



**TF Semiconductor
Solutions**

TF Products Logistics Guide

Spring 2022

Package Codes

Ordering Codes

TFxxxx-PPZ

Device Function

Package Code

Pack Form

(Tube or T&R)

* Dry Pack

Package and Pack Codes

Package Name	Abbreviated Package Name	Pin Count	Package Code	Tube Mark Code	Tube Pack Quantity	Tray Mark Code	Tray Pack Quantity	180 mm Code	180 mm Pack Quantity	330 mm Code	330 mm Pack Quantity
Plastic Dual In-line Package Narrow	PDIP (N)	8	3A	S	50						
	PDIP (N)	14	3B	S	25						
	PDIP (N)	16	3E								
	PDIP (N)	22	3H	S	18						
Small Outline IC Narrow	SOIC (N)	8	TA	S / U*	95			P / G*	1000	Q / H*	2500
	SOIC (N)	14	TU	S / U*	54					Q / H*	2500
	SOIC (N)	16	TB	S / U*	48			P / G*	500	Q / H*	2500
Small Outline IC Wide	SOIC (W)	16	TE	U*	47					H*	2500
	SOIC (W)	20	TG								
	SOIC (W)	28	TL								
Small Outline IC Narrow w/ Exposed Pad	SOIC (N)-EP	8	TP	S	95			P	1000	Q	2500
	SOIC (N)-EP	16	TR	S	48						
Thin Shrink Small Outline Package	TSSOP	14	6B								
	TSSOP	16	6C	U*	94			G	1000		
Small Outline Transistor Package	SOT23	3	UR					P	3000	Q	10000
	SOT23	5	US					P	3000	Q	10000
	SOT23	6	UT					P	3000	Q	10000
SC70 Transistor Package	SC70	3	XR					P	3000	Q	10000
	SC70	5	XS					P	3000	Q	10000
	SC70	6	XT					P	3000	Q	10000
Dual / Quad Flatpack, Leadless	DFN 2x3	2x4	ND					P	3000	Q	10000
	DFN 2x2	2x4	NB	S	120			P	3000	Q	10000
	DFN 3x3	2x5	NH	S	120			P	3000	Q	10000
	DFN 4x3	2x7	NF					P	1000	Q	3000
	QFN 4x4	4x6	NE								
	QFN 7x7	4x11	NC	U*	52			G*	1000		
Quad Flatpack, Leads	TQFP	4x25	PB			V*	90				
Ball Grid Array	BGA	10x10	BB			V*	240				
Evaluation Board	EVK										
Mini Small Outline Package	MSOP	10	MK		100						3000

Information in this guide is believed accurate at time of publication but is subject to change at any time without notice. Please consult the most current applicable data sheet for latest information.

Package Dimensions

TFxxxx-PPZ

Device Function Package Code Pack Form (Tube or T&R)

Package Dimensions

* Dry Pack

Package Name	Abreviated Package Name	Pin Count	Package Code	Lead / Ball Pitch (mm)	Package Length L (mm)	Package Width W (mm)	Package Thickness T (mm)
Plastic Dual In-line Package Narrow	PDIP (N)	8	3A	2.54	9.80	6.30	3.60
	PDIP (N)	14	3B	2.54	20.00	6.30	3.60
	PDIP (N)	16	3E	2.54	20.00	6.30	3.60
	PDIP (N)	22	3H	5.54	26.25	6.30	3.60
Small Outline IC Narrow	SOIC (N)	8	TA	1.27	4.90	3.90	1.45
	SOIC (N)	14	TU	1.27		3.90	1.45
	SOIC (N)	16	TB	1.27	9.90	3.90	1.45
Small Outline IC Wide	SOIC (W)	16	TE	1.27	10.30	7.47	2.50
	SOIC (W)	20	TG	1.27	12.80	7.47	2.50
	SOIC (W)	28	TL	1.00	18.30	8.40	3.00
Small Outline IC Narrow w/ Exposed Pad	SOIC (N)-EP	8	TP	1.27	4.90	3.90	1.45
	SOIC (N)-EP	16	TR	1.27	9.90	3.90	1.45
Thin Shrink Small Outline Package	TSSOP	14	6B	0.65	5.00	4.40	0.90
	TSSOP	16	6C	0.65	5.00	4.40	0.90
Small Outline Transistor Package	SOT23	3	UR	1.91	2.92	1.30	0.93
	SOT23	5	US	0.95	2.92	1.60	1.02
	SOT23	6	UT	0.95	2.92	1.60	1.02
SC70 Transistor Package	SC70	3	XR	1.30	2.00	1.25	0.90
	SC70	5	XS	0.65	2.00	1.25	0.90
	SC70	6	XT	0.65	2.00	1.25	0.90
Dual / Quad Flatpack, Leadless	DFN 2x3	2x4	ND	0.50	2.00	1.25	0.90
	DFN 2x2	2x4	NB	0.50	2.00	1.25	0.90
	DFN 3x3	2X5	NH	0.50	2.00	2.00	0.75
	DFN 4x3	2x7	NF	0.50	4.00	3.00	0.75
	QFN 4x4	4x6	NE				
	QFN 7x7	4x11	NC	0.50	7.00	7.00	0.90
Quad Flatpack, Leads	TQFP	4x25	PB	0.50	14.00	14.00	1.00
Ball Grid Array	BGA	10x10	BB	0.80	10.00	10.00	1.40
Mini Small Outline Package	MSOP	10	MK	0.50	4.90	3.00	1.10

