#### IS 43 DR 8 1280 B - 25D **Product Family** Bus Width Die rev. Package type Temp. grade Operating voltage range No. of Words Speed/CL Solder type Packing option

## **SDRAM Product Family**

41 = Asynchronous

42 = SDR Commercial/Industrial grade

43 = DDR/DDR2/DDR3

Commercial/Industrial grade

45 = SDR Automotive grade

46 = DDR/DDR2/DDR3 Automotive grade

#### **Operating Voltage Range**

Asynchronous: Fast Page and EDO

C = 5V

LV = 3.3V

# **Synchronous**

S = 3.3V SDR

SM/RM/VM = 3.3V/2.5V/1.8V mobile SDR

VS = 1.8V SDR

R = 2.5V DDR or 2.5V SDR

LR =1.8V mobile DDR

DR = DDR2

TR = DDR3

#### Speed

7 = up to 143Mhz

-6 = up to 166Mhz

-75 = up to 133Mhz @ CL2

-5 = up to 200Mhz

-37 = up to 266Mhz

-3 = up to 333Mhz

-25 = up to 400Mhz

-187 = up to 533Mhz (DDR3 -1066)

-15 up to 667Mhz (DDR3 -1333)

-125 = up to 800Mhz (DDR3-1600)

# CAS Latency (CL)

B = 3, C = 4, D = 5, E = 6, F = 7,

G = 8, H = 9, J = 10, K = 11, L = 12, M = 13

(Not all speeds and CL's available for all products.)

# Generation (Rev)

A - Z

## Package Type

B= BGA

CT = Copper TSOP

T = TSOP

#### Words **Bus Width** 100 = 1M8x = 8200 = 2M16 = x16

32 = x32

160 = 16M320 = 32M

## Solder Type

Blank = Sn/Pb

N = NiPdAu plating

L = 100% matte Sn for non-BGA

L = SnAgCu for BGA

### **Temperature Grade**

Blank = Commercial Grade (0C to +70C)

I = Industrial Grade (-40C to +85C)

A1 = Automotive Grade (-40C to +85C)

A2 = Automotive Grade (-40C to +105C)

(Ambient temperature limits shown for most products)