



# Memory Configurations - Asus SABERTOOTH Z170 Manual



1

2

Table Of Contents

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

19  
20  
21  
22  
23  
24  
25  
26  
27  
28  
29  
30  
31  
32  
33  
34  
35  
36  
37  
38  
39  
40  
41  
42  
43  
44  
45  
46  
47  
48  
49  
50  
51  
52  
53  
54  
55  
56  
57  
58  
59  
60  
61  
62  
63  
64  
65  
66  
67  
68

69  
70  
71  
72  
73  
74  
75  
76  
77  
78  
79  
80  
81  
82  
83  
84  
85  
86  
87  
88  
89  
90  
91  
92  
93  
94  
95  
96  
97  
98  
99  
100  
101  
102  
103  
104  
105  
106  
107  
108  
109  
110  
111  
112  
113  
114  
115  
116  
117  
118

119  
120  
121  
122  
123  
124  
125  
126  
127  
128  
129  
130  
131  
132  
133  
134  
135  
136  
137  
138  
139  
140  
141  
142  
143  
144  
145  
146  
147  
148  
149  
150  
151  
152  
153  
154  
155  
156  
157  
158  
159  
160  
161  
162  
163  
164  
165  
166  
167  
168

169  
170  
171  
172  
173  
174



•

[Table of Contents](#)



•

## Bookmarks





## Memory configurations

You may install 2 GB, 4 GB, 8 GB, and 16 GB unbuffered and non-ECC DDR4 DIMMs into the DIMM sockets.

Visit the ASUS website at [www.asus.com](http://www.asus.com) for the latest QVL.

- You may install varying memory sizes in Channel A and Channel B. The system maps the total size of the lower-sized channel for the dual-channel configuration. Any excess memory from the higher-sized channel is then mapped for single-channel operation.

- Due to the memory address limitation on 32-bit Windows \_\_\_\_\_ or more memory on the motherboard, the actual usable memory for the OS can be about 3GB or less. For effective use of memory, we recommend that you do any of the following:

a)

Use a maximum of 3GB system memory if you are using a 32-bit Windows

b)

Install a 64-bit Windows motherboard.

c)

For more details, refer to the Microsoft [com/kb/929605/en-us](http://com/kb/929605/en-us).

This motherboard does not support DIMMs made up of 512 Mb (64 MB) chips or less (Memory chip capacity counts in Megabit, 8 Megabit/Mb = 1 Megabyte/MB).

When running XMP at DDR4 3200 MHz or higher, the system's stability depends on the CPU's capabilities.

The default DIMM frequency depends on its Serial Presence Detect (SPD), which is the standard way of accessing information from a memory module. Under default state, some memory modules for overclocking may operate at a lower frequency than the vendor-marked value. To operate at the vendor-marked or at a higher frequency, refer to section 3.5 Ai Tweaker menu for manual memory frequency adjustment.

For system stability, use a more efficient memory cooling system to support a full memory load (4 DIMMs) or overclocking condition.

Always install DIMMs with the same CAS latency. For optimal compatibility, we recommend that you install memory modules of the same version or date code (D/C) from the same vendor. Check with the retailer to get the correct memory modules.

Highly recommended to use 4-DIMM/2-DIMM kit for full DIMM configuration. Full DIMM support is subject to the physical characteristics of individual CPUs or Memory.

Memory module with memory frequency higher than 2133 MHz and its corresponding timing or the loaded XMP Profile is not the JEDEC memory standard. The stability and compatibility of these memory modules depend on the CPU's capabilities and other installed devices.

## SABERTOOTH Z170 S

OS when you want to install 4 GB or more on the

support site at <http://support.microsoft>.

OS, when you install 4GB

OS.

1-11



ManualsLib.com

Table of Contents

[Previous Page](#)  
[Next Page](#)

1  
...  
24  
25  
26  
27  
28  
29  
30  
31

Quick Links:

[Motherboard Layout](#)

[Internal Connectors](#)

[Sata Device Connection](#)

[Front I/O Connector](#)

## Related Manuals for Asus SABERTOOTH Z170

[Motherboard Asus Z170 PRO GAMING User Manual](#)

(100 pages)

[Motherboard Asus Z170 PRO GAMING Manual](#)

(96 pages)

[Motherboard Asus Z170-A User Manual](#)

(130 pages)

[Motherboard Asus Z170M-E D3 Manual](#)



(85 pages)

[Motherboard Asus Z170-P D3 User Manual](#)

(85 pages)

[Motherboard Asus Z170-K Quick Start Manual](#)

(11 pages)

[Motherboard ASUS Z170-K User Manual](#)

(85 pages)

[Motherboard Asus Z170-P Manual](#)

(86 pages)

[Motherboard Asus Z170-AR Manual](#)

(130 pages)

[Motherboard Asus Z170M-PLUS User Manual](#)

(89 pages)

[Motherboard Asus SABERTOOTH Z170 MARK 1 Manual](#)

(176 pages)

[Motherboard Asus Z170I PRO GAMING User Manual](#)

(86 pages)

[Motherboard Asus Z170I PRO GAMING Manual](#)

(86 pages)

[Motherboard Asus Z170-E Manual](#)

(128 pages)

[Motherboard Asus Z170-DELUXE Series User Manual](#)

(186 pages)

[Motherboard Asus Z170-PRO Manual](#)

(170 pages)

## Related Content for Asus SABERTOOTH Z170

[P11C-E/4L Memory Configurations](#)

Asus P11C-E/4L

[P11C-I Memory Configurations](#)

Asus P11C-I

[P11C-X Memory Configurations](#)

Asus P11C-X

[P11C-X/AUDIO Memory Configurations](#)

Asus P11C-X/AUDIO

[KRPA-U16 Memory Configurations](#)

Asus KRPA-U16

[P10S-X Memory Configurations](#)

Asus P10S-X

[M2N-X Memory Configurations](#)

Asus M2N-X

[P5LD2-VM/CR Memory Configurations](#)

Asus P5LD2-VM/CR