**Memory Capacity over Time** 1,000 = **Memory Bus type** 1T-SRAM O DDR O DDR2 O DDR3 O DDR3L 100 -O DDR4 O DRAM O EDO VRAM 0 00 AA O 0 ○ FPM O GDDR2 **A A O O O A** O GDDR3 10 -O GDDR4 ADAD AMA AM COMODANAO AD AENAAM D O GDDR5 O GDDR5X O GDDR6 O GDDR6X  $\triangle \triangle \triangle$ O GDDR7 A CIDCUIDA CIDCO ACONO, CODO A A O HBM MAGDONIA (STO) NO STORES O HBM2  $\Delta\Delta$ ○ HBM2E Memory Size (GB) O HBM3 НВМЗЕ O HT 0.1 – O LPDDR4 A CA CROMA CHINID ANDROOO A A O LPDDR4X O LPDDR5 CA CKO ACDACACA O CA 0 0 O LPDDR5X 0 04 02  $\Delta \Delta$ 0 000 O SDR 0.01 SGRAM 0 4 40004 4 4 XDR 0 O A Vendor O AMD A 0 0 Intel ▲ NVIDIA 0.001 0 0.0001 0.00001 1994 2002 2004 2006 2008 2014 2020 1986 1988 1990 1992 1996 1998 2000 2010 2012 2016 2018 2022 2024 Launch