Summary Of the testing device

Testing the CPU performance

Idle

CPU_256

```
User@DESKTOP-JOJO MINGW64 /h/!Current/CAO/CPU-vs-GPU/Code/CPU (main)
$ ./cpu_matrix_mult.exe 256
CPU Time: 0.004 seconds
```

CPU Time: 0.004 seconds
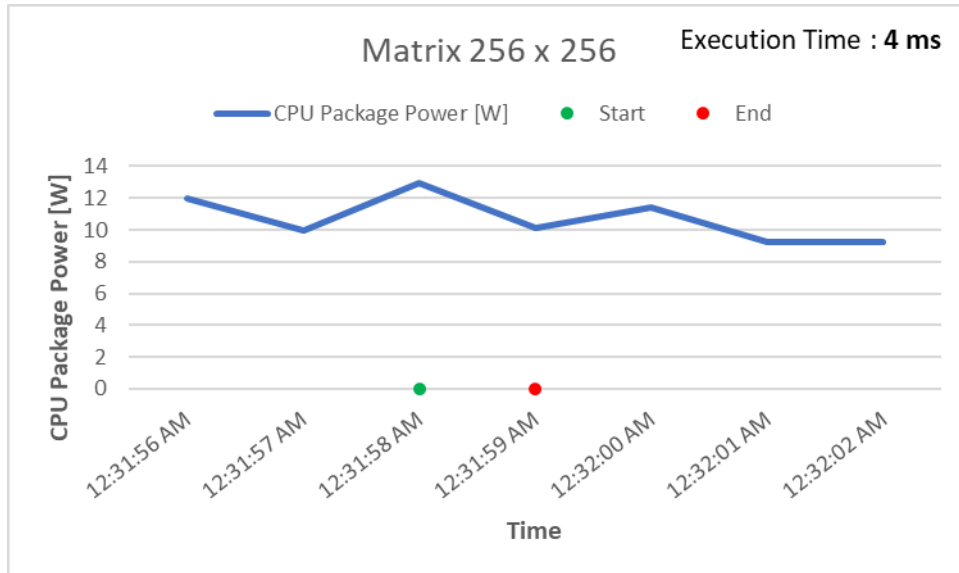
CPU_1024

```
User@DESKTOP-JOJO MINGW64 /h/!Current/CAO/CPU-vs-GPU/Code/CPU (main)
$ ./cpu_matrix_mult.exe 1024
CPU Time: 0.260 seconds
```

CPU Time: 0.260 seconds

CPU_2048

```
User@DESKTOP-JOJO MINGW64 /h/!Current/CAO/CPU-vs-GPU/Code/CPU (main)
$ ./cpu_matrix_mult.exe 2048
CPU Time: 7.177 seconds
```

