

Standard Logic

Selection Guide



*THE PEOPLE WHO MAKE
SYSTEMS ON SILICON
WORK FOR YOU*



SYMBOL	PARAMETER	VALUE	UNIT
V _{dd}	Supply Voltage	3 to 18	V
V _i	Input Voltage	0 to V _{dd}	V
Top	Operating Temperature Range	-40 to 85	°C
I _o	Output Current @ V _{dd} = 15V	7	mA
tpd	Delay Time @ V _{dd} = 15V	45 (TYP)*	ns

ORDER CODE	
DIP (Tube)	HCF4xxxBEY
SO (Tube)	HCF4xxxBM1
SO (T&R)	HCF4xxxM013TR

* Referred to HCF4011B

F	TYPE	PIN
G	HCF 4000B	14
G	HCF 4001B	14
G	HCF 4002B	14
M	HCF 4006B	14
G	HCF 4007UB	14
M	HCF 4008B**	16
S	HCF 4009UB	16
S	HCF 4010B	16
G	HCF 4011B	14
G	HCF 4012B	14
S	HCF 4013B	14
M	HCF 4014B	16
M	HCF 4015B	16
S	HCF 4016B	14
M	HCF 4017B	16
M	HCF 4018B	16
S	HCF 4019B	16
M	HCF 4020B	16
M	HCF 4021B	16
M	HCF 4022B	16
G	HCF 4023B	14
M	HCF 4024B	14
G	HCF 4025B	14
M	HCF 4026B**	16
S	HCF 4027B	16
M	HCF 4028B	16
M	HCF 4029B	16
S	HCF 4030B	14
M	HCF 4031B**	16 ^Δ
M	HCF 4032B**	16
M	HCF 4033B**	16
M	HCF 4034B	24
M	HCF 4035B	16
M	HCF 4038B**	16
M	HCF 4040B	16
M	HCF 4041UB	14
M	HCF 4042B	16
M	HCF 4043B	16
M	HCF 4044B	16
M	HCF 4045B**	16
M	HCF 4046B	16
M	HCF 4047B	14

F	TYPE	PIN
M	HCF 4048B**	16
S	HCF 4049UB	16
S	HCF 4050B	16
M	HCF 4051B	16
M	HCF 4052B	16
M	HCF 4053B	16
M	HCF 4054B	16
M	HCF 4055B**	16
M	HCF 4056B	16
M	HCF 4060B	16
M	HCF 4063B	16
S	HCF 4066B	14
M	HCF 4067B*	24
G	HCF 4068B	14
G	HCF 4069UB	14
G	HCF 4070B	14
G	HCF 4071B	14
G	HCF 4072B	14
G	HCF 4073B	14
G	HCF 4075B	14
M	HCF 4076B	16
G	HCF 4077B	14
G	HCF 4078B	14
G	HCF 4081B	14
G	HCF 4082B	14
S	HCF 4085B	14
S	HCF 4086B**	14
M	HCF 4089B**	16
S	HCF 4093B	14
M	HCF 4094B	16
M	HCF 4095B**	14
M	HCF 4096B**	14
M	HCF 4097B*	24
M	HCF 4098B	16
M	HCF 4099B	16
M	HCF 4502B	16
M	HCF 4503B	16
M	HCF 4508B*	24
M	HCF 4510B	16 ^Δ
M	HCF 4511B	16
M	HCF 4512B	16
M	HCF 4514B*	24

F	TYPE	PIN
M	HCF 4515B*	24
M	HCF 4516B	16
M	HCF 4517B	16 ^Δ
M	HCF 4518B	16
M	HCF 4519B**	16
M	HCF 4520B	16
M	HCF 4521B**	16
M	HCF 4527B	16 ^Δ
M	HCF 4532B	16
M	HCF 4536B	16 ^Δ
M	HCF 4538B	16
M	HCF 4541B	14
M	HCF 4543B**	16
M	HCF 4555B	16
M	HCF 4556B	16
M	HCF 4585B	16
M	HCF 4724B	16
M	HCF 40100B	16
M	HCF 40101B**	14
M	HCF 40102B	16
M	HCF 40103B	16
M	HCF 40104B**	16 ^Δ
M	HCF 40105B	16 ^Δ
M	HCF 40106B	14
M	HCF 40107B	8
M	HCF 40108B**	24
M	HCF 40109B	16
M	HCF 40110B**	16 ^Δ
M	HCF 40147B**	16
M	HCF 40160B**	16
M	HCF 40161B	16
M	HCF 40162B**	16
M	HCF 40163B**	16
M	HCF 40174B	16
M	HCF 40181B**	24
M	HCF 40182B**	16
M	HCF 40192B**	16
M	HCF 40193B	16
M	HCF 40194B**	16 ^Δ
M	HCF 40208B**	24
M	HCF 40257B	16
M	M 22100B	16 ^Δ

** Minimum quantity required

^Δ Only in DIP-16

* Only in SO-24

F: Function; G: Gate; S: Small Scale Integration; M: Medium Scale Integration; O: Octal.

