



Single, dual, or triple gate logic functions in small footprint ≤10-pin leadless packages

Nexperia advances state-of-the-art logic packaging with MicroPak, Mini Logic solutions in X2SON, XSON & XQFN packages. Designed for use in space-constrained applications, where board space is always limited, MicroPak packages are up to 74% smaller than leaded PicoGate equivalents allowing for compact and slim designs.

Key features

- › Ultra-small / industry's smallest footprint
- › 0.5 mm, 0.35 mm, and 0.3 mm pitch options
- › Low profile height (0.5 mm or 0.35 mm)
- › Pb-free, RoHS, and dark green compliant
- › Fully specified from -40 to 125 °C
- › Automotive options

Benefits

- › Simplified board layout
- › No bent leads
- › No co-planarity issues
- › Low power consumption

Applications

- › Space constrained applications
- › Consumer electronics
- › Portable
- › Automotive

Mini Logic is a portfolio composed of MicroPak leadless packages and PicoGate leaded packages. Our MicroPak packages feature the same silicon die as larger PicoGate options, ensuring that electrical performance remains identical to leaded equivalents. These packages save valuable board real estate while providing a more reliable bond between device and PCB, thanks to a higher pad size-to-package footprint ratio. Our X2SON solutions are available with ≥ 0.4 mm pad pitch, for convenient mass production without a step-down mask.

MicroPak packages are an ideal choice for space constrained applications where PCB space and low cost automated assembly are critical. These packages offer easier component placement as well as improved strength, reliability, and thermal characteristics over similar sized WLCSP solutions.

MicroPak portfolio

Our MicroPak range is very broad and includes gates, analog switches, buffers/inverters/drivers, bus switches, translators, flip-flops, decoders/demultiplexers, multiplexers, latches, level shifters, and Schmitt-trigger devices.

Buffers/inverters/drivers

Type number	Description	V_{CC} (V)	I_o (mA)	t_{pd} (ns)	T_{amb} (°C)	4-pin		5-pin		6-pin		8-pin		(GM)				
						SOT1269 (GX4)	SOT1226 (GX)	SOT1454-1 (UK)	SOT1255 (GX)	SOT1115 (GN)	SOT1202 (GS)	SOT891 (GF)	SOT886 (GM)	SOT1233 (GX)	SOT1116 (GN)	SOT1203 (GS)	SOT1089 (GF)	SOT833-1 (GT)
74AHC1G04	single inverter	2.0 - 5.5	± 8	3.1	-40~125								•					
74AHCT1G04	single inverter; TTL enabled	4.5 - 5.5	± 8	3.4	-40~125								•					
74AHC1G125	single buffer/line driver (3-state)	2.0 - 5.5	± 8	3.4	-40~125								•	•				
74AHCT1G125	single buffer/line driver; TTL enabled (3-state)	4.5 - 5.5	± 8	3.4	-40~125								•	•				
74AHC1G126	single buffer/line driver (3-state)	2.0 - 5.5	± 8	3.4	-40~125								•	•				
74AHCT1G126	single buffer/line driver; TTL enabled (3-state)	4.5 - 5.5	± 8	3.4	-40~125								•	•				
74AUP1G04	single inverter	1.1 - 3.6	± 1.9	4	-40~125	•	•			•	•	•	•	•				
74AUP1G06	single inverter; open-drain	1.1 - 3.6	1.9	4.5	-40~125		•			•	•	•	•	•				
74AUP1G07	single buffer; open-drain	1.1 - 3.6	1.9	4.4	-40~125	•	•			•	•	•	•	•				
74AUP1G16	single buffer	1.1 - 3.6	± 1.9	3.9	-40~125								•	•				
74AUP1G34	single buffer	1.1 - 3.6	± 1.9	3.9	-40~125	•	•	•		•	•	•	•	•				
74AUP1G125	single buffer/line driver (3-state)	1.1 - 3.6	± 1.9	4.3	-40~125		•			•	•	•	•	•				
74AUP1G126	single buffer/line driver (3-state)	1.1 - 3.6	± 1.9	4.3	-40~125		•			•	•	•	•	•				
74AUP1G240	single inverter/line driver (3-state)	1.1 - 3.6	± 1.9	4.2	-40~125		•			•	•	•	•	•				
74AUP1GU04	single inverter; unbuffered	1.1 - 3.6	± 1.9	2.3	-40~125		•			•	•	•	•	•				
74AUP2G04	dual inverter	1.1 - 3.6	± 1.9	4	-40~125			•	•	•	•	•	•	•				
74AUP2G06	dual inverter; open-drain	1.1 - 3.6	1.9	4.5	-40~125				•	•	•	•	•	•				
74AUP2G07	dual buffer; open-drain	1.1 - 3.6	1.9	4.4	-40~125			•	•	•	•	•	•	•				
74AUP2G16	dual buffer	1.1 - 3.6	± 1.9	3.9	-40~125								•	•				
74AUP2G34	dual buffer	1.1 - 3.6	± 1.9	3.9	-40~125			•	•	•	•	•	•	•				
74AUP2G125	dual buffer/line driver (3-state)	1.1 - 3.6	± 1.9	4.3	-40~125								•	•	•	•	•	•
74AUP2G126	dual buffer/line driver (3-state)	1.1 - 3.6	± 1.9	4.3	-40~125								•	•	•	•	•	•
74AUP2G240	dual inverter/line driver (3-state)	1.1 - 3.6	± 1.9	4.2	-40~125								•	•	•	•	•	•
74AUP2G241	dual buffer/line driver (3-state)	1.1 - 3.6	± 1.9	4.3	-40~125								•	•	•	•	•	•
74AUP2GU04	dual inverter; unbuffered	1.1 - 3.6	± 1.9	2.3	-40~125				•	•	•	•	•	•				

