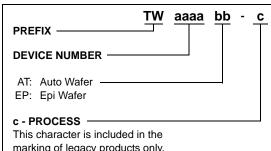
TW Types



marking or legacy products only.		
PROCESS	CODE	
TSMC, 0.35µm, Polycide,	Α	
SPQM or SPTM Logic		
TSMC, 0.25µm	В	
X-FAB, 0.25µm	С	
TSMC, 0.18µm	D	
X-FAB, 0.18µm	Е	
TSMC, 0.18µm, EPI,	G	
Ar Anneal, Hi		
Goyatek/Vanguard, 0.25µm	Н	
TSMC 0.25µm EPI,	J	
Ar Anneal, Hi		
TSMC 0.18µm	K	
Automotive Process		
TSMC 0.13µm	M	
TSMC 90nm	N	
Fujitsu 90nm	Р	
TSMC 0.13µm 12" Wafer	Q	
TSMC 65nm	R	

d - ASSEMBLY VENDOR

TSMC 45nm

This character is included in the marking of legacy products only.

ASSEMBLY VENDOR	CODE
ASEK	Α
ASECL	В
GAPT	С
i2a/IPAC, Quick Pak	D
SPIL	Е
ChipMOS	G
UTAC	J
Fujitsu	K
Amkor Korea	М

e -

Q: 12" Wafer

f - PACKAGE TYPE A -

PACKAGE TYPE	CODE
BGA package	В
LQFP package	L
PQFP package	Р
TQFP package	Т
QFN package	N
PQFP package with Exposed Heat Spreader	E

- I - OPTIONS

S = SLT

B = Burn-in

H = High Temp. Testing

I = Industrial

V = High Volt Testing

T = Tape & Reel Packing

k - PACKAGE VARIANT

PACKAGE VARIANT	CODE
This is only used when one	128
product type is offered in 2	(lead
different sizes or lead counts	count)
of the same package style.	
The last FG# created will	
include the lead count.	

j - PACKAGE TYPE C

PACKAGE TYPE	CODE
Drop-in heat spreader	D
Exposed heat spreader	Е
Regular package without heat spreader	R

h - PACKAGE TYPE B

PACKAGE TYPE	CODE
Green (Halogen Free) and Lead	G
Free package	(Note)
Normal package	N
Green (Halogen Free) and Lead	С
Free package with Cu Bond Wires	
Flip Chip	F
NOTE. The fellowing EO's also use (S

NOTE: The following FG's also use Cu wire:

TW6815-LA1-GR

TW6816-LA1-GR

TW6817-LA1-GR

TW6818-LA1-GR

TW6932-LA1-GR

g# - DIE REVISION

It starts from A1. If full layers are changed, the die revision changes like A1 \rightarrow B1 \rightarrow C1, etc.

If some layers are changed, the die revision changes like A1 \rightarrow A2 \rightarrow A3, etc.