

ECE571: Advanced Microprocessor Design – Homework 11
NVIDIA GPU Readings
Fall 2024

Due: Monday 9 December 2024, 12:00pm

Create a document that contains the answers to the questions below. A .pdf or .txt file is preferred but I can accept MS Office or Libreoffice format if necessary.

1. Read/Skim the following tech report from NVidia:

- **NVIDIA Blackwell Architecture Technical Brief**

<https://resources.nvidia.com/en-us-blackwell-architecture>

- Answer the following questions:

- (a) what is FP4?
- (b) What is a trusted execution environment?
- (c) How many Blackwell GPUs can be hooked together using NVLINK?

2. Also read this article:

- **NVIDIA Blackwell Architecture and B200/B100 Accelerators Announced: Going Bigger With Smaller Data** by Ryan Smith , 18 March 2024

<https://www.anandtech.com/show/21310/nvidia-blackwell-architecture-and-b200b100-accelerators-announced-going-bigger-with-smaller-data>

- Answer the following questions:

- (a) Who is the Blackwell GPU named for?
- (b) This is not in the article, but can you buy a B100 board? How much would it cost?

3. Submitting your work.

- Create the document containing the answers to the questions asked.
- Please make sure your name appears in the document.
- e-mail the file to me by the homework deadline.