Buffers/inverters/drivers (continued)

Type number	Description	V_{CC} (V)	I_o (mA)	t_{pd} (ns)	T_{amb} (°C)	SOT1269 (GX4)	SOT1226 (GX)	4-pin	6-pin		8-pin										
									SOT1454-1 (UK)	SOT1255 (GX)	SOT1115 (GN)	SOT1202 (GS)	SOT891 (GF)	SOT886 (GM)	SOT1233 (GX)	SOT1116 (GN)	SOT1203 (GS)	SOT1089 (GF)	SOT833-1 (GT)	SOT902-2 (GM)	
74AUP3G04	triple inverter	1.1 - 3.6	± 1.9	4	-40~125																
74AUP3G07	triple buffer; open-drain	1.1 - 3.6	1.9	3.9	-40~125												•	•	•	•	•
74AUP3G16	triple buffer	1.1 - 3.6	± 1.9	4.0	-40~125														•	•	•
74AUP3G34	triple buffer	1.1 - 3.6	± 1.9	3.9	-40~125											•	•	•	•	•	•
74AVC9112	1-to-4 fan out buffer	0.8 - 3.6	± 12	2.4	-40~125																
74AXP1G04	single inverter	0.7 - 2.75	± 4.5	2.6	-40~85		•		•	•	•										
74AXP1G06	single inverter; open-drain	0.7 - 2.75	4.5	3.5	-40~85		•		•	•	•										
74AXP1G07	single buffer; open-drain	0.7 - 2.75	4.5	3.5	-40~85		•		•	•	•										
74AXP1G125	single buffer/line driver (3-state)	0.7 - 2.75	± 4.5	2.7	-40~85		•		•	•	•										
74AXP2G07	dual buffer; open-drain	0.7 - 2.75	4.5	3.4	-40~85			•	•	•	•										
74AXP2G3404	single buffer and single inverter	0.7 - 2.75	± 4.5	2.5	-40~85				•	•	•										
74AXP2G34	dual buffer	0.7 - 2.75	± 4.5	2.5	-40~85				•	•	•										
74LVC1G04	single inverter	1.65 - 5.5	± 32	2	-40~125	•	•		•	•	•										
74LVC1G06	single inverter; open-drain	1.65 - 5.5	32	2.3	-40~125	•			•	•	•										
74LVC1G07	single buffer; open-drain	1.65 - 5.5	32	2.2	-40~125	•			•	•	•										
74LVC1G16	single buffer	1.65 - 5.5	± 32	2	-40~125																
74LVC1G34	single buffer	1.65 - 5.5	± 32	2	-40~125	•			•	•	•										
74LVC1G125	single buffer/line driver; TTL enabled (3-state)	1.65 - 5.5	± 32	2.1	-40~125	•			•	•	•										
74LVC1G126	single buffer/line driver; TTL enabled (3-state)	1.65 - 5.5	± 32	2	-40~125	•			•	•	•										
74LVC1GU04	single inverter; unbuffered	1.65 - 5.5	± 32	1.6	-40~125	•			•	•	•										
74LVC2G04	dual inverter	1.65 - 5.5	± 32	2.7	-40~125			•	•	•	•										
74LVC2G06	dual inverter; open-drain	1.65 - 5.5	32	2.3	-40~125			•	•	•	•										
74LVC2G07	dual buffer; open-drain	1.65 - 5.5	32	2.6	-40~125			•	•	•	•										
74LVC2G16	dual buffer	1.65 - 5.5	± 32	2.2	-40~125												•	•			
74LVC2G34	dual buffer	1.65 - 5.5	± 32	2.2	-40~125				•	•	•										
74LVC2G125	dual buffer/line driver; TTL enabled (3-state)	1.65 - 5.5	± 32	2.3	-40~125												•	•	•	•	•
74LVC2G126	dual buffer/line driver; TTL enabled (3-state)	1.65 - 5.5	± 32	2.4	-40~125												•	•	•	•	•
74LVC2G240	dual inverter/line driver (3-state)	1.65 - 5.5	± 32	2.5	-40~125													•	•	•	•

Buffers/inverters/drivers (continued)

Type number	Description	V _{cc} (V)	I _o (mA)	t _{pd} (ns)	T _{amb} (°C)	SOT1269 (GX4)	4-pin	5-pin	6-pin			8-pin		
74LVC2G241	dual buffer/line driver (3-state)	1.65 - 5.5	± 32	2.6	-40~125							•	•	•
74LVC2GU04	dual inverter; unbuffered	1.65 - 5.5	± 32	2.3	-40~125				•	•	•		•	•
74LVC3G04	triple inverter	1.65 - 5.5	± 32	2.7	-40~125							•	•	•
74LVC3G06	triple inverter; open-drain	1.65 - 5.5	32	2	-40~125							•	•	•
74LVC3G07	triple buffer; open-drain	1.65 - 5.5	32	2.1	-40~125							•	•	•
74LVC3G16	triple buffer	1.65 - 5.5	± 32	2.2	-40~125								•	•
74LVC3G34	triple buffer	1.65 - 5.5	± 32	2.2	-40~125							•	•	•
74LVC3GU04	triple inverter; unbuffered	1.65 - 5.5	± 32	2.3	-40~125							•	•	•
XC7SET125	single buffer/line driver; TTL enabled (3-state)	4.5 - 5.5	± 8	3.4	-40~125				•	•				
XC7SH125	single buffer/line driver (3-state)	2.0 - 5.5	± 8	3.4	-40~125				•	•				

