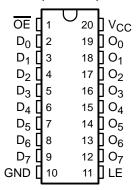
- **Function and Pinout Compatible With FCT** and F Logic
- Reduced V_{OH} (Typically = 3.3 V) Versions of Equivalent FCT Functions
- **Edge-Rate Control Circuitry for** Significantly Improved Noise Characteristics
- I_{off} Supports Partial-Power-Down Mode Operation
- **ESD Protection Exceeds JESD 22**
 - 2000-V Human-Body Model (A114-A)
 - 200-V Machine Model (A115-A)
 - 1000-V Charged-Device Model (C101)
- **Matched Rise and Fall Times**
- Fully Compatible With TTL Input and **Output Logic Levels**
- **3-State Outputs**
- CY54FCT573T
 - 32-mA Output Sink Current
 - 12-mA Output Source Current
- CY74FCT573T
 - 64-mA Output Sink Current
 - 32-mA Output Source Current

CY54FCT573T . . . D PACKAGE CY74FCT573T . . . P. Q. OR SO PACKAGE (TOP VIEW)



description

The 'FCT573T devices consist of eight latches with 3-state outputs for bus-organized applications. When the latch-enable (LE) input is high, the flip-flops appear transparent to the data. Data that meets the required setup times are latched when LE transitions from high to low. Data appears on the bus when the output-enable $(\overline{\sf OE})$ input is low. When \overline{OE} is high, the bus output is in the high-impedance state. In this mode, data can be entered into the latches. The 'FCT573T devices are identical to the 'FCT373T devices, except for the flow-through pinout of the 'FCT573T, which simplifies board design.

These devices are fully specified for partial-power-down applications using Ioff. The Ioff circuitry disables the outputs, preventing damaging current backflow through the device when it is powered down.



Please be aware that an important notice concerning availability, standard warranty, and use in critical applications of Texas Instruments semiconductor products and disclaimers thereto appears at the end of this data sheet.



ORDERING INFORMATION

TA	PAC	KAGE [†]	SPEED (ns)	ORDERABLE PART NUMBER	TOP-SIDE MARKING
	QSOP – Q	Tape and reel	4.7	CY74FCT573CTQCT	FCT573C
	SOIC - SO	Tube	4.7	CY74FCT573CTSOC	FCT573C
	3010 - 30	Tape and reel	4.7	CY74FCT573CTSOCT	FC1573C
	DIP – P	Tube	5.2	CY74FCT573ATPC	CY74FCT573ATPC
-40°C to 85°C	QSOP – Q	Tape and reel	5.2	CY74FCT573ATQCT	FCT573A
-40 C to 65 C	SOIC - SO	Tube	5.2	CY74FCT573ATSOC	FCT573A
	3010 - 30	Tape and reel	5.2	CY74FCT573ATSOCT	FC1575A
	QSOP – Q	Tape and reel	8	CY74FCT573TQCT	FCT573
2010		Tube	8	CY74FCT573TSOC	FCT573
	SOIC – SO	Tape and reel	8	CY74FCT573TSOCT	FC13/3
–55°C to 125°C	CDIP – D	Tube	8.5	CY54FCT573ATLMB	

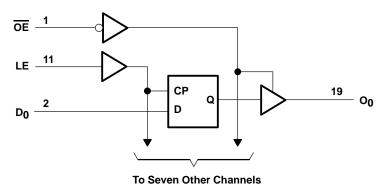
[†] Package drawings, standard packing quantities, thermal data, symbolization, and PCB design guidelines are available at www.ti.com/sc/package.

