

DEVICE QUERY

- <https://github.com/NVIDIA/cuda-samples/tree/master/Samples/deviceQuery>
- GeForce RTX 3070

```
→ deviceQuery git:(master) x ./deviceQuery
./deviceQuery Starting...

  CUDA Device Query (Runtime API) version (CUDA static linking)

Detected 1 CUDA Capable device(s)

Device 0: "GeForce RTX 3070"
  CUDA Driver Version / Runtime Version      11.2 / 11.2
  CUDA Capability Major/Minor version number: 8.6
  Total amount of global memory:              7982 MBytes (8370061312 bytes)
  (46) Multiprocessors, (128) CUDA Cores/MP: 5888 CUDA Cores
  GPU Max Clock rate:                        1770 MHz (1.77 GHz)
  Memory Clock rate:                         7001 Mhz
  Memory Bus Width:                          256-bit
  L2 Cache Size:                             4194304 bytes
  Maximum Texture Dimension Size (x,y,z)     1D=(131072), 2D=(131072, 65536), 3D=(16384, 16384, 16384)
  Maximum Layered 1D Texture Size, (num) layers 1D=(32768), 2048 layers
  Maximum Layered 2D Texture Size, (num) layers 2D=(32768, 32768), 2048 layers
  Total amount of constant memory:            65536 bytes
  Total amount of shared memory per block:    49152 bytes
  Total shared memory per multiprocessor:     102400 bytes
  Total number of registers available per block: 65536
  Warp size:                                 32
  Maximum number of threads per multiprocessor: 1536
  Maximum number of threads per block:        1024
  Max dimension size of a thread block (x,y,z): (1024, 1024, 64)
  Max dimension size of a grid size    (x,y,z): (2147483647, 65535, 65535)
  Maximum memory pitch:                      2147483647 bytes
  Texture alignment:                          512 bytes
  Concurrent copy and kernel execution:       Yes with 2 copy engine(s)
  Run time limit on kernels:                   No
  Integrated GPU sharing Host Memory:          No
  Support host page-locked memory mapping:    Yes
  Alignment requirement for Surfaces:         Yes
  Device has ECC support:                     Disabled
  Device supports Unified Addressing (UVA):    Yes
  Device supports Managed Memory:              Yes
  Device supports Compute Preemption:         Yes
  Supports Cooperative Kernel Launch:         Yes
  Supports MultiDevice Co-op Kernel Launch:   Yes
  Device PCI Domain ID / Bus ID / location ID: 0 / 1 / 0
  Compute Mode:
    < Default (multiple host threads can use ::cudaSetDevice() with device simultaneously) >

deviceQuery, CUDA Driver = CUDART, CUDA Driver Version = 11.2, CUDA Runtime Version = 11.2, NumDevs = 1
Result = PASS
```

LOCAL REGISTERS

Total number of registers available per block: 65536

