

# Re: Illegal instruction – code c000001d (!!! second chance !!!)

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*Source:*

<http://www.tech-archive.net/Archive/Development/microsoft.public.development.device.drivers/2007-12/msg00504.html>

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- *From:* "Ivan Brugiolo [MSFT]" <[ivanbrug@xxxxxxxxxxxxxxxxxxxxxxxx](mailto:ivanbrug@xxxxxxxxxxxxxxxxxxxxxxxx)>
  - *Date:* Thu, 27 Dec 2007 12:29:39 –0800
- 

I guess you need NOT to leave anything (IRPs, WorkItems, DPCs, etc) outstanding before unloading.

As far as the check-vs-free, my take is that it is timing.

Maybe the outstanding IRP below completes before you get unloaded, because the machine/driver is slower.

Or, you get lucky to get reloaded to the same address, and, you never notice the problem.

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<[vijayaraju.k@xxxxxxxx](mailto:vijayaraju.k@xxxxxxxx)> wrote in message

<news:138f0ddf-ab81-4eab-b419-9003177f8ea0@xx>

On Dec 28, 1:01 am, "Ivan Brugiolo [MSFT]"

<[ivanb...@xxxxxxxxxxxxxxxxxxxxxxxx](mailto:ivanb...@xxxxxxxxxxxxxxxxxxxxxxxx)> wrote:

It's possible that the routine that was passed to the WFD framework is invalid, because the driver was unloaded and then loaded to a different address.

Or, the address of the routine (because of unload-and-reuse) now points to something completely different, such as a mapped-view of a file, or a piece of pool.

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<[vijayaraj...@xxxxxxxx](mailto:vijayaraj...@xxxxxxxx)> wrote in message

Re: Illegal instruction – code c000001d (!!! second chance !!!)

news:fe0f19e8-376a-4c41-bce1-87c848c87137@xx

Hi Experts,

I have developed a USB-UART Single KMDF driver for TUSB3410 Device. The device appears as Virtual Com Port in Device manager. I have both the Build versions for this driver Checked and Release. When I loaded the Checked Build versions of the driver Everything seems to be good and device works as expected. Device Open,close,init and Un-init everything works very well including File transfers in Hyper terminal, individual Reads and Writes.

But my problem is when I try to load the Free Build version of the Driver the system crashes with following last line of Error:  
Illegal instruction – code c000001d (!!! second chance !!!)  
f88d4dde 8d ???

and the crash dump for this driver is as follows:

```
*****_*****
*
*
* Bugcheck
Analysis *
*
*
*****_*****
```

Use !analyze -v to get detailed debugging information.

BugCheck FC, {f88d4ddc, 2eed163, f88d4d64, 0}

Probably caused by : Wdf01000.sys ( Wdf01000!  
FxRequestBase::CompleteSubmitted+89 )

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Followup: MachineOwner

-----  
  
kd> !analyze -v

```
*****_*****  
*  
*  
* Bugcheck  
Analysis *  
*  
*  
*****_*****
```

ATTEMPTED\_EXECUTE\_OF\_NOEXECUTE\_MEMORY (fc)

An attempt was made to execute non-executable memory. The guilty driver

is on the stack trace (and is typically the current instruction pointer).

When possible, the guilty driver's name (Unicode string) is printed on the bugcheck screen and saved in KiBugCheckDriver.

Arguments:

Arg1: f88d4ddc, Virtual address for the attempted execute.

Arg2: 02eed163, PTE contents.

Arg3: f88d4d64, (reserved)

Arg4: 00000000, (reserved)

Debugging Details:  
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DEFAULT\_BUCKET\_ID: DRIVER\_FAULT

BUGCHECK\_STR: 0xFC

PROCESS\_NAME: System

TRAP\_FRAME: f88d4d64 --- (.trap 0xfffffffff88d4d64)

ErrCode = 00000011

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eax=c0000016 ebx=00000000 ecx=00000000 edx=00000002 esi=7dfe1fe8  
edi=8233b8fc  
eip=f88d4ddc esp=f88d4dd8 ebp=824b76d0 iopl=0 nv up ei pl zr  
na pe nc  
cs=0008 ss=0010 ds=0023 es=0023 fs=0030 gs=0000  
efl=00010246  
f88d4ddc 044e add al,4Eh  
Resetting default scope

