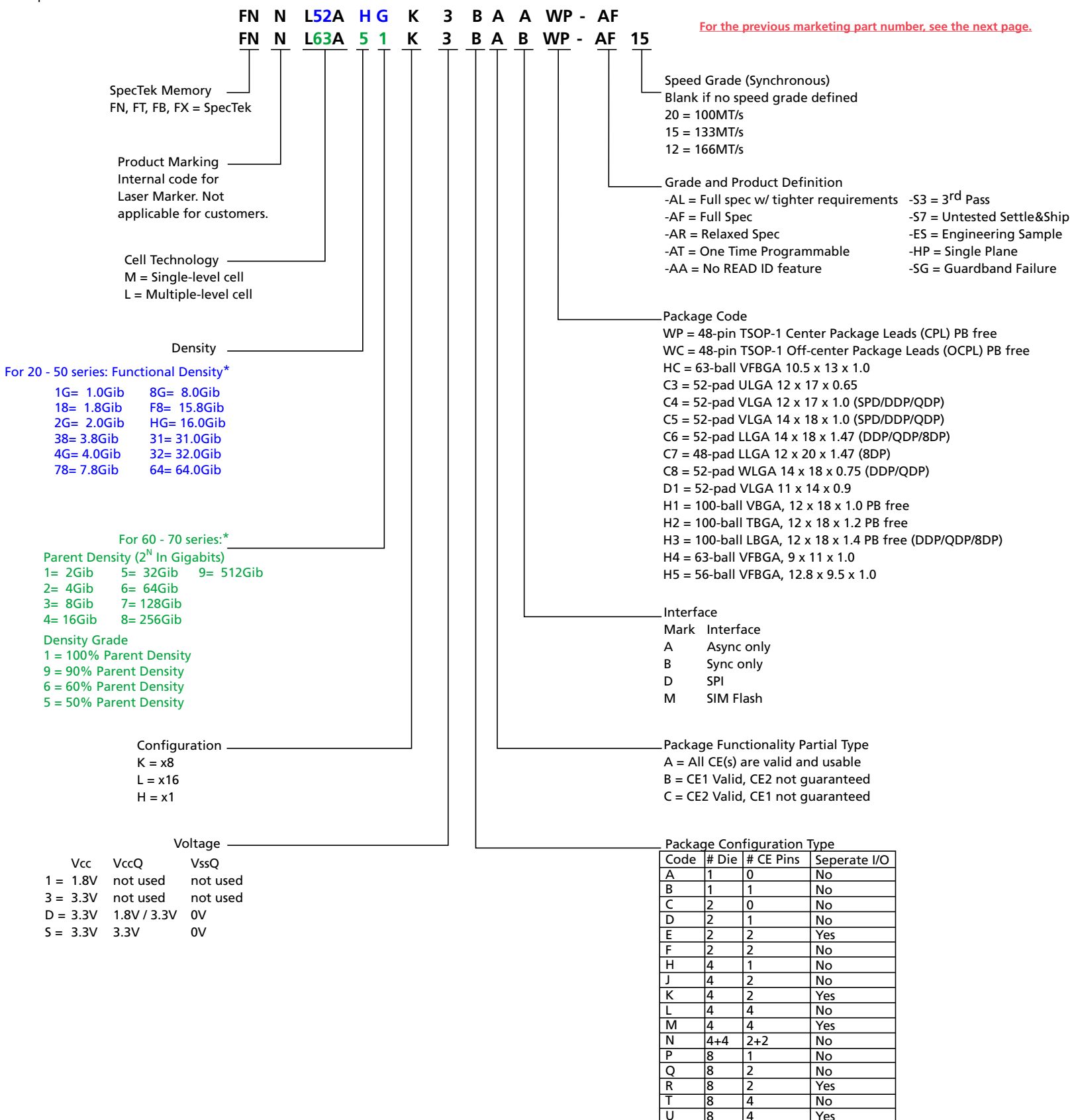


SpecTek Flash Part Numbering System

Last Updated: 01/31/2011



Old SpecTek Flash Part Numbering System



Last Updated: 12/01/09

FNN L52* A H G K 3 WG - AF
FNN L63* A 5 1 K 3 WG - AF

F= SpecTek

Product Family

B, N, T= SpecTek NAND Flash

Product Marking

Internal code for Laser mark. Not applicable for customers.