CPU Time: 7.177 seconds

CPU_ 4096

```
User@DESKTOP-JOJO MINGW64 /h/!Current/CAO/CPU-vs-GPU/Code/CPU (main)
$ ./cpu_matrix_mult.exe 4096
CPU Time: 156.527 seconds
```
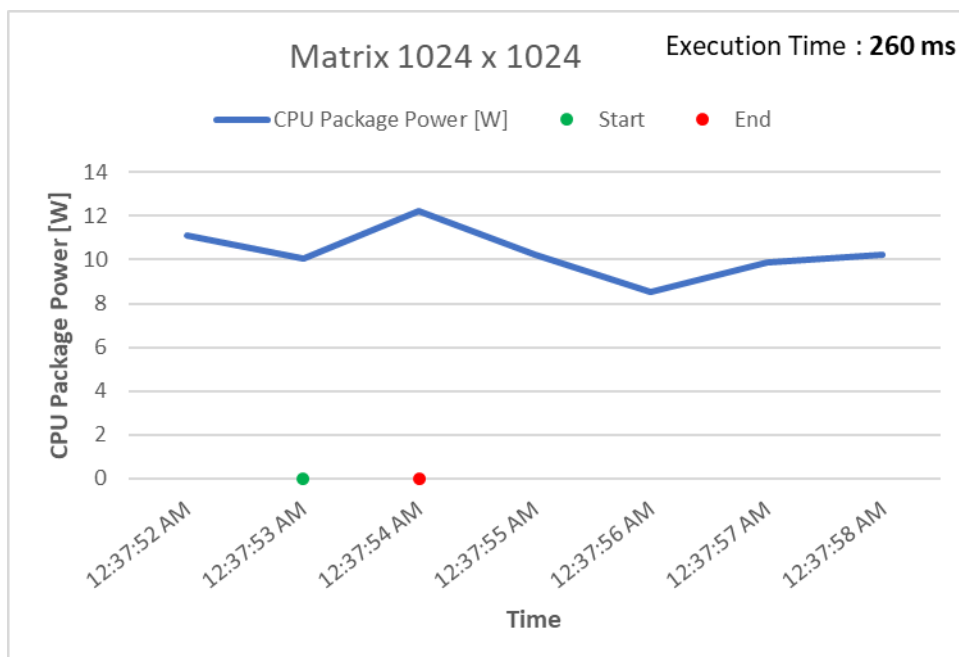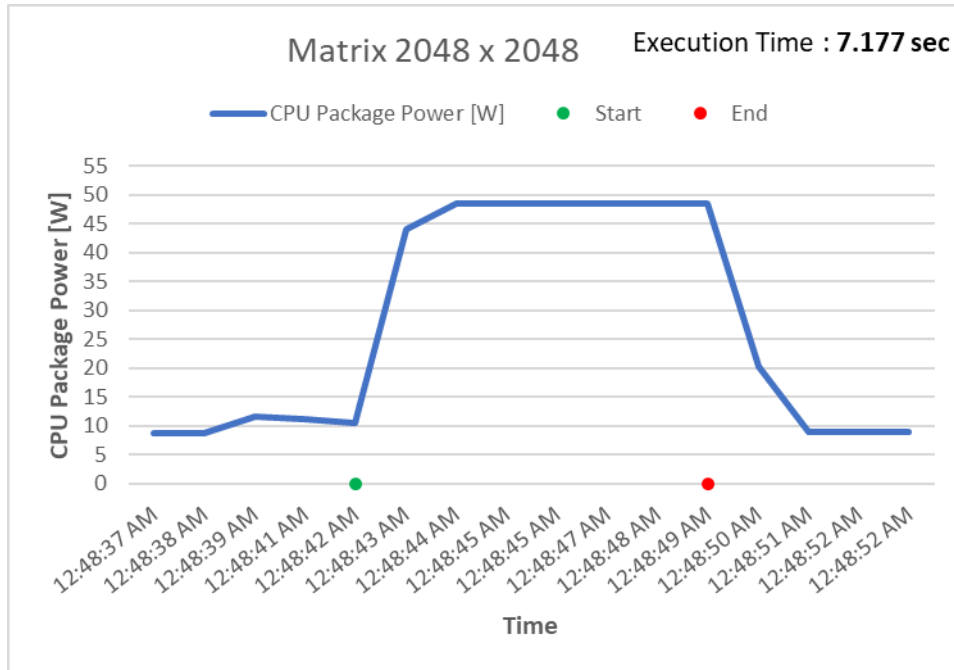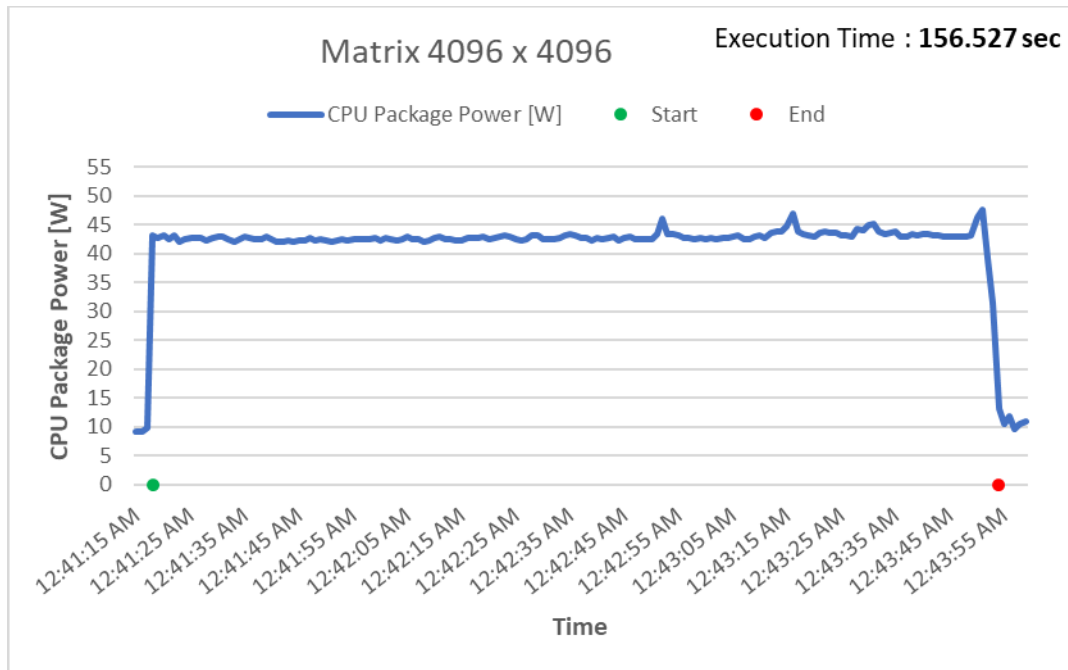
CPU Time: 156.527 seconds