LAST\_CONTROL\_TRANSFER: from 8051c0d3 to 804f8aef

STACK\_TEXT:

f88d4cec 8051c0d3 000000fc f88d4ddc 02eed163 nt!KeBugCheckEx+0x1b  
f88d4d4c 8053f90c 00000008 f88d4ddc 00000000  
nt!MmAccessFault+0x8e7  
f88d4d4c f88d4ddc 00000008 f88d4ddc 00000000 nt!KiTrap0E+0xcc  
WARNING: Frame IP not in any known module. Following frames may be  
wrong.  
f88d4ddc aa030245 7db48928 7db3f600 8233b8fc 0xf88d4ddc  
f88d4e04 aa0075d3 827aa51b 824c09f8 00000000 Wdf01000!  
FxRequestBase::CompleteSubmitted+0x89  
f88d4e20 aa00768d 014b76d0 8236e928 f88d4e4c Wdf01000!  
FxIoTarget::RequestCompletionRoutine+0x195  
f88d4e30 804ef5ed 00000000 827aa460 824b76d0 Wdf01000!  
FxIoTarget::\_RequestCompletionRoutine+0x35  
f88d4e4c 804f054c 00000000 827aa460 8236e928  
nt!IopUnloadSafeCompletion  
+0x1d  
f88d4e7c f7f51ee5 827aa460 81c0fe10 82750028 nt!IopfCompleteRequest  
+0xa2  
f88d4ee4 f7f52b57 81fee4d8 00000000 827507d8 USBPORT!  
USBPORT\_CompleteTransfer+0x373  
f88d4f14 f7f53754 026e6f44 827500e0 827500e0 USBPORT!  
USBPORT\_DoneTransfer+0x137  
f88d4f4c f7f54f6a 82750028 80541ac8 82750230 USBPORT!  
USBPORT\_FlushDoneTransferList+0x16c  
f88d4f78 f7f62fb0 82750028 80541ac8 82750028  
USBPORT!USBPORT\_DpcWorker  
+0x224  
f88d4fb4 f7f63128 82750028 00000001 82489008 USBPORT!  
USBPORT\_IsrDpcWorker+0x37e  
f88d4fd0 80540f7d 8275064c 6b755044 00000000  
USBPORT!USBPORT\_IsrDpc  
+0x166  
f88d4ff4 80540c4a f8930c18 00000000 00000000 nt!KiRetireDpcList+0x46  
f88d4ff8 f8930c18 00000000 00000000 00000000 nt!KiDispatchInterrupt  
+0x2a

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80540c4a 00000000 00000009 bb835675 00000128 0xf8930c18

STACK\_COMMAND: kb

FOLLOWUP\_IP:

Wdf01000!FxRequestBase::CompleteSubmitted+89

aa030245 eb0c jmp Wdf01000!

FxRequestBase::CompleteSubmitted+0x97 (aa030253)

SYMBOL\_STACK\_INDEX: 4

SYMBOL\_NAME: Wdf01000!FxRequestBase::CompleteSubmitted+89

FOLLOWUP\_NAME: MachineOwner

MODULE\_NAME: Wdf01000

IMAGE\_NAME: Wdf01000.sys

DEBUG\_FLR\_IMAGE\_TIMESTAMP: 4549b23a

FAILURE\_BUCKET\_ID:

0xFC\_Wdf01000!FxRequestBase::CompleteSubmitted+89

BUCKET\_ID: 0xFC\_Wdf01000!FxRequestBase::CompleteSubmitted+89

Followup: MachineOwner

Re: Illegal instruction – code c000001d (!!! second chance !!!)

Can anybody help me in this regard? I don't know How to debug further and what to do next as the error is not in my driver?

Please somebody help me to get rid of this problem, It is very urgent for me.

Your valuable suggestions are always appreciable.

Thanks in advance.

~Vijji– Hide quoted text –

– Show quoted text –

Hi Ivan,

Thanks for the Immediate reply.

You are absolutely correct. My driver gets reloaded because, I have firmware download in my driver hence I need to Recycle/Reload the driver after downloading the firmware by using "WdfUsbTargetDeviceCyclePortSynchronously".

So what do you think I can do to fix this issue? Why is it effects only in Free Build of the driver?

Thnaks in advance.

~Vijji

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