**Memory Capacity over Time** 1,000 = **Memory Bus type** 1T-SRAM 2000 O DDR O DDR2 O DDR3 100 -O DDR3L Δ O DDR4 MO A O OA O DRAM 0 00 AA @ OA 0 O EDO VRAM ○ FPM AAAAMBO AA MOODA O OO A AOA DO AAAAAAA O GDDR2 10 -O GDDR3 O GDDR4 O GDDR5 A CO CO COMO CO A O GDDR5X O GDDR6 O GDDR6X A COUNT COLOR OF A O A **A A** O GDDR7 O HBM  $\Delta \Delta$ ○ HBM2 Memory Size (GB) O HBM2E O HBM3 O HBM3E 0.1 – O HT A CA COMPA CHIMO AMERICA A O LPDDR4 O LPDDR4X OA GED AGDIGNOA O 0 0 O LPDDR5 0 000 O LPDDR5X 0.01 O SDR 0 4 40004 4 4 ...2 entries 00 A Vendor O AMD A 0 0 Intel ▲ NVIDIA 0.001 0.0001 0.00001 1988 1990 1992 1994 1996 1998 2000 2002 2004 2006 2008 2010 2012 2014 2016 2018 2020 2022 2024 1986 Launch