

NANYA Standard DRAM Part Numbering Guide



NT = Component

Product Family

- 5T = DDR2
- 5C = DDR3
- 5A = DDR4
- 5F = DDR5

Interface & Power (V<sub>DD</sub>, V<sub>DDQ</sub>)

- U = SSTL-18 (1.8V, 1.8V)
- B = SSTL-15 (1.5V, 1.5V)
- C = SSTL-135 (1.35V, 1.35V)
- D = POD-12 (1.2V, 1.2V)
- F = POD-11 (1.1V, 1.1V)

Organization (Depth, Width):

- 512Mb = 16M32 = 32M16 = 64M8
- 1Gb = 32M32 = 64M16 = 128M8
- 2Gb = 64M32 = 128M16 = 256M8
- 4Gb = 128M32 = 256M16 = 512M8 = 1024M4
- 8Gb = 256M32 = 512M16 = 1024M8 = 2048M4
- 16Gb = 1024M16 = 2048M8 = 4096M4

Device Version

- A = 1<sup>st</sup> version
- B = 2<sup>nd</sup> version
- C = 3<sup>rd</sup> version
- ⋮
- ⋮

Package Code

- (RoHS + Halogen-Free)
- E = 60-Ball BGA
- G = 84-Ball BGA
- N/Q = 78-Ball BGA; DDR3
- P/R = 96-Ball BGA; DDR3
- 1 = 78-Ball FCBGA; DDR3
- 2 = 96-Ball FCBGA; DDR3
- 3 = 78-Ball BGA; DDR4
- 4 = 96-Ball BGA; DDR4
- 7 = 82-Ball FCBGA; DDR5
- 8 = 106-Ball FCBGA; DDR5

Grade

Commercial Grade

- N/A = Commercial Grade
- R = High temp. extend (0~105C)
- T = Quasi. IT (-40~95C)
- W = Quasi. IT (-40~105C)
- B = Reduced standby

Industrial Grade

- I = Industrial Grade
- U = Industrial Grade with Wide Temp.

Automotive Grade

- A = Grade 3
- H = Grade 2

Speed

- AC = 800Mbps [5-5-5]
- BE = 1066Mbps [7-7-7]
- DI = 1600Mbps [11-11-11]
- EK = 1866Mbps [13-13-13]
- FL = 2133Mbps [14-14-14]
- HR = 2666Mbps [19-19-19]
- IY = 2933Mbps [21-21-21]
- JR = 3200Mbps [22-22-22]
- N2 = 4800Mbps [40-39-39]
- P3 = 5200Mbps [42-42-42]
- Q5 = 5600Mbps [46-45-45]