Schmitt-Triggers

Type number	Description	V _{cc} (V)	I _o (mA)	t _{pd} (ns)	T _{amb} (°C)	SOT1269 (GX4)	4-pin	5-pin	6-pin			8-pin		
74AHC1G17	single buffer Schmitt-trigger	2.0 - 5.5	± 8	3.2	-40~125					•	•			
74AHCT1G17	single buffer Schmitt-trigger; TTL enabled	4.5 - 5.5	± 8	4.1	-40~125					•	•			
74AHC3G14	triple inverter Schmitt-trigger	2.0 - 5.5	± 8	3.2	-40~125								•	
74AHCT3G14	triple inverter Schmitt-trigger; TTL enabled	4.5 - 5.5	± 8	4.1	-40~125								•	
74AUP1G14	single inverter; Schmitt-trigger	1.1 - 3.6	± 1.9	4.7	-40~125	•	•		•	•	•			
74AUP1G17	single buffer Schmitt-trigger	1.1 - 3.6	± 1.9	7.8	-40~125	•	•		•	•	•			
74AUP1G132	single 2-input NAND gate Schmitt-trigger	1.1 - 3.6	± 1.9	10	-40~125	•			•	•	•			
74AUP2G14	dual inverter; Schmitt-trigger	1.1 - 3.6	± 1.9	4.7	-40~125		•	•	•	•	•			
74AUP2G17	dual buffer Schmitt-trigger	1.1 - 3.6	± 1.9	7.8	-40~125			•	•	•	•			
74AUP2G132	dual 2-input NAND gate Schmitt-trigger	1.1 - 3.6	± 1.9	10	-40~125							•	•	•
74AUP3G14	triple inverter; Schmitt-trigger	1.1 - 3.6	± 1.9	4.7	-40~125							•	•	•

Schmitt-Triggers (continued)

Type number	Description	V_{cc} (V)	I_o (mA)	t_{pd} (ns)	T_{amb} (°C)	SOT1269 (GX4)	4-pin	5-pin	6-pin			8-pin									
74AUP3G17	triple buffer; Schmitt-trigger	1.1 - 3.6	± 1.9	4.7	-40~125				SOT1226 (GX)	SOT1226 (GX)	SOT1255 (GX)	SOT1115 (GN)	SOT1202 (GS)	SOT891 (GF)	SOT886 (GM)	SOT1233 (GX)	SOT1116 (GN)	SOT1203 (GS)	SOT1089 (GF)	SOT833-1 (GT)	SOT902-2 (GM)
74AXP1G14	single inverter; Schmitt-trigger	0.7 - 2.75	± 4.5	2.9	-40~85		•		•	•	•					•	•	•	•	•	•
74AXP1G17	single buffer; Schmitt-trigger	0.7 - 2.75	± 4.5	2.8	-40~85		•		•	•	•										
74AXP2G14	dual inverter; Schmitt-trigger	0.7 - 2.75	± 4.5	2.9	-40~85		•		•	•	•										
74AXP2G17	dual buffer; Schmitt-trigger	0.7 - 2.75	± 4.5	2.9	-40~85		•		•	•	•										
74LVC1G14	single inverter Schmitt-trigger	1.65 - 5.5	± 32	3	-40~125	•	•		•	•	•										
74LVC1G17	single buffer Schmitt-trigger	1.65 - 5.5	± 32	3	-40~125	•	•		•	•	•										
74LVC2G14	dual inverter Schmitt-trigger	1.65 - 5.5	± 32	3.9	-40~125				•	•	•										
74LVC2G17	dual buffer Schmitt-trigger	1.65 - 5.5	± 32	3.6	-40~125				•	•	•										
74LVC3G14	triple inverter Schmitt-trigger	1.65 - 5.5	± 32	3.2	-40~125													•	•	•	•
74LVC3G17	triple buffer Schmitt-trigger	1.65 - 5.5	± 32	3.6	-40~125													•	•	•	•
XC7WH14	triple inverter Schmitt-trigger	2.0 - 5.5	± 8	3.2	-40~125																•
XC7WT14	triple inverter Schmitt-trigger; TTL enabled	4.5 - 5.5	± 8	4.1	-40~125																•

Asynchronous interface logic

Voltage translators/level-shifters

Type number	Description	V_{cc} (V)	I_o (mA)	t_{pd} (ns)	T_{amb} (°C)	SOT1226 (GX)	5-pin	6-pin			8-pin			10-pin							
74AUP1T00	2-input single supply translating NAND gate	2.3 - 3.6	± 1.9	4.0	-40~125	•	SOT1454-1 (UK)	SOT1255 (GX)	SOT1115 (GN)	SOT1202 (GS)	SOT891 (GF)	SOT886 (GM)	SOT1233 (GX)	SOT1116 (GN)	SOT1203 (GS)	SOT1089 (GF)	SOT833-1 (GT)	SOT902-2 (GM)	SOT1081-2 (GF)	SOT1160-1 (GU)	
74AUP1T02	2-input single supply translating NOR gate	2.3 - 3.6	± 1.9	4.0	-40~125	•															
74AUP1T04	single supply translating inverter	2.3 - 3.6	± 1.9	3.9	-40~125	•															
74AUP1T08	2-input single supply translating AND gate	2.3 - 3.6	± 1.9	4.0	-40~125	•															
74AUP1T14	single supply translating Schmitt-trigger inverter	2.3 - 3.6	± 1.9	3.9	-40~125	•															
74AUP1T17	single supply translating Schmitt-trigger buffer	2.3 - 3.6	± 1.9	3.9	-40~125	•															

