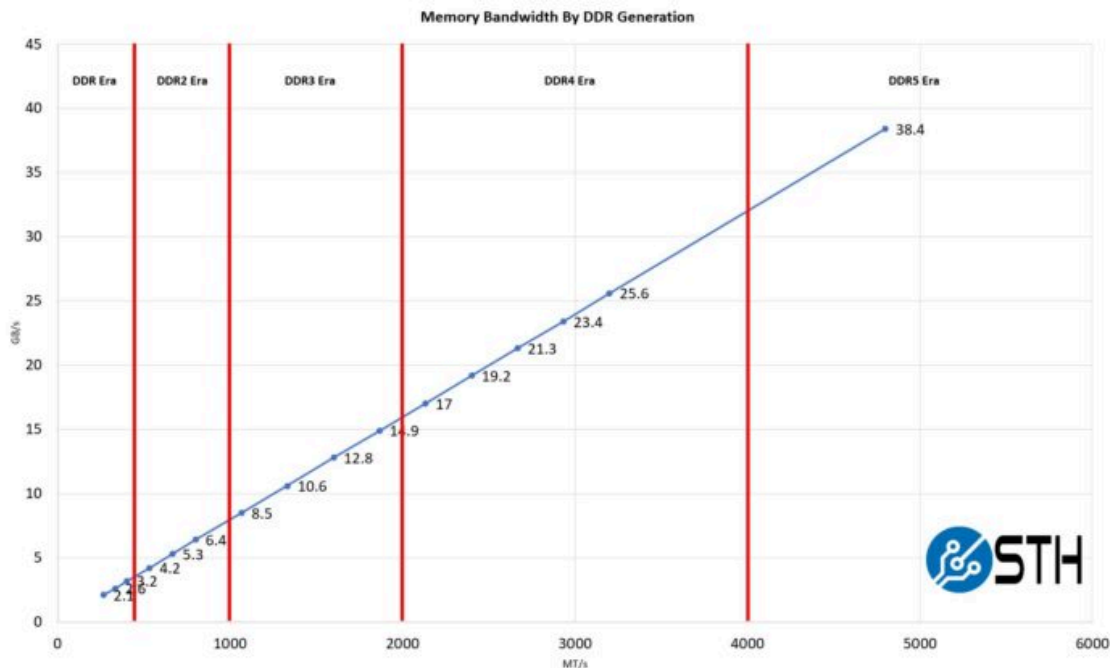


Guide DDR DDR2 DDR3 DDR4 and DDR5 Bandwidth by Generation

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DDR DDR2 DDR3 DDR4 And DDR5 Memory Bandwidth By Generation 1

We have been creating a few cheat sheets lately to understand generations of systems over time. A big part of that is so that we have them for STH's reference. We figured instead of just using them internally, we would share them externally as well. In this one, we are going to quickly have the DDR, DDR2, DDR3, DDR4, and DDR5 GB/s and MT/s numbers by generation.

Guide DDR DDR2 DDR3 DDR4 and DDR5 GB/s Bandwidth by Generation

Here is a hopefully simple table with the memory bandwidth for a single channel DIMM by generation:

Generation	Common Name	MT/s	GB/s
DDR	DDR-266	266	2.1
DDR	DDR-333	333	2.6
DDR	DDR-400	400	3.2
DDR2	DDR2-533	533	4.2
DDR2	DDR2-667	667	5.3
DDR2	DDR2-800	800	6.4
DDR3	DDR3-1066	1066	8.5
DDR3	DDR3-1333	1333	10.6
DDR3	DDR3-1600	1600	12.8
DDR3	DDR3-1866	1866	14.9
DDR4	DDR4-2133	2133	17.0
DDR4	DDR4-2400	2400	19.2
DDR4	DDR4-2666	2666	21.3
DDR4	DDR4-2933	2933	23.4
DDR4	DDR4-3200	3200	25.6
DDR5	DDR5-4800	4800	38.4

In a system, there are often many memory channels, and one does not achieve peak bandwidth on all platforms and scenarios, but it is still interesting to look at. For some sense, here is what the above looks like charted:

