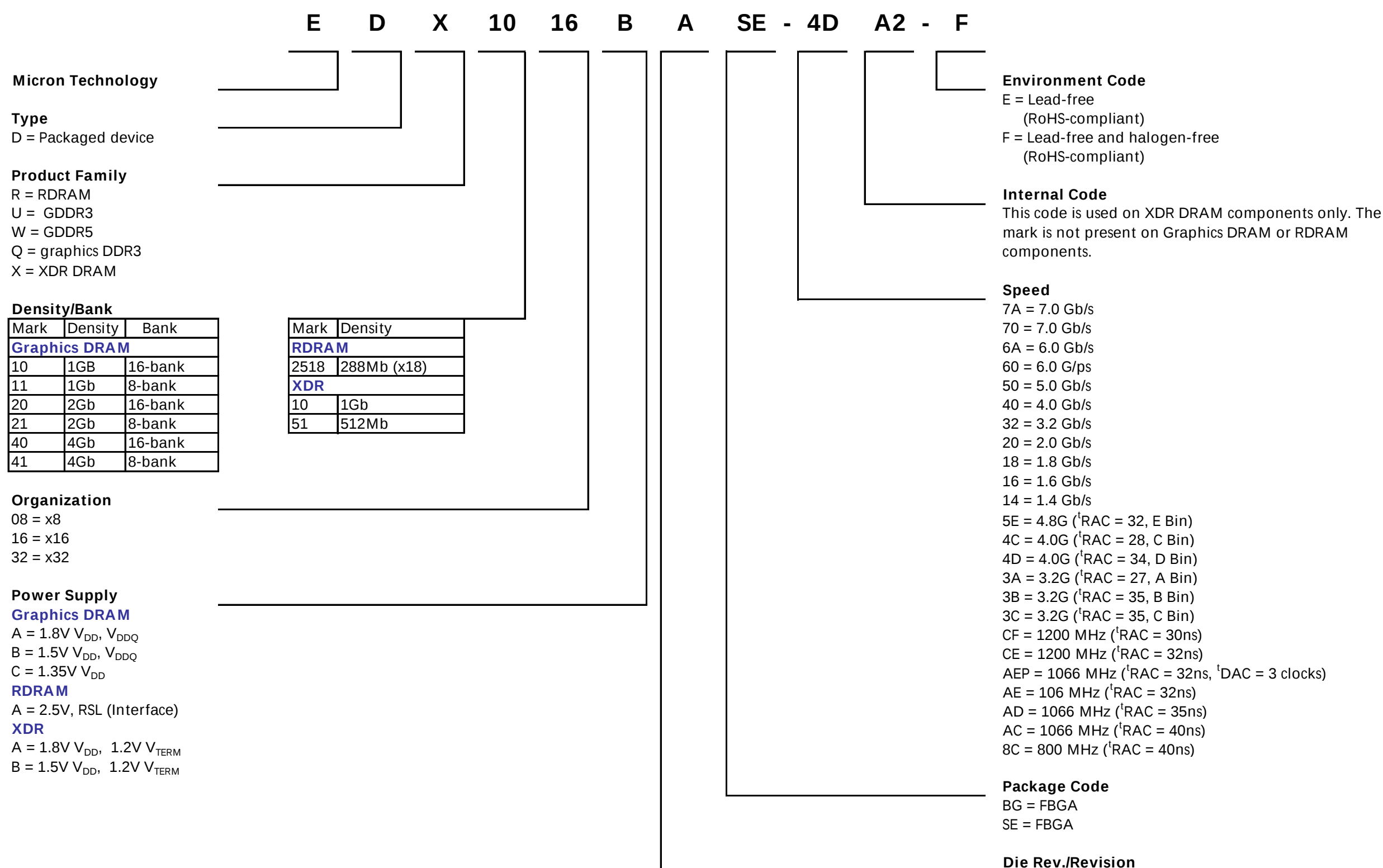


The part numbering system is available at www.micron.com/numbering

[illegible]

