

**HC family**
**NXP Logic Sample-1**
**Page1**

Product	Function	Package	Volume	Package
74HC00PW	5V Quad 2-Input NAND Gate	D/SO-14, DB/SSOP-14, PW/TSSOP-14, BQ/DHVQFN-14	20pcs	PW/TSSOP-14
74HC02PW	5V Quad 2-Input NOR Gate	D/SO-14, DB/SSOP-14, PW/TSSOP-14, BQ/DHVQFN-14	20pcs	PW/TSSOP-14
74HC04PW	5V Hex Inverter	D/SO-14, DB/SSOP-14, PW/TSSOP-14, BQ/DHVQFN-14	20pcs	PW/TSSOP-14
74HC08PW	5V Quad 2-Input AND Gate	D/SO-14, DB/SSOP-14, PW/TSSOP-14, BQ/DHVQFN-14	20pcs	PW/TSSOP-14
74HC14PW	5V Hex Inverter Schmitt-Trigger	D/SO-14, DB/SSOP-14, PW/TSSOP-14, BQ/DHVQFN-14	20pcs	PW/TSSOP-14
74HC32PW	5V Quad 2-Input OR Gate	D/SO-14, DB/SSOP-14, PW/TSSOP-14, BQ/DHVQFN-14	20pcs	PW/TSSOP-14
74HC123PW	5V Dual Retriggerable Monostable Multivibrator with Reset; Triggerable via Reset Input	D/SO-16, DB/SSOP-16, PW/TSSOP-16, BQ/DHVQFN-16	20pcs	PW/TSSOP-16
74HC244PW	5V Octal Buffer/Line Driver; Non-Inverting (3-State)	D/SO-20, DB/SSOP-20, PW/TSSOP-20, BQ/DHVQFN-20	20pcs	PW/TSSOP-20
74HC245PW	5V Transceiver with Direction Pin; Non-Inverting (3-State)	D/SO-20, DB/SSOP-20, PW/TSSOP-20, BQ/DHVQFN-20	20pcs	PW/TSSOP-20
74HC574PW	Octal D-type flip-flop; positive-edge trigger; broadside pin out (3-state)	D/SO-20, DB/SSOP-20, PW/TSSOP-20, BQ/DHVQFN-20	20pcs	PW/TSSOP-20

**LVC family**
**Page2**

Product	Function	Package	Volume	Package
74LVC00APW	3.3V Quad 2-Input NAND Gate	D/SO-14, DB/SSOP-14, PW/TSSOP-14, BQ/DHVQFN-14	20pcs	PW/TSSOP-14
74LVC02APW	3.3V Quad 2-Input NOR Gate	D/SO-14, DB/SSOP-14, PW/TSSOP-14, BQ/DHVQFN-14	20pcs	PW/TSSOP-14
74LVC04APW	3.3V Hex Inverter	D/SO-14, DB/SSOP-14, PW/TSSOP-14, BQ/DHVQFN-14	20pcs	PW/TSSOP-14
74LVC07APW	Hex buffer with open-drain outputs	D/SO-14, PW/TSSOP-14, BQ/DHVQFN-14	20pcs	PW/TSSOP-14
74LVC08APW	3.3V Quad 2-Input AND Gate	D/SO-14, DB/SSOP-14, PW/TSSOP-14, BQ/DHVQFN-14	20pcs	PW/TSSOP-14
74LVC14APW	3.3V Hex Inverter Schmitt-Trigger	D/SO-14, DB/SSOP-14, PW/TSSOP-14, BQ/DHVQFN-14	20pcs	PW/TSSOP-14
74LVC32APW	3.3V Quad 2-Input OR Gate	D/SO-14, DB/SSOP-14, PW/TSSOP-14, BQ/DHVQFN-14	20pcs	PW/TSSOP-14
74LVC125APW	3.3V Buffer/Line Driver with Active LOW Output Enable (3-State)	D/SO-14, DB/SSOP-14, PW/TSSOP-14, BQ/DHVQFN-14	20pcs	PW/TSSOP-14
74LVC244APW	3.3V Buffer/Line Driver; Non-Inverting (3-State)	D/SO-20, DB/SSOP-20, PW/TSSOP-20, BQ/DHVQFN-20, BX/DHXQFN-20	20pcs	PW/TSSOP-20
74LVC245APW	3.3V Transceiver with Direction Pin; Non-Inverting (3-State)	D/SO-20, DB/SSOP-20, PW/TSSOP-20, BQ/DHVQFN-20, BX/DHXQFN-20	20pcs	PW/TSSOP-20

