On 25 juin, 13:32, David Grier <david.gr...@nyu.edu> wrote:
> On 6/25/12 4:27 AM, alx wrote:
>
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>
>> This message is intended to afficionados of GPULIB (in particular
>> Michael Galloy...)
>
>> I was successfully using a Tesla C1060 over several monthes on some
>> workstation running Windows XP 64 bits and IDL8.0. Very successfully.
>
>> Recently, I upgraded the same machine to Windows 7 64 bits and IDL8.2,
>> with the following unsatisfying result:
>
>> IDL> print,!version
>> { x86_64 Win32 Windows Microsoft Windows 8.2 Apr 10 2012   64
>> 64}
>
>> IDL> gpuinit,0, /HARDWARE, ERROR=err, /VERBOSE
>> Welcome to GPULib 1.4.4 (Revision: 2107)
>> % GPUINIT: using hardware
>> Graphics card: Tesla C1060, compute capability: 1.3, memory: 4040 MB
>> available, 4095 MB total
>> Checking GPU memory allocation...no errors
>
>> IDL> a = gpuputarr(findgen(10), ERROR=err) & print,err
>>   0
>> IDL> b = gpuputarr(findgen(10), ERROR=err) & print,err
>>   0
>> IDL> c = gpumult(a,b,LHS=c, ERROR=err) & print,err
>>   8
>> The c GPU variable is created, but is in error
>
>> IDL> print, gpugetarr(c,ERROR=err) & print,err
>>   1.43493e-042 1.73472e-018   0.000000 7.34684e-040   0.000000
>> 0.000000   0.000000 6.01853e-036   0.000000 2.52435e-029
>>   0
>
>> Does someone have an explanation ?
>> alain.
>
> I see two possible issues

>
> 1. It appears that c is declared to be the LHS (left-hand side) of
>   the gpumult() call without first having being allocated.
>   Have you tried getting gpumult to allocate the necessary GPU
>   variable?
>
>   IDL> c = gpumult(a, b, ERROR=err) & print, err
>
>   You also might allocate the variable explicitly:
>   IDL> c = gpufltarr(10)
>   IDL> c = gpumult(a, b, LHS = c)
>
> 2. Did you rebuild GPULib when you upgraded your OS and IDL
>   installation? I've forgotten to rebuild GPULib on
>   my linux machines after upgrades and have had strange results.
>
> TTFN,
>
> David
>
>

Regarding issue 1: preallocation statement was missed in the message,
but was done in actual processing.
Regarding issue 2: GPUlib cannot be rebuilt (from my side), since the
binary DLL (GPUlib.1.4.4) file is distributed without any sources.
I forgot to say that, when upgrading OS and IDL, I kept same NVIDIA
graphics driver and CUDA version than before... So, I do not think
that rebuilding the library would be mandatory.
Thanks anyway for the tips.
alain.