SYMBOL	PARAMETER	VALUE	UNIT
Vcc	Supply Voltage: HC series HCT series	2 to 6 4.5 to 5.5	V
Vi	Input Voltage	0 to Vcc	V
Top	Operating Temperature	-40 to 85	°C
Io	Output Current @ Vcc=5V	4	mA
Tpd	Delay Time @ Vcc=4.5V CL= 50pF	12 (TYP)*	ns

PACKAGE	HC	HCT
DIP (TUBE)	M74HCxxxB1R	M74HCTxxxB1R
SO (TUBE)	M74HCxxxM1R	M74HCTxxxM1R
SO (T&R)	M74HCxxxRM13TR	M74HCTxxxRM13TR
TSSOP (T&R)	M74HCxxxTTR	M74HCTxxxTTR

* Referred to M74HC244

F	TYPE	PIN
G	M74HC 00	14
G	M74HCT 00	14
G	M74HC 02	14
G	M74HCT 02	14
G	M74HC 03	14
G	M74HC 04	14
G	M74HCT 04	14
G	M74HCU 04	14
G	M74HC 05	14
G	M74HCT 05	14
G	M74HC 07**	14
G	M74HC 08	14
G	M74HCT 08	14
G	M74HC 09	14
G	M74HC 10	14
G	M74HCT 10	14
G	M74HC 11	14
S	M74HC 14	14
S	M74HCT 14	14
G	M74HC 20	14
G	M74HC 21	14
G	M74HC 27	14
G	M74HCT 27	14
G	M74HC 30	14
G	M74HCT 30	14
G	M74HC 32	14
G	M74HCT 32	14
M	M74HC 42	16
G	M74HC 51	14
S	M74HC 73	14
S	M74HC 74	14
S	M74HCT 74	14
S	M74HC 75	16
S	M74HCT 75**	16
S	M74HC 76	16
M	M74HC 77**	14
M	M74HC 85	16
S	M74HC 86	14
S	M74HCT 86	14
S	M74HC 107	14
S	M74HC 109	16
S	M74HC 112	16
S	M74HC 113	14
M	M74HC 123	16
M	M74HC 123A	16
S	M74HC 125	14
S	M74HCT 125	14
S	M74HC 126	14
S	M74HCT 126	14
M	M74HC 131**	16
S	M74HC 132	14
S	M74HCT 132	14
G	M74HC 133	14
M	M74HC 137	16
M	M74HCT 137	16
M	M74HC 138	16
M	M74HCT 138	16

F	TYPE	PIN
M	M74HC 139	16
M	M74HC 147	16
M	M74HC 148	16
M	M74HC 151	16
M	M74HC 153	16
M	M74HC 154	24
M	M74HC 155	16
M	M74HC 157	16
M	M74HCT 157	16
M	M74HC 158**	16
M	M74HCT 158	16
M	M74HC 160	16
M	M74HCT 160**	16
M	M74HC 161	16
M	M74HCT 161**	16
M	M74HC 162**	16
M	M74HCT 162**	16
M	M74HC 163	16
M	M74HCT 163**	16
M	M74HC 164	14
M	M74HCT 164	14
M	M74HC 165	16
M	M74HCT 165**	16
M	M74HC 166	16
M	M74HC 173	16
M	M74HC 174	16
M	M74HCT 174	16
M	M74HC 175	16
M	M74HC 181**	24
M	M74HC 182**	16
M	M74HC 190	16
M	M74HC 191	16
M	M74HC 192	16
M	M74HC 193	16
M	M74HC 194	16
M	M74HC 195**	16
M	M74HC 221	16
M	M74HC 221A**	16
M	M74HC 237	16
M	M74HC 238	16
O	M74HC 240	20
O	M74HCT 240	20
O	M74HC 241	20
O	M74HCT 241	20
M	M74HC 242**	14
M	M74HC 243	14
O	M74HC 244	20
O	M74HCT 244	20
O	M74HC 245	20
O	M74HCT 245	20
M	M74HC 251	16
M	M74HC 253	16
M	M74HC 257	16
M	M74HCT 257	16
M	M74HC 258	16
M	M74HCT 258**	16
M	M74HC 259	16

F	TYPE	PIN
M	M74HC 294	16
S	M74HC 266	14
O	M74HC 273	20
O	M74HCT 273	20
M	M74HC 279	16
M	M74HC 280	14
M	M74HC 283	16
M	M74HC 292	16
M	M74HC 298	16
O	M74HC 299	20
M	M74HC 323	20
M	M74HC 352	16
M	M74HC 353**	16
M	M74HC 354	20
M	M74HC 356**	20
S	M74HC 365	16
S	M74HC 366	16
S	M74HC 367	16
S	M74HCT 367	16
S	M74HC 368	16
S	M74HCT 368**	16
O	M74HC 373	20
O	M74HCT 373	20
O	M74HC 374	20
O	M74HCT 374	20
O	M74HC 375	20
O	M74HC 377	20
S	M74HC 386**	14
M	M74HC 390	16
M	M74HC 393	14
M	M74HC 423	16
M	M74HC 423A**	16
O	M74HC 533	20
O	M74HCT 533**	20
O	M74HC 534	20
O	M74HCT 534	20
O	M74HC 540	20
O	M74HCT 540	20
O	M74HC 541	20
O	M74HCT 541	20
O	M74HC 563	20
O	M74HCT 563**	20
O	M74HC 564	20
O	M74HCT 564	20
O	M74HC 573	20
O	M74HCT 573	20
O	M74HC 574	20
O	M74HCT 574	20
M	M74HC 590	16
M	M74HC 592	16
M	M74HC 593**	20
M	M74HC 595	16
M	M74HC 597	16
O	M74HC 620	20
O	M74HC 623	20
O	M74HC 640	20
O	M74HCT 640	20
O	M74HC 643**	20