**AUP family**
**Page 3**

Product	Function	Package	Volume	Package
74AUP1G00GW	1.8V single low-power 2-input NAND gate	GW/PicoGate-5, GM/XSON-6, GF/XSON-6	20pcs	GW/PicoGate-5
74AUP1G02GW	1.8V single low-power 2-input NOR gate	GW/PicoGate-5, GM/XSON-6, GF/XSON-6	20pcs	GW/PicoGate-5
74AUP1G04GW	1.8V single low-power inverter	GV/PicoGate-5, GW/PicoGate-5, GM/XSON-6, GF/XSON-6, GS/XSON-6, GN/XSON-6	20pcs	GW/PicoGate-5
74AUP1G07GW	1.8V single low-power buffer with open-drain output	GW/PicoGate-5, GM/XSON-6, GF/XSON-6, GS/XSON-6, GN/XSON-6	20pcs	GW/PicoGate-5
74AUP1G08GW	1.8V single low-power 2-input AND gate	GW/PicoGate-5, GM/XSON-6, GF/XSON-6	20pcs	GW/PicoGate-5
74AUP1G14GW	1.8V single low-power schmitt-trigger inverter	GW/PicoGate-5, GM/XSON-6, GF/XSON-6	20pcs	GW/PicoGate-5
74AUP1G32GW	1.8V single low-power 2-input OR gate	GW/PicoGate-5, GM/XSON-6, GF/XSON-6	20pcs	GW/PicoGate-5
74AUP1G34GW	1.8V single low-power buffer	GW/PicoGate-5, GM/XSON-6, GF/XSON-6, GS/XSON-6, GN/XSON-6	20pcs	GW/PicoGate-5
74AUP1G125GW	1.8V single low-power buffer/line driver (3-state)	GW/PicoGate-5, GM/XSON-6, GF/XSON-6, GS/XSON-6, GN/XSON-6	20pcs	GW/PicoGate-5
74AUP1T45GW	Single low-power dual supply voltage translating transceiver (3-state)	GW/PicoGate-6, GM/XSON-6, GF/XSON-6	20pcs	GW/PicoGate-6

Product	Function	Package	Volume	Package
74AHC00PW	5V Quad 2-Input NAND Gate	D/SO-14, PW/TSSOP-14, BQ/DHVQFN-14	20pcs	PW/TSSOP-14
74AHC02PW	5V Quad 2-Input NOR Gate	D/SO-14, PW/TSSOP-14, BQ/DHVQFN-14	20pcs	PW/TSSOP-14
74AHC04PW	5V Hex Inverter	D/SO-14, PW/TSSOP-14, BQ/DHVQFN-14	20pcs	PW/TSSOP-14
74AHC08PW	5V Quad 2-Input AND Gate	D/SO-14, PW/TSSOP-14, BQ/DHVQFN-14	20pcs	PW/TSSOP-14
74AHC14PW	5V Hex Inverter Schmitt-Trigger	D/SO-14, PW/TSSOP-14, BQ/DHVQFN-14	20pcs	PW/TSSOP-14
74AHC32PW	5V Quad 2-Input OR Gate	D/SO-14, PW/TSSOP-14, BQ/DHVQFN-14	20pcs	PW/TSSOP-14
74AHC123APW	5V Dual Retriggerable Monostable Multivibrator with Reset; Triggerable via Reset Input	D/SO-16, PW/TSSOP-16, BQ/DHVQFN-16	20pcs	PW/TSSOP-16
74AHC125PW	5V Quad Buffer/Line Driver with Active LOW Output Enable (3-State)	D/SO-14, PW/TSSOP-14, BQ/DHVQFN-14	20pcs	PW/TSSOP-14
74AHCT244PW	5V Buffer/Line Driver; Non-Inverting; TTL Enabled (3-State)	D/SO-20, PW/TSSOP-20, BQ/DHVQFN-20	20pcs	PW/TSSOP-20
74AHCT245PW	5V Transceiver with Direction Pin; Non-Inverting; TTL Enabled (3-State)	D/SO-20, PW/TSSOP-20, BQ/DHVQFN-20	20pcs	PW/TSSOP-20

