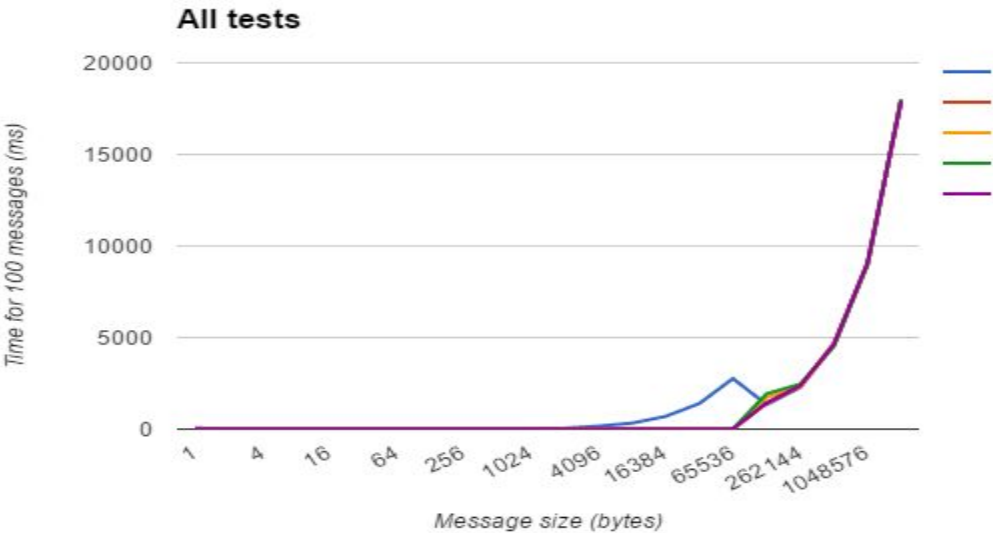


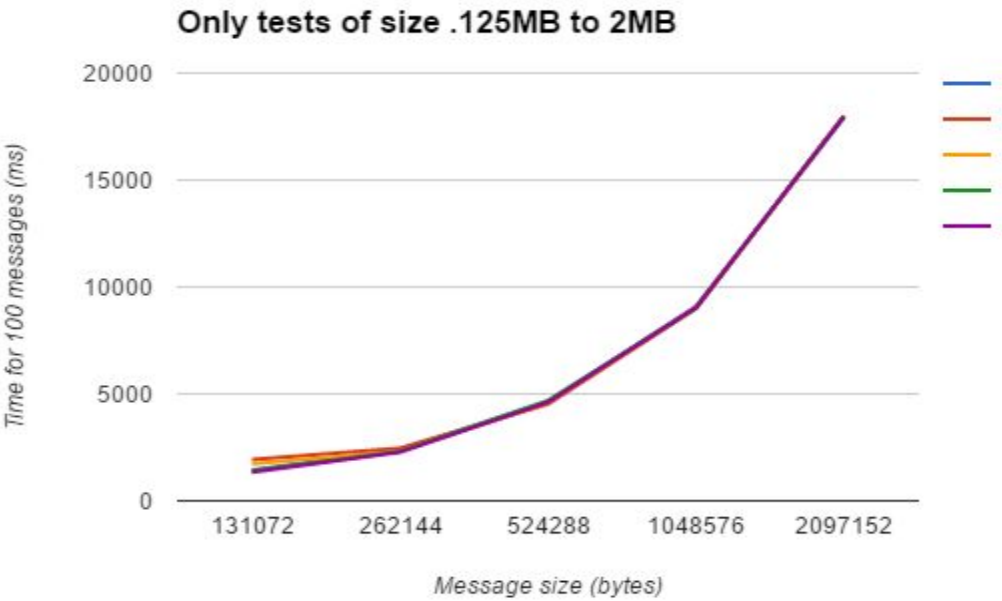
Time for 100 messages in milliseconds from each other rank to 0. Ranks 5 and 7 omitted because they clearly share a cache.

| Rank | 1     | 2     | 3     | 4     | 6     | AVG     | AVG/100 |  | Size<br>(Bytes) |
|------|-------|-------|-------|-------|-------|---------|---------|--|-----------------|
|      | 67    | 7     | 7     | 5     | 2     | 17.6    | 0.176   |  | 1               |
|      | 11    | 6     | 6     | 5     | 2     | 6       | 0.06    |  | 2               |
|      | 11    | 6     | 6     | 5     | 2     | 6       | 0.06    |  | 4               |
|      | 11    | 7     | 7     | 5     | 2     | 6.4     | 0.064   |  | 8               |
|      | 11    | 8     | 7     | 5     | 2     | 6.6     | 0.066   |  | 16              |
|      | 12    | 7     | 7     | 5     | 2     | 6.6     | 0.066   |  | 32              |
|      | 12    | 7     | 7     | 5     | 2     | 6.6     | 0.066   |  | 64              |
|      | 13    | 8     | 7     | 5     | 2     | 7       | 0.07    |  | 128             |
|      | 14    | 8     | 7     | 5     | 2     | 7.2     | 0.072   |  | 256             |
|      | 15    | 9     | 7     | 5     | 2     | 7.6     | 0.076   |  | 512             |
|      | 17    | 11    | 9     | 6     | 2     | 9       | 0.09    |  | 1024            |
|      | 51    | 12    | 10    | 7     | 2     | 16.4    | 0.164   |  | 2048            |
|      | 164   | 12    | 10    | 8     | 2     | 39.2    | 0.392   |  | 4096            |
|      | 327   | 13    | 11    | 8     | 2     | 72.2    | 0.722   |  | 8192            |
|      | 698   | 14    | 11    | 9     | 2     | 146.8   | 1.468   |  | 16384           |
|      | 1397  | 15    | 12    | 9     | 3     | 287.2   | 2.872   |  | 32768           |
|      | 2764  | 16    | 13    | 10    | 9     | 562.4   | 5.624   |  | 65536           |
|      | 1339  | 1403  | 1734  | 1929  | 1439  | 1568.8  | 15.688  |  | 131072          |
|      | 2277  | 2317  | 2314  | 2460  | 2375  | 2348.6  | 23.486  |  | 262144          |
|      | 4606  | 4689  | 4596  | 4523  | 4632  | 4609.2  | 46.092  |  | 524288          |
|      | 9034  | 9023  | 9008  | 8989  | 9083  | 9027.4  | 90.274  |  | 1048576         |
|      | 17976 | 17985 | 17985 | 17996 | 17917 | 17971.8 | 179.718 |  | 2097152         |

Plotting this data gives



But plotting only tests 18-22 gives



The linear regressions of these data sets give (these are derived with just the =SLOPE(yset,xset) and =INTERCEPT(yset,xset)) functions. These are calculated from the average/100 column, so the intercept is in milliseconds and represents latency while the slope is in bytes/millisecond.

|                  | Bytes and milliseconds | Megabytes and seconds |
|------------------|------------------------|-----------------------|
| Slope(all)       | 8.58E-05               | 8.58E-02              |
| Intercept(all)   | 3.55E-01               | 3.55E-04              |
| Slope(18-22)     | 8.42E-05               | 8.42E-02              |
| Intercept(18-22) | 1.27E+00               | 1.27E-03              |

This data seems to suggest a latency of .35-1.2ms and a bandwidth of 0.08mb/s... which doesn't sound like the correct bandwidth.