

SpecTek DRAM Wafer Part Numbering System



Last Updated: 01/25/2023

WB X U80M D F AA K - NA E0 D

WB = Die on Frame
 WC = Carcass Die
 WM = Wafer Maps
 WU = Unground Wafer

LPDDR4 and Future Technologies

	V _{CC}	V _{CCQ}
WD = Die on Frame	1.1V	0.6V
WF = Wafer	1.1V	0.6V
WG = Wafer Maps	1.1V	0.6V
WH = Die on Frame	1.1V	1.1V
WJ = Wafer	1.1V	1.1V
WK = Wafer Maps	1.1V	1.1V
WL = Die on Frame	1.05V	0.5V
WN = Wafer	1.05V	0.5V

Parent Device/Component Type

1 = 64MX16	D = 16MX16	Q =
2 = 192MX32	E = 8MX18	R = 32MX32
3 = 384MX16	F = 256MX32	S = 256MX8
4 = 1GX8	G =	T =
5 = 512MX16	H = 256MX16	V = 512MX8
6 = 768MX16	I = 4MX32	W = 64MX32
7 = 1GX16	J = 64MX8	X = 128MX32
8 = 512MX32	K = 128MX4	Y = 128MX16
9 = 8MX16	L = 32MX16	Z = 16MX32
A = 2MX32	M = 128MX8	
B = 64MX4	N = 8MX32	
C = 32MX8	P = 256MX4	

Internal Designator

Y = SDRAM
 T = DDR
 U = DDR2
 V = DDR3/LPDDR3
 Z = DDR4/LPDDR4

Density

1 = 8M	6 = 256M
2 = 16M	7 = 512M
3 = 32M	8 = 1G
4 = 64M	9 = 2G
5 = 128M	0 = 4G

Film Frame Type

D = DISCO
 G = GEL PAK
 K = K&S
 N = NA

Wafer Tape Type

B = D-175 (200mm)	G = D-175-129 (300mm)
C = R-3000/R-3100	H = P-4110G-12P (300mm)
D = LE-Z01	N = NA (uncut wafer)
F = P-2110G (200mm)	

CU Bond Pad Type

A = (NI/PD) Nickel/Palladium plating has been applied to the copper bond pads
 B = (NI/AU) Nickel/Gold plating has been applied to the copper bond pads
 C = (AL CAP) Fabrication site = MTI Boise (Fab 3) / CU Bond Pad Type has no value
 D = ALM3
 E = ALM2
 F = ALM4
 G = ALM5
 H = ALM6

Grade

E0 = 100%
 EX = 2% Carcass (not reconstructed)

Partials Type

FP = First Pass Wafer
 P2 = Prime Wafer
 PC = Prime Combined
 PS = Prime Sort
 RA = 1P/2P Mixed Reconstructed Die (Mobile)
 SP = 2nd Pass Wafer
 3P = 3rd Pass Wafer
 4P = 4th Pass Wafer
 NA = N/A

Target Wafer Thickness

A = 150µm	K = 60µm	T = 175µm
B = 200µm	L = 80µm	U = 110µm
C = 250µm	M = 70µm	V = 55µm
D = 750µm	N = 90µm	W = 225µm
E = 305µm	O = 100µm	X = 65µm
F = 790µm	P = 50µm	Y = 45µm
G = 125µm	Q = 35µm	Z = Unknown
H = 170µm	R = 40µm	1 = 160µm
J = 75µm	S = 120µm	

Backside Adhesive

AA = EM-310J-P-12-60	AP = HR-900T-20-N20
AB = HR-9070GT-20	AQ = HR-900T-10-N20
AD = EM-310J-P-12-25	AR = EM-760L2-P-12-25
AE = FH-9011T-20	AS = EM-430V2J1-P-12-60
AF = ATB-120A-12	AT = EM-760L2-P-12-20
AG = EM-710J-P-12-20	AU = HR-400T-60
AH = EM-310J-P-12-50	AV = HR-9070GT-7
AJ = EM-715L2-P-12-20	AW = HR-400T-50-S41-150
AK = HR-9070GT-10	AX = HR-900T-15-N51
AL = NEX-130E4X(01)-12-60	AZ = FH-9011T-10
AM = EM-710J1-P-12-10	NA = N/A