

# Nomenclature for DRAM Component

Ver.4.5

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
<b>SC</b>	<b>B</b>	<b>15</b>	<b>H</b>	<b>1G</b>	<b>80</b>	<b>0</b>	<b>A</b>	<b>F</b>	<b>-</b>	<b>25</b>	<b>D</b>	<b>I</b>					
<b>Identifier</b> SC = UnilC Identifier												<b>Operating Temperature</b> I = Industrial Temperature chip (DDR2, DDR3: -40°C ~ +95°C; SDR, DDR, LPDDR2, LPDDR4: -40°C ~ +85°C) Blank = Commercial Temperature chip (DDR2, DDR3, DDR4: 0°C ~ +95°C; LPDDR2: 0°C ~ +85°C SDR, DDR: 0°C ~ +70°C) A3 = Automotive grade 3(-40°C ~ +95°C) ; LPDDR4(-40°C ~ +85°C) A2 = Automotive grade 2(-40°C ~ +105°C) A25 = Automotive grade 2(-40°C ~ +115°C) A1 = Automotive grade 1(-40°C ~ +125°C) X = High-Rel grade (-55°C ~ +125°C)					
<b>Product Group</b> B = Commodity chip E = ECC chip X = Extra Robustness ECC chip N = Consumer chip												<b>Latencies</b> A = 2-2-2 (SDRAM), = 32-32-32 (DDR4 / LP DDR4 / LP DDR5 / LP DDR4) B = 2.5(3)-3-3      P = 15-15-15 C = 4-4-4            R = 16-16-16 D = 5-5-5            T = 17-17-17 E = 6-6-6            U = 18-18-18 F = 7-7-7            Q = 19-19-19 G = 8-8-8            S = 22-22-22 H = 9-9-9            V = 21-21-21 J = 10-10-10        W = 20-20-20 K = 11-11-11        X = 24-24-24 L = 12-12-12        Y = 28-28-28 M = 13-13-13        Z = 36-36-36 N = 14-14-14					
<b>DRAM Volatge</b> 12 = 1.2V            11 = 1.1V 13 = 1.35V          1A = 1.05V 15 = 1.5V            2A = S2A 18 = 1.8V            2B = S2B 25 = 2.5V            4A = S4A 33 = 3.3V            4B = S4B												<b>Speed Bin</b> 75 = 133 MHz            09 = 1066 MHz 7 = 143 MHz            08 = 1200 MHz 6 = 166 MHz            07 = 1333 MHz 5 = 200 MHz            05 = 1466 MHz 4 = 250 MHz            06 = 1600 MHz 37 = 267 MHz            03 = 1866 MHz 3 = 333 MHz            04 = 2133 MHz 25 = 400 MHz            20 = 2400 MHz 19 = 533 MHz            21 = 2750 MHz 15 = 667 MHz            22 = 3000 MHz 13 = 800 MHz            23 = 3200 MHz 11 = 933 MHz					
<b>DRAM Generation</b> S = SDRAM            J = LP SDR D = DDR                K = LP DDR1 T = DDR2                L = LP DDR2 H = DDR3                M = LP DDR3 Q = DDR4                N = LP DDR4 V = DDR5                P = LP DDR5 R = LP DDR4X												<b>Power</b> - = Standard L = Low power					
<b>DRAM Density</b> 1G = 1 Gbit            32 = 32 Mbit 2G = 2 Gbit            64 = 64 Mbit 4G = 4 Gbit            128 = 128 Mbit 8G = 8 Gbit            256 = 256 Mbit 16 = 16 Gbit            512 = 512 Mbit																	
<b>Number of IOs of Device</b> 40 = x4                16 = x16 80 = x8                32 = x32																	
<b>Die Numbers</b> 0 = Monolytic        4 = 4 dies 2 = 2 dies            6 = 6 dies																	
<b>Die Revision</b> A = Frist product    C = Third product B = Second product D = Fourth product																	
<b>Package</b> C = FBGA black      T = TSOPII black F = FBGA green      E = TSOPII green L = FCBGA            G = TSOP stack green B = FBGA green Package = 7.5*13.5mm H = FBGA green low alpha I = FBGA green low alpha and 0.43 ball size																	