Cell Technology

M= Single-level cell
L= Multiple-level cell

Design Generation

(Consult factory)

Density

For 20, 40, 50 series: Functional Density*

1G= 1.0 Gib 8G= 8.0 Gib
18= 1.8 Gib F8= 15.8 Gib
2G= 2.0 Gib HG= 16.0 Gib
38= 3.8 Gib 31= 31.0 Gib
4G= 4.0 Gib 32= 32.0 Gib
78= 7.8 Gib 64= 64.0 Gib

For 60 -70 series*

Parent Density (2^N in Gigabits)

1= 2 Gib 5= 32 Gib
2= 4 Gib 6= 64 Gib
3= 8 Gib 7= 128 Gib
4= 16 Gib 8= 256 Gib
NA= Unavailable

Density Grade

1= 100% of Parent Density
9= 90% of Parent Density
6= 60% of Parent Density
5= 50% of Parent Density

Configuration

K= x8 L= x16 H= x1

Grade and Product Definition

-AL= Full Spec Lexar
-AF= Full Spec
-AR= Relaxed Spec
-AT= One Time Programmable
-AC= No Cache Feature
-AW= No Write Protect Feature
-AA= No READ ID Feature
-SS= Settle & Ship
-S3= 3rd Pass
-S7= Untested Settle & Ship
-ES= Engineering Sample
-HP= Single Plane
-SJ= 1st Step Failure
-SG= Guardband Failure

Package Functionality

G= Single Die Package, CE only
1= Dual Die Package, CE1 functional only
2= Dual Die Package, CE1 and CE2 functional
3= Dual Die Package, CE3 functional only
4= Quad Die Package, CE1 and CE2 functional
5= Quad Die Package, CE1 functional only
6= Quad Die Package, CE2 functional only
7= Octal Die Package, CE3 functional
8= Octal Die Package, CE2/CE3/CE4 functional
9= Octal Die Package, CE2/CE4 functional

Package Code

B= 100/170B BGA 12x18mm PB free
C= 52-pad ULGA 12x17mm PB free
D= 63/120B VFBGA 9x11mm PB free
G= 52-pad VLGA 12x17x1mm PB free
H= 63/120B VBGA 10.5x13mm PB free
J= 48/52-pad SOP/LLGA 12x20mm PB free
L= 52-pad LLGA 14x18mm PB free
P= 48ld TSOP-1 Off-center Package Leads (OCPL) PB free
T= 48ld TSOP-1 PB
V= 52-pad VLGA 14x18mm PB free
W= 48ld TSOP-1 Center Package Leads (CPL) PB free

Voltage

	Vcc	VccQ	VssQ
1=	1.8V	not used	not used
3=	3.3V	not used	not used
D=	3.3V	1.8V	0V
S=	3.3V	3.3V	0V

