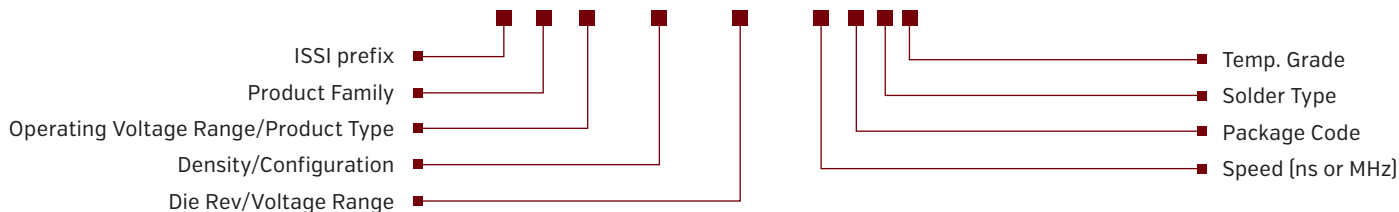




SRAM Part Decoder

IS 61 WV 12816 DBLL - 10 T L I



SRAM Product Family

- 61/63 = High Speed
- 62 = Low Power
- 64 = Automotive High Speed
- 65 = Automotive Low Power
- 66 = Pseudo SRAM/HyperRAM™
- 67 = Automotive PSRAM/HyperRAM™

Density/Configuration

- Example:
- 25636 = 256Kx36
 - 51216 = 512Kx16
 - 1M36 = 1Mx36

Die Rev/Voltage Range

Die Rev
Blank-Z

Voltage Range (WV)

- ALL = 1.65V to 2.2V
- BLL = 2.2V [2.4V/2.5V] to 3.6V

Operating Voltage Range/ Product Type

Asynchronous SRAM

- C = 5V
- LV = 3.3V
- WV = Wide Voltage Range
- WVS = Serial SRAM
- WVH = HyperRAM™

Synchronous SRAM

- P = Pipeline, F = Flowthrough
- NLP/NLF/NVP/NVF = No-Wait Option
- LP/LF: Vcc = 3.3V, VccQ = 3.3V/2.5V
- VP/VF: Vcc = 2.5V, VccQ = 2.5V
- QD = QUAD, Vcc = 1.8V, VccQ = 1.8V/1.5V
- DD = DDR-II, Vcc = 1.8V, VccQ = 1.8V/1.5V

Temp. Grade

- Blank = Commercial Grade (0C to +70°C)
- I = Industrial Grade [-40C to +85°C]
- A1 = Automotive Grade [-40C to +85°C]
- A2 = Automotive Grade [-40C to +105°C]
- A3 = Automotive Grade [-40C to +125°C]

Solder Type

- Blank = SnPb
- L = Lead-free [RoHS Compliant]

Speed (ns or MHz)

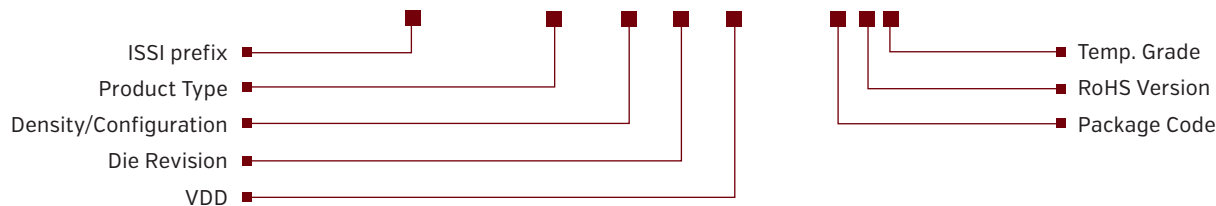
- Example:
- 8 = 8ns
 - 200 = 200MHz

Package Code

- B, B1, B2, B3 = BGA
- CT = Copper TSOP
- H = sTSOP
- J = 300-mil SOJ
- K = 400-mil SOJ
- LQ = LQFP
- M, M3, = BGA
- N = 8-SOIC
- Q = SOP
- T/T2 = TSOP
- TQ = QFP
- U = SOP

PSRAM Part Decoder

IS 66/67 WVE 4M16 x BLL - 70 B L I



PSRAM Product Type

- Blank = Standard Asynch PSRAM
- E = Asynch/Page PSRAM
- C = Cellular RAM 1.5

Density/Configuration

- 51216 = 8Mb /512K x16
- 1M16 = 16Mb /1M x16
- 2M16 = 32Mb /2M x16
- 4M16 = 64Mb /4M x16

