



# Clipper Memory Mother Board & Memory Subsystem

**54-25582-01**

**50-25581-01**

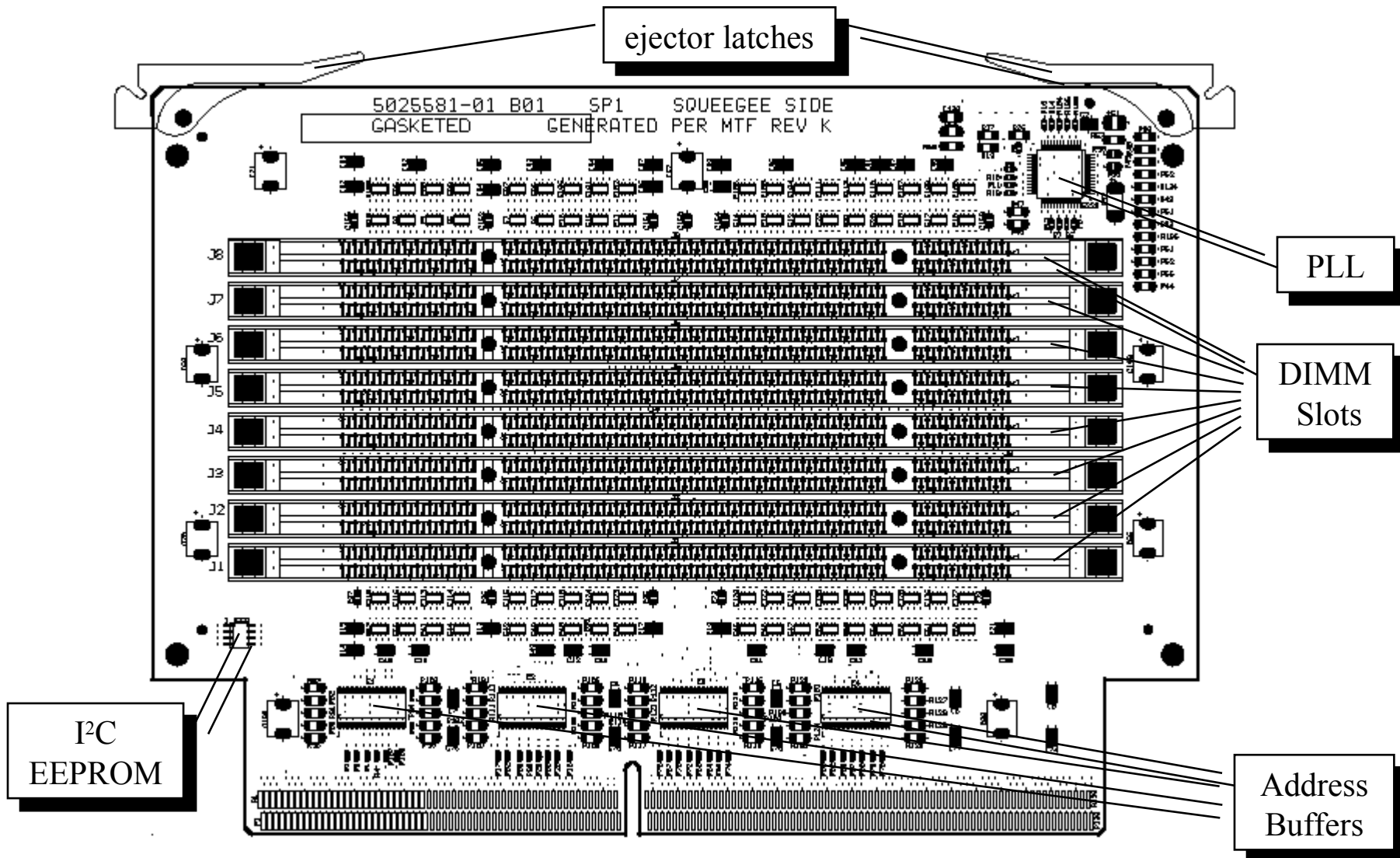
**Presenter: Steve Baka**

# Features

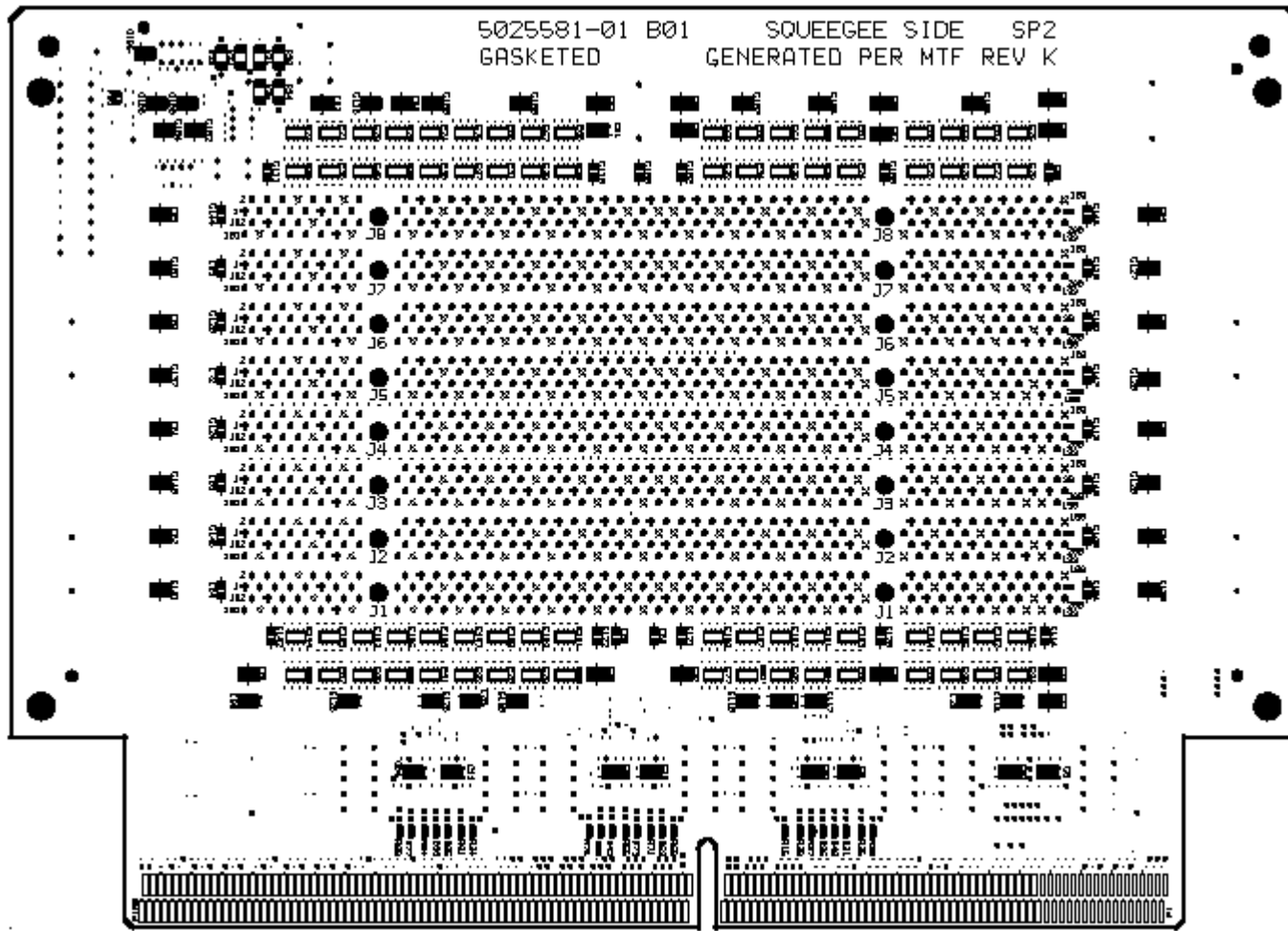
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- Supports up to eight registered, buffered, 200-pin DIMM's built to JEDEC standards
- Supports the use of stacked SDRAM technology
- Supports up to 8GB of memory (32GB per system max)
- A 2-kbit EEPROM for storing module-level information
- Provides system with a 128-bit wide data path
- Provides system with 16 check bits; one per data byte
- All data transactions controlled by two separate sets of address/control lines
- Supports memory bus speeds from 50MHz to 83MHz with CAS latencies of two or three (target: 83MHz with CAS latency of two)

