

# Vivado High-Level Synthesis (HLS)

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## Not able to open .dat file ✓ SOLVED

 **sai\_shashi**  
Explorer



Posts: 297  
Registered: 07-25-2016

✓ **Not able to open .dat file**


02-21-2017 01:02 AM

Hi there,

I am trying to open the .dat file in vivado HLS test bench, do some operation on the data, in the core and then print the data. But i am not able to open the file itself. I have attached the code here. Can someone help me here and give me some inputs?

Thanks


 [core.cpp](#) 1 KB

 [core\\_test.cpp](#) 1 KB

Message 1 of 10 (2,623 Views)

0 Kudos

## Accepted Solutions

 **u4223374**  
Scholar



Posts: 2,413  
Registered: 04-26-2015

✓ **Re: Not able to open .dat file**

02-22-2017 02:24 AM

Looking at your code in core.cpp, I can see a few problems.

(1) Both your variables there (pixelNum and energy) are unsigned char (8-bit). You read a value into each of them, then shift them up to 16 bits. If you shift an 8-bit variable by 8 bits, you don't have anything left. I'm not sure what you're aiming for here, but it might indicate that you are using different data type.

(2) You're passing the arguments by value. That is, when you call readBytes, the compiler is making a new copy of pixelNum and energy to play with. readBytes modifies these values, but when it finishes the extra copies that were created just for readBytes to use are deleted.

To fix this, you need to pass those by reference. Luckily, in C++ this is easy: just change the first line of readBytes to this:


```
void readBytes(unsigned char buffer[13], unsigned char & pixelNum, unsigned char & energy)
```

[View solution in original post](#)

Message 9 of 10 (5,023 Views)

0 Kudos

## All Replies

 **u4223374**  
Scholar



Posts: 2,413  
Registered: 04-26-2015


Message 2 of 10 (2,606 Views)

**Re: Not able to open .dat file**

02-21-2017 01:35 AM

What error message are you seeing? The code looks OK to me.

0 Kudos

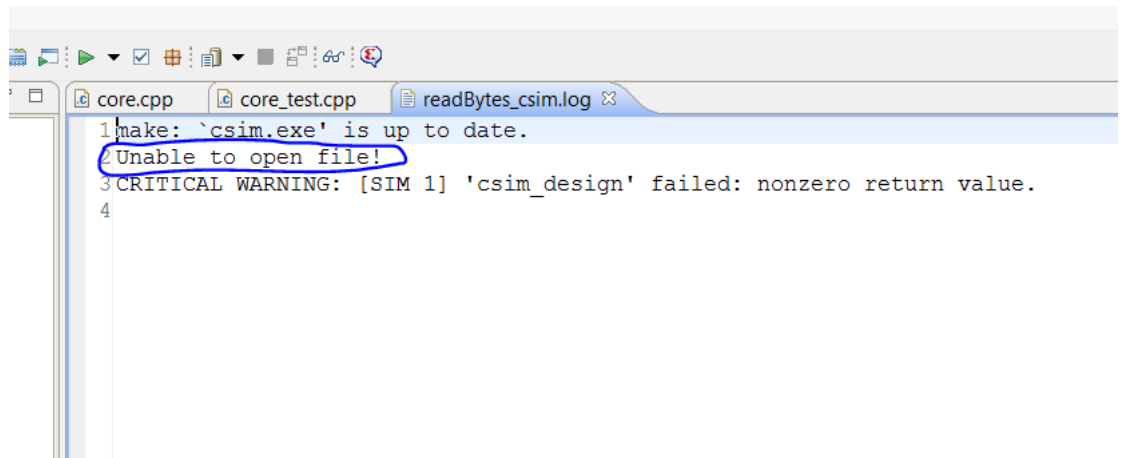
 **sai\_shashi**  
Explorer



Posts: 297

**Re: Not able to open .dat file**


02-21-2017 01:37 AM



```
1 make: 'csim.exe' is up to date.
2 Unable to open file!
3 CRITICAL WARNING: [SIM 1] 'csim_design' failed: nonzero return value.
4
```

Message 3 of 10 (2,600 Views)

0 Kudos

 **sai\_shashi**  
ExplorerPosts: 297  
Registered: 07-25-2016**Re: Not able to open .dat file**


02-21-2017 01:41 AM

You can check with this file:

 [file.dat 1 KB](#)

Message 4 of 10 (2,593 Views)

0 Kudos

 **u4223374**  
ScholarPosts: 2,413  
Registered: 04-26-2015**Re: Not able to open .dat file**

02-21-2017 02:19 AM


Try providing an absolute path to the file:

```
fopen("C:/HLS/data_file.txt", "rb");
```

That ensures that HLS can actually find it - without needing to know exactly what directory is being used for execution.

Message 5 of 10 (2,581 Views)

0 Kudos


 **sai\_shashi**  
ExplorerPosts: 297  
Registered: 07-25-2016**Re: Not able to open .dat file**

02-21-2017 05:26 AM

Hi  
I did that. Still the same error. What else can i do?  
Is the program correct first of all?

Message 6 of 10 (2,570 Views)

0 Kudos

 **muzaffer**  
TeacherPosts: 5,149  
Registered: 03-31-2012**Re: Not able to open .dat file**

02-21-2017 06:37 PM

@sai\_shashi I just ran your code locally and I got the proper output.  
make sure you are using the correct absolute path of the file in your fopen line.  
Go to the directory where file.dat resides and type "pwd" and check if the path is the same as in the string you give to fopen.

- Please mark the Answer as "Accept as solution" if information provided is helpful.  
Give Kudos to a post which you think is helpful and reply oriented.

Message 7 of 10 (2,553 Views)

0 Kudos

 **sai\_shashi**  
ExplorerPosts: 297  
Registered: 07-25-2016**Re: Not able to open .dat file**

02-21-2017 08:53 PM


Hi [muzaffer](#),  
Thanks a lot..It works now.  
But while printing it prints only zeros.(as shown below)

When you compiled the code, did you get the correct answer? Can you help me?

```
read.cpp  read_test.cpp  readBytes_csim.log x
1 make: `csim.exe' is up to date.
2 Pixel:0      Energy:0
3 Pixel:0      Energy:0
4 Pixel:0      Energy:0
5 Pixel:0      Energy:0
6 Pixel:0      Energy:0
7 Pixel:0      Energy:0
8 Pixel:0      Energy:0
9 Pixel:0      Energy:0
10 Pixel:0     Energy:0
11 Pixel:0     Energy:0
12 Pixel:0     Energy:0
13 Pixel:0     Energy:0
14 Pixel:0     Energy:0
15 Pixel:0     Energy:0
16 Pixel:0     Energy:0
17 Pixel:0     Energy:0
18 Pixel:0     Energy:0
19 Pixel:0     Energy:0
20 Pixel:0     Energy:0
21 Pixel:0     Energy:0
22 Pixel:0     Energy:0
23 INFO: [SIM 1] CSim done with 0 errors.
24
```

Message 8 of 10 (2,541 Views)

0 Kudos

 u4223374  
Scholar



Posts: 2,413  
Registered: 04-26-2015

## ✓ Re: Not able to open .dat file

02-22-2017 02:24 AM

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```

Message 9 of 10 (5,024 Views)

0 Kudos

 sai\_shashi  
Explorer



Posts: 297  
Registered: 07-25-2016

## Re: Not able to open .dat file

02-22-2017 02:55 AM

Hi Voyager,  
Thanks a lot.

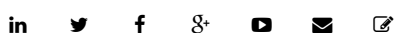
It solved my issue

Message 10 of 10 (2,526 Views)

0 Kudos

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