Information in this guide is believed accurate at time of publication but is subject to change at any time without notice. Please consult the most current applicable data sheet for latest information.

Product Mark

ALL PACKAGES $\geq$ 4.9mm X 3.9mm (SOIG8)

Line 1: Date Code

Line 2: Product Name (up to 10 total characters)

Line 3: Lot Identifier

TF Logo



YYWW

1403 = Year 2014, Week 03

7X7 QFN/DFN

Line 1: Date Code

Line 2: Product Name (up to 8 total characters)

Line 3: Lot Identifier

TF Logo



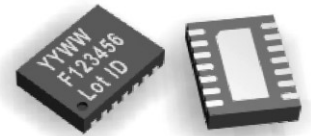
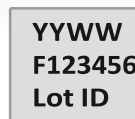
4X3 QFN/DFN

Line 1: Date Code

Line 2: Product Name (up to 7 total characters)

Line 3: Lot Identifier

No Logo



2X3, 2X2 QFN/DFN

Line 1: Date Code (Year, **W** Week as per table), and Lot Identifier

Line 2: Product Name (3 Character Code established by TF Semi)

No Logo



WorkWeek	Date Code Week	WorkWeek	Date Code Week	WorkWeek	Date Code Week	WorkWeek	Date Code Week
VW01	A	VW14	N	VW27	a	VW40	n
VW02	B	VW15	O	VW28	b	VW41	o
VW03	C	VW16	P	VW29	c	VW42	p
VW04	D	VW17	Q	VW30	d	VW43	q
VW05	E	VW18	R	VW31	e	VW44	r
VW06	F	VW19	S	VW32	f	VW45	s
VW07	G	VW20	T	VW33	g	VW46	t
VW08	H	VW21	U	VW34	h	VW47	u
VW09	I	VW22	V	VW35	i	VW48	v
VW10	J	VW23	W	VW36	j	VW49	w
VW11	K	VW24	X	VW37	k	VW50	x
VW12	L	VW25	Y	VW38	l	VW51	y
VW13	M	VW26	Z	VW39	m	VW52	z

Line 1: Product Name (3 Character Code established by TF Semi)

Line 2: Date Code (Year, **W** Week as per table), and Lot Identifier

No Logo



WorkWeek	Date Code Week	WorkWeek	Date Code Week	WorkWeek	Date Code Week	WorkWeek	Date Code Week
VW01	A	VW14	G	VW27	N	VW40	T
VW02	B	VW15	H	VW28	O	VW41	U
VW03	C	VW16	I	VW29	P	VW42	V
VW04	D	VW17	J	VW30	Q	VW43	W
VW05	E	VW18	K	VW31	R	VW44	X
VW06	F	VW19	L	VW32	S	VW45	Y
VW07	G	VW20	M	VW33	T	VW46	Z
VW08	H	VW21		VW34		VW47	
VW09	I	VW22		VW35		VW48	
VW10	J	VW23		VW36		VW49	
VW11	K	VW24		VW37		VW50	
VW12	L	VW25		VW38		VW51	
VW13	M	VW26		VW39		VW52	

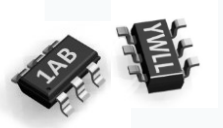
Product Mark

SOT, SC70

TOP: Product Name (3 Character Code established by TF Semi)

BOTTOM: Date Code (Year, **W** Week as per table), and Lot Identifier

TOP **1AB**
BOTTOM **YWLL**



Reference Table: Definition of single **W** format.

