

DDR3 SDRAM PART NUMBERING

H 5 I Q 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

T : DDR3 SDRAM

POWER SUPPLY

Q : VDD=1.5V & VDDQ=1.5V
 C : VDD=1.35V & VDDQ=1.35V
 K : VDD=1.25V & VDDQ=1.25V

DENSITY & REFRESH

51 : 512Mb, 8K/64ms Refresh
 1G : 1Gb, 8K/64ms Refresh
 2G : 2Gb, 8K/64ms Refresh
 4G : 4Gb, 8K/64ms Refresh
 8G : 8Gb, 8K/64ms Refresh
 AG : 16Gb, 8K/64ms Refresh

ORGANIZATION

4 : x4
 8 : x8
 6 : x16
 2 : x32

NUMBER OF BANKS

3 : 8 Banks
 4 : 16 Banks

DIE GENERATION

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

OPERATING TEMPERATURE & POWER CONSUMPTION

C : Commercial Temp¹⁾ & Normal Power
 L : Commercial Temp¹⁾ & Low Power
 E : Extended Temp²⁾ & Normal Power
 I : Industrial Temp³⁾ & Normal Power
 A : Commercial Temp¹⁾ & 1.35 VDD Power
 R : Commercial Temp²⁾ & 1.35 VDD Power & Reduced IDD6
 U : Commercial Temp²⁾ & 1.25 VDD Power

SPEED(tCL-tRCD-tRP)

TE : DDR3-2133 14-14-14
 RD : DDR3-1866 13-13-13
 PB : DDR3-1600 11-11-11
 H9 : DDR3-1333 9-9-9
 G7 : DDR3-1066 7-7-7
 S6 : DDR3-800 6-6-6

PACKAGE MATERIAL

L : Leaded
 P : Lead Free (ROHS⁴⁾ compliant)
 R : Lead Free & Halogen Free (ROHS⁴⁾ compliant)

PACKAGE TYPE

F : FBGA SDP (Single Die Package)
 L : FBGA DDP 1CS (Dual Die Package)
 M : FBGA DDP 2CS (Dual Die Package)
 H : FBGA QDP (Quad Die Package)

Note:

- 1) Commercial Temperature: 0°C ~ 85°C
- 2) Extended Temperature: -25°C ~ 85°C
- 3) Industrial Temperature: -40°C ~ 85°C
- 4) ROHS : Restriction Of Hazardous Substances