**アナログ・スイッチ (Analog switch)**

Product	Function	Package	Volume	Package
74AHCT1G66GV (SPST-NO)	Single 5V single-pole, single-throw bilateral analog switch ;TTL enabled	GV/PicoGate-5, GW/PicoGate-5	20pcs	GV/PicoGate-5
74LVC1G66GV (SPST-NO)	Single 3.3V single-pole, single-throw bilateral analog switch	GV/PicoGate-5, GW/PicoGate-5, GM, GF, GS, GN /XSON-6	20pcs	GV/PicoGate-5
NX3L1G66GW (SPST-NO)	Single low-voltage 0.5Ω low-holmic, single-pole, single-throw analog switch	GW/PicoGate-5, GM/XSON-6	20pcs	GW/PicoGate-5
74LVC1G53DP (SPDT-CO)	Single 3.3V single-pole, double-throw, center-off analog switch	DP/TSSOP-8, GT/XSON-8, GD/XSON-8, GF/XSON-8	20pcs	DP/TSSOP-8
NX3L1G3157GW (SPDT)	Single low-voltage 0.5Ω low-ohmic, single-pole, double-throw analog switch	GW/PicoGate-5, GM/XSON-6	20pcs	GW/PicoGate-5
74HC4052PW (DP4T)	Dual 4-channel analog multiplexer/demultiplexer	D/SO-16, DB/SSOP-16, PW/TSSOP-16, BQ/DHVQFN-16	20pcs	PW/TSSOP-16
NX3L2467PW (2 X DPDT)	Dual low-voltage 0.5Ω low-ohmic, double-pole, double-throw analog switch	TSSOP-16, HR/HXQFN-16, GU/XQFN-16	20pcs	TSSOP-16

**バス・スイッチ (Bus switch)**

74CBTLV1G125GW	Single bus switch	GW/PicoGate-5, GV/PicoGate-5, GM/XSON-6, GF/XSON-6	20pcs	GW/PicoGate-5
74CBTLV3125PW (4x SPST)	Low-Volt 4-Bit 5Ω Bus Switch with Independent Output Enables	PW/TSSOP-14, BQ/DHVQFN-14	20pcs	PW/TSSOP-14
74CBTLV3245PW (8xSPST)	8-bit bus switch with output enable	PW/TSSOP-20, BQ/DHVQFN-20	20pcs	PW/TSSOP-20

**機能設定ロジック (Configurable logic)**

Product	Function	Package	Volume	Package
74AUP1G97GW	1.8V single low power configurable multiple function gate	GW/PicoGate-6, GM/XSON-6, GF/XSON-6	20pcs	GW/PicoGate-6
74AUP1G98GW	1.8V single low-power configurable multiple function gate	GW/PicoGate-6, GM/XSON-6, GF/XSON-6	20pcs	GW/PicoGate-6
74LVC1G57GV	3.3V single low-power configurable multiple function gate	GV/PicoGate-6, GW/PicoGate-6, GM/XSON-6, GF/XSON-6	20pcs	GV/PicoGate-6
74LVC1G58GV	3.3V single low-power configurable multiple function gate	GV/PicoGate-6, GW/PicoGate-6, GM/XSON-6, GF/XSON-6	20pcs	GV/PicoGate-6
74LVC1G99GD	3.3V single low-power ultra-configurable multiple function gate (3-state)	DP/TSSOP-8, GD/XSON-8, GT/XSON-8, GM/XQFN-8, GF/XSON-8	20pcs	GD/XSON-8

