TI DSP DEVICE NOMENCLATURE

Texas Instruments DSP device nomenclature includes a Prefix (signifying the device qualification status), the Device Family number (i.e., 320 or 32 for TI DSPs), a Technology symbol, the Device number (typically three to five alpha-numeric characters), a two or three character Package Type code, an optional

Temperature Range character, and the Device Speed Range. Other variations do exist on a limited basis. See the specific device data sheet for additional information on device nomenclature for that device.

For the most updated information, visit **www.dspvillage.com**

Typical DSP Device Nomenclature

TMS　320　C　6416　T　GDK　( )　600

Prefix
TMX　= Experimental device
TMP　= Prototype device
TMS　= Qualified device
SMJ　= MIL-PRF-38535, QML
SM　= High Rel (non-38535)
OMAP = OMAP
P　= Experimental device (OMAP)

Device Family
32 or 320　= TMS320™ DSP family

Technology
C　= CMOS
DM = Digital media
E　= CMOS EPROM
F　= CMOS Flash EEPROM
LC　= Low-voltage CMOS (3.3 V)
LF　= Flash EEPROM (3.3 V)
UC　= Low-voltage CMOS [3 V (1.8-V core)]
VC　= Low-voltage CMOS [3 V (2.5-V core)]

Device Revision

Device Speed Designation

C6000™ DSPs		C5000™ DSPs	
150 MHz	500 MHz	50 MIPS	120 MIPS
167 MHz	600 MHz	80 MIPS	160 MIPS
200 MHz	720 MHz	100 MIPS	200 MIPS
233 MHz	5E0 (500-MHz core)		
250 MHz	6E3 (600-MHz core)		
300 MHz	7E3 (720-MHz core)		
400 MHz	1 (1-GHz core)		

Temperature Range
Blank = 0°C to 90°C, commercial temperature, default for C6000 DSPs
Blank = −40°C to 100°C, default for C54x™ DSPs
A　= −40°C to 105°C, extended temperature (C6000 DSPs)
A　= −40°C to 85°C, extended temperature (C2000™ DSPs)
H　= 0°C to 50°C
L　= 0°C to 70°C
M　= −55°C to 125°C
S　= −55°C to 125°C (C5000 DSPs)
S　= −40°C to 125°C (C2000 DSPs)

Package Type
FN　= 38-lead PLCC
GDK　= 548-pin plastic BGA (23 mm^2)
GDP　= 272-pin plastic BGA (27 mm^2)
GDY　= 289-pin MicroStar BGA™ (19 mm^2)
GEL　= 181-pin PGA
GFN　= 256-pin plastic BGA (27 mm^2)
GGU　= 144-/169-pin MicroStar BGA (12 mm^2)
GGW = 176-/240-pin MicroStar BGA (15 mm^2)
GHH　= 179-pin MicroStar BGA (12 mm^2)
GHK　= 257-/288-pin MicroStar BGA (16 mm^2)
GJC　= 352-pin plastic BGA (35 mm^2)
GJL　= 352-pin plastic BGA (27 mm^2)
GLS　= 384-pin plastic BGA (18 mm^2)
GLW = 340-pin plastic BGA (18 mm^2)
GLZ　= 532-pin plastic BGA (23 mm^2)
GNY　= 284-pin plastic BGA (18 mm^2)

GNZ = 352-/548-pin plastic BGA (27 mm^2)
GTS　= 288-pin plastic BGA (23 mm^2)
GZG = 289-pin MicroStar BGA (12 mm^2)
GZZ = 201-pin MicroStar BGA (15 mm^2)
PG　= 64-pin PQFP (14 × 20 mm)
PAG = 64-pin TQFP (10 mm^2)
PBK = 128-pin LQFP (14 mm^2)
PCM = 144-pin PQFP (28 mm^2)
PGE　= 144-pin LQFP (20 mm^2)
PGF　= 176-pin LQFP (24 mm^2)
PQ　= 132-pin PQFP (24.13 × 27.44 mm)
PYP = 208-pin PowerPAD™ plastic QFP (28 mm^2)
PZ　= 100-pin LQFP (14 mm^2)
VF　= 32-pin LQFP (7 mm^2)
ZDY = 289-pin MicroStar BGA (19 mm^2)
ZZG = 289-pin MicroStar BGA (12 mm^2)

Device

C6000 DSPs		C5000 DSPs		C2000 DSPs	
6201	6701	5401	5420	240	2801
6202B	6711D	5402	5421	241	2806
6203B	6712D	5402A	5441	242	2808
6204	6713B	5404	5501	243	2810
6205	DM640	5407	5502	2401A	2811
6211B	DM641	5409	5503	2402A	2812
6410	DM642	5409A	5507	2403A	
6412		5410	5509A	2404A	
6413		5410A	5510A	2406A	
6414/6414T		5416	5910	2407A	
6415/6415T		54CST	5912		
6416/6416T					
6418					

For the *actual* device-specific part numbers, see the
Product Specification Guides in the DSP Selection Guide (SSDV004)

SPRT304A

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