Testing the GPU performance

Idle


```
User@DESKTOP-JOJO MINGW64 /h/!Current/CAO/CPU-vs-GPU/Code/GPU (main)
$ nvcc -O3 -arch=sm_86 gpu_matrix_mult.cu -o gpu_matrix_mult.exe
gpu_matrix_mult.cu
tmpxft_00003e58_00000000-10_gpu_matrix_mult.cudafe1.cpp
   Creating library gpu_matrix_mult.lib and object gpu_matrix_mult.exp
```

GPU_256

```
User@DESKTOP-JOJO MINGW64 /h/!Current/CAO/CPU-vs-GPU/Code/GPU (main)
$ ./gpu_matrix_mult.exe 256
GPU Time: 1.859 ms
```
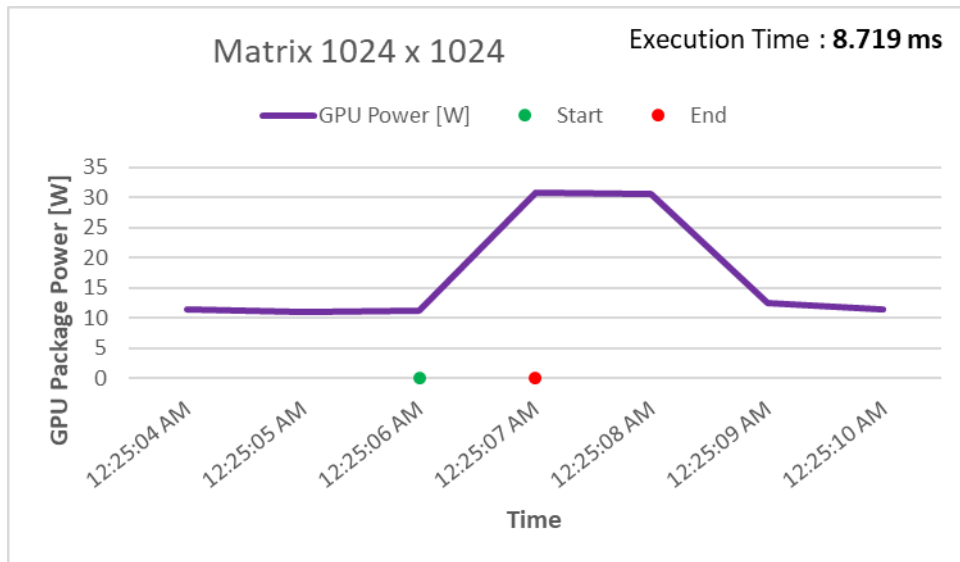
GPU Time: 1.859 ms
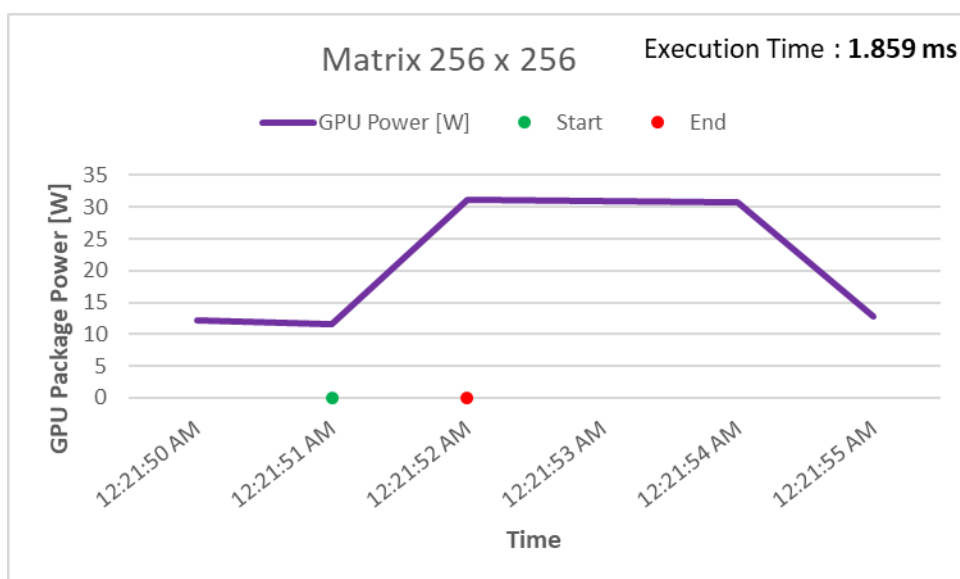
GPU_1024

```
User@DESKTOP-JOJO MINGW64 /h/!Current/CAO/CPU-vs-GPU/Code/GPU (main)
$ ./gpu_matrix_mult.exe 1024
GPU Time: 8.719 ms
```
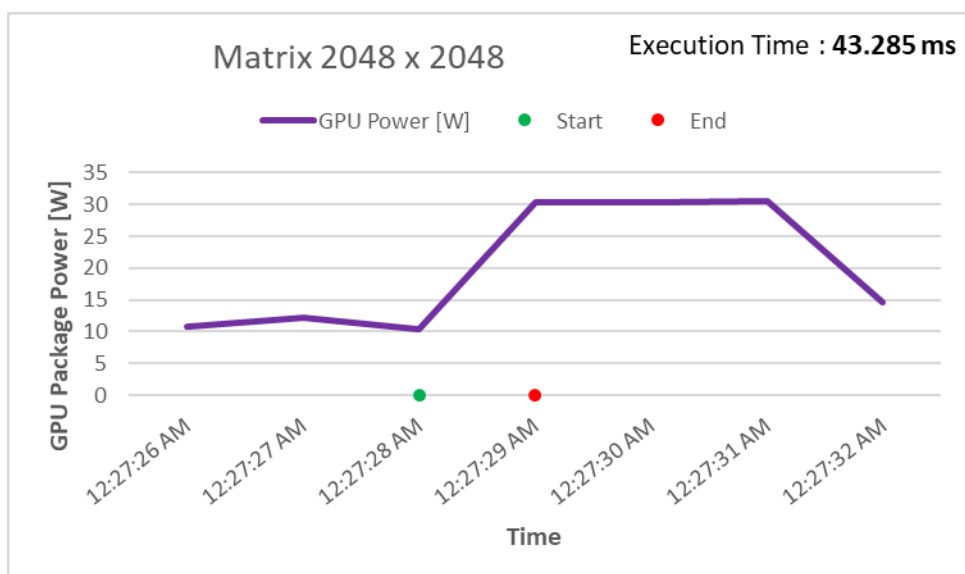
GPU Time: 8.719 ms

