

# Mobile SDR / DDR / DDR2 PART NUMBERING

**H 5 X X XX X X X X X - XX X**  
 1 2 3 4 5 6 7 8 9 10 11 12 13 14

**HYNIX MEMORY**

**PRODUCT FAMILY**

5 : DRAM

**PRODUCT MODE**

5 : Mobile SDR  
 M : Mobile DDR  
 L : Mobile DDR2-S4  
 K : Mobile DDR2-S2

**POWER SUPPLY**

S : VDD=1.8V & VDDQ=1.8V  
 D : VDD1=1.8V, VDD2=1.35V, VDDCA & VDDQ=1.2V  
 R : VDD1=1.8V, VDD2=1.2V, VDDCA & VDDQ=1.2V

**DENSITY & REFRESH**

64 : 64M / 4K REF / 64ms  
 12 : 128M / 4K REF / 64ms  
 26 : 256M / 4K REF / 64ms  
 25 : 256M / 8K REF / 64ms  
 51 : 512M / 8K REF / 64ms  
 1G : 1G / 8K REF / 64ms  
 2G : 2G / 8K REF / 64ms

**ORGANIZATION**

8 : x8  
 6 : x16  
 2 : x32  
 3 : x32, Reduced Page Size

**NUMBER OF BANKS**

1 : 2 Banks  
 2 : 4 Banks  
 3 : 8 Banks

**OPERATING TEMPERATURE & POWER CONSUMPTION**

L : Commercial Temp<sup>1)</sup> Low Power  
 G : Extended Temp<sup>2)</sup> & Low Power  
 M : Mobile Temp<sup>3)</sup> & Low Power

**SPEED(tCL-tRCD-tRP)**

<b>Mobile SDR</b>	<b>Mobile DDR2</b>
A3 : 105MHz 3-3-3	E3 : DDR400 3-3-3
75 : 133MHz 3-3-3	EC : DDR400 3-4-4
60 : 166MHz 3-3-3	C4 : DDR533 4-4-4
	CA : DDR533 4-5-5
	Y5 : DDR667 5-5-5
<b>Mobile DDR</b>	YA : DDR667 5-6-6
L3 : DDR200 3-3-3	S6 : DDR800 6-6-6
K3 : DDR266 3-3-3	SA : DDR800 6-8-8
J3 : DDR333 3-3-3	
Q3 : DDR370 3-3-3	
QA : DDR370 4-3-3	
E3 : DDR400 3-3-3	
EA : DDR400 4-3-3	
EB : DDR400 3-4-3	

**PACKAGE MATERIAL**

L : Leaded  
 P : Lead free (ROHS<sup>4)</sup> Compliant  
 R : Lead & Halogen free (ROHS<sup>4)</sup> Compliant  
 A : Wafer only

**PACKAGE TYPE**

F : FBGA (Wire Bond)  
 M : FBGA / DDP (Dual Die Package)  
 W : Wafer  
 K : KGD  
 U : ULGA

**DIE GENERATION**

M : 1st  
 A : 2nd  
 B : 3rd  
 C : 4th  
 D : 5th  
 E : 6th  
 F : 7th  
 G : 8th

Note:

- 1) Commercial Temperature : 0°C ~70°C
- 2) Extended Temperature: -25°C ~85°C
- 3) Mobile Temperature: -30°C ~85°C
- 4) ROHS : Restriction Of Hazardous Substances