**自動方向制御レベルシフタ (Auto direction level shifter)**

NTB0101GW	Single, dual-supply voltage-level translating auto-direction sensing transceiver (3-state)	GV/PicoGate-6, GW/PicoGate-6, GM/XSON-6, GF/XSON-6, GS/XSON-6	20pcs	GW/PicoGate-6
NTS0101GW	Single, dual-supply voltage-level translating auto-direction sensing transceiver with open-drain outputs (3-state OE)	GV/PicoGate-6, GW/PicoGate-6, GM/XSON-6, GF/XSON-6, GS/XSON-6	20pcs	GW/PicoGate-6
NTS0104PW	Quad, dual-supply voltage-level translating auto-direction sensing transceiver with open-drain outputs (3-state OE)	D/SO-14, PW/TSSOP-14, BQ/DHVQFN-14, GU16/XQFN-16, GU12/XQFN-12	20pcs	PW/TSSOP-14

**コンパレータ (Comparator)**

NCX2200GW	Single low voltage comparator	GW/PicoGate-5, GM/XSON-6	20pcs	GW/PicoGate-5
NCX2200GW	Single low voltage comparator	GW/PicoGate-5, GM/XSON-6	20pcs	GW/PicoGate-5

























## 5V, 低電圧ロジック・ファミリ・一般機能、特性表

Typical features and performance for 5-volt products (5V ロジック)						
Family	HEF4000	HC/T	AHC/T	FAST	ABT	CBT
伝達遅延 tpd	60 ns	9 ns	5 ns	4 ns	3 ns	<1-ns prop delay
ドライブ電流	±3 mA	±8 mA	±8 mA	-15/+24 mA	-32/+64 mA	5 Ω RON
スタンバイ電流	600 μA	80 μ	40 μ	90 mA	250 μ	3 μ
Vcc	5-15V	2-6V	2-6V	4.5-5.5V	4.5-5.5V	4.5-5.5V
Multisourced	Yes	Yes	Yes	Yes	Yes	Yes
PicoGate パッケージ		Yes	Yes			
特長	<ul style="list-style-type: none"> <li>Gate, MSI, バッファ</li> </ul>	<ul style="list-style-type: none"> <li>Gate, MSI, バッファ</li> <li>アナログスイッチ</li> </ul>	<ul style="list-style-type: none"> <li>Gate, バスインターフェース</li> <li>VHC/T相当品</li> <li>過電圧入力レラント</li> <li>パッケージ PicoGate</li> </ul>	<ul style="list-style-type: none"> <li>Gate, バスインターフェース</li> <li>option</li> <li>終端抵抗</li> </ul>	<ul style="list-style-type: none"> <li>Gate, バスインターフェース</li> <li>活線挿抜</li> <li>option</li> <li>バス・ホールド</li> <li>終端抵抗</li> </ul>	<ul style="list-style-type: none"> <li>信号とスイッチングを絶縁</li> <li>活線挿抜用プリチャージ回路</li> <li>ショットキー/チャージポンプ・アンダーシュート・プロテクション</li> <li>レベルシフタ用ダイオード集積</li> </ul>

Typical features and performance for low-voltage products (低電圧ロジック)							
Family	LV	LVC	ALVC	LVT	ALVT	AVC	AUP
伝達遅延 tpd	9ns	4 ns	2 ns	2 ns	1.5 ns	1.3 ns	2.5 ns
ドライブ電流	±8 m	±24 m	±24 m	-32/+64 m	-32/+64 m	±8-m	2-mA
スタンバイ電流	20 μA	20 μA	40 μA	120-190 μA	90 μA	20 μA	0.9 μA
Vcc	1.0-3.6 V	1.2-3.6 V	1.2-3.6 V	2.7-3.6 V	2.3-3.6 V	1.2-3.3 V	0.8-3.6 V
Multisourced	Yes	Yes	Yes	Yes	Yes	Yes	Yes
I/O 電圧トレラント		5	5	(inputs) 5	5	3.6	3.6
Bus hold		Optional	Optional	Built-in	Built-in	Optional	
終端抵抗 Termination resistor		Optional	Optional	Optional	Optional	Optional	
活線挿抜 Live insertion				Yes	Yes		
DQFN, BGA パッケージ		Yes	Yes	Yes			
特長	<ul style="list-style-type: none"> <li>Gate, MSI, バッファ</li> </ul>	<ul style="list-style-type: none"> <li>Gate, MSI, 8/16/32-bit バスインターフェース</li> <li>過電圧入力レラント</li> <li>パッケージ PicoGate MicroPak</li> <li>LCX相当品</li> </ul>	<ul style="list-style-type: none"> <li>Gate, MSI, 8/16/32-bit バスインターフェース</li> <li>VCX相当品</li> </ul>	<ul style="list-style-type: none"> <li>Gate, MSI, 8/16/32-bit バスインターフェース</li> <li>パッケージ PicoGate</li> </ul>	<ul style="list-style-type: none"> <li>バスインターフェース</li> </ul>	<ul style="list-style-type: none"> <li>2.5V電源</li> <li>バス・インターフェース</li> </ul>	<ul style="list-style-type: none"> <li>1.8V電源</li> <li>パッケージ PicoGate microPak</li> </ul>