Type number	Description	V _{cc} (V)	I _o (mA)	t _{pd} (ns)	T _{amb} (°C)	5-pin	6-pin	8-pin	10-pin
74AUP1T32	2-input single supply translating OR gate	2.3 - 3.6	±1.9	3.9	-40~125	•	SOT1226 (GX)	SOT116 (GN)	SOT1081-2 (GU)
74AUP1T34	single dual supply translating buffer	1.1 - 3.6	± 1.9	15.2	-40~125	•	• • • •	SOT1203 (GS)	SOT1089 (GF)
74AUP1T45	single dual-supply voltage level translating transceiver (3-state)	1.1 - 3.6	± 1.9	15.6	-40~125	•	• • • •	SOT115 (GN)	SOT1833-1 (GT)
74AUP1T50	single supply translating Schmitt-trigger buffer	2.3 - 3.6	±1.9	3.9	-40~125	•		SOT1223 (GX)	SOT1080-2 (GM)
74AUP1T57	configurable gate with voltage level translation	2.3 - 3.6	± 1.9	8.7	-40~125	•	• • • •	SOT116 (GN)	SOT1089 (GF)
74AUP1T58	configurable gate with voltage level translation	2.3 - 3.6	± 1.9	8.7	-40~125	•	• • • •		SOT116 (GN)
74AUP1T86	2-input single supply translating Exclusive-OR gate	2.3 - 3.6	±1.9	4.1	-40~125	•			
74AUP1T87	2-input single supply translating Exclusive-NOR gate	2.3 - 3.6	± 1.9	4.3	-40~125	•			
74AUP1T97	configurable gate with voltage level translation	2.3 - 3.6	± 1.9	8.7	-40~125	•	• • • •		
74AUP1T98	configurable gate with voltage level translation	2.3 - 3.6	± 1.9	8.7	-40~125	•	• • • •		
74AUP1T1326	dual supply buffer/line driver; 3-state	2.3 - 3.6	±1.9	2.9	-40~125				• •
74AVC1T1022	dual-supply translating 1-to-4 fan out buffer	0.8 - 3.6	±12	3.9	-40~125				•
74AVC1T45	single dual-supply voltage level translating transceiver (3-state)	0.8 - 3.6	± 12	2.1	-40~125	•	• • •		
74AVC2T245	dual-bit dual-supply voltage-translating transceiver	0.8 - 3.6	±12	2.3	-40~125				•
74AVC2T45	dual-bit dual-supply voltage level translating transceiver (3-state)	0.8 - 3.6	± 12	2.1	-40~125			• • •	
74AVCH1T45	single dual-supply voltage translating transceiver with bus hold (3-state)	0.8 - 3.6	± 12	2.1	-40~125	•	• •	•	
74AVCH2T45	dual-bit dual-supply voltage translating transceiver with bus hold (3-state)	0.8 - 3.6	± 12	2.1	-40~125	•	• •	• • •	
74AXP1T14	dual-supply translating Schmitt-trigger inverter	0.7 - 2.75	±12	4.9	-40~125	•			
74AXP1T32	dual-supply translating OR gate	0.7 - 2.75	±12	4.9	-40~125	•	•		
74AXP1T34	single dual-supply translating buffer	0.7 - 2.75	±12	4.7	-40~125	•	• •	•	
74AXP1T125	single dual-supply translating buffer (3-state)	0.7 - 2.75	±12	4.8	-40~125	•	• •	•	
74AXP1T57	single dual supply voltage level translating configurable multifunction gate	0.7 - 5.5	± 12	4.7	-40~85			• • •	
74AXP2T08	Dual-supply 2-input translating AND gate	0.7 - 2.75	±12	4.8	-40~125				•
74AXP2T3407	dual-supply translating buffer and buffer with open-drain	0.7 - 2.75	±12	4.7	-40~125			• • •	
74LV1T00	2-input single supply translating NAND gate	1.6 - 5.5	±8	3.7	-40~125	•			

Voltage translators/level-shifters (continued)