The part numbering system is available at www.micron.com/numbering

Legacy GDDR3, GDDR5, graphics DDR3, RDRAM, and XDR



Rev. August 14, 2015

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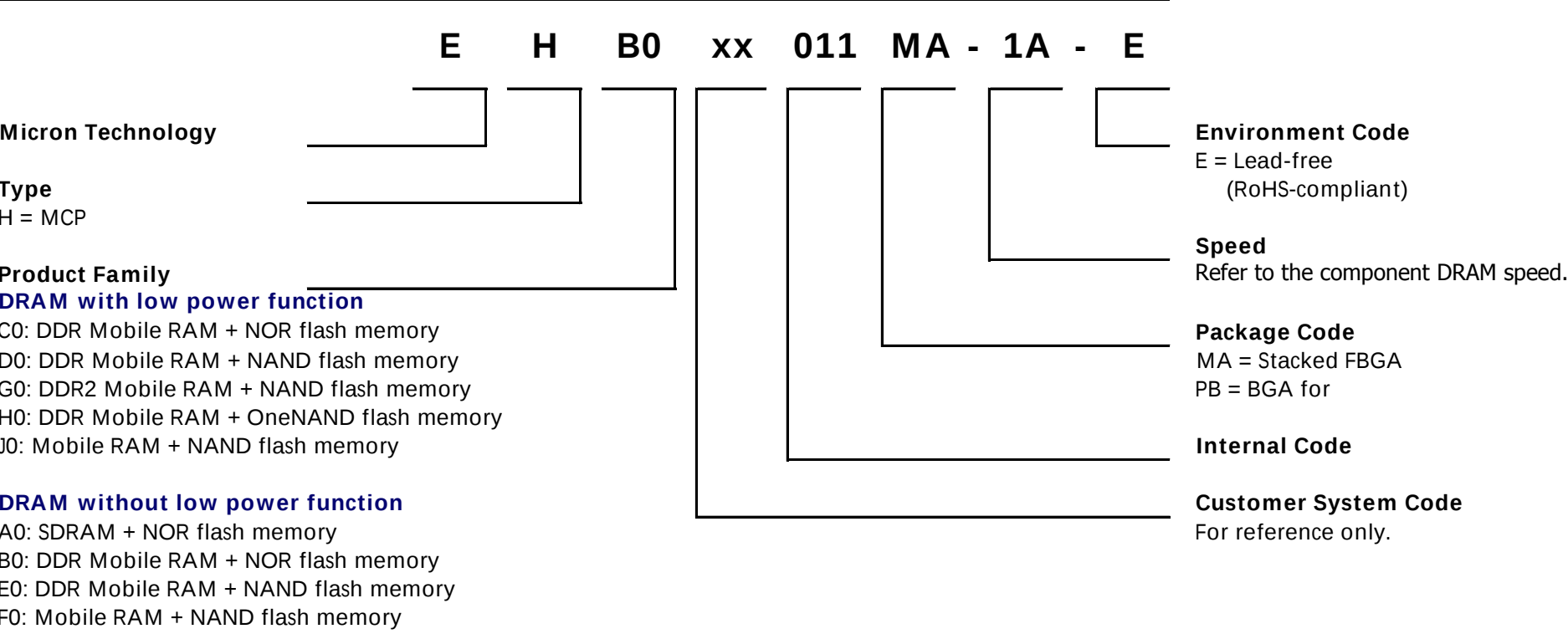
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Legacy MCP Part Numbering System

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Legacy Multichip Packages



The part numbering system is available at www.micron.com/numbering

[illegible]

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The part numbering system is available at www.micron.com/numbering

