

X299 Memory Slot Configuration Guide

This guide summarizes the recommended memory installation order for Intel X299 quad-channel motherboards. The optimal slots should be populated first to ensure maximum stability and performance.

Physical Slot Order

B1 | B2 | A1 | A2 | CPU | C2 | C1 | D2 | D1

Recommended Priority Order

A2 → B2 → C2 → D2 → A1 → B1 → C1 → D1

Number of Modules	Recommended Slots
1 Module	A2
2 Modules	A2, C2
3 Modules	A2, B2, C2
4 Modules	A2, B2, C2, D2
5 Modules	A2, B2, C2, D2 + A1
6 Modules	A2, B2, C2, D2 + A1, B1
7 Modules	A2, B2, C2, D2 + A1, B1, C1
8 Modules	All Slots

Performance Comparison

- 8GB × 4 modules: Enables quad-channel mode for maximum memory bandwidth.
- 16GB × 2 modules: Operates in dual-channel mode with lower bandwidth but allows future expansion.