F	TYPE	PIN
O	M74HCT 643	20
O	M74HC 646	24
O	M74HCT 646	24
O	M74HC 648	24
O	M74HCT 648**	24
O	M74HC 651	24
O	M74HCT 651	24
O	M74HC 652	24
O	M74HCT 652	24
M	M74HC 670	16
M	M74HC 688	20
M	M74HCT 688	20
M	M74HC 690**	20
M	M74HC 691**	20
M	M74HC 692**	20
M	M74HC 693**	20
M	M74HC 696**	20
M	M74HC 697**	20
M	M74HC 698**	20
M	M74HC 699**	20
G	M74HC 4002	14
S	M74HC 4016	14
M	M74HC 4017	16
M	M74HC 4020	16
M	M74HC 4022	16
M	M74HC 4024	14
M	M74HC 4028	16
M	M74HC 4040	16
S	M74HC 4049	16
S	M74HC 4050	16
M	M74HC 4051	16
M	M74HC 4052	16
M	M74HC 4053	16
M	M74HC 4060	16
S	M74HC 4066	14
G	M74HC 4072	14
G	M74HC 4075	14
G	M74HC 4078	14
M	M74HC 4094	16
M	M74HC 40102**	16
M	M74HC 40103	16
M	M74HC 4316	16
M	M74HC 4351	20
M	M74HC 4352**	20
M	M74HC 4353**	20
M	M74HC 4511	16
M	M74HC 4514	24
M	M74HC 4515	24
M	M74HC 4518	16
M	M74HC 4520	16
M	M74HC 4538	16
M	M74HC 4543	16
S	M74HCT 7007	14
M	M74HCT 7259	16
S	M74HC 7266	14
M	M74HC 7292	16
M	M74HC 7294**	16

** Minimum quantity required

F: Function; G: Gate; S: Small Scale Integration; M: Medium Scale Integration; O: Octal.

5V

AC / ACT LOGIC

SYMBOL	PARAMETER	VALUE	UNIT	PACKAGE	ORDER CODE	
					AC	ACT
Vcc	Supply Voltage: AC series ACT series	2 to 6 4.5 to 5.5	V V	DIP (TUBE) SO (TUBE) SO (T&R) TSSOP (T&R)	74ACxxxB	74ACTxxxB
Vi	Input Voltage	0 to Vcc	V		74CxxxM	74ACTxxxM
Top	Operating Temperature	-40 to 85	°C		74ACxxxMTR	74ACTxxxMTR
Io	Output Current @ Vcc=5V	24	mA		74CxxxxTTR	74ACTxxxxTTR
Tpd	Delay Time @ Vcc=5V	4 (TYP)*	ns			

* Referred to 74AC244

F	TYPE	PIN	F	TYPE	PIN	F	TYPE	PIN
G	74AC 00	14	S	74AC 125	14	O	74AC 273	20
G	74ACT 00	14	S	74ACT 125	14	O	74ACT 273	20
G	74AC 02	14	M	74AC 138	16	M	74AC 280	14
G	74ACT 02	14	M	74ACT 138	16	M	74ACT 280	14
G	74AC 04	14	M	74AC 157	16	M	74AC 299	20
G	74ACT 04	14	M	74ACT 157	16	M	74ACT 299	20
G	74AC 08	14	M	74AC 158	16	O	74AC 373	20
G	74ACT 08	14	M	74ACT 158	16	O	74ACT 373	20
G	74AC 10	14	M	74AC 161	16	O	74AC 374	20
G	74ACT 10	14	M	74ACT 161	16	O	74ACT 374	20
G	74AC 11	14	M	74AC 163	16	O	74AC 573	20
G	74ACT 11	14	M	74ACT 163	16	O	74ACT 573	20
S	74AC 14	14	M	74AC 174	16	O	74AC 541	20
S	74ACT 14	14	M	74ACT 174	16	O	74ACT 541	20
G	74AC 20	14	O	74AC 240	20	O	74AC 574	20
G	74ACT 20	14	O	74ACT 240	20	O	74ACT 574	20
G	74AC 32	14	O	74AC 244	20	16BIT	74ACT 16244*	48
G	74ACT 32	14	O	74ACT 244	20	16BIT	74ACT 16245*	48
S	74AC 74	14	O	74AC 245	20	16BIT	74ACT 16373	48
S	74ACT 74	14	O	74ACT 245	20	16BIT	74ACT 16374*	48
S	74AC 86	14	M	74AC 257	16	16BIT	74ACT 16374*	48
S	74ACT 86	14	M	74ACT 257	16	16BIT	74ACT 16541*	48

* Only TSSOP

F: Function; G: Gate; S: Small Scale Integration; M: Medium Scale Integration; O: Octal.

