

DDR1/DDR2/DDR3 SDRAM Module Ordering Information

<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>
M	X	X	X	X	X	X	X	X	X	X	X	X

1 Memory Modules	7 Composition Component
2 DIMM Configuration	8 Component Revision
3 Data Bites	9 Package
4 Feature	10 PCB revision & Type
5 Depth	11 Power
6 Refresh # of Baks in Comp. & Interface	12 Speed

1 Memory Module : M

2 DIMM configuration

3- DIMM
4- SODIMM

8 Component Revision

DDR1 M- 1stGEN	A- 2ndGEN
B- 3rdGEN	C- 4thGEN
D- 5thGEN	E- 6thGEN
F- 7thGEN	G- 8thGEN
H- 9thGEN	J- 11thGEN

3 Data Bite

DDR 1	68- x64 187pin Unbuffered DIMM
	81- x72 184 pin ECC unbuffered DIMM
	83- x72 184 pin Registered DIMM
	12- x72 184 pin Low Profile Registered DIMM
	70- x64 200 pin Unbuffered SODIMM
	63- x64 172 pin Micro DIMM

DDR2

Q- 17thGEN (DDR2)
R- 18thGEN (DDR)

DDR3

M- 1stGEN	A- 2ndGEN
B- 3rdGEN	C- 4thGEN
D- 5thGEN	E- 6thGEN
F- 7thGEN	G- 8thGEN

DDR2

78- x64 240pin Unbuffered DIMM
91- x72 240pin ECC Unbuffered DIMM
92- x72 240pin VLP Registered DIMM
93- x72 240pin Registered DIMM
95- x72 240pin Fully Buffered DIMM
70- x64 200pin Unbuffered SODIMM

9 Package

DDR1 T- TSOP II (400mil)	U- TSOPII lead-free
N- Stsop	V- sTSOPII lead-free
G- FBGA	Z- FBGA lead-free

DDR3

71- x64 204pin Unbuffered SODIMM
78- x64 240pin Unbuffered DIMM
91- x72 240pin ECC Unbuffered DIMM
91- x72 240pin VLP Registered DIMM
93- x72 240pin Registered DIMM

DDR2

Z- FBGA (Lead-free)
J- FBGA DDP (Lead-free)
Q- FBGA QDP (Lead-free)
H- FBGA (Lead-free & Halogen-free)
M- FBGA DDR (Lead-free & Halogen-free)
E- FBGA QDP (Lead-free & Halogen-free)

4 Feature

DDR1 L- DDR SDRAM (2.5V VDD)

DDR3

Z- FBGA (Lead-free)
H- FBGA (Lead-free & Halogen-free)
J- FBGA DDP (Lead-free)
M- FBGA DDR (Lead-free & Halogen-free)

DDR2

T- DDR2 SDRAM (1.8V VDD)

DDR3

B- DDR3 SDRAM (1.5V VDD)

5 Depth

DDR1	16- 16M	17- 16M (for 128Mb/512Mb)
	32- 32M	33- 32M (for 128Mb/512Mb)
	64- 64M	65- 64M (for 128Mb/512Mb)
	28- 128M	29- 128M (for 128Mb/512Mb)
	56- 256M	57- 256M (for 512Mb)
	51- 512M	

10 PCB Revision & Type

DDR1	0- Mother PCB	1- 1st Rev
	2- 2nd Rev	3- 3rd Rev
	S- Reduced layer PCB	

DDR2

32- 32M	33- 32M (for 128Mb/512Mb)
64- 64M	65- 64M (for 128Mb/512Mb)

DDR2

0- Mother PCB	1- 1st Rev
2- 2nd Rev	3- 3rd Rev
4- 4th Rev	A- Party DIMM
	S- Reduced PCB

DDR3

32- 32M	33- 32M (for 128Mb/512Mb)
64- 64M	65- 64M (for 128Mb/512Mb)

DDR3

0- Mother PCB	1- 1st Rev
2- 2nd Rev	3- 3rd Rev

28- 128M	29- 128M (for 128Mb/512Mb)
56- 256M	57- 256M (for 512Mb/2Gb)
51- 512M	52- 512M (for 512Mb/2Gb)
1G- 1G	1K- 1G (for 2Gb)

4- 4th Rev

11 Temp & Power

DDR3

32- 32M	33- 32M (for 128Mb/512Mb)
64- 64M	65- 64M (for 128Mb/512Mb)
28- 128M	29- 128M (for 128Mb/512Mb)
56- 256M	57- 256M (for 512Mb/2Gb)
51- 512M	52- 512M (for 512Mb/2Gb)
1G- 1G	1K- 1G (for 2Gb)
2G- 2G	2K- 2G (for 2Gb)

DDR1 C- Commercial Temp(0~70)&Normal P
L- Commercial Temp(0~70)&Low P

DDR2 C- Commercial Temp(0~95)&Normal P
L- Commercial Temp(0~95)& Low Power
Y- Commercial Temp(0~95)&Low Voltage

DDR3 C- Commercial Temp(0~85)&Normal P
L- Commercial Temp(0~85)& Low Power
Y- Commercial Temp(0~85)&Low VDD(1.35)

6 Refresh, #of Bank in comp.& Interface

DDR1 1- 4K/64ms Ref., 4Banks & SSTL-2
2- 8K/64ms Ref., 4Banks & SSTL-2

12 Speed

DDR2 5- 4Banks & SSTL-1.8V
6- 8Banks & SSTL-1.8V

DDR1 CC- DDR400 A2- DDR266
B3- DDR333 B0-DDR266

DDR3 7- 8Banks & SSTL-1.5V

DDR2 CC- DDR2-400 (200Mhz @ CL3)
D5- DDR2-533 (266Mhz @CL4)
E6- DDR2-667 (333Mhz @CL5)
F7- DDR2-800 (400Mhz @CL6)
E7- DDR2-800 (400Mhz @CL5)
F8- DDR2-533 (400Mhz @CL7)

7 Composition Component

DDR1 0- x 4
3- x 8
4- x 16
8- x 4 Stack
9- x 8Stack

DDR2 0- x 4
3- x 8
4- x 16
6- x 4 Stack JS
7- x 8 Stack JS
8- x 4 Stack
9- x 8 Stack

DDR3 F7- DDR3-800 (400Mhz @CL6)
F8- DDR3-1066 (533Mhz @CL7)
H9- DDR3-1333 (667Mhz @CL9)
K0- DDR3-1600 (800Mhz @CL11)

DDR3 0- x 4
3- x 8
4- x 16

13 AMB Vendor For FBDIMM

DDR2 5- INTEL
6,8- IDT
3,4,9- Montage

NOTE

PC2-3200 (DDR2-400)	PC2-6400 (DDR2-800)	PC3-8500 (DDR3-1066)
PC2-4200 (DDR2-533)	PC2-8500 (DDR2-1066)	PC3-10600 (DDR3-1333)
PC2-5300 (DDR2-667)	PC3-6400 (DDR3-800)	PC3-12800 (DDR3-1600)