Die Rev

Die Rev

VDD

- ALL = 1.8V
- BLL = 3V
- CLL = 1.8V

Package Code

- B = BGA
- T = TSOP

RoHS Version

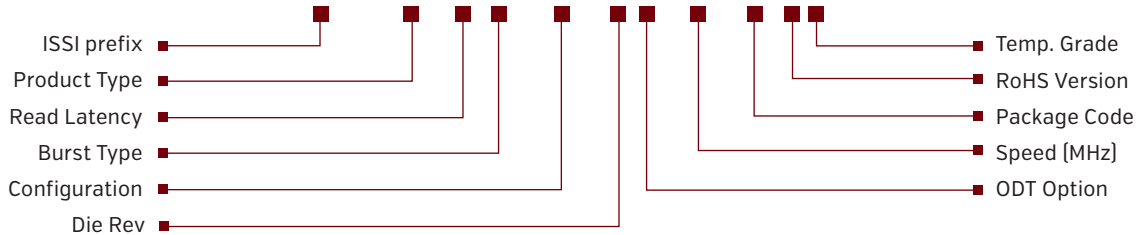
- Blank = Leaded
- L = Lead-free

Temperature Range

- I = Industrial [-40°C to 85°C]
- A1 = Automotive [-40°C to 85°C]

QUAD/P, DDR-II/P Part Decoder

IS 61 QDP 2 B4 4M18 X 1 - 333 M3 L I



Product Type

QD = QUAD
QDP = QUADP
DD = DDR-II, Common I/O
DDP = DDR-IIP, Common I/O

Configuration

51236 = 512Kb x 36
1M18 = 1Mb x 18
1M36 = 1Mb x 36
2M18 = 2Mb x 18
2M36 = 2Mb x 36
4M18 = 4Mb x 18

Read Latency (RL):

For QUAD/DDR-II devices:
Blank = 1.5 clock cycles

For QUADP/DDR-IIP devices:
Blank = 2.5 clock cycles
2 = 2.0 clock cycles

Burst Type:

B2 = Burst 2
B4 = Burst 4

ODT Option (if supported):

Blank: No ODT

1: ODT Option 1
If ODT = HIGH or floating, a high range termination resistance is selected.
If ODT = LOW, a low range termination resistance is selected.

2: ODT Option 2
If ODT = HIGH, a high range termination resistance is selected.
If ODT = LOW or floating, ODT is disabled

Speed

Example
250 = 250MHz

Package Code

B4 = 165 ball BGA (13 x 15 mm)
M3 = 165-ball BGA (15 x 17 mm)

RoHS Version

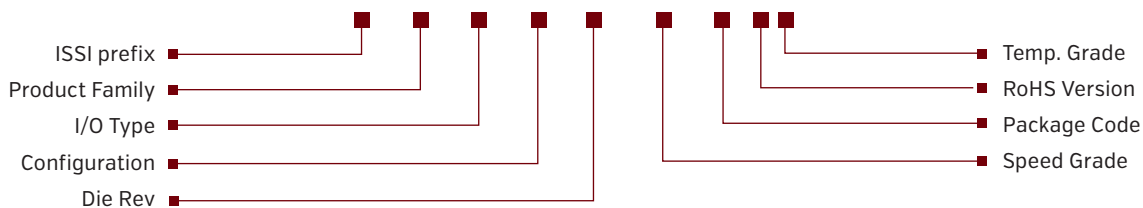
Blank = Leaded
L = Lead-free

Temperature Range

Blank = Commercial (0C to 70°C)
I = Industrial (-40C to 85°C)

RLDRAM®2, RLDRAM®3 Part Decoder

IS 49NL C 36800 x - 25E WB L I



Product Family:

49NL = RLDRAM®2
49RL = RLDRAM®3

I/O Type:

C = Common I/O
S = Separate I/O
Blank = RLDRAM®3

Configuration

288Mb
93200 = 32M x 9
18160 = 16M x 18
36800 = 8M x 36

1Gb
18640 = 64M x 18
36320 = 32M x 36

2Gb
18128 = 128M x 18
36640 = 64M x 36

576Mb
96400 = 64M x 9
18320 = 32M x 18
36160 = 16M x 36

Speed Grade:

18 - tCK = 1.875ns; tRC = 15ns
25E - tCK = 2.5ns; tRC = 15ns
25 - tCK = 2.5ns; tRC = 20ns
33 - tCK = 3.3ns; tRC = 20ns
5 - tCK = 5ns; tRC = 20ns
093E - tCK = 0.93ns; tRC = 8ns
093 - tCK = 0.93ns; tRC = 10ns
107E - tCK = 1.07ns; tRC = 8ns
107 - tCK = 1.07ns; tRC = 10ns
125F - tCK = 1.25ns; tRC = 8ns
125E - tCK = 1.25ns; tRC = 10ns
125 - tCK = 1.25ns; tRC = 12ns

Package Code:

B = 168-ball FBGA (RLDRAM®3)
B = 144-ball FBGA (RLDRAM®2)
WB = 144 - ball WBGA (RLDRAM2)

RoHS Version:

Blank = SnPb
L = Lead-free (RoHS compliant)

Temperature Range:

Blank = Commercial (0C to 70°C)
I = Industrial (-40C to 85°C)

Notes : 1. RLDRAM® is a registered trademark of Micron, Technology Inc. 2. S= Sample, Prod=Production