5V

VHC / VHCT LOGIC

SYMBOL	PARAMETER	VALUE	UNIT	PACKAGE	ORDER CODE	
					VHC	VHCT
Vcc	Supply Voltage: VHC series VHCT series	2 to 5.5 4.5 to 5.5	V V	SO (TUBE) SO (T&R) TSSOP (T&R) TSSOP (T&R) Basic Type TSSOP (T&R) Bus Hold	74VHCxxxM	74VHCTxxxAM
Vi	Input Voltage	0 to 5.5	V		74VHCxxxMTR	74VHCTxxxAMTR
Top	Operating Temperature	-40 to 85	°C		74VHCxxxTTR	74VHCTxxxATTR
Io	Output Current	8	mA		74VHCxxxxTTR	74VHCTxxxxATTR
tpd	Delay Time @ Vcc=5V, CL=15pF	4 (TYP)*	ns		74VHCT16xxxTTR	74VHCTH16xxxATTR

* Referred to 74VHC244

F	TYPE	PIN	F	TYPE	PIN	F	TYPE	PIN
G	74VHC 00	14	M	74VHC 123A	16	M	74VHC 174	16
G	74VHCT 00A	14	S	74VHC 125	14	M	74VHCT 174A	16
G	74VHC 02	14	S	74VHCT 125A	14	M	74VHC 238	16
G	74VHCT 02A	14	S	74VHC 126	14	M	74VHCT 238A	16
G	74VHC 03	14	S	74VHCT 126A	14	O	74VHC 240	20
G	74VHCT 03A	14	S	74VHC 132	14	O	74VHCT 240A	20
G	74VHC 04	14	S	74VHCT 132A	14	O	74VHC 244	20
G	74VHCT 04A	14	M	74VHC 138	16	O	74VHCT 244A	20
G	74VHC U04	14	M	74VHCT 138A	16	O	74VHC 245	20
G	74VHC 05	14	M	74VHC 139	16	O	74VHCT 245A	20
G	74VHCT 05A	14	M	74VHCT 139A	16	M	74VHC 257	16
G	74VHC 08	14	M	74VHC 157	16	M	74VHCT 257A	16
G	74VHCT 08A	14	M	74VHCT 157A	16	O	74VHC 273	20
S	74VHC 14	14	16BIT	74VHC 16240*	48	O	74VHCT 273A	20
S	74VHCT 14A	14	16BIT	74VHCT 16240*	48	O	74VHC 373	20
G	74VHC 20	14	16BIT	74VHC 16244*	48	O	74VHCT 373A	20
G	74VHCT 20A	14	16BIT	74VHCT 16244*	48	O	74VHC 374	20
G	74VHC 27	14	16BIT	74VHC 16245*	48	O	74VHCT 374A	20
G	74VHCT 27A	14	16BIT	74VHCT 16245*	48	O	74VHC 541	20
G	74VHC 32	14	16BIT	74VHC 16373*	48	O	74VHCT 541A	20
G	74VHCT 32A	14	16BIT	74VHCT 16373*	48	O	74VHC 573	20
S	74VHC 74	14	16BIT	74VHC 16374*	48	O	74VHCT 573A	20
S	74VHCT 74A	14	16BIT	74VHCT 16374*	48	O	74VHC 574	20
S	74VHC 86	14	16BIT	74VHC 16245*	48	O	74VHCT 574A	20
S	74VHCT 86A	14	16BIT	74VHCTH 16245*	48			

* Only TSSOP

F: Function; G: Gate; S: Small Scale Integration; M: Medium Scale Integration; O: Octal.



VHC / VHCT

Single Gate Logic

SYMBOL	PARAMETER	VALUE	UNIT
Vcc	Supply Voltage: V1G series V1T series	2 to 5.5 4.5 to 5.5	V V
Vi	Input Voltage	0 to 5.5	V
Top	Operating Temperature	-40 to 85	°C
Io	Output Current	8	mA
Tpd	Delay Time @ Vcc=5V, CL=15PF	4 (TYP)	ns

PACKAGE	ORDER CODE	
	V1G	V1T
SOT23-5L (T&R)* 3000pcs	74V1GxxxSTR	74V1TxxxSTR
SOT23-5L (T&R)* 250pcs	74V1GxxxSTR2	74V1TxxxSTR2
SC-70 (T&R)* 3000pcs	74V1GxxxCTR	74V1TxxxCTR
SC-70 (T&R)* 250pcs	74V1GxxxCTR2	74V1TxxxCTR2

* Samples are managed as part of reel.

