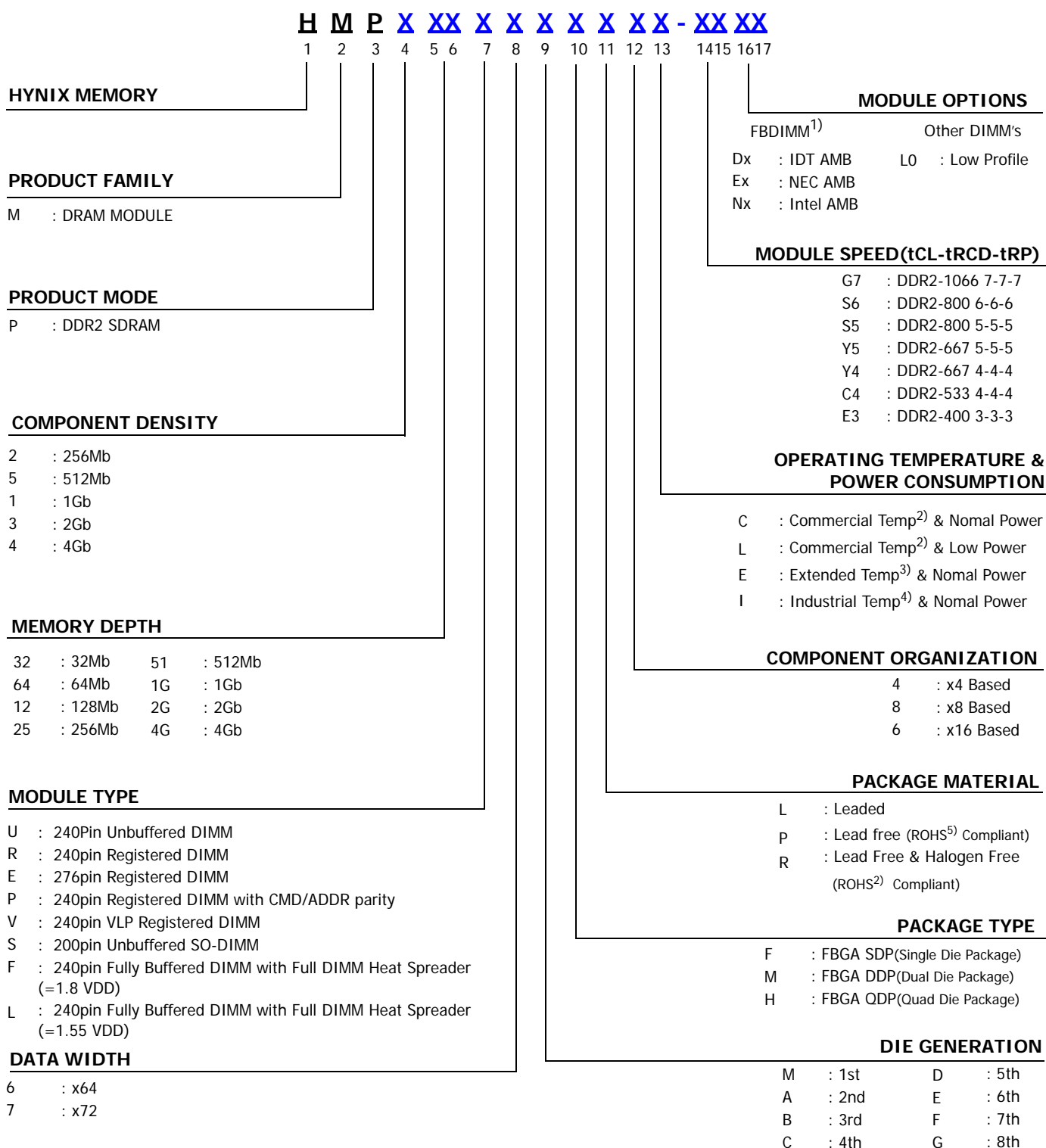# Part Number System Change Notice

Effective from August 6, 2007, a more concise part numbering system is utilized by Hynix with the intention of managing product line with more consistency. Devices developed after August 2007 and their respective products will be Refer to the following pages for more details. (www.hynix.com/pn_notice.jsp)

Part Number with prefix 'HY' -> Old Part Number Decoder Link

Part Number with prefix 'H' -> New Part Number Decoder Link

DDR2 SDRAM MODULE PART NUMBERING

H M P X XX X X X X X XX X - XX XX
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17

