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Memory
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Product Lineup > Mobile DDR > K4X1G163PC

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For more details about product specifications or technical files, please inquire through '[Contact us](#)' Some information may be limited to the authorized person or company.

Ordering Code Information

part number	K4X1G163PC-FGC3	K4X1G163PC-FGC6
speed	7.5ns@CL3	6ns@CL3
refresh	8K/64ms	8K/64ms
power	Low, PASR & TCSR	Low, PASR & TCSR
package type	FBGA	FBGA
packing	Tray	Tray
pins	60	60
package size	11.0X11.5	11.0X11.5
marking code	K4X1G163PC-FGC3	K4X1G163PC-FGC6
compliance with RoHS	Lead Free	Lead Free
MOQ (small box)	1,280	1,280
MOQ (large box)	5,120	5,120

RoHS information

You can search and download data about Materials, China RoHS information and Declaration letter after entering your email address.
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K4X1G163PC-FGC3 is Lead-free and RoHS-compliant.



K4X1G163PC-FGC6 is Lead-free and RoHS-compliant.

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Mobile-SDR/DDR Code Information(1/3)

Last Updated : July 2009

K	4	X	X	X	X	X	X	X	X	-	X	X	X	X	X	X	X
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18

1. Memory (K)

2. DRAM : 4

3. Small Classification

M : Mobile-SDRAM (Discrete Device for Mobile)
X : Mobile-DDR SDRAM (Discrete Device for Mobile)
P : Mobile-DDR2-S4 SDRAM
Q : Mobile DDR2-S2 SDRAM

4~5. Density, Refresh3. Small Classification

64 : 64M, 4K/64ms
28 : 128M, 4K/64ms
56 : 256M, 8K/64ms
51 : 512M, 8K/64ms
1G : 1G, 8K/64ms
2G : 2G, 8K/64ms
4G : 4G, 8K/64ms

6~7. Organization

15 : x16 (2CS)	16 : x16
30 : x32 (2CS/2CKE)	31 : x32 (2CS)
32 : x32	

8. Bank

3 : 4Bank	4 : 8Bank
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9. Interface(VDD, VDDQ)

3 : LVCMOS (3.0V & 3.3V, 3.0V & 3.3V)
L : LVCMOS (2.5V, 2.5V)
P : LVCMOS (1.8V, 1.8V)
G : LVCMOS,1.8V,1.2V
B : HSUL_1,1.8V,N/A,1.2V,1.2V
C : HSUL_1,1.8V,1.35V,1.2V,1.2V
E : HSUL_1,1.8V,1.2V,1.2V,1.2V

10. Generation

11. "—"

12. Package

- Mobile-SDRAM(M)
B : 54-CSP(LF, HF)
H : 90-FBGA_S(LF, HF)

- Mobile-DDR SDRAM(X)
8 : 90-FBGA(LF, HF)
A : 168-FBGA(LF, HF, DDP)
F : 60-FBGA(LF, HF)
N : 168-FBGA(LF, POP, HF)
X : 152-FBGA(POP,HF,LF)

- Mobile DDR2-S2 SDRAM
A : 168-FBGA (POP,HF,LF)

- Mobile DDR2-S4 SDRAM
A : 168-FBGA(POP,HF,LF)
C : 136-FBGA(POP,HF,LF)

- DRAM COMMON
W : WAFER

※ HF : Halogen-Free
LF : Lead-Free
DDP : Dual Die Package
POP : Package on Package

Mobile-SDR/DDR Code Information(2/3)

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K	4	X	X	X	X	X	X	X	X	-	X	X	X	X	X	X	X
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18

13. Temp, Power

E : Extended, Normal, PASR & TCSR

G : Extended, Low, PASR & TCSR

14~15. Speed

- Mobile-SDRAM(M)

60 : 166MHz @ CL3

75 : 133MHz @ CL3, 111MHz @ CL2

DP : Daisy Chain (PCB)

- Mobile-DDR SDRAM(X)

C8 : 5ns @ CL3

C7 : 5.4ns @ CL3

C6 : 6ns @ CL3

C3 : 7.5ns @ CL3

DP : Daisy Chain (PCB)

- Mobile DDR2-S4 SDRAM(P)

C9 : 3.75ns@RL4,TRCD18ns,TRP18ns

C0 : 3.0ns@RL5,TRCD18ns,TRP18ns

C1 : 2.5ns@RL6,TRCD18ns,TRP18ns

DP : Daisy Chain (PCB)

- Mobile DDR2-S2 SDRAM(Q)

C6 : 6.0ns@RL3,TRCD18ns,TRP18ns

C8 : 5.0ns@RL3,TRCD18ns,TRP18ns

DP : Daisy Chain (PCB)

Mobile-SDR/DDR Code Information(3/3)

Last Updated : July 2009

K **4** X X X X X X X X - X X X X X X X

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18

16. Packing "Packing Type Reference"

- Common to all products, except of Mask ROM
- Divided into TAPE & REEL(In Mask ROM, divided into TRAY, AMMO Packing Separately)

Divide	Packing Type	New Marking
Component	TAPE & REEL	T
	Other (Tray, Tube, Jar)	0 (Number)
	Stack	S
Module	MODULE TAPE & REEL	P
	MODULE Other Packing	M

17~18. Customer "Customer List Reference"