F	TYPE	PIN
G	74V1G 00	5
G	74V1T 00	5
G	74V1G 02	5
G	74V1T 02	5
G	74V1G 03	5
G	74V1T 03	5
G	74V1G 04	5
G	74V1T 04	5
G	74V1G U04	5
G	74V1G 05	5
G	74V1T 05	5
G	74V1G 07	5
G	74V1T 07	5
G	74V1G 08	5
G	74V1T 08	5
G	74V1G 14	5
G	74V1T 14	5

F	TYPE	PIN
G	74V1G 32	5
G	74V1T 32	5
G	74V1G 77	5
G	74V1T 77	5
G	74V1G 79	5
G	74V1T 79	5
G	74V1G 80	5
G	74V1T 80	5
G	74V1G 86	5
G	74V1T 86	5
G	74V1G 125	5
G	74V1T 125	5
G	74V1G 126	5
G	74V1T 126	5
G	74V1G 70	5
G	74V1T 70	5

F: Function; G: Gate;



VHC / VHCT

Dual Gate Logic

SYMBOL	PARAMETER	VALUE	UNIT
Vcc	Supply Voltage: V2G series V2T series	2.7 to 5.56 4.5 to 5.5	V V
Vi	Input Voltage	0 to 5.5	V
Top	Operating Temperature	-40 to 85	°C
Io	Output Current	8	mA
Tpd	Delay Time @ Vcc=5V, CL=15PF	4 (TYP)	ns

PACKAGE	ORDER CODE	
	V2G	V2T
SOT23-8L(T&R)*3000pcs	74V2GxxxSTR	74V2TxxxSTR
SOT23-8L(T&R)*250pcs	74V2GxxxSTR2	74V2TxxxSTR2

*Samples are managed as part of reel

F	TYPE	PIN
G	74V2G 00	8
G	74V2T 00	8
G	74V2G 02	8
G	74V2G 03	8
G	74V2G 04	8
G	74V2T 04	8
G	74V2G U04	8
G	74V2G 05	8
G	74V2T 05	8
G	74V2G 07	8
G	74V2T 07	8
G	74V2G 08	8
G	74V2T 08	8
G	74V2G 14	8

F	TYPE	PIN
G	74V2T 14	8
G	74V2G 32	8
G	74V2T 32	8
G	74V2G 70	8
G	74V2T 70	8
G	74V2G 86	8
G	74V2T 86	8
G	74V2G 125	8
G	74V2T 125	8
G	74V2G 126	8
G	74V2T 126	8
G	74V2G 132	8
G	74V2T 132	8

F: Function; G: Gate;

5V

HCMOS - VHC / VHCT

Single and Dual Switches

SYMBOL	PARAMETER	VALUE	UNIT
V _{cc}	Supply Voltage	2 to 12	V
V _i	Input Voltage	0 to V _{cc}	V
Top	Operating Temperature	-40 to 85	°C
R _{on}	On resistance @ V _{cc} =12V	45 (TYP)	Ω
tpz	Enable Time @ V _{cc} = 12V	6 (TYP)	ns

ORDER CODE	
SOT23-5L	
T&R (250pcs)	74H1G66STR2
T&R (3000pcs)	74H1G66STR

F	TYPE	PIN
S	74H1G 66	5

F: Function; S: Small Scale Integration;

5V

VHC / VHCT

Single and Dual Switches

F	TYPE	PIN
S	74V1G	66
S	74V1T	66
S	74V1G	67*
S	74V1T	67*
S	74V1G	384
S	74V1T	384
S	74V2G	384
S	74V2T	384
S	74V2G	53
S	74V2T	53
S	74V2G	66
S	74V2T	66
S	74V2G	67*
S	74V2T	67*
S	STG	719

* Available on request

SYMBOL	PARAMETER	VALUE	UNIT
V _{cc}	Supply Voltage: VHC series	2 to 5.5	V
	VHCT series	4.5 to 5.5	V
V _i	Input Voltage	4.5 to 5.5*	V
Top	Operating Temperature	-40 to 85	C
R _{on}	On resistance @ V _{cc} = 5V	4 to 10	W
tpz	Enable Time @ V _{cc} = 5V	2,5	nA

STG719 V_i=0 to V_{cc}

PACKAGE	ORDER CODE	
	V1G/V2G	V1T/V2T
SOT23-5/6/8L(T&R)*3000pcs	74VxGxxxSTR	74VxTxxxSTR
SOT23-5/6/8L(T&R)*250pcs	74VxGxxxSTR2	74VxTxxxSTR2
SOT323-5L(T&R)*3000pcs	74V1GxxxCTR	74V1TxxxCTR
SOT323-5L(T&R)*250pcs	74V1GxxxCTR2	74V1TxxxCTR2

*Samples are managed as part of reel

F: Function; S: Small Scale Integration;

POWER LOGIC FAMILY

COMING SOON

TYPE	DESCRIPTION	PIN
STPIC44L02	LOW SIDE PRE-FET DRIVER	24
STPIC6C595	8-BIT POWER LOGIC SHIFT REGISTER	16
STPIC6A259	8-BIT POWER LOGIC ADDRESSABLE LATCH	8