HYNIX MEMORY

PRODUCT FAMILY

M : DRAM MODULE

PRODUCT MODE

P : DDR2 SDRAM

COMPONENT DENSITY

2 : 256Mb
5 : 512Mb
1 : 1Gb
3 : 2Gb
4 : 4Gb

MEMORY DEPTH

32	: 32Mb	51	: 512Mb
64	: 64Mb	1G	: 1Gb
12	: 128Mb	2G	: 2Gb
25	: 256Mb	4G	: 4Gb

MODULE TYPE

U : 240Pin Unbuffered DIMM
R : 240pin Registered DIMM
E : 276pin Registered DIMM
P : 240pin Registered DIMM with CMD/ADDR parity
V : 240pin VLP Registered DIMM
S : 200pin Unbuffered SO-DIMM
F : 240pin Fully Buffered DIMM with Full DIMM Heat Spreader (=1.8 VDD)
L : 240pin Fully Buffered DIMM with Full DIMM Heat Spreader (=1.55 VDD)

DATA WIDTH

6 : x64
7 : x72

MODULE OPTIONS

FBDIMM[1]   Other DIMM's
Dx : IDT AMB   L0 : Low Profile
Ex : NEC AMB
Nx : Intel AMB

MODULE SPEED(tCL-tRCD-tRP)

G7 : DDR2-1066 7-7-7
S6 : DDR2-800 6-6-6
S5 : DDR2-800 5-5-5
Y5 : DDR2-667 5-5-5
Y4 : DDR2-667 4-4-4
C4 : DDR2-533 4-4-4
E3 : DDR2-400 3-3-3

OPERATING TEMPERATURE & POWER CONSUMPTION

C : Commercial Temp[2] & Nomal Power
L : Commercial Temp[2] & Low Power
E : Extended Temp[3] & Nomal Power
I : Industrial Temp[4] & Nomal Power

COMPONENT ORGANIZATION

4 : x4 Based
8 : x8 Based
6 : x16 Based

PACKAGE MATERIAL

L : Leaded
P : Lead free (ROHS[5] Compliant)
R : Lead Free & Halogen Free (ROHS[2] Compliant)

PACKAGE TYPE

F : FBGA SDP(Single Die Package)
M : FBGA DDP(Dual Die Package)
H : FBGA QDP(Quad Die Package)

DIE GENERATION

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

Note:
1) Refer to respective datasheet for AMB revision.
2) Commercial Temperature: 0°C ~ 85°C
3) Extended Temperature: -25°C ~ 85°C
4) Industrial Temperature: -40°C ~ 85°C
5) ROHS : Restriction Of Hazardous Substances

DDR2 SDRAM MODULE PART NUMBERING

HYM XX X XX X XX X X X X X X XX - X

HYNIX MODULE

COMPONENT GROUP

P2 : 256Mb DDR2 SDRAM 8K Ref./4Banks

P5 : 512Mb DDR2 SDRAM 8K Ref./4Banks

P1 : 1Gb DDR2 SDRAM 8K Ref./8Banks

P3 : 2Gb DDR2 SDRAM 8K Ref./8Banks

P4 : 4Gb DDR2 SDRAM 8K Ref./8Banks

POWER SUPPLY & INTERFACE

BLANK : VDD 1.8V & VDDQ 1.8V

MEMORY DEPTH

16	: 16M	51	: 512M
32	: 32M	1G	: 1G
64	: 64M	2G	: 2G
12	: 128M	4G	: 4G
25	: 256M		

MODULE TYPE

B : Fully Buffered DIMM

F : Fully Buffered DIMM with Full DIMM Heat Spreader

E : 276Pin Registered DIMM

M : 214pin Micro-DIMM

N : 244pin Mini-DIMM

P : 240pin Registered DIMM with Command/Address parity

R : 240pin Registered DIMM

S : 200pin SO-DIMM

U : 240pin Unbuffered DIMM

DATA WIDTH

64 : x64

72 : x72

DIE GENERATION

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

SPEED

S6 : DDR2-800 6-6-6

S5 : DDR2-800 5-5-5

Y5 : DDR2-667 5-5-5

Y4 : DDR2-667 4-4-4

C4 : DDR2-533 4-4-4

E3 : DDR2-400 3-3-3

AMB VENDOR & REVISION

Nx : Intel

Ex : NEC

Dx : IDT

Cx : ICS

Px : Inphi

Ax : Infineon

Mx : Micron

MODULE REVISION

R : Low Cost

L : Low Profile

T : DDR2 667 SODIMM with Thermal Sensor

COMPONENT CONFIGURATION

4 : x4 Based

8 : x8 Based

6 : x16 Based

PACKAGE MATERIAL

BLANK : Normal

P : Lead free(ROHS* Compliant)

R : Lead & Halogen free (ROHS* Compliant)

PACKAGE TYPE

BLANK : FBGA Single Die

S : FBGA Stack

M : FBGA DDP(Dual Die Package)

H : FBGA DDP Stack

POWER CONSUMPTION

BLANK : Nomal

L : Low Power

* **ROHS: Restriction Of Hazardous Substances**
** **All DDR2 Modules follow above Part Numbering System**