Type number	Description	V_{cc} (V)	I_o (mA)	t_{pd} (ns)	T_{amb} (°C)	SOT1226 (GX)	5-pin		6-pin		8-pin		10-pin						
							SOT1454-1 (UK)	SOT1255 (GX)	SOT1115 (GN)	SOT1202 (GS)	SOT891 (GF)	SOT886 (GM)	SOT1233 (GX)	SOT1116 (GN)	SOT1203 (GS)	SOT1089 (GF)	SOT833-1 (GT)	SOT902-2 (GM)	SOT1081-2 (GF)
74LV1T02	2-input single supply translating NOR gate	1.6 - 5.5	± 8	3.8	-40~125	•													
74LV1T04	single supply translating inverter	1.6 - 5.5	± 8	3.7	-40~125	•													
74LV1T08	2-input single supply translating AND gate	1.6 - 5.5	± 8	3.8	-40~125	•													
74LV1T125	single supply translating buffer / line driver; 3-state	1.6 - 5.5	± 8	3.8	-40~125	•													
74LV1T126	single supply translating buffer / line driver; 3-state	1.6 - 5.5	± 8	3.8	-40~125	•													
74LV1T32	2-input single supply translating OR gate	1.6 - 5.5	± 8	3.9	-40~125	•													
74LV1T34	single supply translating buffer	1.6 - 5.5	± 8	3.7	-40~125	•													
74LV1T86	2-input single supply translating Exclusive-OR gate	1.6 - 5.5	± 8	4.2	-40~125	•													
74LV1T87	2-input single supply translating Exclusive-NOR gate	1.6 - 5.5	± 8	4.2	-40~125	•													
74LVC1T45	single dual-supply voltage level translating transceiver (3-state)	1.2 - 5.5	± 32	2.5	-40~125		•	•	•	•									
74LVCH1T45	single dual-supply voltage translating transceiver with bus hold (3-state)	1.2 - 5.5	± 32	2.5	-40~125		•	•	•	•									
74LVC2T45	dual-bit dual-supply voltage level translating transceiver (3-state)	1.2 - 5.5	± 32	2.5	-40~125										•	•	•	•	•
74LVCH2T45	dual-bit dual-supply voltage level translating transceiver with bus hold (3-state)	1.2 - 5.5	± 32	2.5	-40~125										•	•	•	•	•

Analog switches

Type number	Description	V _{CC} (V)	R _{ON} (Ω)	f _(-3dB) (MHz)	T _{amb} (°C)	SOT1226 (GX)	SOT1255 (GX)	SOT115 (GN)	SOT1202 (GS)	SOT891 (GF)	SOI1886 (GM)	SOT116 (GN)	SOT1203 (GS)	SOT1089 (GF)	SOT833-1 (GT)	SOT902-2 (GM)	SOT1049-3 (GM)	10-pin
74HC2G66	dual single-pole, single-throw analog switch	2.0 - 9.0	105	200	-40~125										•			
74HCT2G66	dual single-pole, single-throw analog switch; TTL enabled	4.5 - 5.5	118	180	-40~125										•			
74LVC1G53	single-pole, double-throw analog switch	1.65 - 5.5	15	300	-40~125							•	•	•	•	•		
74LVC1G66	single-pole, single-throw analog switch	1.65 - 5.5	15	440	-40~125			•	•	•	•							
74LVC1G384	single-pole, single-throw analog switch	1.65 - 5.5	15	440	-40~125	•		•	•	•	•							
74LVC1G3157	single-pole, double-throw analog switch	1.65 - 5.5	15	300	-40~125	•	•	•	•	•	•							
74LVC2G3157	dual single-pole, double-throw analog switch	1.6 - 5.5	15	300	-40~125												•	
74LVC2G53	single-pole, double-throw analog switch	1.65 - 5.5	15	300	-40~125							•	•	•	•	•		
74LVC2G66	dual single-pole, single-throw analog switch	1.65 - 5.5	15	440	-40~125							•			•	•		
74LVCV2G66	dual single-pole, single-throw analog switch; overvoltage tolerant	2.3 - 5.5	15	210	-40~125										•	•		

Bus switches

Type number	Description	V _{CC} (V)	R _{ON} (Ω)	f _(-3dB) (MHz)	T _{amb} (°C)	SOT115 (GN)	SOT1202 (GS)	SOT891 (GF)	SOT886 (GM)	8-pin
74CBTLV1G125	single bus switch	2.3 - 3.6	7	400	-40~125	•	•	•	•	
74CBTLV3306	dual bus switch	2.3 - 3.6	7	400	-40~125					•
CBT3306	dual bus switch	4.5 - 5.5	7	300	-40~85					•
CBTD3306	dual bus switch level translator	4.5 - 5.5	7	300	-40~85					•

Decoders/demultiplexers

Type number	Description	V _{CC} (V)	I _O (mA)	t _{pd} (ns)	T _{amb} (°C)	SOT115 (GN)	SOT1202 (GS)	SOT891 (GF)	SOT886 (GM)
74AUP1G18	1-to-2 demultiplexer (3-state)	1.1 - 3.6	± 1.9	3.2	-40~125	•	•	•	•
74AUP1G19	1-to-2 decoder/demultiplexer	1.1 - 3.6	± 1.9	3	-40~125	•	•	•	•
74LVC1G19	1-to-2 decoder/demultiplexer	1.65 - 5.5	± 32	1.8	-40~125	•	•	•	•

Digital Multiplexers

Type number	Description	V_{cc} (V)	I_o (mA)	t_{pd} (ns)	T_{amb} (°C)	6-pin				8-pin				
						SOT1255 (GX)	SOT1115 (GN)	SOT1202 (GS)	SOT891 (GF)	SOT886 (GM)	SOT1116 (GN)	SOT1203 (GS)	SOT1089 (GF)	SOT833-1 (GT)
74AUP1G157	single 2-input multiplexer	1.1 - 3.6	± 1.9	3.2	-40~125	•	•	•	•	•				
74AUP1G158	single 2-input multiplexer; inverting	1.1 - 3.6	± 1.9	3.2	-40~125		•	•	•	•				
74AUP2G157	single 2-input multiplexer	1.1 - 3.6	± 1.9	3.4	-40~125						•	•	•	•
74AXP1G157	single 2-input multiplexer	0.7 - 2.75	±4.5	2.7	-40~85		•	•		•				
74LVC1G157	single 2-input multiplexer	1.65 - 5.5	± 32	2.2	-40~125		•	•	•	•				