FUNCTION TABLE

	INPUTS		OUTPUT
OE	LE	D	0
L	Н	Н	Н
L	Н	L	L
L	L	Χ	Q_0
Н	X	X	Z

H = High logic level, L = Low logic level, X = Don't care, Z = High-impedance state, Q_n = Previous state of flip flops (Q_{n-1})

logic diagram (positive logic)



absolute maximum rating over operating free-air temperature range (unless otherwise noted)

Supply voltage range to ground potential	–0.5 V to 7 V
DC input voltage range	–0.5 V to 7 V
DC output voltage range	–0.5 V to 7 V
DC output current (maximum sink current/pin)	120 mA
Package thermal impedance, θ _{JA} (see Note 1): P package	69°C/W
Q package	68°C/W
SO package	58°C/W
Ambient temperature range with power applied, T _A	–65°C to 135°C
Storage temperature range, T _{sta}	–65°C to 150°C

[†] Stresses beyond those listed under "absolute maximum ratings" may cause permanent damage to the device. These are stress ratings only, and functional operation of the device at these or any other conditions beyond those indicated under "recommended operating conditions" is not implied. Exposure to absolute-maximum-rated conditions for extended periods may affect device reliability.

recommended operating conditions (see Note 2)

		CY!	54FCT57	'3T	CY7	4FCT57	3T	UNIT
		MIN	NOM	MAX	MIN	NOM	MAX	UNIT
VCC	Supply voltage	4.5	5	5.5	4.75	5	5.25	V
VIH	High-level input voltage	2			2			V
VIL	Low-level input voltage			0.8			0.8	V
ІОН	High-level output current			-12			-32	mA
loL	Low-level output current			32			64	mA
TA	Operating free-air temperature	-55		125	-40		85	°C

NOTE 2: All unused inputs of the device must be held at V_{CC} or GND to ensure proper device operation.



NOTE 1: The package thermal impedance is calculated in accordance with JESD 51-7.

CY54FCT573T, CY74FCT573T 8-BIT LATCHES WITH 3-STATE OUTPUTS

SCCS068 - OCTOBER 2001

electrical characteristics over recommended operating free-air temperature range (unless otherwise noted)

		TEGT GOVERNMENT		CY	54FCT57	'3T	CY	74FCT57	'3T	
PARAMETER		TEST CONDITIO	JN5	MIN	TYP [†]	MAX	MIN	TYP [†]	MAX	UNIT
Vive	V _{CC} = 4.5 V,	I _{IN} = -18 mA			-0.7	-1.2				V
VIK	$V_{CC} = 4.75 \text{ V},$	$I_{IN} = -18 \text{ mA}$						-0.7	-1.2	V
	$V_{CC} = 4.5 \text{ V},$	$I_{OH} = -12 \text{ mA}$		2.4	3.3					
Voн	V _{CC} = 4.75 V	$I_{OH} = -32 \text{ mA}$					2			V
	VCC = 4.75 V	$I_{OH} = -15 \text{ mA}$					2.4	3.3		
Voi	$V_{CC} = 4.5 \text{ V},$	$I_{OL} = 32 \text{ mA}$			0.3	0.55				V
VOL	$V_{CC} = 4.75 \text{ V},$	$I_{OL} = 64 \text{ mA}$						0.3	0.55	V
V_{hys}	All inputs				0.2			0.2		٧
1.	$V_{CC} = 5.5 \text{ V},$	VIN = VCC				5				μΑ
lį	$V_{CC} = 5.25 \text{ V},$	VIN = VCC							5	μА
l., .	$V_{CC} = 5.5 \text{ V},$	$V_{1N} = 2.7 \text{ V}$				±1				μΑ
IH	$V_{CC} = 5.25 \text{ V},$	$V_{1N} = 2.7 \text{ V}$							±1	μА
1	$V_{CC} = 5.5 \text{ V},$	$V_{1N} = 0.5 V$				±1				μА
IIL	$V_{CC} = 5.25 \text{ V},$	$V_{1N} = 0.5 V$							±1	μА
lozu	$V_{CC} = 5.5 \text{ V},$	V _{OUT} = 2.7 V				10				μА
IOZH	$V_{CC} = 5.25 \text{ V},$	V _{OUT} = 2.7 V							10	μА
lozu	$V_{CC} = 5.5 \text{ V},$	$V_{OUT} = 0.5 V$				-10				μА
lozl	$V_{CC} = 5.25 \text{ V},$	V _{OUT} = 0.5 V							-10	μΑ
los‡	$V_{CC} = 5.5 \text{ V},$	$V_{OUT} = 0 V$		-60	-120	-225				mA
105+	$V_{CC} = 5.25 \text{ V},$	$V_{OUT} = 0 V$					-60	-120	-225	ША
l _{off}	$V_{CC} = 0 V$	V _{OUT} = 4.5 V				±1			±1	μΑ
Icc	$V_{CC} = 5.5 \text{ V},$	$V_{IN} \le 0.2 V$,	$V_{IN} \ge V_{CC} - 0.2 V$		0.1	0.2				mA
100	$V_{CC} = 5.25 \text{ V},$	$V_{IN} \le 0.2 V$	$V_{IN} \ge V_{CC} - 0.2 V$					0.1	0.2	ША
Δlcc		$_{I}$ = 3.4 V§, f_{1} = 0, O			0.5	2				mA
ΔiCC	$V_{CC} = 5.25 \text{ V}, \text{ V}_{I}$	$N = 3.4 \text{ V}$, $f_1 = 0$, 0	Outputs open					0.5	2	ША
	V _{CC} = 5.5 V, Out One input switchi	tputs open, ing at 50% duty cycl	le, OE = GND,		0.06	0.12				
leas¶	V _{IN} ≤ 0.2 V or V _{II}		• 							mA/
ICCD¶		ing at 50% duty cycl	le, OE = GND,					0.06	0.12	MHz
	$V_{IN} \le 0.2 \text{ V or } V_{II}$	$N \leq ACC = 0.5 A$								