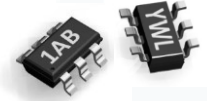
WorkWeek	Date Code Week	WorkWeek	Date Code Week	WorkWeek	Date Code Week	WorkWeek	Date Code Week
VW01	A	VW14	N	VW27	a	VW40	n
VW02	B	VW15	O	VW28	b	VW41	o
VW03	C	VW16	P	VW29	c	VW42	p
VW04	D	VW17	Q	VW30	d	VW43	q
VW05	E	VW18	R	VW31	e	VW44	r
VW06	F	VW19	S	VW32	f	VW45	s
VW07	G	VW20	T	VW33	g	VW46	t
VW08	H	VW21	U	VW34	h	VW47	u
VW09	I	VW22	V	VW35	i	VW48	v
VW10	J	VW23	W	VW36	j	VW49	w
VW11	K	VW24	X	VW37	k	VW50	x
VW12	L	VW25	Y	VW38	l	VW51	y
VW13	M	VW26	Z	VW39	m	VW52	z

Prior to datecode 1X (Dec 1st, 2011)

TOP: Product Name (3 Character Code established by TF Semi)

BOTTOM: Date Code (Year, **W** Week as per table), and Lot Identifier

TOP **1AB**
BOTTOM **YWL**



Reference Table: Definition of single **W** format.

WorkWeek	Date Code Week	WorkWeek	Date Code Week	WorkWeek	Date Code Week	WorkWeek	Date Code Week
VW01	A	VW14	G	VW27	N	VW40	T
VW02		VW15	H	VW28		VW41	U
VW03		VW16	H	VW29		VW42	U
VW04	B	VW17	I	VW30	O	VW43	V
VW05		VW18	I	VW31		VW44	V
VW06		VW19	J	VW32		VW45	W
VW07	C	VW20	J	VW33	P	VW46	W
VW08		VW21	K	VW34		VW47	X
VW09		VW22	K	VW35		VW48	X
VW10	D	VW23	L	VW36	Q	VW49	Y
VW11		VW24	L	VW37		VW50	Y
VW12		VW25	M	VW38		VW51	Z
VW13	E	VW26	M	VW39	R	VW52	Z
VW14							
VW15							
VW16	F				S		
VW17							
VW18							
VW19	G				T		
VW20							
VW21							

Information in this guide is believed accurate at time of publication but is subject to change at any time without notice. Please consult the most current applicable data sheet for latest information.

Package Reference Data

Package	Pin Count	SAP Code	Lead/ Ball Pitch (mm)	Package Length L (mm)	Package Width W (mm)	Package Thickness T (mm)	TF Semi Devices (Ordering Code Examples)
PDIP (N)	8	3A	2.54	9.8	6.3	3.6	TF2101-3AS, TF2103-3AS, TF2103A-3AS, TF2104-3AS, TF2104A-3AS, TF2190-3AS, TF2184-3AS, TF2117/2118-3AS, TF2106-3AS, TF2108-3AS, TF2181-3AS, TF1304-3AS
PDIP (N)	14	3B	2.54	20.0	6.3	3.6	TF2110-3BS, TF2113-3BS, TF21064-3BS, TF21084-3BS, TF21814-3BS, TF21844-3BS
PDIP (N)	16	3E	2.54	20.0	6.3	3.6	
PDIP (N)	18	3F	2.54	23.3	6.3	3.6	
PDIP (N)	20	3G	2.54	26.6	6.3	3.6	
SOIC (N)	8	TA	1.27	4.9	3.9	1.45	TF2101-TAU, TF2103-TAU, TF2103A-TAU, TF2104-TAU, TF2104A-TAU, TF2190-TAU, TF2184-TAU, TF2117/2118TAU, TF2106-TAU, TF2108-TAU, TF2181-TAU, TF1304-TAU, TF6001-TAU, TF6002-TAU, TF1503-TAU, TF1504-TAU
SOIC (N)	14	TU	1.27	8.64	3.9	1.45	TF21064-TUU, TF21084-TUU, TF21814-TUU, TF21844-TUU
SOIC (N)	16	TB	1.27	9.91	3.9	1.45	
SOIC (W)	16	TE	1.27	10.3	7.47	2.5	TF2110-TEU, TF2113-TEU
SOIC (W)	20	TG	1.27	12.8	7.47	2.5	
SOIC (W)	28	TL	1.27	18.0	7.47	2.5	TF23892-TLU, TF1692-TLU, TF0692-TLU, TF2136-TLU, TF1636-TLU, TF0636-TLU
SOIC (N)-EP	8	TP	1.27	4.90	3.9	1.45	TF6003-TPU
SOIC (N)-EP	16	TR	1.27	9.91	3.9	1.45	
TSSOP	14	6B	0.65	5.0	4.4	0.9	
TSSOP	16	6C	0.65	5.0	4.4	0.9	TF90LVDS047-6CU, TF90LVDS048-6CU
SOT23	3	UR	1.91	2.92	1.3	0.93	
SOT23	5	US	0.95	2.92	1.6	1.02	
SOT23	6	UT	0.95	2.92	1.6	1.02	TF4601A-UT45U, TF4601B-UT20U, TF4602-UT28U
SC70	3	XR	1.3	2.0	1.25	0.9	
SC70	5	XS	0.65	2.0	1.25	0.9	
SC70	6	XT	0.65	2.0	1.25	0.9	
QFN	4x2	NA	0.5	2.0	2.0	0.9	
QFN	2x4	NB	0.5	2.0	2.0	0.9	TF4601A-NB45U, TF4601B-NB20U

