

Maxim Product Naming Conventions

These conventions apply to Maxim-branded products. For Dallas parts, see [Dallas Semiconductor Ordering Information](#)

Product Numbers for Second-Sourced Parts

Second-source products follow the most widely accepted numbering system for that particular part, rather than our own convention. This includes the original designators for product grade, temperature range, package type, and number of pins.

Maxim frequently supplies second-source products in packages or temperature ranges that are not supplied by other manufacturers. Whenever possible, these devices are given part numbers that follow the original numbering convention.

Product Numbers for Proprietary Parts

Most Maxim parts use our own part numbering system which consists of a **root part number** followed by three or four **suffix letters**, plus optional **additional designators**. Example:



(A) is the Root Part Number

(B) is the three- or four-letter suffix

When a part has a **four-letter suffix**, the first letter of the suffix denotes product grade (accuracy, voltage spec, speed, etc.) For example, the first "A" in MAX631ACPA indicates 5% output accuracy. The product's full data sheet details the grades that apply to that part.

The next three characters are the **three-letter suffix**. The three letters denote *temperature range, package type, and number of pins*. The meanings are defined in the tables below.

Example: MAX696CWE

C = Operating Temperature Range C (0°C to +70°C)

W = Package Type W (SOIC 0.300")

E = Number of Pins category E (16 pins for this package)

(C) Additional Suffix Characters

The following characters may appear after the three- or four-letter suffix. They can appear alone or in combination.

T or T&R Part number is furnished on tape-and-reel

+ Indicates a lead-free (RoHS) qualified version. See our [lead-free information page](#).

- Indicates the part is not qualified as lead-free (RoHS). (A lead-free version may also be available. See our [lead-free information page](#).)

Indicates an RoHS-compliant part which has an exemption for lead. See our [lead-free information page](#).

-D or -TD Indicates that the device has a Moisture Sensitivity Level (MSL) of >1 and will therefore be drypacked before shipment. See our [Moisture Sensitivity Levels page](#).

Temperature Ranges

Commercial	C	0°C to +70°C
AEC-Q100 Level 2	G	-40°C to +105°C
AEC-Q100 Level 0	T	-40°C to +150°C

Upper Commercial	U	0°C to +85°C
Automotive	A	-40°C to +125°C
Industrial	I	-20°C to +85°C
Extended	E	-40°C to +85°C
Military	M	-55°C to +125°C

Package Type

A	SSOP (Shrink Small Outline Package) 209 mil (14, 16, 20, 24, 28 leads); 300 mil (36 leads)
B	UCSP (Ultra-Small Chip Scale Pkg)
C	PLASTIC TO-92; TO-220
C	LQFP 1.4mm (7mm x 7mm thru 20mm x 20mm)
C	TQFP 1.0mm (7mm x 7mm thru 20mm x 20mm)
D	CERAMIC SIDEBRAZE 300 mil (8, 14, 16, 18, 20 leads); 600 mil (24, 28, 40, 48 leads)
E	QSOP (Quarter Small Outline Package)
F	CERAMIC FLATPACK
G	METAL CAN (Gold)
G	QFN (Plastic, Very Thin, Quad Flat No Lead - Punch Version) 0.9mm
H	SBGA (Super Ball Grid Array)
H	TQFP 1.0mm 5mm x 5mm (32 leads)
H	TSSOP (Thin Shrink Small Outline Package) 4.4mm (8 leads)
J	CERDIP (Ceramic Dual-Inline) (N) 300 mil (8, 14, 16, 18, 20 leads); (W) 600 mil (24, 28, 40 leads)
K	SOT 1.23mm (8 Leads)
L	LCC (Leadless Ceramic Chip Carrier) (18, 20, 28 leads)
L	FCLGA (Flip Chip Land Grid Array); THIN LGA (Thin Land Grid Array)
L	µDFN (Micro Dual Flat No Lead) (6, 8, 10 leads)
M	MQFP (Metric Quad Flat Pack) over 1.4mm; ED-QUAD (28mm x 28mm 160 leads)
N	PDIP (Narrow Plastic Dual-Inline) 300 mil (24, 28 leads)
P	PDIP (Plastic Dual-Inline) 300 mil (8, 14, 16, 18, 20 leads); 600 mil (24, 28, 40 leads)
Q	PLCC (Plastic Leaded Chip Carrier)
R	CERDIP (Narrow Ceramic Dual-Inline) 300 mil (24, 28 leads)
S	SOIC (Narrow Plastic Small Outline) 150 mil
T	METAL CAN (Nickel)
T	TDFN (Plastic, Very Very Thin, Dual Flat No Lead - Sawn Version) 0.9mm (6, 8, 10, 14 leads)
T	THIN QFN (Plastic, Very Very Thin, Quad Flat No Lead - Sawn Version) 0.8mm
TQ	THIN QFN (Plastic, Very Very Thin, Quad Flat No Lead - Sawn Version) 0.8mm (8 leads)
U	SOT 1.23mm (3, 4, 5, 6 leads)
U	TSSOP (Thin Shrink Small Outline Package) 4.4mm (14, 16, 20, 24, 28, 38, 56 leads); 6.1mm (48 leads)
U	µMAX (Thin Shrink Small Outline Package) 3mm x 3mm (8, 10 leads)
W	SOIC (Wide Plastic Small Outline) 300 mil
W	WLP (Wafer Level Pkg)
X	CSBGA 1.4mm
X	CVBGA 1.0mm
X	SC70
Y	SIDEBRAZE (Narrow) 300 mil (24, 28 leads)
Z	THIN SOT 1mm (5, 6, 8 leads)

Number of Pins

A	8, 25, 46
B	10, 64
C	12, 192
D	14, 128
E	16, 144
F	22, 256
G	24, 81

H	44
I	28, 57
J	32
K	5, 68, 265
L	9, 40
M	7, 48, 267
N	18, 56
O	42
P	20, 96
Q	2, 100
R	3, 84
S	4, 80
T	6, 160
U	38, 60
V	8 (.200" pin circle, isolated case), 30
W	10 (.230" pin circle, isolated case), 169
X	36, 45
Y	8 (.200" pin circle, case tied to pin 4), 52
Z	10 (.230" pin circle, case tied to pin 5), 72