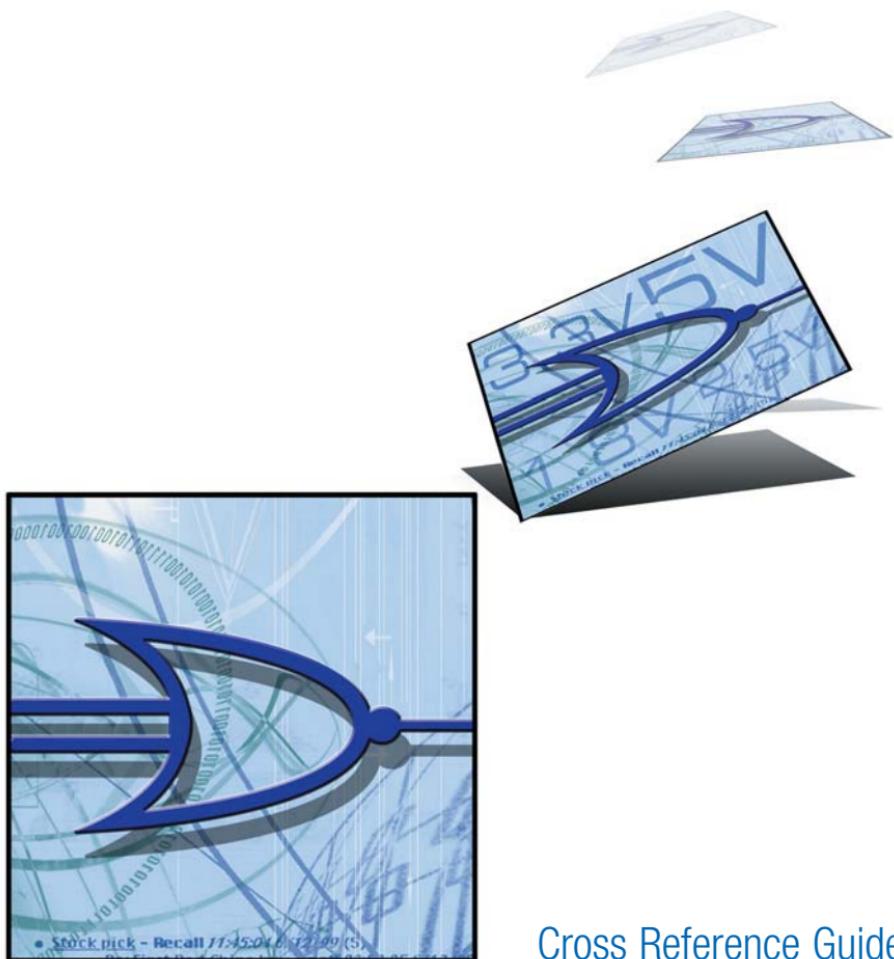


The Complete CMOS Logic Source

Standard Logic



Cross Reference Guide

STMicroelectronics
More Intelligent Solutions





ST LOGIC COMPETITIVE

Family	Package	STMicroelectronics	Texas Instruments
1.8V VCX Very High Speed 3.6V I/O Tolerance	TSSOP (T&R)	74VCX(H)16xxxTTR	SN74ALVC(H)16xxxDGG
3.3V LVC Very Low Voltage, 5V I/O Tolerance	SO (tube) SO (T&R) TSSOP (T&R)	74LVCxxxAM 74LVCxxxAMTR 74LVCxxxATTR	SN74LVC(H)xxxAD SN74LVC(H)xxxADR SN74LVC(H)xxxAPWR
3.3V LCX Low Voltage, 5V Input/Output Tolerance	SO (tube) SO (T&R) TSSOP (T&R)	74LCxxxxM 74LCxxxxMTR 74LCxxxTTR	- - -
3.3V LVX Low Voltage HCMOS, 5V Input Tolerance	SO (tube) SO (T&R) TSSOP (T&R)	74LVxxxxM 74LVxxxxMTR 74LVxxxxTTR	SN74LVxxxD SN74LVxxxDR SN74LVxxPW
3.3V LVQ Low Voltage, Low Noise HCMOS	SO (tube) SO (T&R) TSSOP (T&R)	74LVQxxxxM 74LVQxxxMTR 74LVQxxxxTTR	- - -
5V HC,HCT High Speed CMOS	DIP (tube) SO (tube) SO (T&R) TSSOP (T&R)	M74HC(T)xxxB1R M74HC(T)xxxM1R M74HC(T)xxxRM13TR M74HC(T)xxxTTR	SN74HC(T)xxxN SN74HC(T)xxxD SN74HC(T)xxxDR SN74HC(T)xxxPW