[†] Typical values are at $V_{CC} = 5 \text{ V}$, $T_A = 25^{\circ}\text{C}$.



Not more than one output should be shorted at a time. Duration of short should not exceed one second. The use of high-speed test apparatus and/or sample-and-hold techniques are preferable to minimize internal chip heating and more accurately reflect operational values. Otherwise, prolonged shorting of a high output can raise the chip temperature well above normal and cause invalid readings in other parametric tests. In any sequence of parameter tests, IOS tests should be performed last.

 $[\]S$ Per TTL-driven input ($V_{IN} = 3.4 \text{ V}$); all other inputs at V_{CC} or GND

[¶] This parameter is derived for use in total power-supply calculations.

electrical characteristics over recommended operating free-air temperature range (unless otherwise noted) (continued)

DADAMETER		TEST CONDITION	e	CY	54FCT57	73T	CY	74FCT57	'3T	LINIT
PARAMETER		MIN	TYP [†]	MAX	MIN	TYP [†]	MAX	UNIT		
	V _{CC} = 5.5 V,	One bit switching at f ₁ = 10 MHz	$V_{IN} \le 0.2 \text{ V or}$ $V_{IN} \ge V_{CC} - 0.2 \text{ V}$		0.7	1.4				
	Outputs open,	at 50% duty cycle	$V_{IN} = 3.4 \text{ V or GND}$		1	2.4				
	OE = GND, LE = VCC	Eight bits switching at f ₁ = 2.5 MHz	$V_{IN} \le 0.2 \text{ V or}$ $V_{IN} \ge V_{CC} - 0.2 \text{ V}$		1.3	2.6				
IC#		at 50% duty cycle	$V_{IN} = 3.4 \text{ V or GND}$		3.3	10.6				mA
ıC"	V _{CC} = 5.25 V,	One bit switching at f ₁ = 10 MHz	$V_{IN} \le 0.2 \text{ V or}$ $V_{IN} \ge V_{CC} - 0.2 \text{ V}$					0.7	1.4	IIIA
	Outputs open,	at 50% duty cycle	$V_{IN} = 3.4 \text{ V or GND}$					1	2.4	
	OE = GND, LE = V _{CC}	Eight bits switching at f ₁ = 2.5 MHz	$V_{IN} \le 0.2 \text{ V or}$ $V_{IN} \ge V_{CC} - 0.2 \text{ V}$					1.3	2.6	
		at 50% duty cycle	$V_{IN} = 3.4 \text{ V or GND}$					3.3	10.6	
C _i					6	10		6	10	pF
Co		_			8	12		8	12	pF

[†] Typical values are at $V_{CC} = 5 \text{ V}$, $T_A = 25^{\circ}\text{C}$.

