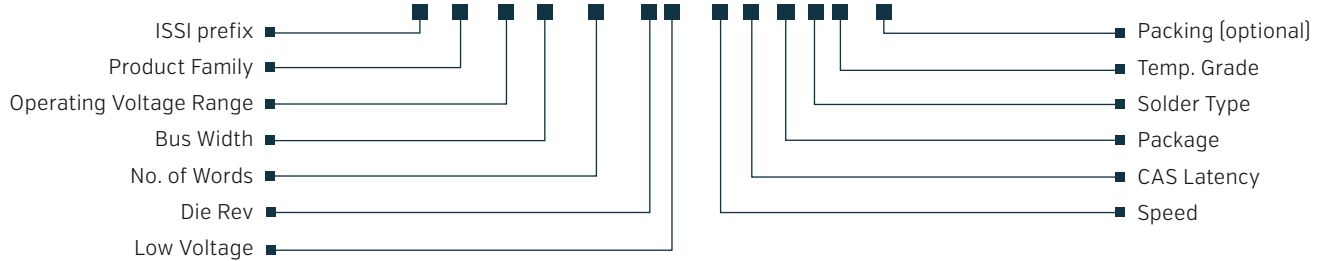




DRAM Part Decoder

IS 43 TR 8 1280 C L - 107M B L I - TR



SDRAM Product Family

- 41 = Asynchronous
- 42 = SDR Commercial/
Industrial grade
- 43 = (LP)DDR/DDR2/DDR3/DDR4
Commercial/Industrial grade
- 45 = SDR Automotive grade
- 46 = (LP)DDR/DDR2/DDR3/DDR4
Automotive grade

Operating Voltage Range

Asynchronous: Fast Page & EDO
LV = 3.3V

Synchronous:

- High Speed**
- S = 3.3V SDR
- VS = 1.8V SDR
- R = 2.5V DDR or 2.5V SDR
- DR = DDR2
- TR = DDR3
- QR = DDR4

Low Power

- SM/RM/VM = 3.3V/2.5V/1.8V
mobile SDR
- LR = 1.8V mobile DDR (LPDDR)
- LD = LPDDR2
- LQ = LPDDR4

Bus Width

- 8 = x8
- 16 = x16
- 32 = x32

No. of Words

- 100 = 1M
- 200 = 2M
- ...
- 128 = 128M
- 256 = 256M
- 512 = 512M
- K01 or 1024 = 1G

Monolithic/Stacked, Ranks

- [Blank] = Monolithic,
Single Rank, unless
stated otherwise.
- S1 = Stacked, Single Rank
- S2 = Stacked, Dual Rank

Generation ["Die Rev"]

- A-Z [1 characters]
- EA-EZ [2 characters]
ECC Feature

Low Voltage

- DDR3
- L = Supports 1.35V & 1.5V

LPDDR4

- L = Supports only 0.6V
I/O (LPDDR4X)

Speed

- 7 = up to 143Mhz
- 6 = up to 166Mhz
- 75E = up to 133Mhz @ CL2 [SDR]
- 5 = up to 200Mhz
- 37 = up to 266Mhz
- 3 = up to 333Mhz
- 25 = up to 400Mhz
- 187 or -18 = up to 533Mhz
[1066 Data Rate]
- 15 = up to 667 Mhz [1333 Data Rate]
- 125 = up to 800Mhz [1600 Data Rate]
- 107 = up to 933Mhz [1866 Data Rate]
- 093 = up to 1066Mhz [2133 Data Rate]
- 083 = up to 1200Mhz [2400 Data Rate]
- 075 = Up to 1333Mhz [2666 Data Rate]
- 068 = Up to 1466Mhz [2933 Data Rate]
- 062 = Up to 1600Mhz [3200 Data Rate]

CAS Latency

- B = 3, C = 4, D = 5, E = 6,
- F = 7, G = 8, H = 9, J = 10,
- K = 11, L = 12, M = 13, N = 14,
- P = 15, R = 16, T = 17, U = 18
- V = 19, Y = 21, AA = 22
- [Blank for some products, whereas
only specific speed and CAS Latency
combinations exist for others.]

Solder Type

- [Blank] = Sn/Pb
- L = 100% matte Sn for non-BGA
or SnAgCu for BGA

Temp. Grade

- Blank = Commercial Grade [0°C to +70°C]
- I = Industrial Grade [-40°C to +85°C]
- A1 = Automotive Grade [-40°C to +85°C]
- A2 = Automotive Grade [-40°C to +105°C]
- A25 = Automotive Grade [-40°C to +115°C]
- A3 = Automotive Grade [-40°C to +125°C]
- [Ambient or case temperature limits shown
for most products. Refer to specs.]

Package Type

- B = BGA
- CT = Copper TSOP
- T = TSOP
- BP = PoP BGA