|  |  |  |
| --- | --- | --- |
| # of processors | 100,000 samples | 10,000,000 samples |
| 1 | 0.0188 seconds | 0.4249 seconds |
| 2 | 0.0194 seconds | 0.2283 seconds |
| 4 | 0.0211 seconds | 0.1244 seconds |
| 8 | 0.0337 seconds | 0.0931 seconds |
| 16 | 0.0760 seconds | 0.1154 seconds |

As you can see in the graph, the more processors used, the less time it took (generally) when calculating with 10,000,000 samples. However, the increase in processors used actually increased the calculation time when calculating with 100,000 samples. Because of this, we see the effect is that the 2 trends come together and result in quite similar calculation times when using 16 processors, a difference of only 0.0394 seconds. This is down from a difference of 0.4061 seconds when using only 1 processor (a 90% decrease in the gap).