5V AC,ACT Very High Speed, Low Power CMOS	DIP (tube) SO (tube) SO (T&R) TSSOP (T&R)	74AC(T)xxxB 74AC(T)xxxM 74AC(T)xxxMTR 74AC(T)xxxTTR	SN74AC(T)xxxN SN74AC(T)xxxD SN74AC(T)xxxDR SN74AC(T)xxxPW
5V VHC,VHCT Low Noise, Very High Speed CMOS	SO (tube) SO (T&R) TSSOP (T&R)	74VHC(T)xxx(A)M 74VHC(T)xxx(A)MTR 74VHC(T)xxx(A)TTR	SN74AHC(T)xxxD SN74AHC(T)xxxDR SN74AHC(T)xxxPW
5V CMOS 4000B	DIP (tube) SO (tube) SO (T&R)	HCF4xxxBEY HCF4xxxBM1 HCF4xxxM013TR	CD4xxxBE CD4xxxBPW CD4xxxBPWR
5V H1G HCMOS Single Switch	SOT23-5 (T&R)	74H1G66STR	
5V VHC (V1G) Single Gates & Switches	SOT23-5/6 (T&R) SOT323-5 (T&R)	74V1GxxxSTR 74V1GxxxCTR	SN74AHC1GxxDBV SN74AHC1GxxDCK
5V VHCT (V1T) Single Gates & Switches	SOT23-5/6 (T&R) SOT323-5 (T&R)	74V1TxxxSTR 74V1TxxxCTR	SN74AHCT1GxxDBV SN74AHCT1GxxDCK
3.3V LCX (LX1G) Single Gates, 5V I/O tolerant	SOT23-5 (T&R) SOT323-5 (T&R)	74LX1GxxxSTR 74LX1GxxxCTR	SN74LVC1GxxDBV SN74LVC1GxxDCK
5V VHC (V2G) Dual Gates & Switches	SOT23-8 (T&R)	74V2GxxxSTR	-
5V VHCT (V2T) Dual Gates & Switches	SOT23-8 (T&R)	74V2TxxxSTR	-

