

Memory Controller

1. The memory controller
 - a. The memory controller is integrated into the AMD processor. The maximum speed supported varies by processor family and also limited by the amount of memory slots used.

	Maximum memory speed supported				
Available Motherboard Memory slots	2	4	4	4	4
Populated memory slots	2	2	4	4	4
AMD processor			Using Single Rank memory	Using Dual Rank memory	Using mixed Dual and Single Rank memory
AMD FX™ processor	1866	1600	1600	1333	1333
AMD A8 & A6 Series APUs	1866	1600	1600	1333	1333
AMD A4 Series APUs	1600	1333	1333	1333	1333
AMD E-Series APUs	1066	n/a	n/a	n/a	n/a
AMD Phenom™ II	1333	1333	1333	1066	1066
AMD Athlon™ II X3 & X4	1333	1066	800	800	800
AMD Athlon II X2	1066	1066	800	800	800
AMD Sempron™	1066	1066	800	800	800

Depending on your selected motherboard and memory, the published speeds and configurations above may be exceeded, which will result in running your AMD processor outside of AMD published specifications. [See note](#). For details, please see the guidance below and contact your motherboard manufacture or memory supplier.