Micron Technology

Type
B = Module

Product Family
E = DDR2

Density/Rank

Mark	Density	Rank
DDR2 Module		
18	16GB	4-rank
81	8GB	2-rank
82	8GB	4-rank
41	4GB	2-rank
42	4GB	4-rank
20	2GB	1-rank
21	2GB	2-rank
10	1GB	1-rank
11	1GB	2-rank
51	512MB	1-rank
52	512MB	2-rank
25	256MB	1-rank
26	256MB	2-rank

Module Type
R = Registered
A = Registered (with address/command parity)
E = Unbuffered (ECC)
U = Unbuffered (nonECC)
F = Fully buffered

DRAM Density
C = 256Mb
D = 512Mb
E = 1Gb
F = 2Gb
1 = 2Gb (DDP)

Environment Code
E = Lead-free (RoHS-compliant)
F = Lead-free and halogen-free (RoHS-compliant)

Speed
8E = PC2-6400(5-5-5)
8G = PC2-6400(6-6-6)
6C = PC2-5300(4-4-4)
6E = PC2-5300(5-5-5)
5C = PC2-4200(4-4-4)
4A = PC2-3200(3-3-3)

Module Rev./AMB Device Information for FBDIMMs only

Module Outline
F, W = 240-pin DIMM
H = 240-pin DIMM (Stacked FBGA)
S, U = 200-pin SO-DIMM
D = 200-pin SO-DIMM (Stacked FBGA)
R = 240-pin DIMM (DDP)
G = 240-pin VLP DIMM
Q = 240-pin VLP DIMM (DDP)

Die Rev.

Power Supply, Interface
A = 1.8V, SSTL_18

DRAM Organization
4 = x4
8 = x8
6 = x16



The part numbering system is available at www.micron.com/numbering

Micron Technology

Type
B = Module

Product Family
S = SDRAM

Mark	Density	Rank
SDRAM Module		
20	2GB	1-rank
21	2GB	2-rank
10	1GB	1-rank
11	1GB	2-rank
51	512MB	1-rank
52	512MB	2-rank
25	256MB	1-rank
26	256MB	2-rank
12	128MB	1-rank
13	128MB	2-rank

Module Type
R = Registered DIMM
E = Unbuffered DIMM (ECC)
U = Unbuffered DIMM (nonECC)

Speed
7A = PC133/CL2,3
75 = PC133/CL3, PC100/CL2
80 = PC100/CL2

Module Rev.

Module Outline
F = 168-pin DIMM
N = 168-pin DIMM (TCP)
S = 144-pin SO DIMM
D = 144-pin SO DIMM (TCP)
M = 144-pin Micro DIMM

Die Rev.