I/O expansion logic

Latches/registered drivers

Type number	Description	V_{cc} (V)	I_o (mA)	t_{pd} (ns)	T_{amb} (°C)	6-pin			
						SOT1115 (GN)	SOT1202 (GS)	SOT891 (GF)	SOT886 (GM)
74AUP1G373	single D-type transparent latch (3-state)	1.1 - 3.6	± 1.9	8.5	-40~125	•	•	•	•

Flip-flops

Type number	Description	V_{cc} (V)	I_o (mA)	t_{pd} (ns)	T_{amb} (°C)	5-pin		6-pin				8-pin			
						SOT1226 (GX)	SOT1115 (GN)	SOT1202 (GS)	SOT891 (GF)	SOT886 (GM)	SOT1233 (GX)	SOT1116 (GN)	SOT1203 (GS)	SOT1089 (GF)	SOT833-1 (GT)
74AUP1G74	single D-type flip-flop with set and reset; positive-edge trigger	1.1 - 3.6	± 1.9	9.2	-40~125							•	•	•	•
74AUP1G79	single D-type flip-flop; positive-edge trigger	1.1 - 3.6	± 1.9	9.1	-40~125	•	•	•	•	•					
74AUP1G80	single D-type flip-flop; positive-edge trigger	1.1 - 3.6	± 1.9	9.1	-40~125	•	•	•	•	•					
74AUP1G175	single D flip-flop with reset; positive-edge trigger	1.1 - 3.6	± 1.9	7.4	-40~125		•	•	•	•					
74AUP1G374	single D-type flip-flop; positive-edge trigger (3-state)	1.1 - 3.6	± 1.9	7.9	-40~125		•	•	•	•					
74AUP2G79	dual D-type flip-flop; positive-edge trigger	1.1 - 3.6	± 1.9	8.5	-40~125							•	•	•	•
74AUP2G80	dual D-type flip-flop; positive-edge trigger	1.1 - 3.6	± 1.9	9.1	-40~125							•	•	•	•
74LVC1G74	single D-type flip-flop with set and reset; positive-edge trigger	1.65 - 5.5	± 32	3.5	-40~125							•	•	•	•
74LVC1G79	single D-type flip-flop; positive-edge trigger	1.65 - 5.5	± 32	2.2	-40~125	•	•	•	•	•					
74LVC1G80	single D-type flip-flop; positive-edge trigger	1.65 - 5.5	± 32	2.4	-40~125	•	•	•	•	•					
74LVC1G175	single D flip-flop with reset; positive-edge trigger	1.65 - 5.5	± 32	3.1	-40~125		•	•	•	•					
74LVC2G74	single D-type flip-flop with set and reset; positive-edge trigger	1.65 - 5.5	± 32	3.5	-40~125							•	•	•	•

Multivibrators

Type number	Description	V_{cc} (V)	I_o (mA)	t_{pd} (ns)	T_{amb} (°C)	8-pin			
						SOT1116 (GN)	SOT1203 (GS)	SOT1089 (GF)	SOT833-1 (GT)
74LVC1G123	single retriggerable monostable multivibrator	1.65 - 5.5	± 32	3.5	-40~125	•	•	•	•