CROSS REFERENCE GUIDE

Fairchild	On Semiconductor	Toshiba	Philips
74VCX16xxxMDT	-	TC74VCX16xxxFTEL	74ALVC(H)16xxxDGG
-	-	-	74LVCxxxAD
-	-	-	74LVCxxxAD-T
-	-	-	74LVCxxxAPW
74LCXxxxM/WM	MC74LCXxxxD	TC74LCXxxxFN	-
74LCXxxxMX/WMX	MC74LCXxxxDR2	TC74LCXxxxFNEL	-
74LCXxxxMTC	MC74LCXxxxDTR2	TC74LCXxxxFTEL	-
74LVXxxxM/WM	MC74LVXxxxD	TC74LVXxxxFN	74LVxxxD
74LVXxxxMX/WMX	MC74LVXxxxDR2	TC74LVXxxxFNEL	74LVxxxD-T
74LVXxxxMTC	MC74LVXxxxDTR2	TC74LVXxxxFTEL	74LVxxxPW
74LVQxxxS	-	-	-
-	-	-	-
-	-	-	-
MM74HC(T)xxxN	MC74HC(T)xxxN	TC74HC(T)xxxAP	74HC(T)xxxN
MM74HC(T)xxxM	MC74HC(T)xxxD	TC74HC(T)xxxAFW	74HC(T)xxxD
MM74HC(T)xxxMX	MC74HC(T)xxxDR2	TC74HC(T)xxxAFWEL	74HC(T)xxxD-T
MM74HC(T)xxxMTC	MC74HC(T)xxxDTR2	-	74HC(T)xxxPW
74AC(T)xxxPC	MC74AC(T)xxxN	TC74AC(T)xxxP	-
74AC(T)xxxM	MC74AC(T)xxxD	TC74AC(T)xxxFN	-
74AC(T)xxxMX	MC74AC(T)xxxDR2	TC74AC(T)xxxFNEL	-
74AC(T)xxxMTC	MC74AC(T)xxxDTR2	TC74AC(T)xxxFTEL	-
MM74VHC(T)xxxM	MC74VHC(T)xxxD	TC74VHC(T)xxxAFN	74AHC(T)xxxD
MM74VHC(T)xxxMX	MC74VHC(T)xxxDR2	TC74VHC(T)xxxAFNEL	74AHC(T)xxxD-T
MM74VHC(T)xxxMTC	MC74VHC(T)xxxDTR2	TC74VHC(T)xxxAFTEL	74AHC(T)xxPW
CD4xxxBCN	MC14xxxBCP	TC4xxxBP	HEFxxxBPN
CD4xxxBCM	MC14xxxBD	TC4xxxBFN	HEFxxxBTD
CD4xxxBCMX	MC14xxxBDR2	TC4xxxBFNEL	HEFxxxBTD-T
		TC7SxxF	
NC7SxxM5	-	TC7SHxxF	-
NC7SxxP5	MC74VHC1GxxDFT1	TC7SHxxFU	74AHC1GxxGW
NC7STxxM5	-	TC7SETxxF	-
NC7STxxP5	MC74VHC1GTxxDFT1	TC7SETxxFU	74AHCT1GxxGW
NC7SZxxM5	-	TC7SZxxF	-
NC7SZxxP5	-	TC7SZxxFU	-
-	-	TC7WHxxFU	-
-	-	-	-

Features, Technologies, Packages: ST Has The Right Solution For Your Application

ST Standard Logic families comply with various environments including supply voltage ranges from 1.65 to 18V, TTL/CMOS compatibility, voltage tolerant I/Os, low noise, low consumption, very high speed, single gates and more. These families provide the designer with more than 700 functions from which to find the right solution for his needs.

