

I

CPU

4 cores . Each core has 4 ALUs

So no. of ALUs = 16

Base frequency = 1.60 GHz

Memory B.W. = 34.1 GBps.

$$\begin{aligned}\text{No. of operations} &= 16 \times 1.60 \times 10^9 \\ &= \underline{25.6 \text{ GOPs}} =\end{aligned}$$

$$\underline{\text{Arithmetic intensity}} = \frac{25.6 \text{ G}}{34.1 \text{ G}}$$

$$= 0.75 = \boxed{\frac{3}{4}}$$

II

GPU

4992 cuda cores

Frequency = 562 MHz.

Memory B.W. = 480 GBps

$$\begin{aligned}\text{No. of operations} &= 4992 \times 562 \times 10^6 \\ &= \underline{2805 \text{ GOPs}}\end{aligned}$$

$$\underline{\text{Arithmetic intensity}} = \frac{2805 \text{ G}}{480} = 5.84 \underline{\underline{6}}$$