

Pascal GPU Architecture

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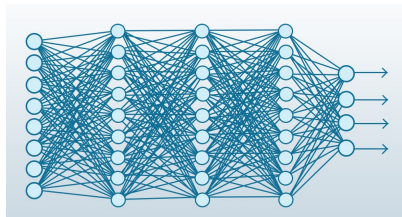
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Outline

- 1 Introduction
- 2 Graphic processing unit architecture

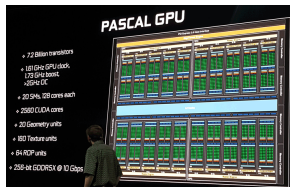
Introduction

- Graphic Processor Unit(GPU)
 - Games
 - Graphical softwares
 - Photoshop
 - corel
 - Deep learning and Artificial Intelligence



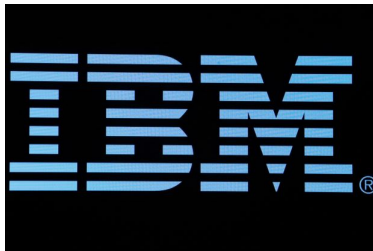
Introduction

- Nvidia
 - Pascal architecture
 - Facebook and Google
 - Audi and Benz - self drive

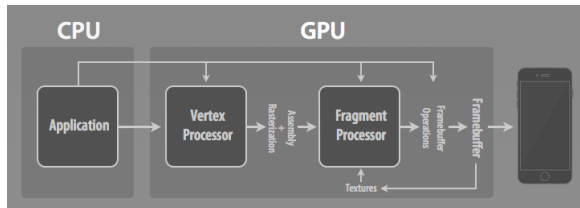


Graphics card

- First graphci card: IBM 1960 / 4 kb RAM / green
- Graphic Card Components
 - Graphic processor: Main componet
 - Memory
 - Peripherals



- Vertex processor
- Pixel Fragment Processor
- Programming language
- NVidia
- CUDA



CUDA

References

- [7] Drăxler, S., H. Karl, and Z.Á. Mann. Joint Optimization of Scaling and Placement of Virtual Network Services. in 2017 17th IEEE/ACM International Symposium on Cluster, Cloud and Grid Computing (CCGRID). 2017.
- [8] Huin, N., B. Jaumard, and F. Giroire, Optimal Network Service Chain Provisioning. IEEE/ACM Transactions on Networking, 2018. 26(3): p. 1320-1333.
- [9] Masri, W., et al. Minimizing delay in IoT systems through collaborative fog-to-fog (F2F) communication. in 2017 Ninth International Conference on Ubiquitous and Future Networks (ICUFN). 2017
- [10] Fan, J., et al. Deadline-Aware Task Scheduling in a Tiered IoT.Infrastructure. in GLOBECOM 2017 - 2017 IEEE Global Communications Conference. 2017.
- [11] Gupta, A., et al. Service Chain (SC) Mapping with Multiple SC Instances in a Wide Area Network. in GLOBECOM 2017 - 2017 IEEE Global Communications Conference. 2017.

**Thanks for
your attention.**