

XDR™ DRAM Product Guide

Revision 0.5
Mar. 2006

Change History

Revision 0.1 (August '03)

- First Copy

Revision 0.2 (Dec '04)

- Add C-die, D-bin

Revision 0.3 (Mar '05)

- Add 512Mb XDR DRAM

Revision 0.4 (Dec '05)

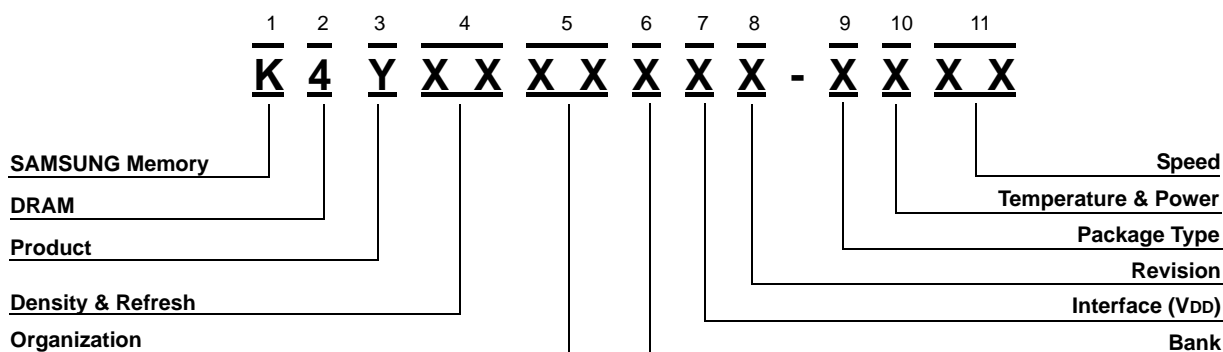
- Delete code 17 in organization

Revision 0.5 (Mar. '06)

- Add E-die

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A. XDR DRAM Ordering Information



1. SAMSUNG Memory : K

2. DRAM : 4

3. Product

Y : XDR DRAM

4. Density & Refresh

54 : 256M, 16K/16ms(0.98us)

50 : 512M, 32K/16ms(0.49us)

5. Organization

02 : x2

04 : x4

08 : x8

16 : x16

6. Bank

4 : 8 Banks

7. Interface (VDD, VDDQ)

U : DRSL(1.8V,1.2V)

8. Revision

M : 1st Gen.

C : 4th Gen.

E : 6th Gen.

F : 7th Gen.

9. Package Type

J : BOC lead free

10. Temperature & Power

C : Commercial, Normal Power

11. Speed (Data frequency, t_{RAC}, t_{RC})

DS : for Daisy chain Sample

A2 : 2.4Gbps, 36ns, 16cycles

B3 : 3.2Gbps, 35ns, 20cycles

C3 : 3.2Gbps, 35ns, 24cycles

C4 : 4.0Gbps, 28ns , 24cycles

B. XDR DRAM Component Product Guide

Density	Banks	Part Number	Speed ^{*2}	Org.	Power(V)	Refresh	Package Type	Availability
256Mb(F-die)	8 Banks	K4Y54044UF-J ^{*1} C	A2/ B3/ C4	64Mx4	1.8V± 0.09	16K/16ms	104ball BOC	EOL
		K4Y54084UF-JC		32Mx8				
		K4Y54164UF-JC		16Mx16				
512Mb(C-die)	8 Banks	K4Y50024UC-JC	A2/ B3/ C4	256Mx2	1.8V± 0.09	32K/16ms	104ball BOC	Now
		K4Y50044UC-JC		128Mx4				
		K4Y50084UC-JC		64Mx8				
		K4Y50164UC-JC		32Mx16				
512Mb(E-die)	8 Banks	K4Y50024UE-JC	A2/ B3/ C4	256Mx2	1.8V± 0.09	32K/16ms	100ball BOC	Q4'06
		K4Y50044UE-JC		128Mx4				
		K4Y50084UE-JC		64Mx8				
		K4Y50164UE-JC		32Mx16				

***1 Package Type**

Code	Description
J	BOC lead free

***2 Speed (tRAC & Freq.)**

Code	Description (Data frequency, t _{RAC} , t _{RC})
C4	4000Mbps, -28, 24clks
B3	3200Mbps, -35, 20clks
C3	3200Mbps, -35, 24clks
A2	2400Mbps, -36, 16clks