GPU_2048

```
User@DESKTOP-JOJO MINGW64 /h/!Current/CAO/CPU-vs-GPU/Code/GPU (main)
$ ./gpu_matrix_mult.exe 2048
GPU Time: 43.285 ms
```
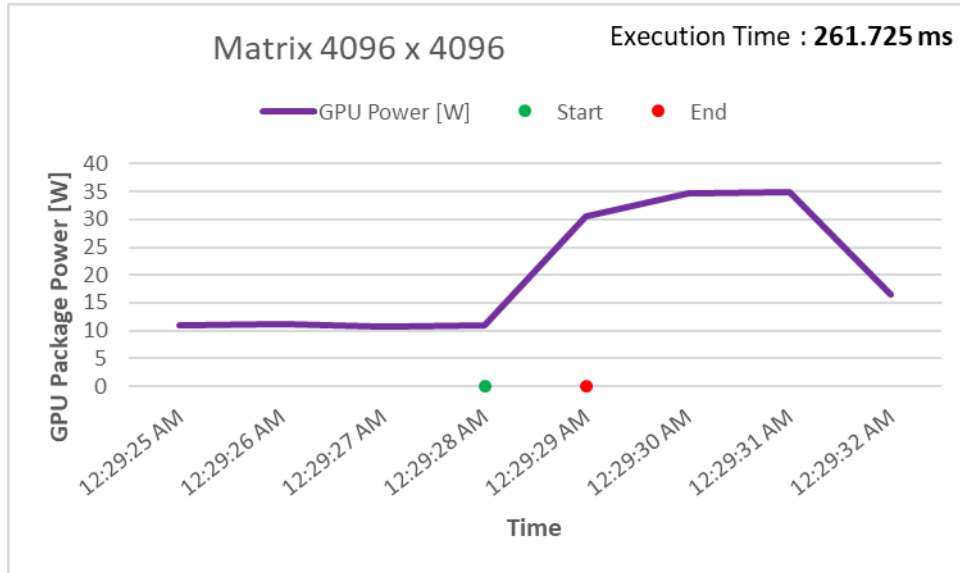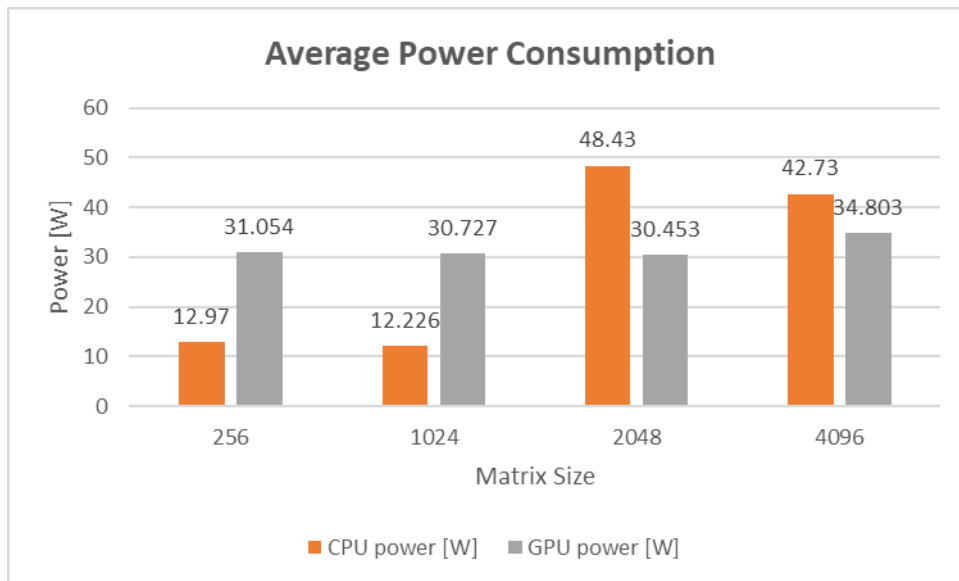
GPU Time: 43.285 ms

GPU_ 4096

```
User@DESKTOP-JOJO MINGW64 /h/!Current/CAO/CPU-vs-GPU/Code/GPU (main)
$ ./gpu_matrix_mult.exe 4096
GPU Time: 261.725 ms
```

GPU Time: 261.725 ms

Overall Comparison

Power

Time