Power Supply, Interface
A = 2.5, SSTL_2

DRAM Organization
2 = x2
4 = x4
8 = x8
6 = x16

DRAM Density
B = 128Mb
C = 256Mb
D = 512Mb

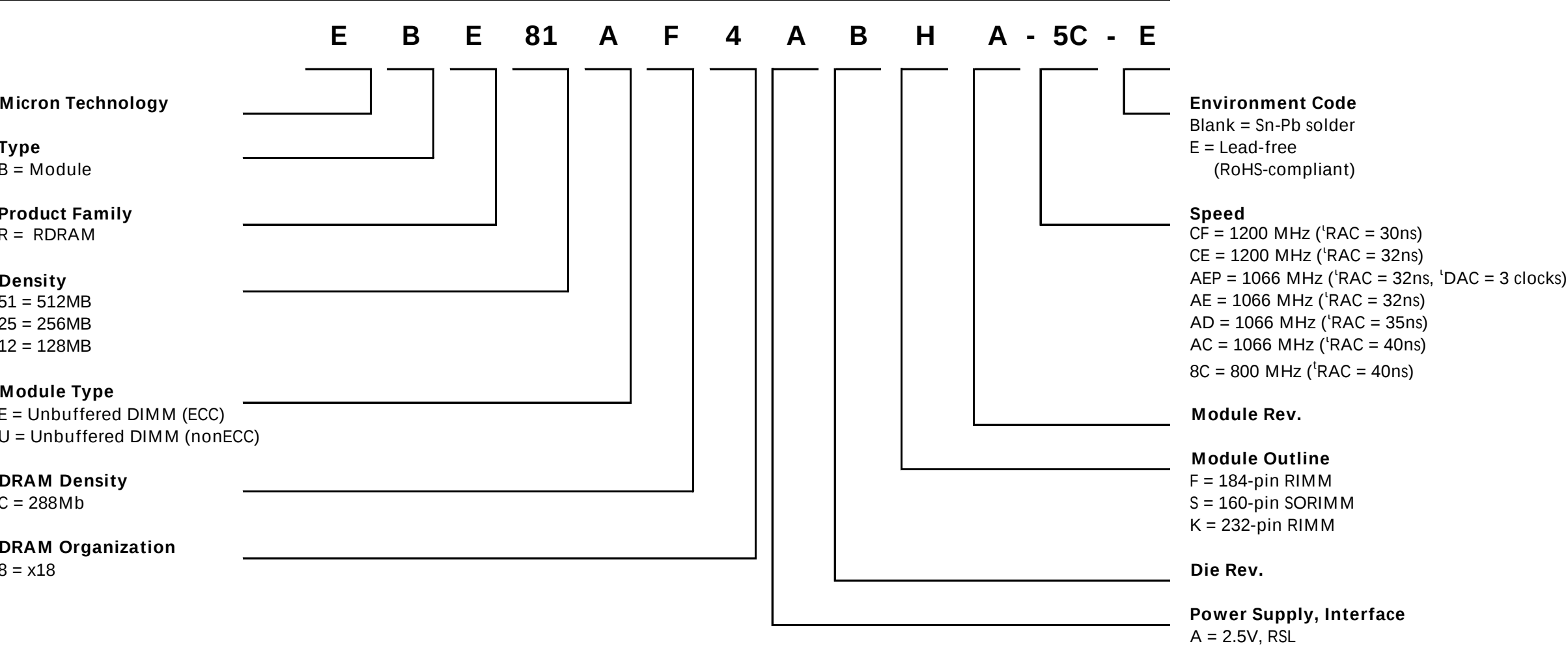
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Legacy RIMM™ Part Numbering System

The part numbering system is available at www.micron.com/numbering

Legacy RIM M



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Legacy Mobile Bare Die Part Numbering System

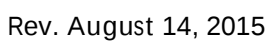
The part numbering system is available at www.micron.com/numbering

Legacy Mobile Wide IO, LPDDR3, LPDDR2, Mobile RAM™

	E	C	1	40	51	A	A	VA	Y3	xx	-	F	
Micron Technology													Environment Code (Not shown on Mobile RAM) F = Lead-free and halogen-free (RoHS-compliant)
Type C = Bare die													Wafer Type (Not shown on all products) V1,blank = Hiroshima Epi V2 = Hiroshima Non-Epi V3 = RexChip Epi V4 = RexChip Non-Epi
Product Family 1 = Mobile Wide IO F = LPDDR3 B = LPDDR2 K = LPDDR L = LPSDR M = DDR Mobile RAM/Mobile RAM													Speed (Mobile RAM only) LPSDR Blank = 133 MHz 60 = 166 MHz LPDDR: 65nm 以降 Blank = 370 Mb/s 50 = 400 Mb/s LPDDR: 70nm 迄 Blank = 133 MHz 60 = 166 MHz 54 = 185 MHz 50 = 200 MHz
Density/Page Size 40 = 4Gb 84 = 8Gb/4KB 62 = 6Gb/4KB 44 = 4Gb/4KB 24 = 2Gb/2KB 22 = 2Gb/4KB 10 = 1Gb/2KB, 4KB 14 = 1Gb/4KB 13 = 1Gb/2KB 51 = 512Mb/1KB 54 = 512Mb/2KB 25 = 256Mb/1KB 26 = 256Mb/2KB 28 = 256Mb/1KB, 2KB 12 = 128Mb/1KB 64 = 64Mb/512B													φ300mm Wafer (bare die only)
Organization 51 = x512 (128 I/O x 4 channel) 16 = x16 0A = x16 /x32 (x32 optional on LPDDR2 and Mobile RAM) 32 = x32 64 = x64													Package Codes Vx, CN = Bare die VA = Die with surface bump and solder
													Die Revision
													Power Supply, Interface Wide IO A = V _{DD1} = 1.8V; V _{DD2} = V _{DDCA} = V _{DDQ} = 1.2V LPDDR3 A = V _{DD1} = 1.8V; V _{DD2} = V _{DDCA} = V _{DDQ} = 1.2V; S8 device, HSUL_12 LPDDR2 B = V _{DD1} = 1.8V; V _{DD2} = V _{DDCA} = V _{DDQ} = 1.2V; S4B device, HSUL Mobile RAM C = V _{DD} = 1.8V; V _{DDQ} = 1.8V; LVCMOS



