Key parameters 5,7

Block size time

1. 256 5.32
2. 512 4.01
3. 1024 3.48
4. 2048 4.083
5. 4096 4.37
6. 8192 4.906
7. 16392 5.023

Key parameter 131 and 137,,,3 as e and 17947 as value of n

4 64 256 7.56 9.45 12.56 1.66

8 64 512 7.25 9.13 19.14 2.65

16 64 1024 6.86 8.23 23.60 3.44

32 64 2048 5.38 7.65 27.33 5.51

64 64 4096 5.68 7.78 29.64 5.74

128 64 8192 6.27 8.92 31.16 5.60

256 64 16392 7.21 9.13 33.66 5.50

512 64 32784 9.25 11.68 35.37 4.58

Key parameter 1009\*509 ,,5 and 513581

8 32 256 6.08 8.57

16 32 512 6.52 8.23

32 32 1024 6.69 8.79

64 32 2048 5.538 7.62

128 32 4096 6.58 8.88

256 32 8192 6.66 8.97

512 32 16392 7.81 9.13

1024 32 32784 8.76 11.05

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Data Size (bits)** | **No. Of blocks** | **Threads per block** | **GPU RSA Time** | **CPU RSA Time** |
| 256 | 4 | 64 | 7.56 | 12.56 |
| 512 | 8 | 64 | 7.25 | 19.14 |
| 1024 | 16 | 64 | 6.86 | 23.60 |
| 2048 | 32 | 64 | 5.38 | 29.33 |
| 4096 | 64 | 64 | 5.68 | 32.64 |
| 8192 | 128 | 64 | 6.27 | 35.16 |
| 16392 | 256 | 64 | 7.21 | 39.66 |
| 32784 | 512 | 64 | 9.25 | 42.37 |

|  |  |  |  |
| --- | --- | --- | --- |
| **Data Size (bits)** | **No. Of blocks** | **Threads per block** | **GPU RSA Time** |
| 256 | 8 | 32 | 6.08 |
| 512 | 16 | 32 | 6.52 |
| 1024 | 32 | 32 | 6.69 |
| 2048 | 64 | 32 | 5.53 |
| 4096 | 128 | 32 | 6.58 |
| 8192 | 256 | 32 | 6.66 |
| 16392 | 512 | 32 | 7.81 |
| 32784 | 1024 | 32 | 8.76 |

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Data Size (bits)** | **No. Of blocks** | **Threads per block** | **GPU RSA Time** | **CPU RSA Time** | **Speedup** |  |  |  |  |  |
| 256 | 4 | 64 | 7.56 | 12.56 | 1.66 |  |  |  |  |  |
| 512 | 8 | 64 | 7.25 | 19.14 | 2.65 |  |  |  |  |  |
| 1024 | 16 | 64 | 6.86 | 23.60 | 3.44 |  |  |  |  |  |
| 2048 | 32 | 64 | 5.38 | 29.33 | 5.51 |  |  |  |  |  |
| 4096 | 64 | 64 | 5.68 | 32.64 | 5.74 |  |  |  |  |  |
| 8192 | 128 | 64 | 6.27 | 35.16 | 5.60 |  |  |  |  |  |
| 16392 | 256 | 64 | 7.21 | 39.66 | 5.50 |  |  |  |  |  |
| 32784 | 512 | 64 | 9.25 | 42.37 | 4.58 |  |  |  |  |  |