Gates

Type number	Description	V_{cc} (V)	I_o (mA)	t_{pd} (ns)	T_{amb} (°C)	SOT1226 (GX)	SOT1454-1 (UK)	SOT1255 (GX)	SOT1115 (GN)	SOT1202 (GS)	SOT891 (GF)	SOT886 (GM)	SOT1233 (GX)	SOT1116 (GN)	SOT1203 (GS)	SOT1089 (GF)	SOT833-1 (GT)	SOT902-2 (GM)	SOT1081-2 (GF)	SOT1160-1 (GU)
74AUP1G00	single 2-input NAND gate	1.1 - 3.6	± 1.9	8.3	-40~125	•			•	•	•	•								
74AUP1G02	single 2-input NOR gate	1.1 - 3.6	± 1.9	8.3	-40~125	•			•	•	•	•								
74AUP1G08	single 2-input AND gate	1.1 - 3.6	± 1.9	8.2	-40~125	•			•	•	•	•								
74AUP1G09	single 2-input AND gate; open-drain	1.1 - 3.6	1.9	8.5	-40~125	•			•	•	•	•								
74AUP1G11	single 3-input AND gate	1.1 - 3.6	± 1.9	6.9	-40~125	•			•	•	•	•								
74AUP1G32	single 2-input OR gate	1.1 - 3.6	± 1.9	7.9	-40~125	•			•	•	•	•								
74AUP1G38	single 2-input NAND gate; open-drain	1.1 - 3.6	1.9	8.5	-40~125	•			•	•	•	•								
74AUP1G57	configurable gate; Schmitt-trigger	1.1 - 3.6	± 1.9	8.7	-40~125				•	•	•	•								
74AUP1G58	configurable gate; Schmitt-trigger	1.1 - 3.6	± 1.9	8.7	-40~125				•	•	•	•								
74AUP1G86	single 2-input EXCLUSIVE-OR gate	1.1 - 3.6	± 1.9	9	-40~125	•			•	•	•	•								
74AUP1G97	configurable gate; Schmitt-trigger	1.1 - 3.6	± 1.9	8.7	-40~125				•	•	•	•								
74AUP1G98	configurable gate; Schmitt-trigger	1.1 - 3.6	± 1.9	8.9	-40~125				•	•	•	•								
74AUP1G332	single 3-input OR gate	1.1 - 3.6	± 1.9	6.8	-40~125				•	•	•	•								
74AUP1G386	single 3-input EXCLUSIVE-OR gate	1.1 - 3.6	± 1.9	8.6	-40~125				•	•	•	•								
74AUP1G885	dual function gate	1.1 - 3.6	± 1.9	7.6	-40~125											•	•	•	•	
74AUP1G0832	single 3-input AND-OR gate	1.1 - 3.6	± 1.9	6.7	-40~125				•	•	•	•								
74AUP1G3208	single 3-input OR-AND gate	1.1 - 3.6	± 1.9	7.4	-40~125				•	•	•	•								
74AUP1Z04	crystal driver with enable and internal resistor	1.1 - 3.6	± 1.9	5.6	-40~125				•	•	•	•								
74AUP1Z125	crystal driver with enable and internal resistor (3-state)	1.1 - 3.6	± 1.9	4.7	-40~125				•	•	•	•								
74AUP2G00	dual 2-input NAND gate	1.1 - 3.6	± 1.9	8.3	-40~125										•	•	•	•	•	
74AUP2G02	dual 2-input NOR gate	1.1 - 3.6	± 1.9	8.3	-40~125										•	•	•	•	•	
74AUP2G08	dual 2-input AND gate	1.1 - 3.6	± 1.9	8.2	-40~125										•	•	•	•	•	
74AUP2G32	dual 2-input OR gate	1.1 - 3.6	± 1.9	7.9	-40~125										•	•	•	•	•	
74AUP2G38	dual 2-input NAND gate; open-drain	1.1 - 3.6	1.9	8.5	-40~125										•	•	•	•	•	
74AUP2G57	dual PCB configurable multiple function gate	1.1 - 3.6	± 1.9	8.7	-40~125														•	
74AUP2G86	dual 2-input EXCLUSIVE-OR gate	1.1 - 3.6	± 1.9	9	-40~125										•	•	•	•	•	
74AUP2G0604	inverter with open-drain and inverter	1.1 - 3.6	± 1.9	4	-40~125				•	•	•	•								
74AUP2G3404	buffer and inverter	1.1 - 3.6	± 1.9	4	-40~125				•	•	•	•								

Gates (continued)

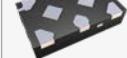
Type number	Description	V _{cc} (V)	I _o (mA)	t _{pd} (ns)	T _{amb} (°C)	SOT1226 (GX)	SOT1454-1 (UK)	SOT1255 (GX)	SOT1115 (GN)	SOT1202 (GS)	SOT891 (GF)	SOT886 (GM)	SOT1233 (GX)	SOT1116 (GN)	SOT1203 (GS)	SOT1089 (GF)	SOT833-1 (GT)	SOT902-2 (GM)	SOT1081-2 (GF)	SOT1160-1 (GU)
74AUP2G3407	buffer and buffer with open-drain	1.1 - 3.6	± 1.9	4.1	-40~125				•	•	•	•			•	•	•	•		
74AUP3G0434	dual inverter and single buffer	1.1 - 3.6	± 1.9	4	-40~125										•	•	•	•	•	
74AUP3G3404	dual buffer and single inverter	1.1 - 3.6	± 1.9	4	-40~125										•	•	•	•	•	
74AXP1G00	single 2-input NAND gate	0.7 - 2.75	± 4.5	2.7	-40~85	•			•	•	•	•								
74AXP1G02	single 2-input NOR gate	0.7 - 2.75	± 4.5	2.6	-40~85	•			•	•	•	•								
74AXP1G08	single 2-input AND gate	0.7 - 2.75	± 4.5	2.6	-40~85	•			•	•	•	•								
74AXP1G09	single 2-input AND gate; open-drain	0.7 - 2.75	4.5	2.6	-40~85	•			•	•	•	•								
74AXP1G10	single 3-input NAND gate	0.7 - 2.75	±4.5	2.6	-40~85				•	•	•	•								
74AXP1G11	single 3-input AND gate	0.7 - 2.75	±4.5	2.6	-40~85				•	•	•	•								
74AXP1G32	single 2-input OR gate	0.7 - 2.75	± 4.5	2.5	-40~85	•			•	•	•	•								
74AXP1G57	configurable gate; Schmitt-trigger	0.7 - 2.75	± 4.5	4.6	-40~85				•	•	•	•								
74AXP1G58	configurable gate; Schmitt-trigger	0.7 - 2.75	± 4.5	4.5	-40~85				•	•	•	•								
74AXP1G86	single 2-input EXCLUSIVE-OR gate	0.7 - 2.75	±4.5	4.5	-40~85	•			•	•	•	•								
74AXP1G97	configurable gate; Schmitt-trigger	0.7 - 2.75	± 4.5	4.5	-40~85				•	•	•	•								
74AXP1G98	configurable gate; Schmitt-trigger	0.7 - 2.75	± 4.5	4.5	-40~85				•	•	•	•								
74LVC1G00	single 2-input NAND gate	1.65 - 5.5	± 32	2.2	-40~125	•			•	•	•	•								
74LVC1G02	single 2-input NOR gate	1.65 - 5.5	± 32	2.1	-40~125	•			•	•	•	•								
74LVC1G08	single 2-input AND gate	1.65 - 5.5	± 32	2.1	-40~125	•			•	•	•	•								
74LVC1G10	single 3-input NAND gate	1.65 - 5.5	± 32	2.6	-40~125				•	•	•	•								
74LVC1G11	single 3-input AND gate	1.65 - 5.5	± 32	2.6	-40~125				•	•	•	•								
74LVC1G27	single 3-input NOR gate	1.65 - 5.5	± 32	2.6	-40~125				•	•	•	•								
74LVC1G32	single 2-input OR gate	1.65 - 5.5	± 32	2.1	-40~125	•			•	•	•	•								
74LVC1G38	single 2-input NAND gate; open-drain	1.65 - 5.5	32	2.3	-40~125	•			•	•	•	•								
74LVC1G57	configurable gate; Schmitt-trigger	1.65 - 5.5	± 32	6.3	-40~125				•	•	•	•								
74LVC1G58	configurable gate; Schmitt-trigger	1.65 - 5.5	± 32	6.3	-40~125				•	•	•	•								
74LVC1G86	single 2-input EXCLUSIVE-OR gate	1.65 - 5.5	± 32	2.4	-40~125	•			•	•	•	•								
74LVC1G97	configurable gate; Schmitt-trigger	1.65 - 5.5	± 32	6.3	-40~125				•	•	•	•								
74LVC1G98	configurable gate; Schmitt-trigger	1.65 - 5.5	± 32	6.3	-40~125				•	•	•	•								

