

## 1 Overview

**1.1 Location** \$(AMDAPPSDKSAMPLESROOT)\samples\opencl\cl\app

**1.2 How to Run** See the *Getting Started* guide for how to build samples. You first must compile the sample.

Use the command line to change to the directory where the executable is located. The default executables are placed in \$(AMDAPPSDKSAMPLESROOT)\samples\opencl\bin\x86 for 32-bit builds and \$(AMDAPPSDKSAMPLESROOT)\samples\opencl\bin\x86\_64\ for 64-bit builds.

Type the following command(s).

1. PCIeBandwidth  
Measures the bandwidth during transfers between host and device.
2. PCIeBandwidth -h  
This prints the help message.

**1.3 Command Line Options** Table 1 lists, and briefly describes, the command line options.

**Table 1 Command Line Options**

Short Form	Long Form	Description
-h	--help	Shows all command options and their respective meaning.
	--device	Devices on which the program is to be run. Acceptable values are <code>cpu</code> or <code>gpu</code> .
-q	--quiet	Quiet mode. Suppresses all text output.
-e	--verify	Verify results against reference implementation.
-t	--timing	Print timing.
	--dump	Dump binary image for all devices.
	--load	Load binary image and execute on device.
	--flags	Specify compiler flags to build the kernel.
-p	--platformId	Select platformId to be used (0 to N-1, where N is the number of available platforms).
-d	--deviceId	Select deviceId to be used (0 to N-1, where N is the number of available devices).
-i	--iterations	Number of iterations for kernel execution.
-x	--length	Length of the input buffer.

## 2 Implementation Details

Measures the bandwidth of transfers from:

1. Host to device, using `clEnqueueReadBuffer()`.
2. Device to host, using `clEnqueueWriteBuffer()`.

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### Contact

Advanced Micro Devices, Inc.  
One AMD Place  
P.O. Box 3453  
Sunnyvale, CA, 94088-3453  
Phone: +1.408.749.4000

For AMD Accelerated Parallel Processing:  
URL: [developer.amd.com/appsdk](http://developer.amd.com/appsdk)  
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