The part numbering system is available at www.micron.com/numbering



The part numbering system is available at www.micron.com/numbering

	E	D	F	A1	64	A	1	MA -	GD -	F -	D	
Micron Technology												
Type D = Packaged device M = Daisy chain sample												
Product Family F = Mobile LPDDR3												
Density/Chip Select B1 = 32Gb/4-CS (2-CS/channel) B2 = 32Gb/2-CS A1 = 16Gb/4-CS A2 = 16Gb/2-CS A3 = 16Gb/2-CS 81 = 8Gb/2-CS 44 = 4Gb/1-CS												
Organization 32 = x32 64 = x64												
Power Supply, Interface A = $V_{DD1} = 1.8V$; $V_{DD2} = V_{DDCA} = V_{DDQ} = 1.2V$; S8 device; HSUL_12 B = $V_{DD1} = 1.8V$; $V_{DD2} = V_{DDCA} = V_{DDQ} = 1.0V$; S8 device; HSUL_12												

178-ball FBGA

178-ball Stacked FBGA

253-ball Stacked FBGA

4Gb		8Gb		16Gb		32Gb	
30nm	25nm	30nm	25nm	30nm	25nm	30nm	25nm
BJ							
		MC	MA	MA	MA		
		MA	MA	MA	MA		MA