Where:

IC = Total supply current

I_{CC} = Power-supply current with CMOS input levels

 ΔI_{CC} = Power-supply current for a TTL high input ($V_{IN} = 3.4 \text{ V}$)

 D_H = Duty cycle for TTL inputs high N_T = Number of TTL inputs at D_H

ICCD = Dynamic current caused by an input transition pair (HLH or LHL)

f₀ = Clock frequency for registered devices, otherwise zero

f₁ = Input signal frequency

N₁ = Number of inputs changing at f₁

All currents are in milliamperes and all frequencies are in megahertz.

|| Values for these conditions are examples of the I_{CC} formula.

timing requirements over recommended operating free-air temperature range (unless otherwise noted) (see Figure 1)

		CY54FC	T573T	CY54FCT	573AT	UNIT
		MIN	MAX	MIN	MAX	UNIT
t _W	Pulse duration, LE high	6		6		ns
t _{su}	Setup time, data before LE↑	2		2		ns
th	Hold time, data after LE↑	1.5		1.5		ns

timing requirements over recommended operating free-air temperature range (unless otherwise noted) (see Figure 1)

		CY74FC	T573T	CY74FCT	573AT	CY74FCT	573CT	UNIT
		MIN	MAX	MIN	MAX	MIN	MAX	UNIT
t _W	Pulse duration, LE high	6		5		5		ns
t _{su}	Setup time, data before LE↑	2		2		2		ns
th	Hold time, data after LE↑	1.5		1.5		1.5		ns



 $^{^{\#}}$ IC = ICC + \triangle ICC \times DH \times NT + ICCD (f₀/2 + f₁ \times N₁)

CY54FCT573T, CY74FCT573T 8-BIT LATCHÉS WITH 3-STATE OUTPUTS SCCS068 – OCTOBER 2001

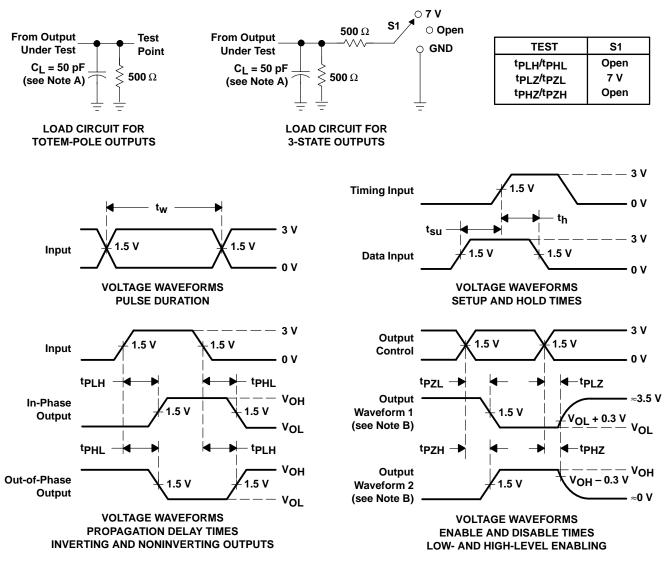
switching characteristics over operating free-air temperature range (see Figure 1)

PARAMETER	FROM	то	CY54FCT	573AT	UNIT
PARAMETER	(INPUT)	(OUTPUT)	MIN	MAX	UNIT
^t PLH	D	0	1.5	5.6	nc
^t PHL	ע)	1.5	5.6	ns
t _{PLH}	LE	0	2	9.8	20
^t PHL	LE	O	2	9.8	ns
^t PZH	ŌĒ	0	1.5	7.5	20
t _{PZL}	OE .	0	1.5	7.5	ns
^t PHZ	ŌĒ	0	1.5	6.5	ns
t _{PLZ}	OE .)	1.5	6.5	115

switching characteristics over operating free-air temperature range (see Figure 1)