# NXP PicoGate & MicroPak™ Packages

pitch	5 pins	6 pins	8 pins	10 pins	12 pins	16 pins	20 pins
0.95 mm	 GV (SOT753) 2.8 x 2.9 x 1.0	 GV (SOT457) 2.8 x 2.9 x 1.0					
0.65 mm	 GW (SOT353) 2.0 x 2.0 x 1.0	 GW (SOT363) 2.0 x 2.0 x 1.0	 DP (SOT505 / TSSOP) 3.0 x 4.0 x 1.1				
0.5 mm		 GM - SOT886 1.0 x 1.5 x 0.5	 DC (SOT765 / VSSOP) 2.0 x 3.0 x 0.5  GD (SOT996) 2.0 x 3.0 x 0.5  GM (SOT902) 1.6 x 1.6 x 0.5  GT (SOT833) 1.0 x 1.95 x 0.5	 TK (SOT650) 3.0 x 3.0 x 0.85  GM (SOT1049) 2.0 x 1.55 x 0.5		 HR (SOT1039) 3.0 x 3.0 x 0.5	 BX (SOT1045) 2.5 x 4.5 x 0.5
0.4 mm				 GU (SOT1160) 1.4 x 1.8 x 0.5	 GU (SOT1174) 1.7 x 2.0 x 0.5	 GU (SOT1161) 1.8 x 2.6 x 0.5	
0.35 mm		 GF (SOT891) 1.0 x 1.0 x 0.5  GS (SOT1202) 1.0 x 1.0 x 0.35	 GF (SOT1089) 1.0 x 1.35 x 0.5  GS (SOT1203) 1.0 x 1.35 x 0.35	 GF (SOT1081) 1.7 x 1.0 x 0.4			
0.3 mm		 GN (SOT1115) 1.0 x 0.9 x 0.35	 GN (SOT1116) 1.0 x 1.2 x 0.35				

Width x length x height[mm]

## パッケージ・クロス・リファレンス

Package	Pins	NXP	Toshiba	TI	Fairchild	ON
SO	14, 16	D	FN	D	M SC	D
SO	20, 24, 28	D	FW	DW	WM SC	DW
SSOP	14, 16, 20, 24	DB	FS	DB	MSA	SD
SSOP	48, 56	DL	-	DL	MEA	-
TSSOP	8	DP	FU	DCT	-	-
TSSOP	14, 16, 20, 24	PW	FT	PW	MTC	DT
TSSOP	48, 56	DGG	FT	DGG	MTD	DT
VFBGA	48, 56	EV	-	GQL	-	-
DQFN	14, 16, 20, 24	BQ	-	-	BQ	-
SOT353	5	GW	FU	DCK	P5	DFT
SOT753	5	GV	F	DBV	M5	DTT
SOT363	6	GW	FU	DCK	P6	DFT
SOT457	6	GV	F	DBV	-	DTT
SOT505-2	8	DP	FU	DCT	-	-
SOT765-1	8	DC	FK	DCU	K8	US
MicroPak	6, 8	GM	-	-	L6 L8	-