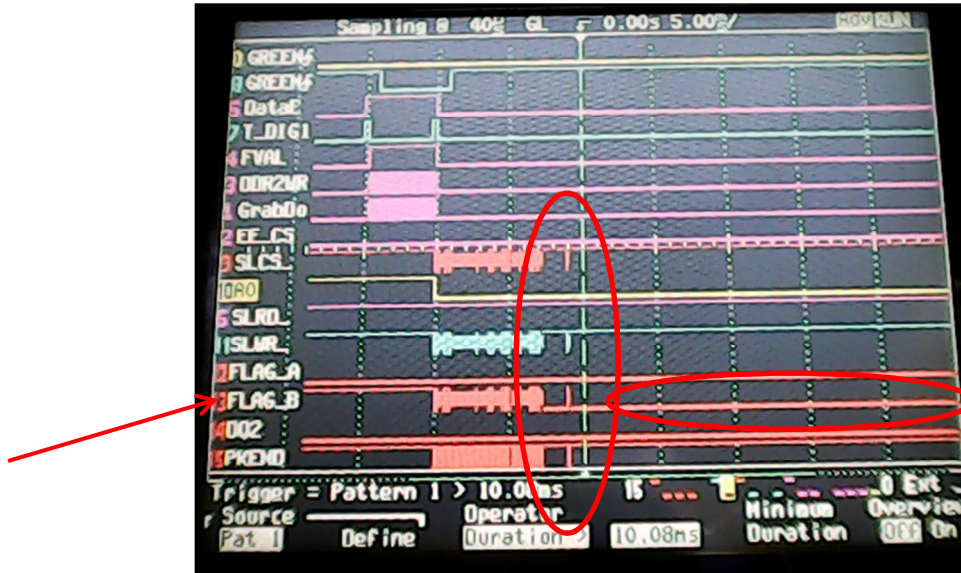Hi,

we are experiencing similar problems with our FX3 (CYUSB3014).

Here are our observations. With USB3.0 it's more frequent to have a Xferdata stall. We noticed that this error appends more frequently with old PCs or one with a bad CPU. As you can see on the "Flag B Stall for a while 1.jpg"
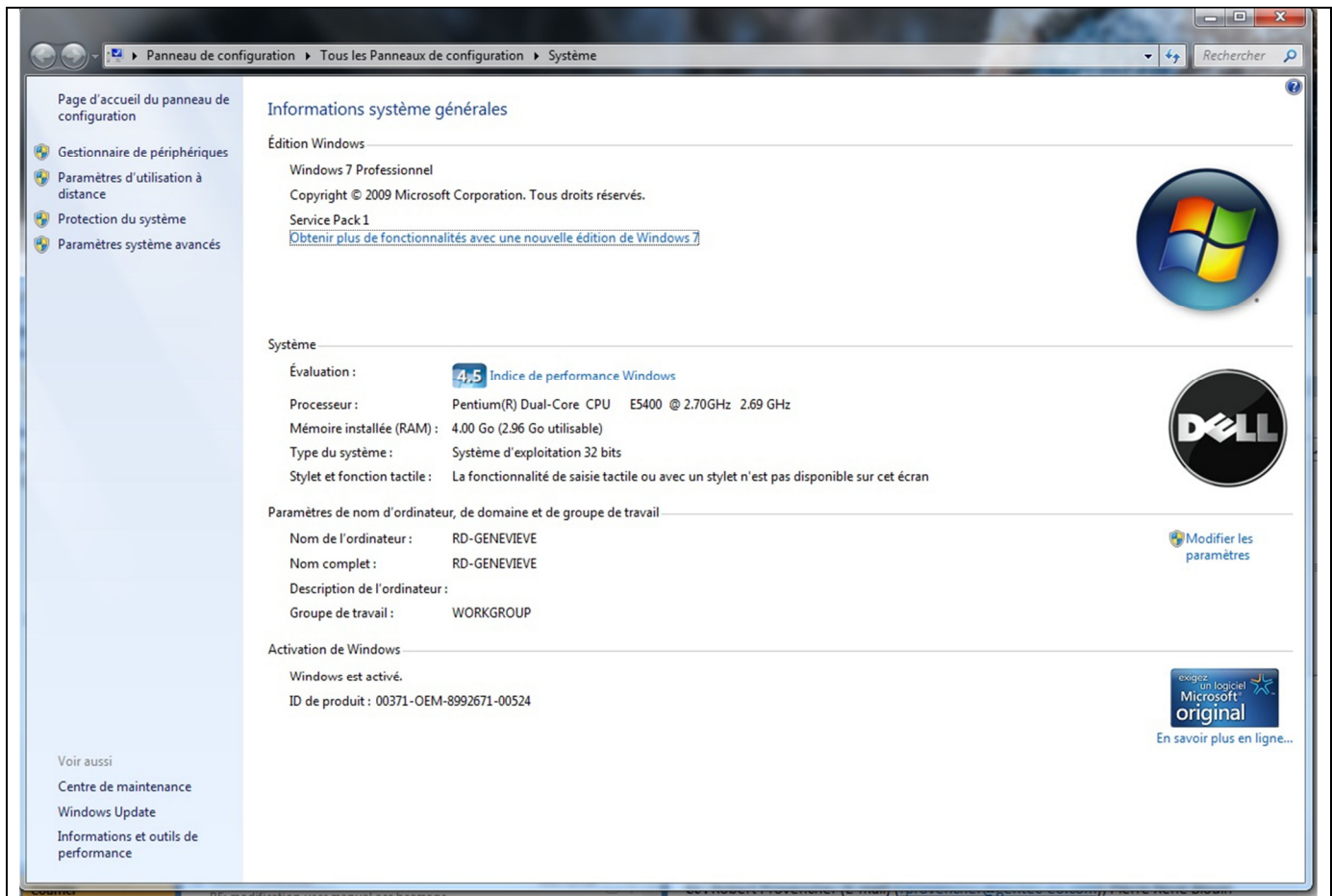

picture, you see the "FLAG_B" stalls for a while and do not recuperates.In this state, the FPGA waits for the FX3 flag to get back to positive "1" to send the other datas on GPIF bus and never recover back until we reset the FX3. This is not acceptable for us. It takes a while to get back on track and negotiate again the USB 3.0 link. Also, we verified the timing on GPIF bus and all seem to be correct as described in the app note #65974. We even running the GPIFF@ 50MHz instead of 100MHz. We noticed that the packet was sent by the FPGA we use to talk to the FX3 configured as SlaveFifo.

We have done some tests on packet size also. We are currently running on packet size = 16384bytes more than recommended bu USB.org. Considering that fact, we reduced the packet size to the recommended 1024 bytes but we observed the same problem (FLAG_B stalls). Then we tried to not asserting the "PKEND" signal. No positive results neither (See pictures "PKEND inactive" and "PKEND active" attached).

PKEND active	PKEND inactive

We noticed the problem more frequently on the computer below:

In resume, we would like to see an answer(s) from Cypress to the threads below. Hope this would help engineer at Cypress to have a more reliable product or to understand what we done wrong with the FX3.

As reference see other threads here:

http://www.cypress.com/?id=4&rID=33460

http://www.cypress.com/?app=forum&id=167&rID=76748

http://www.cypress.com/?app=forum&id=167&rID=82234

http://www.cypress.com/?app=forum&id=167&rID=59160

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