PARAMETER	FROM	то	CY74FC	T573T	CY74FCT	573AT	CY74FCT	573CT	UNIT
PARAMETER	(INPUT)	(OUTPUT)	MIN	MAX	MIN	MAX	MIN	MAX	UNIT
^t PLH	D	0	1.5	8	1.5	5.2	1.5	4.7	ns
^t PHL			1.5	8	1.5	5.2	1.5	4.7	110
^t PLH	LE	0	2	13	2	8.5	2	5.5	200
^t PHL	LC	O	2	13	2	8.5	2	5.5	ns
^t PZH	ŌĒ	0	1.5	12	1.5	6.5	1.5	5.5	
^t PZL	OE	U	1.5	12	1.5	6.5	1.5	5.5	ns
^t PHZ	ŌĒ	0	1.5	7.5	1.5	5.5	1.5	5	200
^t PLZ	J OE		1.5	7.5	1.5	5.5	1.5	5	ns

PARAMETER MEASUREMENT INFORMATION



NOTES: A. C_I includes probe and jig capacitance.

- B. Waveform 1 is for an output with internal conditions such that the output is low except when disabled by the output control. Waveform 2 is for an output with internal conditions such that the output is high except when disabled by the output control.
- C. The outputs are measured one at a time with one input transition per measurement.

Figure 1. Load Circuit and Voltage Waveforms





25-Sep-2013

PACKAGING INFORMATION

Orderable Device	Status	Package Type	Package Drawing	Pins	Package Qty	Eco Plan	Lead/Ball Finish	MSL Peak Temp	Op Temp (°C)	Device Marking (4/5)	Samples
5962-9223801MRA	ACTIVE	CDIP	J	20	1	TBD	A42	N / A for Pkg Type	-55 to 125	5962-9223801MR A	Samples
5962-9223802M2A	ACTIVE	LCCC	FK	20	1	TBD	POST-PLATE	N / A for Pkg Type	-55 to 125	5962- 9223802M2A CY54FCT 573ATLMB	Samples
CY54FCT573ATLMB	ACTIVE	LCCC	FK	20	1	TBD	POST-PLATE	N / A for Pkg Type	-55 to 125	5962- 9223802M2A CY54FCT 573ATLMB	Samples
CY74FCT573ATPC	ACTIVE	PDIP	N	20	20	Pb-Free (RoHS)	CU NIPDAU	N / A for Pkg Type	-40 to 85	CY74FCT573ATPC	Samples
CY74FCT573ATPCE4	ACTIVE	PDIP	N	20	20	Pb-Free (RoHS)	CU NIPDAU	N / A for Pkg Type	-40 to 85	CY74FCT573ATPC	Samples
CY74FCT573ATQCT	ACTIVE	SSOP	DBQ	20	2500	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-2-260C-1 YEAR	-40 to 85	FCT573A	Samples
CY74FCT573ATQCTE4	ACTIVE	SSOP	DBQ	20	2500	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-2-260C-1 YEAR	-40 to 85	FCT573A	Samples
CY74FCT573ATQCTG4	ACTIVE	SSOP	DBQ	20	2500	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-2-260C-1 YEAR	-40 to 85	FCT573A	Samples
CY74FCT573ATSOC	ACTIVE	SOIC	DW	20	25	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM	-40 to 85	FCT573A	Samples
CY74FCT573ATSOCE4	ACTIVE	SOIC	DW	20	25	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM	-40 to 85	FCT573A	Samples
CY74FCT573ATSOCG4	ACTIVE	SOIC	DW	20	25	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM	-40 to 85	FCT573A	Samples
CY74FCT573ATSOCT	ACTIVE	SOIC	DW	20	2000	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM	-40 to 85	FCT573A	Samples
CY74FCT573ATSOCTE4	ACTIVE	SOIC	DW	20	2000	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM	-40 to 85	FCT573A	Samples
CY74FCT573ATSOCTG4	ACTIVE	SOIC	DW	20	2000	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM	-40 to 85	FCT573A	Samples
CY74FCT573CTQCT	ACTIVE	SSOP	DBQ	20	2500	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-2-260C-1 YEAR	-40 to 85	FCT573C	Samples





