GPU

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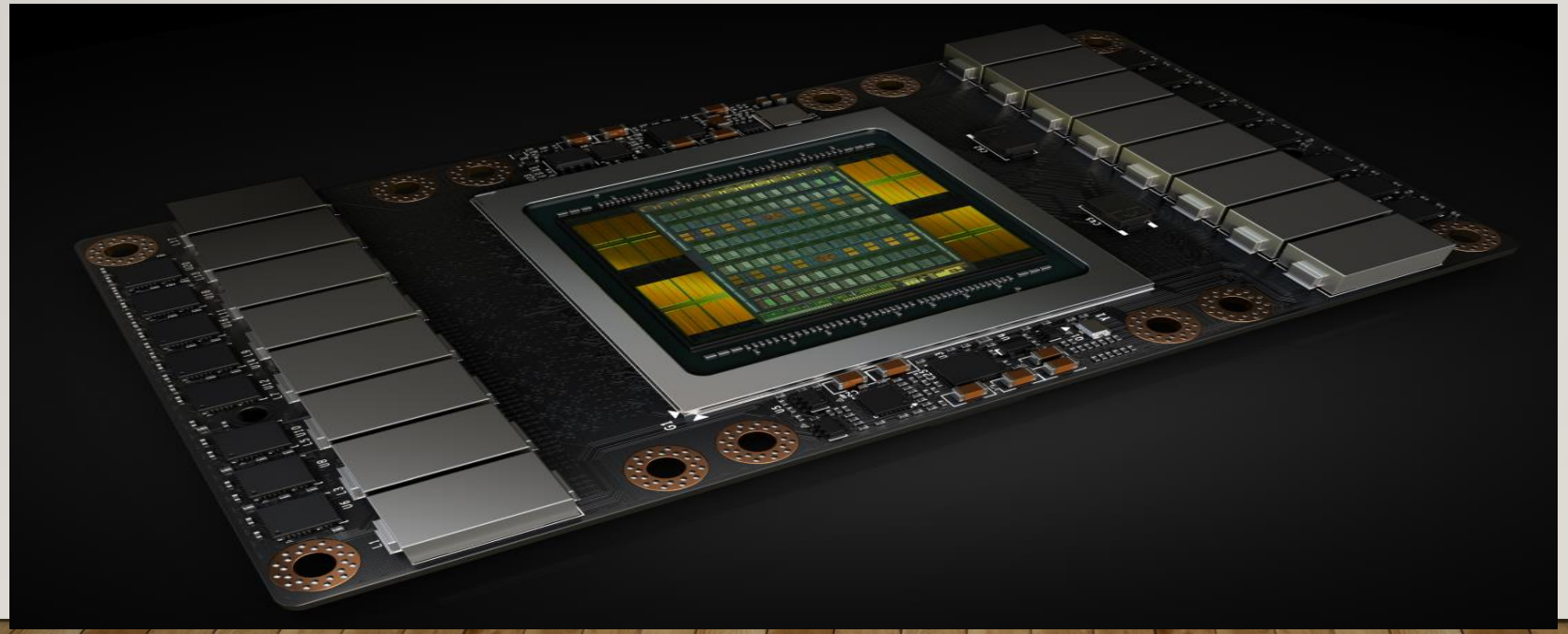
NVIDIA TESLA V100

- 2017 GPU Technology Conference in San Jose, NVIDIA CEO Jen-Hsun Huang announced the new NVIDIA Tesla V100, the most advanced accelerator ever built.

