Memristor Crossbar Layout

Layer-by-Layer Mapping

Layer 0: 2×2 = 4 memristors

Layer 1: 2×1 = 2 memristors

TOTAL: 6 memristors

Circuit Components

Memristors: 6

Neurons/Activations: 3

Input Encoders: 2

Output Decoders: 1

Implementation:

- Crossbar: 6 programmable synapses
- Neurons: RC circuits + comparators
- Technology: Can use ReRAM, PCM, or ECRAM