Gates (continued)

Type number	Description	V_{cc} (V)	I_o (mA)	t_{pd} (ns)	T_{amb} (°C)	SOT1226 (GX)	5-pin				6-pin				8-pin				10-pin	
							SOT1454-1 (UK)	SOT1255 (GX)	SOT1115 (GN)	SOT1202 (GS)	SOT891 (GF)	SOT886 (GM)	SOT1233 (GX)	SOT1116 (GN)	SOT1203 (GS)	SOT1089 (GF)	SOT833-1 (GT)	SOT902-2 (GM)	SOT1081-2 (GF)	SOT1160-1 (GU)
74LVC1G99	configurable gate; Schmitt-trigger	1.65 - 5.5	± 32	8.4	-40~125															
74LVC1G332	single 3-input OR gate	1.65 - 5.5	± 32	2.6	-40~125		•	•	•	•	•									
74LVC2G00	dual 2-input NAND gate	1.65 - 5.5	± 32	2.2	-40~125								•	•	•	•	•	•		
74LVC2G02	dual 2-input NOR gate	1.65 - 5.5	± 32	2.4	-40~125								•	•	•	•	•	•		
74LVC2G08	dual 2-input AND gate	1.65 - 5.5	± 32	2.1	-40~125								•	•	•	•	•	•		
74LVC2G32	dual 2-input OR gate	1.65 - 5.5	± 32	2.2	-40~125								•	•	•	•	•	•		
74LVC2G38	dual 2-input NAND gate; open-drain	1.65 - 5.5	32	2.1	-40~125								•	•	•	•	•	•		
74LVC2G86	dual 2-input EXCLUSIVE-OR gate	1.65 - 5.5	± 32	2.3	-40~125								•	•	•	•	•	•		

MicroPak packages

Our MicroPak packages include 4-pin X2SON, 5-pin X2SON, 6-pin XSON and X2SON, 8-pin XSON and XQFN, as well as 10-pin XSON and XQFN variants.

Package suffix	GX4	GX	UK	GX	GN	GS	GF	GM	GX
	X2SON4	X2SON5	WLCSP6	X2SON6	XSON6	XSON6	XSON6	XSON6	X2SON8
									
Package	SOT1269-2	SOT1226	SOT1454-1	SOT1255	SOT1115	SOT1202	SOT891	SOT886	SOT1233
Width (mm)	0.60	0.80	0.65	0.80	1.00	1.00	1.00	1.00	0.80
Length (mm)	0.60	0.80	0.47	1.00	0.90	1.00	1.00	1.45	1.35
Height (mm)	0.32	0.35	0.27	0.35	0.35	0.35	0.50	0.50	0.35
Pitch (mm)	≥0.4	≥0.4	0.22	≥0.4	0.30	0.35	0.35	0.50	≥0.4

Package suffix	GN	GS	GF	GT	GM	GF	GU	GM
	XSON8	XSON8	XSON8	XSON8	XQFN8	XSON10	XQFN10	XQFN10
								
Package	SOT1116	SOT1203	SOT1089	SOT833-1	SOT902-2	SOT1081-2	SOT1160-1	SOT1049-2
Width (mm)	1.00	1.00	1.00	1.00	1.60	1.00	1.80	1.55
Length (mm)	1.20	1.35	1.35	1.95	1.60	1.70	1.40	2.00
Height (mm)	0.35	0.35	0.50	0.50	0.50	0.50	0.50	0.50
Pitch (mm)	0.30	0.35	0.35	0.50	0.50	0.35	0.40	0.50

For more information about our MicroPak portfolio visit
nexperia.com/products/logic/family/MICROPAK/

Notes



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