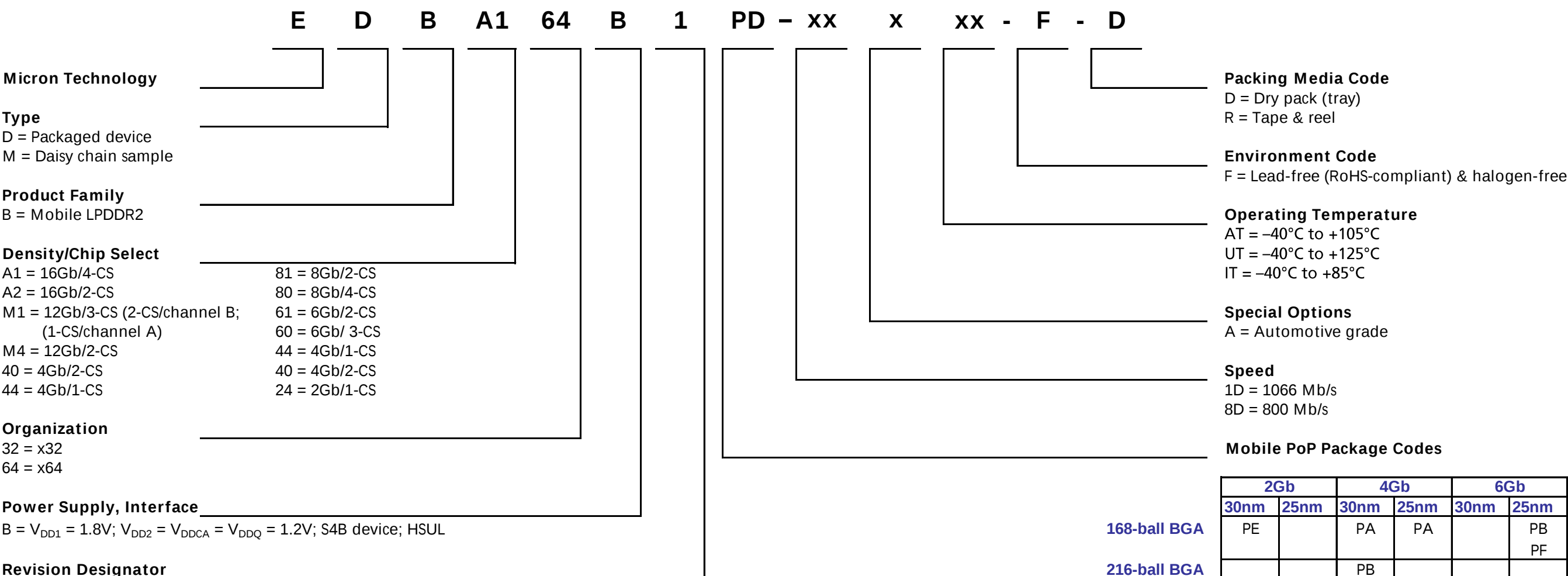
Revision Designator



Legacy LPDRAM Part Numbering System

The part numbering system is available at www.micron.com/numbering

Legacy LPDDR2 PoP

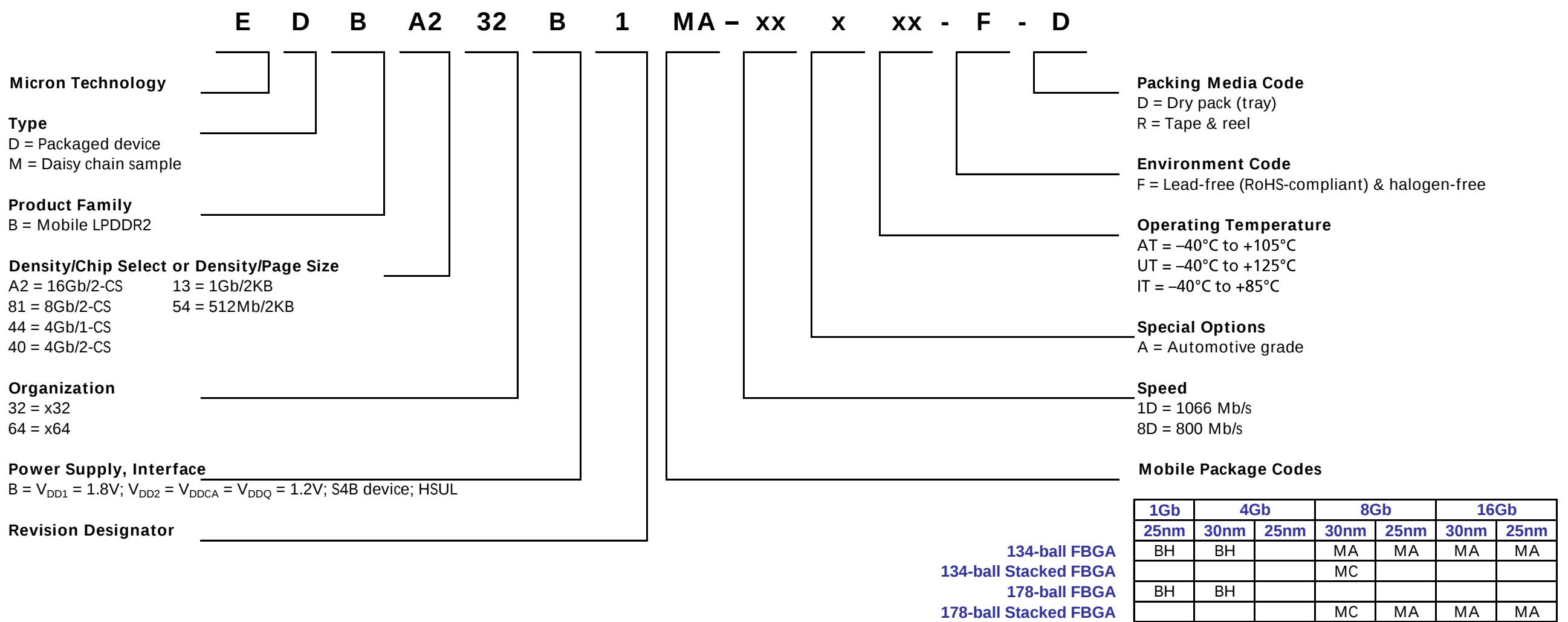


2Gb		4Gb		6Gb		8Gb		12Gb	
30nm	25nm	30nm	25nm	30nm	25nm	30nm	25nm	30nm	25nm
PE		PA	PA		PB PF	PB PP			PB PF
		PB				PF			