SpecTek Flash Wafer/Die Marketing Matrix

Last Updated: 01/05/2011

WB		S	M	50A	D	B	CX	N	L	-	NA	F3	A
WB or WT = Die- 3.3 Volt WC or WS = Unground Wafer- 3.3 Volt WD or WF = Die- 1.8 Volt WG or WH = Unground Wafer- 1.8 Volt WM or WN = Stacked die, no ring WJ or WK = Stacked die- 1.8 Volt													
Parent Device/Configuration 2 = 2Mx8 H = 8Gx8 3 = 1Mx16 M = 128Mx8 4 = 8Mx8 Q = 64Mx16 6 = 4Mx16 S = 256Mx8 C = 32Mx8 T = 2Mx16 E = 1Gx8 V = 512Mx8 F = 2Gx8 Y = 128Mx16 G = 4Gx8 Z = 256Mx16 U = Unavailable													
Cell Technology M = SLC L = MLC													
Device Generation & Parent Density x9x = 2Gb x2x = 16Gb x0x = 4Gb x3x = 32Gb x1x = 8Gb x4x = 64Gb													
Film Frame Type D = Disco K = K & S N = NA													
Wafer Tape Type B = D-175 C = R-3000 D = LE-Z01 F = P-2110G N = NA (uncut wafers)													
Backside Adhesive													
BX = Hitachi FH-800T 10µm CX = Hitachi FH-800P 10µm DX = Hitachi FH-800T 10µm EX = Nitto EM500-M3-60 FX = Hitachi FH-800T 20µm GX = Hitachi FH-9011 20µm HX = Hitachi FH-800P 20µm JX = Hitachi FH-9011T 20µm KX = Nitto EM500-M2A-G-20µm LX = Hitachi FH-800 20µm MX = Hitachi FH-800L 20µm PX = Hitachi FH-800L 25µm QX = Nitto EM550G-P 20µm RX = Nitto EM500-M2A-G-P 20µm SX = Nitto EM550G-P-12-25 TX = Nitto EM-550G-P-8-25 VX = Nitto EM-310J-P-12-60 WX = Nitto EM500-M3-70 YX = Hitachi FH-WPX2913T-60 ZX = Nitto EM-310J-P-8-60 BB = Nitto FOW EM30J-P-12LW-60 BC = Hitachi FH9411ST 40µm BD = Lintec LE4431 BE = Nitto EM500-M3 25µm BF = Nitto EM500-M3VJ-60 BG = Hitachi FH-900NT-25-E BH = Hitachi FH-900T-40 BJ = Hitachi FH- 9211ST BK = Nitto EM-310VJ-P-60 BL = Nitto EM700J=p 25µm BN = Nitto EM310VJ-P BP = Lintec LE4411 BQ = Nitto EM500-MA 2 BR = Henkel ATB - 120-12 30µm BT = Nitto EM310G-P-8LW-50 BV = Hitachi FH-900T-25µm BW = Nitto EM500-M3VJ-60 BZ = Lintec LE4738 CB = Hitachi FH-900-20 CC = Hitachi FH-900-40 CD = Henkel ATB - 130-12 CF = Hitachi FH- 9011T-25 CG = Henkel ATB -S120-12 CH = Lintec LE4423H CJ = Cheil DF-725NT CK = Nitto EM-550H-P-12-20 CL = Hitachi FH-9011P-20 CM = Hitachi FH-9011P-40 CN = Nitto EM-310J-P-12-25 CP = Nitto FOW EM310VJ-P-12LW-60 CQ = Hitachi FH9111ST CR = Lintec LE4764 CS = Hitachi FH-9011T-40 CT = Nitto EM500-M2A-10 CV = Henkel ATB -120A-12 CY = Henkel ATB -130A-12 NX = NA													
CU Bond Pad Type A = Ni/PD B = Ni/AU C = AL CAP D = Ni/PD with Polyimide Passivation E = Ni/AU with Polyimide Passivation F = AL CAP with Polyimide Passivation G = AL CAP													
Pick Grade F1 ¹ = 1 st Pass F2 ¹ = 2 nd Pass F3 ¹ = 3 rd Pass F5 ¹ = 1 st Pass/Limited Write Endurance F6 ¹ = 2 nd Pass/Limited Write Endurance S5 ¹ = 3 rd Pass/Limited Write Endurance FH ¹ = Single Plane W2 = Whole 200mm wafer W3 = Whole 300mm wafer W4 = Whole 200mm wafer/Limited Write Endurance W5 = Whole 300mm wafer/Limited Write Endurance W6 = Whole 200mm wafer W7 = Whole 300mm wafer WA = Whole 200mm wafer WB = Whole 200mm wafer WC = Whole 200mm wafer													
Reticle Grade and Revision MM = Not applicable Nx ² = 300mm wafer Rx ² = 200mm wafer A-S = Top Metal Reticle Revision Note 2: Where x equals the revision.													
Die Thickness A = 100µm I = 40µm R = 150µm 2 = 340µm B = 508µm J = 750µm S = 510µm 3 = 230µm C = 200µm K = 350µm T = 65µm 4 = 75µm D = 375µm L = 80µm U = 325µm 5 = 135µm E = 305µm M = 175µm V = 90µm 6 = 275µm F = 400µm N = 250µm W = 120µm 7 = 70µm G = 675µm P = 125µm X = 600µm 8 = 60µm H = 500µm Q = 225µm Y = 265µm 9 = 50µm													
Multi Pass Pick Information N = Not applicable Other = Consult factory													