25-Sep-2013

Orderable Device	Status	Package Type	_	Pins	_	Eco Plan	Lead/Ball Finish	MSL Peak Temp	Op Temp (°C)	Device Marking	Samples
	(1)		Drawing		Qty	(2)		(3)		(4/5)	
CY74FCT573CTQCTE4	ACTIVE	SSOP	DBQ	20	2500	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-2-260C-1 YEAR	-40 to 85	FCT573C	Samples
CY74FCT573CTQCTG4	ACTIVE	SSOP	DBQ	20	2500	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-2-260C-1 YEAR	-40 to 85	FCT573C	Samples
CY74FCT573CTSOC	ACTIVE	SOIC	DW	20	25	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM	-40 to 85	FCT573C	Samples
CY74FCT573CTSOCG4	ACTIVE	SOIC	DW	20	25	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM	-40 to 85	FCT573C	Samples
CY74FCT573TQCT	ACTIVE	SSOP	DBQ	20	2500	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-2-260C-1 YEAR	-40 to 85	FCT573	Samples
CY74FCT573TQCTE4	ACTIVE	SSOP	DBQ	20	2500	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-2-260C-1 YEAR	-40 to 85	FCT573	Samples
CY74FCT573TQCTG4	ACTIVE	SSOP	DBQ	20	2500	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-2-260C-1 YEAR	-40 to 85	FCT573	Samples
CY74FCT573TSOC	ACTIVE	SOIC	DW	20	25	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM	-40 to 85	FCT573	Samples
CY74FCT573TSOCE4	ACTIVE	SOIC	DW	20	25	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM	-40 to 85	FCT573	Samples
CY74FCT573TSOCG4	ACTIVE	SOIC	DW	20	25	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM	-40 to 85	FCT573	Samples
CY74FCT573TSOCT	ACTIVE	SOIC	DW	20	2000	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM	-40 to 85	FCT573	Samples
CY74FCT573TSOCTE4	ACTIVE	SOIC	DW	20	2000	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM	-40 to 85	FCT573	Samples
CY74FCT573TSOCTG4	ACTIVE	SOIC	DW	20	2000	Green (RoHS & no Sb/Br)	CU NIPDAU	Level-1-260C-UNLIM	-40 to 85	FCT573	Samples

⁽¹⁾ The marketing status values are defined as follows:

ACTIVE: Product device recommended for new designs.

LIFEBUY: TI has announced that the device will be discontinued, and a lifetime-buy period is in effect.

NRND: Not recommended for new designs. Device is in production to support existing customers, but TI does not recommend using this part in a new design.

PREVIEW: Device has been announced but is not in production. Samples may or may not be available.

OBSOLETE: TI has discontinued the production of the device.

TBD: The Pb-Free/Green conversion plan has not been defined.

⁽²⁾ Eco Plan - The planned eco-friendly classification: Pb-Free (RoHS), Pb-Free (RoHS Exempt), or Green (RoHS & no Sb/Br) - please check http://www.ti.com/productcontent for the latest availability information and additional product content details.



PACKAGE OPTION ADDENDUM

25-Sep-2013

Pb-Free (RoHS): TI's terms "Lead-Free" or "Pb-Free" mean semiconductor products that are compatible with the current RoHS requirements for all 6 substances, including the requirement that lead not exceed 0.1% by weight in homogeneous materials. Where designed to be soldered at high temperatures, TI Pb-Free products are suitable for use in specified lead-free processes. **Pb-Free** (RoHS Exempt): This component has a RoHS exemption for either 1) lead-based flip-chip solder bumps used between the die and package, or 2) lead-based die adhesive used between the die and leadframe. The component is otherwise considered Pb-Free (RoHS compatible) as defined above.

