Technology Functions Table

TEXAS INSTRUMENTS

Families	Functions													Special Features						Process					
	Buffers/Line Drivers	Transceivers	Gates	Combination Logic	Configurable Logic	Shift Registers	Flip-Flops	Analog Switches	Encoders/Multiplexers	Decoders/Demultiplexers	Bus Switches	Schmitt Triggers	Phase Lock Loops	Comparators/Parity Gen.	Counters	Level Shifters/Translators	Bushold	Series Damping Resistors	Live Insertion	Overvoltage-Tolerant Inputs	Power-off Output Disable	Power-up Reset	Bipolar	CMOS	BiCMOS
1.8-Volt Logic																									
AUC	Х	Х	Х				Х	Х	Х	х		Х					Х			Х	Х			Х	
AUP	X		Х		Х		Х					Х				Х					Х			Х	
3.3-Volt Logic																									
ALVC	Х	Х	Х				Х					Х				Х	Х	Х						Х	
AVC	Х	Х					Х									х	Х	х		Х	Х			х	
LV-A	Х	Х	Х			Х	Х	Х	Х	Х		Х	Х		Х					Х	Х			Х	
LV-AT	Х	Х					Х		Х	Х														Х	
LVC	Х	Х	Х	Х	Х		Χ	Х	Х	Х						Х	Х	Х		Х	Х	Х		Х	
ALB	Х	Х																							Х
ALVT	Х	Х					Х										Х	Х			Х	Х			Х
LVT	Х	Х					Х										Х	Х			Х	Х			Х
CB3Q									Х	Х	Х														
CB3T									х	Х															
CBTLV								Х	Х	Х	Х								Х		Х				
GTL		Х															Х				Х				
GTLP		Х																	Х		Х	Х			
TS								Х	Х	Х															
TVC									Х	Х															
VME		Х															Х		Х		Х	Х			
5-Volt Logic																									
AC	Х	Х	Х			Х	Х		Х	Х					Х									Х	
ACT	Х	Х	Х			Х	Х		Х	Х			Χ	Х	Х		Х							Х	
AHC	Х	Х	Х			Х	Х	Х	Х	Х		Х								Х				Х	
AHCT	Х	Х	Х			Х	Х		Х	Х		Х												Х	
FCT	Х	Х				Х	Х		Х	Х				Х	Х		Х							Х	
HC	Х	Х	Х			Х	Х	Х	Х	Х		Х	Χ	Х	Х									Х	
HCT	Х	Х	Х			Х	Х	Х	Х	Х			Χ	Х	Х	Х								Х	
ABT	Х	Х					Х		Х	Х							Х	Х			Х	Х			Х
ABTE		Х									Х														Х
BCT	Х	Х					Х		Х	Х								Х							Χ
ALS	Х	Х	Х			Х	Х		Х	Х				Х	Х								Х		
AS	Х	Х	Х			Х	Х		Х	Х				Х	Х								Х		
F	Х	Х	Х			Х	Х		Х	Х				Х	Х			Х					Х		
LS	Х	Х	Х	Х		Х	Х		Х	Х			Х	Х	Х								Х		
S	Х		Х	Х		Х	Х		Х	Х		Х	Χ	Х	Х								Х		
TTL	Х		Х	Х		Х	Х		Х	Х		Х											Х		
CBT								Х	Х	Х	Х					Х			Χ						
CBT-C									Х	Х	Х										Х				
FB		Х																	Χ						
TS								Х	Х	Х															
10-Volt Logic																									
CD4000	X		Х	Х	Х	Х	Х	Х	Х	Х			Х	Х	Х	Х								X	

The platform bar is a trademark of Texas Instruments. All other trademarks are the property of their respective owners. © 2013 Texas Instruments Incorporated. Printed in U.S.A.

TI Worldwide Technical Support

Internet

TI Semiconductor Product Information Center Home Page

support.ti.com

TI E2E™ Community Home Page

e2e.ti.com

Product Information Centers

Americas Phone +1(512) 434-1560

Brazil Phone 0800-891-2616

Mexico Phone 0800-670-7544

Fax +1(972) 927-6377

Internet/Email support.ti.com/sc/pic/americas.htm

Europe, Middle East, and Africa

Phone

European Free Call 00800-ASK-TEXAS

(00800 275 83927)

International +49 (0) 8161 80 2121 Russian Support +7 (4) 95 98 10 701

Note: The European Free Call (Toll Free) number is not active in all countries. If you have technical difficulty calling the free call number, please use the international number above.

Fax +(49) (0) 8161 80 2045
Internet www.ti.com/asktexas
Direct Email asktexas@ti.com

Japan

 Phone
 Domestic
 0120-92-3326

 Fax
 International
 +81-3-3344-5317

 Domestic
 0120-81-0036

Internet/Email International support.ti.com/sc/pic/japan.htm

Domestic www.tij.co.jp/pic

The platform bar and E2E are trademarks of Texas Instruments. All other trademarks are the property of their respective owners.

Asia

Phone

International +91-80-41381665

Domestic Toll-Free Number

Note: Toll-free numbers do not support

mobile and IP phones.

Australia 1-800-999-084 China 800-820-8682 Hong Kong 800-96-5941 India 1-800-425-7888 Indonesia 001-803-8861-1006 Korea 080-551-2804 Malaysia 1-800-80-3973 New Zealand 0800-446-934 **Philippines** 1-800-765-7404 Singapore 800-886-1028 Taiwan 0800-006800 Thailand 001-800-886-0010

Fax +8621-23073686

Email tiasia@ti.com or ti-china@ti.com Internet support.ti.com/sc/pic/asia.htm

Important Notice: The products and services of Texas Instruments Incorporated and its subsidiaries described herein are sold subject to TI's standard terms and conditions of sale. Customers are advised to obtain the most current and complete information about TI products and services before placing orders. TI assumes no liability for applications assistance, customer's applications or product designs, software performance, or infringement of patents. The publication of information regarding any other company's products or services does not constitute TI's approval, warranty or endorsement thereof.

A090712



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 microcontroller.ti.com Video and Imaging www.ti.com/video

RFID <u>www.ti-rfid.com</u>

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

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