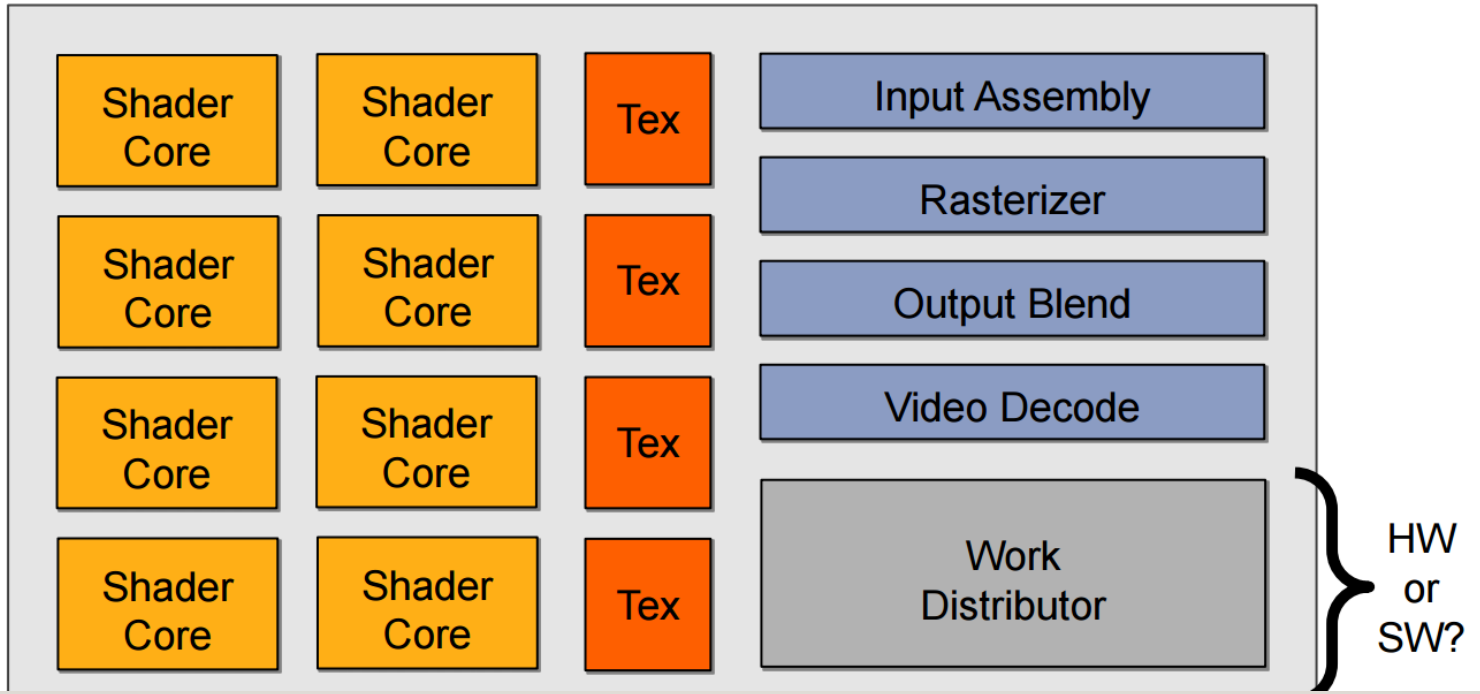


MAJOR FEATURES INCLUDE:

- New mixed-precision FP16/FP32 Tensor Cores purpose-built for deep learning matrix arithmetic;
- Enhanced L1 data cache for higher performance and lower latency;
- Streamlined instruction set for simpler decoding and reduced instruction latencies;
- Higher clocks and higher power efficiency.

What's in a GPU?

A GPU is a heterogeneous chip multi-processor (highly tuned for graphics)




超低功耗
Ultra Low Voltage
:3
intel
极致色彩
Best Color
RADEON
GRAPHICS
AMD
曲面细分
Tessellation
NVIDIA
GEFORCE
GTX
哇！我看不到像素点！
Wow!Retina!
_(:3 」∠)_
A5X

AMD AND NVIDIA

- GeForce and Radeon

- GTX m750ti
- GTX 1070

- RX 480
- RX 580

GTX 1060 AND GTX 1070

GTX 1060 key specifications:
- CUDA Cores: 1280
- Core Clock: 1506MHz
- Boost Clock: 1708Hz
- VRAM: 6GB GDDR5
- TFLOP: 3.8
- Memory Clock: 8Gbps
- Memory Bus Width: 192-bit
- Memory Bandwidth (GB/s): 192
- TDP: 120W
- Transistors: 4.4b
- Manufacturing process: FinFET 16nm
- Power connector: 1x 6-pin PCIe

GTX 1070 key specifications
- CUDA Cores: 1920
- Core Clock: 1506MHz
- Boost Clock: 1683MHz
- VRAM: 8GB GDDR5
- TFLOP: 6.5
- Memory Clock: 8Gbps
- Memory Bus Width: 256-bit
- Memory Bandwidth (GB/s): 256
- TDP: 150W
- Transistors: 7.2b
- Manufacturing process: FinFET 16nm
- Power connector: 1x 8-pin PCIe

MAXQ


THE PERFECT BALANCE
Peak Efficiency
High Performance
Much Thinner
Much Quieter
Incremental Performance
Power

WORK CITED

- https://devblogs.nvidia.com/parallelforall/inside-volta/
- Inside Volta: The World's Most Advanced Data Center GPU

- https://www.nvidia.com/en-us/geforce/products/10series/laptops/max-q/
- GEFORCE® GTX WITH MAX-Q DESIGN TRANSFORMING GAMING LAPTOPS


GEFORCE® GTX
WITH MAX-Q DESIGN
2014
51 MM | 10 LBS | 1 X PERF | GTX 880M
MAX-Q
18 MM | 5 LBS | 3.3 X PERF | GTX 1080