Green (RoHS & no Sb/Br): TI defines "Green" to mean Pb-Free (RoHS compatible), and free of Bromine (Br) and Antimony (Sb) based flame retardants (Br or Sb do not exceed 0.1% by weight in homogeneous material)

- (3) MSL, Peak Temp. -- The Moisture Sensitivity Level rating according to the JEDEC industry standard classifications, and peak solder temperature.
- (4) There may be additional marking, which relates to the logo, the lot trace code information, or the environmental category on the device.
- (5) Multiple Device Markings will be inside parentheses. Only one Device Marking contained in parentheses and separated by a "~" will appear on a device. If a line is indented then it is a continuation of the previous line and the two combined represent the entire Device Marking for that device.

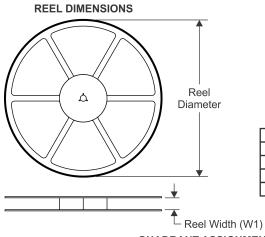
Important Information and Disclaimer: The information provided on this page represents TI's knowledge and belief as of the date that it is provided. TI bases its knowledge and belief on information provided by third parties, and makes no representation or warranty as to the accuracy of such information. Efforts are underway to better integrate information from third parties. TI has taken and continues to take reasonable steps to provide representative and accurate information but may not have conducted destructive testing or chemical analysis on incoming materials and chemicals. TI and TI suppliers consider certain information to be proprietary, and thus CAS numbers and other limited information may not be available for release.

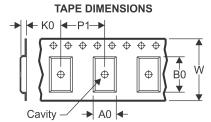
In no event shall TI's liability arising out of such information exceed the total purchase price of the TI part(s) at issue in this document sold by TI to Customer on an annual basis.

PACKAGE MATERIALS INFORMATION

www.ti.com 26-Jan-2013

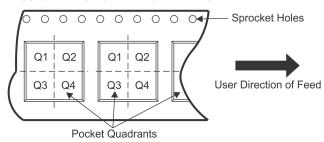
TAPE AND REEL INFORMATION





	Dimension designed to accommodate the component width
	Dimension designed to accommodate the component length
K0	Dimension designed to accommodate the component thickness
W	Overall width of the carrier tape
P1	Pitch between successive cavity centers

QUADRANT ASSIGNMENTS FOR PIN 1 ORIENTATION IN TAPE



*All dimensions are nominal

All differsions are nominal												
Device	Package Type	Package Drawing		SPQ	Reel Diameter (mm)	Reel Width W1 (mm)	A0 (mm)	B0 (mm)	K0 (mm)	P1 (mm)	W (mm)	Pin1 Quadrant
CY74FCT573ATQCT	SSOP	DBQ	20	2500	330.0	16.4	6.5	9.0	2.1	8.0	16.0	Q1
CY74FCT573ATSOCT	SOIC	DW	20	2000	330.0	24.4	10.8	13.0	2.7	12.0	24.0	Q1
CY74FCT573CTQCT	SSOP	DBQ	20	2500	330.0	16.4	6.5	9.0	2.1	8.0	16.0	Q1
CY74FCT573TQCT	SSOP	DBQ	20	2500	330.0	16.4	6.5	9.0	2.1	8.0	16.0	Q1
CY74FCT573TSOCT	SOIC	DW	20	2000	330.0	24.4	10.8	13.0	2.7	12.0	24.0	Q1

www.ti.com 26-Jan-2013



*All dimensions are nominal

All difficions die fiorinal										
Device	Package Type	Package Drawing	Pins	SPQ	Length (mm)	Width (mm)	Height (mm)			
CY74FCT573ATQCT	SSOP	DBQ	20	2500	367.0	367.0	38.0			
CY74FCT573ATSOCT	SOIC	DW	20	2000	367.0	367.0	45.0			
CY74FCT573CTQCT	SSOP	DBQ	20	2500	367.0	367.0	38.0			
CY74FCT573TQCT	SSOP	DBQ	20	2500	367.0	367.0	38.0			
CY74FCT573TSOCT	SOIC	DW	20	2000	367.0	367.0	45.0			

IMPORTANT NOTICE

Texas Instruments Incorporated and its subsidiaries (TI) reserve the right to make corrections, enhancements, improvements and other changes to its semiconductor products and services per JESD46, latest issue, and to discontinue any product or service per JESD48, latest issue. Buyers should obtain the latest relevant information before placing orders and should verify that such information is current and complete. All semiconductor products (also referred to herein as "components") are sold subject to TI's terms and conditions of sale supplied at the time of order acknowledgment.