		PC	PC	PD	PD	PD PH	PD		PD
		PP		PB	PF	PD	PF PP	PD	
		PD				PH			



The part numbering system is available at www.micron.com/numbering

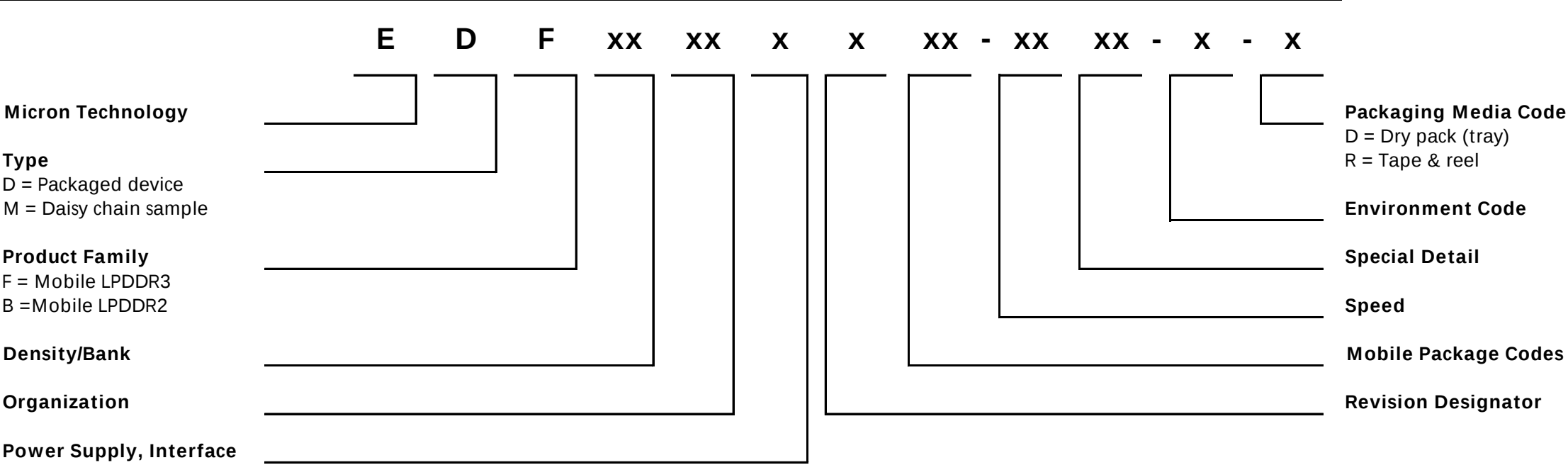
Legacy LPDDR2 FBGA



Legacy LPDRAM Part Numbering System

The part numbering system is available at www.micron.com/numbering

Legacy LPDDR3 and LPDDR2



Rev. August 14, 2015