1.8V VCX VERY HIGH SPEED With 3.6V Input/Output Tolerance	3.3V LVC VERY LOW VOLTAGE With 5V Input/Output Tolerance	3.3V LCX LOW VOLTAGE With 5V Input/Output Tolerance
Supply Voltage 1.8 to 3.6V Input Voltage 0 to 3.6V Operating Temperature -40 to 85°C Output Current @ Vcc = 3V 24mA @ Vcc = 1.8V 6mA Delay Time @ Vcc = 2.3V 3.2ns Package TSSOP Bus interface functions. options: Bus hold, termination resistor	Supply Voltage 1.8 to 3.6V Input Voltage 0 to 5.5V Operating Temperature -55 to 125°C Output Current 24mA Delay Time 3ns (typ) Packages SO TSSOP	Supply Voltage 2.7 to 3.6V Input Voltage 0 to 5.5V Operating Temperature -55 to 125°C Output Current 24mA Delay Time @ Vcc = 3.3V 4ns (typ) Packages SO TSSOP Direct interface with TTL levels. Bus hold & damping resistors options (16bit).
3.3V LVX LOW VOLTAGE HCMOS With 5V Input Tolerance	3.3V LVX LOW VOLTAGE HCMOS DUAL SUPPLY LEVEL SHIFTERS	3.3V LVQ LOW VOLTAGE HCMOS Low Noise
Supply Voltage 2 to 3.6V Input Voltage 0 to 5.5V Operating Temperature -55 to 125°C Output Current 4mA Delay Time 4.7ns (typ) Packages SO TSSOP	Supply Voltage A 2.7 to 3.6V Supply Voltage B 4.5 to 5.5V Input Voltage 0 to VccA/VccB Operating Temperature -40 to 85°C Output Current 24mA Delay Time @ Vcc = 3.3V 5.6ns (typ) Packages SO TSSOP	Supply Voltage 2 to 3.6V Input Voltage 0 to Vcc Operating Temperature -55 to 125°C Output Current 12mA Delay Time @ Vcc = 3.3V 5ns (typ) Packages SO TSSOP Direct interface with TTL levels
5V HC,HCT HIGH SPEED CMOS	5V AC,ACT VERY HIGH SPEED LOW POWER CMOS	5V VHC,VHCT LOW NOISE, VERY HIGH SPEED CMOS
Supply Voltage HC series 2 to 6V HCTseries 4.5 to 5.5V Input Voltage 0 to Vcc Operating Temperature -55 to 125°C Output Current @ Vcc = 5V 4mA Delay Time @ Vcc = 4.5V 12ns (typ) CL = 50pF Packages DIP SO TSSOP	Supply Voltage AC series 2 to 6V ACTseries 4.5 to 5.5V Input Voltage 0 to Vcc Operating Temperature -55 to 125°C Output Current @ Vcc = 5V 24mA Delay Time @ Vcc = 5V 4ns (typ) Packages SO TSSOP ACT: direct interface with TTL levels	Supply Voltage VHC series 2 to 5.5V VHCT series 4.5 to 5.5V Input Voltage 0 to 5.5V Operating Temperature -55 to 125°C Output Current @ Vcc = 5V 8mA Delay Time @ Vcc = 5V 4ns (typ) CL = 15pF Packages SO TSSOP Bus hold option (16-bit). Compared to HCMOS: 3x faster, 16% less noise, 75% less dynamic power and 50% less static
5V CMOS 4000B	5V H1G HCMOS SINGLE SWITCH	5V VHC,VHCT SINGLE AND DUAL SWITCHES
Supply Voltage 3 to 18V Input Voltage 0 to Vdd Operating Temperature -55 to 125°C Output Current @ Vdd = 15V 7mA Delay Time @ Vdd = 15V 45ns (typ) Packages DIP SO Phase locked-loop expert: HCF4046B	Supply Voltage 2 to 12V Input Voltage 0 to Vcc Operating Temperature -40 to 85°C On resistance @ Vcc = 12V 45 (typ) Enable Time @ Vcc = 12V 6ns (typ) Package SOT23-5	Supply Voltage VHC series 2 to 5.5V VHCTseries 4.5 to 5.5V Input Voltage 0 to 5.5V Operating Temperature -55 to 125°C On Resistance @ Vcc = 5V 4 to 10 Enable Time @ Vcc = 5V 2.5ns (typ) Packages SOT23-5/6 SOT323-5 *STG719 Vi=O to Vcc
SINGLE GATES LCX With 5V Input/Output Tolerance	5V V1G,V1T SINGLE GATES VHC,VHCT Low Noise, Very High Speed CMOS	5V V2G,V2T DUAL GATES VHC,VHCT Low Noise, Very High Speed CMOS
Supply Voltage 1.65 to 5.5V Input Voltage 0 to 5.5V Operating Temperature -55 to 125°C Output Current 24mA Delay Time 5.2ns Packages SOT23-5 SOT323-5 Direct interface with TTL levels. Low power, very high speed.	Supply Voltage V1G series 2 to 5.5V V1T series 4.5 to 5.5V Input Voltage 0 to 5.5V Operating Temperature -55 to 125°C Output Current @ Vcc = 5V 8mA Delay Time @ Vcc = 5V 4ns (typ) CL = 15pF Packages SOT23-5 SOT323-5 Perfect when space is a concern. Full selection of function available.	Supply Voltage V1G series 2.7 to 5.5V V1T series 4.5 to 5.5V Input Voltage 0 to 5.5V Operating Temperature -55 to 125°C Output Current @ Vcc = 5V 8mA Delay Time @ Vcc = 5V 4ns (typ) CL = 15pF Package SOT23-8



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