## LOAD. STORE MEMOP STRIDE WIDTH OPCODE\_WIDTH MEMOP\_ID\_WIDTH MEMOP SRAM ADDR WIDTH MEMOP DRAM ADDR WIDTH 2 \* MEMOP SIZE WIDTH 4 \* MEMOP DRAM ADDR WIDTH Y PAD: Y PAD: X PAD: X PAD: **DEPT** Y SIZE X SIZE X STRIDE **BUFFER ID** SRAM BASE DRAM BASE OPCODE TOP **BOTTOM** LEF1 **RIGHT** unused unused **FLAGS** (y) (x) (x\_stride) (sram base) (dram base) (sram mem) (y\_pad\_0) (y\_pad\_1) $(x_pad_0)$ (x\_pad\_1) 63 64 127 GEMM OPCODE WIDTH 2 \* LOOP ITER WIDTH 2 \* LOG\_UOP\_BUFF\_DEPTH 2 \* LOG\_ACC\_BUFF\_DEPTH 2 \* LOG\_INP\_BUFF\_DEPTH 2 \* LOG WGT BUFF DEPTH LOOP **ACCUM IDX INPUT IDX INPUT IDX** MICRO-OP MICRO-OP LOOP **ACCUM IDX** WEIGHT IDX **WEIGHT IDX DEPT** OPCODE **RESET** FACTOR 1 **BEGIN END EXTENT 0 EXTENT 1** FACTOR 0 FACTOR 1 FACTOR 0 FACTOR 0 FACTOR 1 unused unused **FLAGS** (end0) (end1) (uop bgn) (uop end) (x0)(x1)(y0) (y1)(z0) (z1)63 64 127 **ALU** ALU OPCODE WIDTH