TI warrants performance of its components to the specifications applicable at the time of sale, in accordance with the warranty in TI's terms and conditions of sale of semiconductor products. Testing and other quality control techniques are used to the extent TI deems necessary to support this warranty. Except where mandated by applicable law, testing of all parameters of each component is not necessarily performed.

TI assumes no liability for applications assistance or the design of Buyers' products. Buyers are responsible for their products and applications using TI components. To minimize the risks associated with Buyers' products and applications, Buyers should provide adequate design and operating safeguards.

TI does not warrant or represent that any license, either express or implied, is granted under any patent right, copyright, mask work right, or other intellectual property right relating to any combination, machine, or process in which TI components or services are used. Information published by TI regarding third-party products or services does not constitute a license to use such products or services or a warranty or endorsement thereof. Use of such information may require a license from a third party under the patents or other intellectual property of the third party, or a license from TI under the patents or other intellectual property of TI.

Reproduction of significant portions of TI information in TI data books or data sheets is permissible only if reproduction is without alteration and is accompanied by all associated warranties, conditions, limitations, and notices. TI is not responsible or liable for such altered documentation. Information of third parties may be subject to additional restrictions.

Resale of TI components or services with statements different from or beyond the parameters stated by TI for that component or service voids all express and any implied warranties for the associated TI component or service and is an unfair and deceptive business practice. TI is not responsible or liable for any such statements.

Buyer acknowledges and agrees that it is solely responsible for compliance with all legal, regulatory and safety-related requirements concerning its products, and any use of TI components in its applications, notwithstanding any applications-related information or support that may be provided by TI. Buyer represents and agrees that it has all the necessary expertise to create and implement safeguards which anticipate dangerous consequences of failures, monitor failures and their consequences, lessen the likelihood of failures that might cause harm and take appropriate remedial actions. Buyer will fully indemnify TI and its representatives against any damages arising out of the use of any TI components in safety-critical applications.

In some cases, TI components may be promoted specifically to facilitate safety-related applications. With such components, TI's goal is to help enable customers to design and create their own end-product solutions that meet applicable functional safety standards and requirements. Nonetheless, such components are subject to these terms.

No TI components are authorized for use in FDA Class III (or similar life-critical medical equipment) unless authorized officers of the parties have executed a special agreement specifically governing such use.

Only those TI components which TI has specifically designated as military grade or "enhanced plastic" are designed and intended for use in military/aerospace applications or environments. Buyer acknowledges and agrees that any military or aerospace use of TI components which have *not* been so designated is solely at the Buyer's risk, and that Buyer is solely responsible for compliance with all legal and regulatory requirements in connection with such use.

TI has specifically designated certain components as meeting ISO/TS16949 requirements, mainly for automotive use. In any case of use of non-designated products, TI will not be responsible for any failure to meet ISO/TS16949.

Products Applications

Audio www.ti.com/audio Automotive and Transportation www.ti.com/automotive Communications and Telecom **Amplifiers** amplifier.ti.com www.ti.com/communications **Data Converters** dataconverter.ti.com Computers and Peripherals www.ti.com/computers **DLP® Products** www.dlp.com Consumer Electronics www.ti.com/consumer-apps

DSP **Energy and Lighting** dsp.ti.com www.ti.com/energy Clocks and Timers www.ti.com/clocks Industrial www.ti.com/industrial Interface interface.ti.com Medical www.ti.com/medical logic.ti.com Logic Security www.ti.com/security

Power Mgmt power.ti.com Space, Avionics and Defense www.ti.com/space-avionics-defense

Microcontrollers <u>microcontroller.ti.com</u> Video and Imaging <u>www.ti.com/video</u>

RFID www.ti-rfid.com

OMAP Applications Processors www.ti.com/omap TI E2E Community e2e.ti.com

Wireless Connectivity <u>www.ti.com/wirelessconnectivity</u>