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| --- | --- | --- | --- |
| Size/System | Intel Core i3-7100 CPU @ 3.90GHz (CPU)  Nvidia Geforce GTX 1050 TI (GPU) | | |
|  | **Method** | **Speed(seconds)** | **Speedup(Ts/Tp)** |
| 512x512 | Sequential | 5.906498e-01 |  |
| OpenACC | 1.162069e-01 | *5.083* (508.3%) |
| CUDA Global Memory | 2.288103e-03 | *258.14* (25814%) |
| CUDA Shared Memory | 1.162052e-03 | *508.282* (50828.2%) |
| 1024x1024 | Sequential | 13.35325 |  |
| OpenACC | 1.308241e-01 | *102.07* (10207%) |
| CUDA Global Memory | 1.847792e-02 | *722.67* (72267%) |
| CUDA Shared Memory | 9.077072e-03 | *1471.099* (147 |
| 2048x2048 | Sequential | 106.4078 |  |
| OpenACC | 3.450470e-01 | *308.386* (30838.6%) |
| CUDA Global Memory | 1.281788e-01 | *830.151* (83015.1%) |
| CUDA Shared Memory | 7.176995e-02 | *1482.623* (148262.3%) |
| 4096x4096 | Sequential | 874.135 |  |
| OpenACC | 1.7556 | *497.912* (49791.2%) |
| CUDA Global Memory | 1.0862 | *804.764* (80476.4%) |
| CUDA Shared Memory | 5.1807e-01 | *1687.291* (168729.1%) |
| 8192x8192 | Sequential | 5760.748 |  |
| OpenACC | 12.68030 | *454.306 (45430.6%)* |
| CUDA Global Memory | 8.737388 | *659.321 (65931.1%)* |
| CUDA Shared Memory | 3.633853 | *1585.30 (158530%)* |
| 16384x16384 | Sequential | ~46085.98 |  |
| OpenACC | 115.624 | 398.584 |
| CUDA Global Memory | 105.2529 | 438.914 |
| CUDA Shared Memory | 28.39943 | 1645.937 |