PACKAGE	ORDER CODE
SO-8/16/24 (Tube)	STPICxxxxxM
SO-8/16/24 (T&R)	STPICxxxxxMTR

3.3V

LVX LOW NOISE LOGIC

With 5V Input Tolerance

LOW VOLTAGE

SYMBOL	PARAMETER	VALUE	UNIT
V _{cc}	Supply Voltage	2 to 3.6	V
V _i	Input Voltage	0 to 5.5	V
Top	Operating Temperature	-40 to 85	°C
I _o	Output Current	4	mA
T _{pd}	Delay Time	4.7 (TYP)*	ns

PACKAGE	ORDER CODE
SO (TUBE)	74LVXxxxM
SO (T&R)	74LVXxxxMTR
TSSOP Basic Type	74LVXxxxxTTR
TSSOP Bus Hold	74LVXH16xxxTTR

* Referred to octal devices

F	TYPE	PIN
G	74LVX 00	14
G	74LVX 02	14
G	74LVX 03	14
G	74LVX 04	14
G	74LVX U04	14
G	74LVX 05	14
G	74LVX 08	14
S	74LVX 14	14
G	74LVX 20	14
G	74LVX 27	14
G	74LVX 32	14
S	74LVX 74	14
S	74LVX 86	14
M	74LVX 123A	14
S	74LVX 125	14
S	74LVX 126	14
S	74LVX 132	14
M	74LVX 138	16
M	74LVX 139	16
M	74LVX 157	16
M	74LVX 174	16

F	TYPE	PIN
M	74LVX 238	16
O	74LVX 240	20
O	74LVX 244	20
O	74LVX 245	20
O	74LVX 257	16
O	74LVX 273	20
O	74LVX 373	20
O	74LVX 374	20
O	74LVX 541	20
O	74LVX 573	20
O	74LVX 574	20
O	74LVX 3245	24
O	74LVXC 3245	24
O	74LVX 4245	24
O	74LVXC 4245	24
16BIT	74LVX 16240*	48
16BIT	74LVX 16244*	48
16BIT	74LVX 16245*	48
16BIT	74LVX 16373*	48
16BIT	74LVX 16374*	48
16BIT	74LVXH 16245*	48

* Only TSSOP

F: Function; G: Gate; S: Small Scale Integration; M: Medium Scale Integration; O: Octal.

3.3V

LVQ LOW VOLTAGE LOGIC

SYMBOL	PARAMETER	VALUE	UNIT
V _{cc}	Supply Voltage	2 to 3.6	V
V _i	Input Voltage	0 to V _{cc}	V
Top	Operating Temperature	-40 to 85	°C
I _o	Output Current	12	mA
t _{pd}	Delay Time @ V _{cc} = 3.3V	5 (TYP)*	ns

PACKAGE	ORDER CODE
SO (TUBE)	74LVQxxxxM
SO (T&R)	74LVQxxxxMTR
TSSOP (T&R)	74LVQxxxxTTR

* Referred to 74LVQ244

F	TYPE	PIN
G	74LVQ 00	14
G	74LVQ 02	14
G	74LVQ 04	14
G	74LVQ 08	14
G	74LVQ 10	14
G	74LVQ 11	14
G	74LVQ 14	14
G	74LVQ 20	14
G	74LVQ 32	14
S	74LVQ 74	14
S	74LVQ 86	14
S	74LVQ 125	14
M	74LVQ 138	16
M	74LVQ 157	16

F	TYPE	PIN
M	74LVQ 158	16
M	74LVQ 161	16
M	74LVQ 163	16
M	74LVQ 174	16
O	74LVQ 240	20
O	74LVQ 241	20
O	74LVQ 244	20
O	74LVQ 245	20
O	74LVQ 273	20
M	74LVQ 280	14
O	74LVQ 373	20
O	74LVQ 374	20
O	74LVQ 573	20
O	74LVQ 574	20
S	74LVQ 4066	14

F: Function; G: Gate; S: Small Scale Integration; M: Medium Scale Integration; O: Octal.

3.3V

LCX LOW VOLTAGE LOGIC

With 5V Input/Output Tolerance

SYMBOL	PARAMETER	VALUE	UNIT
V _{cc}	Supply Voltage	2.7 to 3.6	V
V _i	Input Voltage	0 to 5.5	V
Top	Operating Temperature	-40 to 85	°C
I _o	Output Current	24	mA
tpd	Delay Time @ V _{cc} =3.3v	4 (TYP)*	ns

PACKAGE	ORDER CODE
SO (TUBE)	74LCXxxxxxM
SO (T&R)	74LCXxxxxxMTR
TSSOP (T&R) Basic Type	74LCXxxxxxTTR
TSSOP (T&R) Out. Res	74LCX162xxxTTR
TSSOP (T&R) Bus Hold + Out. Res	74LCXH162xxxTTR

* Referred to octal devices

F	TYPE	PIN
G	74LCX 00	14
G	74LCX 02	14
G	74LCX 04	14
G	74LCX U04	14
G	74LCX 07	14
G	74LCX 08	14
S	74LCX 14	14
G	74LCX 32	14
S	74LCX 74	14
S	74LCX 86	14
S	74LCX 125	14
M	74LCX 138	16
M	74LCX 139	16
M	74LCX 157	16
O	74LCX 240	20
O	74LCX 244	20
O	74LCX 245	20
M	74LCX 257	16

F	TYPE	PIN
O	74LCX 373	20
O	74LCX 374	20
O	74LCX 541	20
O	74LCX 573	20
O	74LCX 574	20
O	74LCX 646	20
O	74LCX 652	20
16BIT	74LCXH 162244	48
16BIT	74LCX 162244	48
16BIT	74LCX 16541	48
16BIT	74LCXH 162245	48
16BIT	74LCXH 16245	48
16BIT	74LCX 16240*	48
16BIT	74LCX 16244*	48
16BIT	74LCX 16245*	48
16BIT	74LCX 16373*	48
16BIT	74LCX 16374*	48

* Only TSSOP

F: Function; G: Gate; S: Small Scale Integration; M: Medium Scale Integration; O: Octal.