Package	Pin Count	SAP Code	Lead/ Ball Pitch (mm)	Package Length L (mm)	Package Width W (mm)	Package Thickness T (mm)	TF Semi Devices (Ordering Code Examples)
TDFN	2x5	NH	0.5	3.0	3.0	0.75	TF0503-NHS, TF0504-NHS, TF0506-NHS, TF0507-NHS
TQFP	4x16	PA	0.5	10.0	10.0	1.0	
TQFP	4x25	PB	0.5	14.0	14.0	1.0	TF112-PBU
BGA	8x8	BA	0.80	8.0	8.0	1.4	
BGA	10x10	BB	0.80	10.0	10.0	1.4	TF112-BBU
DIP	20						
DIP	25						
DIP	27						
DIP							

TF Semiconductors Contacts

Sales Contacts	Region	Telephone Number	E-mail
Duke Walton	Worldwide	+(1) 916-580-5805	duke.walton@tfsemiconductors.com
Felix Cai	Asia	+86-1351-102-3160	felix.cai@tfsemi.com
Applications Support			
Keith Spaulding	Worldwide	+(1) 603-343-4499	keith.spaulding@tfsemiconductors.com
Support	Worldwide	+(1) 916-865-4961	support@tfsemi.com
Customer Service			
Customer Service Hotline	Worldwide	+(1) 916-865-4961	support@tfsemi.com
Quality			
Ken Nowak	Worldwide	+(1) 603-343-1952	ken.nowak@tfsemiconductors.com
Supply Chain Management			
Daniel Xu	Worldwide	+(1) 916-865-4961	daniel.xu@tfsemiconductors.com

NORTH AMERICA 1430 Blue Oaks Boulevard, Suite 288 Roseville, CA 95747, USA Tel: +(1) 916-865-4961	ASIA Tel: + 86-1351-102-3160
--	---

Important Notice

TF Semiconductor Solutions (TFSS) PRODUCTS ARE NEITHER DESIGNED NOR INTENDED FOR USE IN MILITARY AND/OR AEROSPACE, AUTOMOTIVE OR MEDICAL DEVICES OR SYSTEMS UNLESS THE SPECIFIC TFSS PRODUCTS ARE SPECIFICALLY DESIGNATED BY TFSS FOR SUCH USE. BUYERS ACKNOWLEDGE AND AGREE THAT ANY SUCH USE OF TFSS PRODUCTS WHICH TFSS HAS NOT DESIGNATED FOR USE IN MILITARY AND/OR AEROSPACE, AUTOMOTIVE OR MEDICAL DEVICES OR SYSTEMS IS SOLELY AT THE BUYER'S RISK.

TFSS assumes no liability for application assistance or customer product design. Customers are responsible for their products and applications using TFSS products.

Resale of TFSS products or services with statements different from or beyond the parameters stated by TFSS for that product or service voids all express and any implied warranties for the associated TFSS product or service. TFSS is not responsible or liable for any such statements.

©2021 TFSS. All Rights Reserved. Information and data in this document are owned by TFSS wholly and may not be edited, reproduced, or redistributed in any way without the express written consent from TFSS.