



# Part Number Decoder—SigmaQuad/SigmaDDR

**GSI** **/QQ**  
**GS P DDD O FF WWW R KK - BBB T C S**

**P = Product Line Code**  
**(Up to 1 digit)**

8 = Sync SRAM

**DDD = Density/Product Family**  
**(Up to 3 digits)**

18 = 16 or 18Mb  
34 = 32 or 36Mb  
66, 67 = 64 or 72Mb  
130, 131 = 128 or 144Mb  
258 = 256 or 288Mb

**O = Option**  
**(Up to 1 digit)**

2 = II/II+  
3 = IIIe  
4 = IVe

**FF = Function Code**  
**(Up to 2 alpha)**

D = SigmaQuad B4  
DT = SigmaQuad B4 (Weak/Strong ODT)  
DV = 2.5 V SigmaQuad B4  
E = LV and HV HSTL  
H = HV (1.5 V) HSTL  
L = LV (1.2 V) HSTL  
P = POD  
Q = SigmaQuad B2  
QT = SigmaQuad B2 (Weak/Strong ODT)  
QV = 2.5 V SigmaQuad B2  
R = SigmaDDR B4  
S = SigmaSIO DDR  
T = SigmaDDR B2  
TT = SigmaDDR B2 (Weak/Strong ODT)

**WWW = I/O Width/Variation**  
**(Up to 3 digits)**

6, 7, 8 = x8  
9, 10, 11 = x9  
18, 19, 20, 21 = x18  
36, 37, 38, 39 = x36

**R = Revision Level**  
**(Up to 1 alpha)**

Blank = Original Mask Set  
A = 2nd Generation  
B = 3rd Generation  
C = 4th Generation

**KK = Package**  
**(Up to 2 alpha)**

CE = 21 mm x 25 mm, 165 CCGA  
D = 13 mm x 15 mm, 165 FPBGA  
E = 15 mm x 17 mm, 165 FPBGA  
K = 14 mm x 22 mm, 260 BGA  
LE = 21 mm x 25 mm, 165 CLGA  
GD = Green 13 mm x 15 mm, 165 FPBGA  
GE = Green 15 mm x 17 mm, 165 FPBGA  
GK = Green 14 mm x 22 mm, 260 BGA

**BBB = Speed Bin**  
**(Up to 3 digits)**

XX = ns or MHz

**T = Temp Grade**  
**(Up to 1 alpha)**

Blank = Commercial (0° to 70°C)  
I = Industrial (-40° to 85°C)  
E = Extended (-40° to 125°C)  
M = Military (-55° to 125°C)

**C = Customization**

V = Voltage Variation  
X = Non-catalog Post-assembly Option

Note: If "X" is shown in the Customization field, the Speed Bin field may become a general purpose alphanumeric custom part number field.

**S = Shipping Option**  
**(Up to 1 alpha)**

Blank = Bulk  
T = Tape and Reel

**QQ = Qualification Status**  
**(Up to 1 symbol and 2 alpha)**

Blank = Pre-Qual or Qualified  
/ES = Eng Sample\*

\*Note: The /ES mark may appear anywhere on the top surface of the package. The /ES mark supersedes any other qualification status mark that may appear on the device.