3.3V

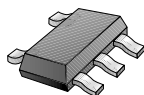
LCX

Single Gate Logic

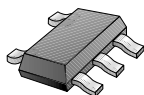
F	TYPE	PIN
G	74LX1G 04	5
G	74LX1G 05	5
G	74LX1G 07*	5
G	74LX1G U04*	5
G	74LX1G 14	5
G	74LX1G 70	5

SYMBOL	PARAMETER	VALUE	UNIT
V _{cc}	Supply Voltage	2.7 to 3.6	V
V _i	Input Voltage	0 to 5.5	V
Top	Operating Temperature	-40 to 85	C
I _o	Output Current	24	mA
tpd	Delay Time	4 (TYP)	ns

* Available on request



SOT323-5L



SOT23-5L

PACKAGE	ORDER CODE
SOT23-5L (T&R)* 3000pcs	74L1GxxxSTR
SOT23-5L (T&R)* 250pcs	74L1GxxxSTR2
SOT323-5L (T&R)* 3000pcs	74L1GxxxCTR
SOT323-5L (T&R)* 250pcs	74L1GxxxCTR2

* Samples are managed as part of reel

2.5V

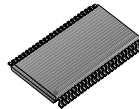
Vcx VERY HIGH SPEED LOGIC

With 3.6V Input/Output Tolerance

LOW VOLTAGE

SYMBOL	PARAMETER	VALUE	UNIT
Vcc	Supply Voltage	1.8 to 3.6	V
Vi	Input Voltage	0 to 3.6	V
Top	Operating Temperature	-40 to 85	°C
Io	Output Current: @ Vcc=3V	24	mA
		@ Vcc= 2.3V	18
		@ Vcc= 1.8V	6
Tpd	Delay Time @Vcc= 2.3V	3.2*	ns

DEVICE	TSSOP (T&R)
BASIC TYPE	74VCX16xxxTTR
BUS HOLD	74VCXH16xxxTTR
OUT.RES.	74VCX162xxxTTR
BUS HOLD + OUT.RES.	74VCXH162xxxTTR



TSSOP48

* Referred to 74VCX16244

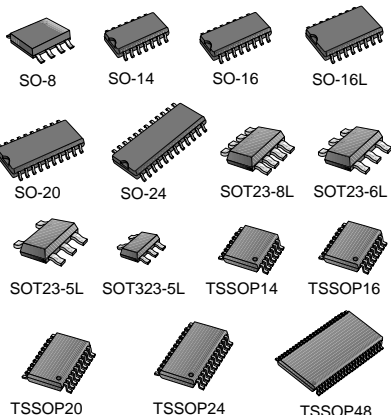
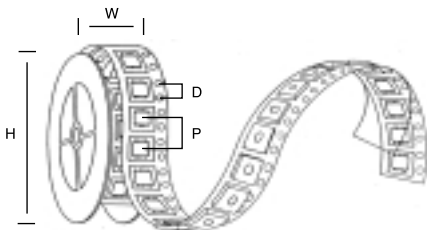
F	TYPE	PIN
16 BIT	74VCX 16240	48
16 BIT	74VCX 162240	48
16 BIT	74VCXH 16240	48
16 BIT	74VCXH 162240	48
16 BIT	74VCX 16244	48
16 BIT	74VCX 162244	48
16 BIT	74VCXH 16244	48
16 BIT	74VCXH 162244	48
16 BIT	74VCX 16245	48
16 BIT	74VCX 162245	48

F	TYPE	PIN
16 BIT	74VCXH 16245	48
16 BIT	74VCXH 162245	48
16 BIT	74VCX 16373	48
16 BIT	74VCX 162373	48
16 BIT	74VCXH 16373	48
16 BIT	74VCXH 162373	48
16 BIT	74VCX 16374	48
16 BIT	74VCX 162374	48
16 BIT	74VCXH 16374	48
16 BIT	74VCXH 162374	48

F: Function; G: Gate; S: Small Scale Integration; M: Medium Scale Integration; O: Octal.