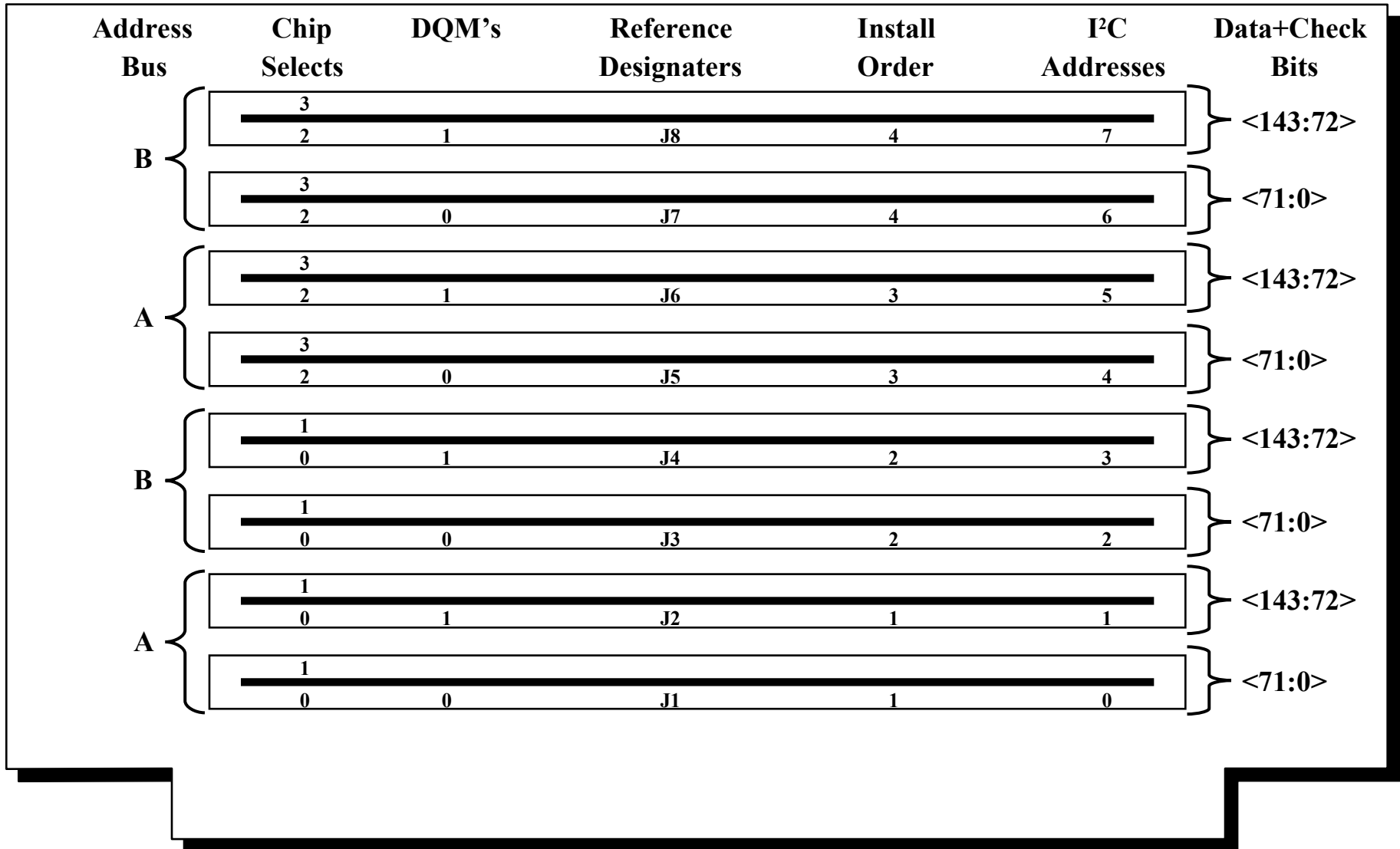
# Viewed from side 1



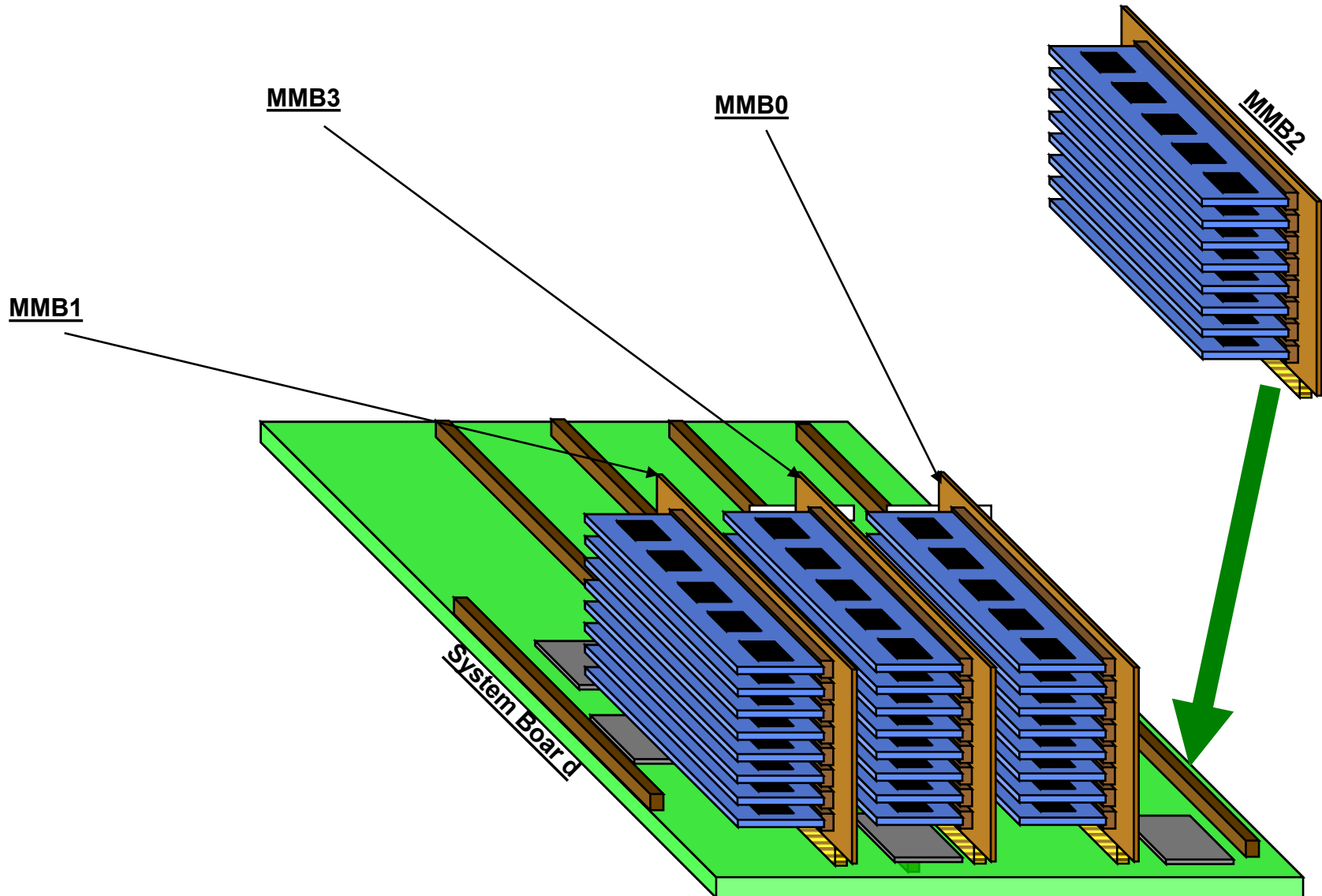
# Viewed from side 2



# Functional Layout



# MMB Installation Diagram





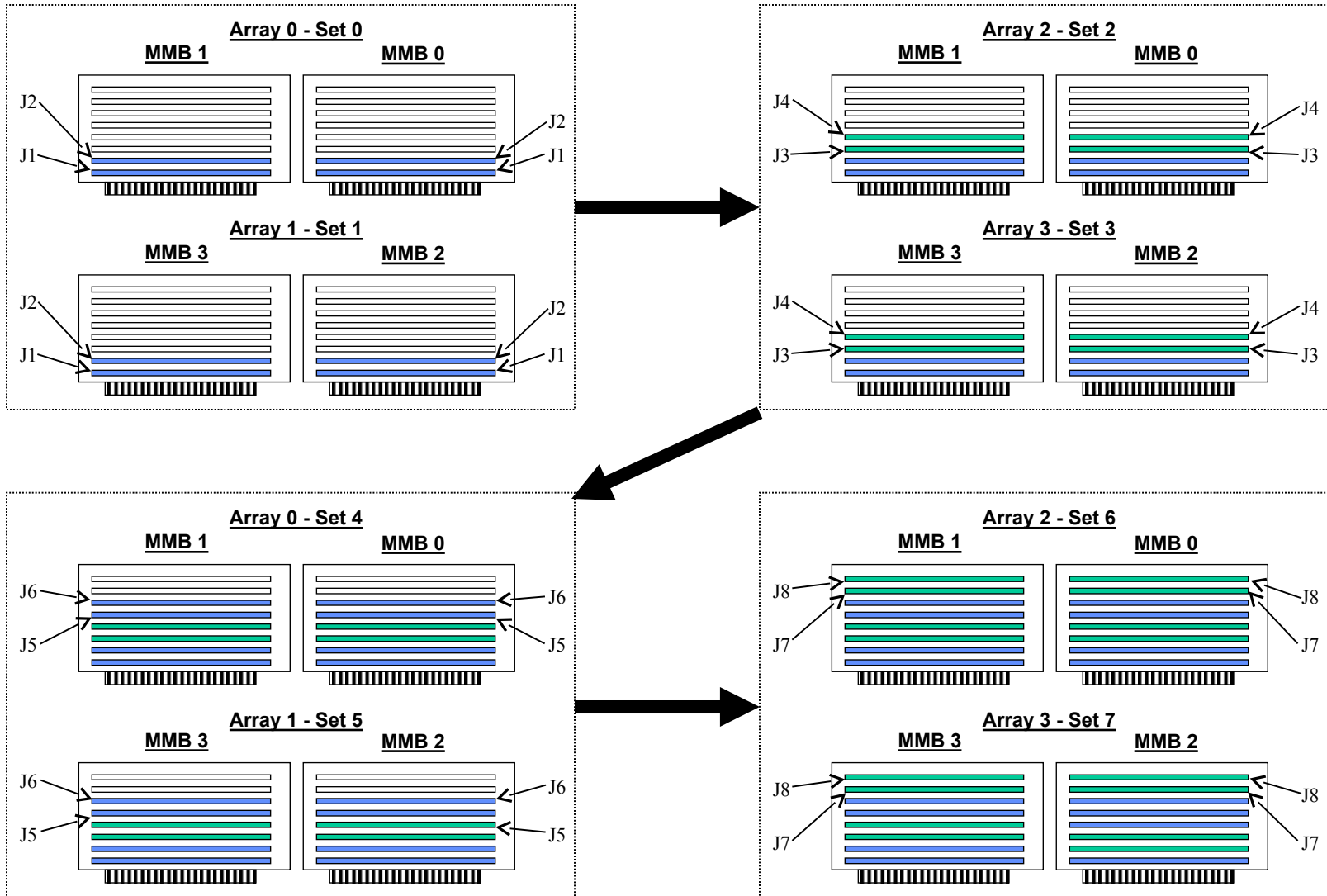
# Memory Installation Rules

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- Clipper has 8 memory sets, numbered 0 through 7.
- Each memory set is composed of four DIMM's.
- Sets get installed in numerical order.
- All DIMM's within a set must be the same size and have the same number of SDRAM's.
- Each memory address array consists of two sets:
  - Array 0: Sets 0 & 4
  - Array 1: Sets 1 & 5
  - Array 2: Sets 2 & 6
  - Array 3: Sets 3 & 7
- All DIMM's within a memory array must be the same size and have the same number of SDRAM's



# Memory Installation Diagram



- Invalid memory configurations will be reported along with missing DIMM's
- Memory faults will be isolated to the failing DIMM(s)
- Failed DIMM's alone will not prevent successful system power-up to SRM console
- If no valid memory configuration exists, then system will report on missing DIMM's and system will halt
- All memory errors will be displayed at the OCP and reported to the Remote Server Management corner