SMD PACKAGE RANGE

SO, TSSOP & SOT23-5L
TAPE AND REEL
(EIA RS 481 OUTLINE)



DIM	SO-8	SO-14 TSSOP14 TSSOP16	SO-16 TSSOP16 TSSOP20 TSSOP24	SO-20 SO-24 TSSOP48	SOT23-5L SOT323-5L
H (Inch)	13"	13"	13"	13"	7"
W (Tape Width) mm	12	16	16	24	8
P (mm)	8	8	12	12	4
D (mm)	4	4	4	4	4

* Wide version only

PACKAGE	QUANTITY
SO-8 SO-14 SO-16 TSSOP14 TSSOP16 TSSOP20 TSSOP24	2500 pcs
SO-16* SO-20 SO-24 TSSOP48	1000 pcs
SOT323-5L SOT23-5/6/8L	3000 pcs
SOT323-5L SOT23-5/6/8L	250 pcs

* Wide version only

▲ Only CTR2, STR2 versions

FUNCTION		HC/HCT, AC/ACT, VHC/VHCT, LCX, LVQ, LVX, VCX, V2G, V2T, V1G, V1T STANDARD CODE	CMOS 4000B STANDARD CODE	
GATE BUFFER	NAND	00, 03, 10, 30, 133	4011B, 4012B, 4023B, 4068B, 40107B	
	NOR	02, 27, 4002	4000B, 4001B, 4002B, 4025B	
	AND	08, 09, 11, 21	4068B, 4073B, 4081B, 4082B	
	OR	32, 4072, 4075	4071B, 4072B, 4075B	
	EX NOR	266, 7266	4077B	
	EX OR	86, 386	4030B, 4070B	
	INVERTER	04, 05 14	4069UB, 4502B	
	BUFFER	07, 4049, 4050, 7007	4007UB, 4009UB, 4010B, 4041UB, 4049B, 4050B, 4052B, 40107B	
	3 - STATE		125, 126, 240, 241, 244, 365, 366, 367, 368, 540, 541	4503B
		16 - BIT	16240, 16244	
		BIDIRECTIONAL		242, 243, 245, 620, 623, 640, 643 4245, 3245, C4245, C3245
16 - BIT	16245			
MULTIFUNCTION	51, 4078	4019B, 4030B, 4048B, 4070B, 4077B		
SCHMITT TRIGGER	14, 132	4093B, 40106B		
FLIP - FLOP	J-K FLIP - FLOP	73, 76, 107, 109, 112, 113	4027B, 4095B, 4096B	
	D FLIP - FLOP	74, 174, 175, 273, 377	4013B, 4076B, 40174B	
	3 - STATE		374, 534, 564, 574, 646, 648, 651,652	
		16 - BIT	16374	
INTERFACE CIRCUIT			4009UB, 4010UB, 40109B	
LATCH		75, 77, 259, 279, 375, 7259	4042B,4043B,4044B,4099B, 4720B	
	3 - STATE		4508B	
		16 - BIT	16373	
MULTIVIBRATOR	123, 221, 423, 4538	4047B, 4098B, 4538B		
DECODER		42, 131, 137, 138, 139, 154, 155, 237, 238, 4028, 4514, 4515	4028B, 4514B, 4515B, 4555B, 4556B	
	7 - SEGMENT	4511, 4543		
ENCODER	147, 148	4532B, 40147B		
DISPLAY DRIVER			4054B, 4055B, 4056B, 4511B, 4543B	
	WITH COUNTER		4026B, 4033B, 40110B	
REGISTER		164, 165, 166, 194, 195, 595, 597, 289, 299	4006B, 4014B, 4015B, 4021B, 4031B, 4034B, 4035B, 4017B, 40100B, 4076B, 4099B, 40104B, 10405B, 40108B, 40194B, 40208B	
	3 - STATE	173, 299, 323, 670, 4094	4094B, 4517B	
COUNTER	BINARY	161, 163, 191,193, 393, 590, 592, 593, 691, 693, 697, 699, 4020, 4024, 4040, 4060, 4520	4017B, 4020B, 4024B, 4039B, 4040B, 4060B, 4516B, 4520B, 4536B, 4541B, 40103B, 40161B, 40163B, 40193B	
		160, 162, 190, 192, 390, 690, 692, 696, 698, 4518	4029B, 4510B, 4518B, 40102B, 40160B, 40162B, 40192B	
	DIVIDER	292, 4017, 4022, 40102, 40103, 7292, 7294	4017B, 4018B, 4022B, 4024B, 4040B, 4045B, 4060B, 4521B	
MULTIPLEXER/ DEMULTIPLEXER	ANALOG	4016, 4066, 4051, 4052, 4053, 4316, 4351, 4352, 4353	4016B, 4066, 4051B, 4052B, 4053B, 4067B, 4097B	
	DIGITAL	151, 153, 157, 158, 257, 352, 353, 354, 356	4019B, 4512B, 4519B, 4555B, 4556B, 40257B	
SWITCH	ANALOG	66, 67, 384, 719		
PHASE LOCKED LOOP			4046B	
CROSSPOINT SWITCH	4 X 4		22100	
	4 X 4 X 2		22101, 22102	
OTHERS	ADDER	283	4008B, 4032B, 4038B	
	COMPARATOR	85, 688	4030B,4063B,4070B,4077B,4585B,40101B	
	ALU / MULTIPLEXER	181, 182	4089B, 4527B, 40181B, 40182B	
	PARITY TREE	280		

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