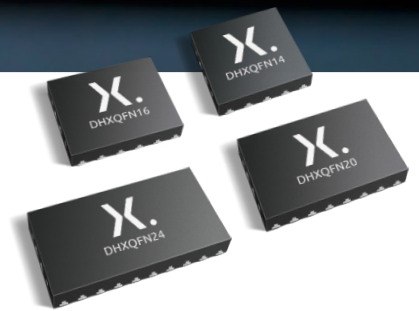


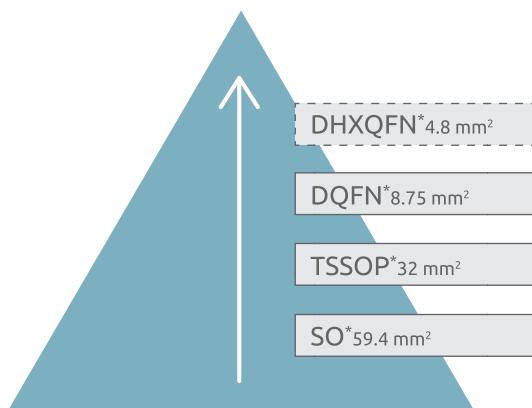
Industry's smallest and thinnest package in 14, 16, 20 and 24 pins for Standard Logic functions



Miniaturization is the continuous trend in the semiconductor industry and Nexperia is driving this trend in Standard Logic product family with the release of the DHXQFN package. It offers a 45% reduction in package footprint compared to industry's DQFN package for a 16 pin device.



Miniaturization of Standard Logic Packages

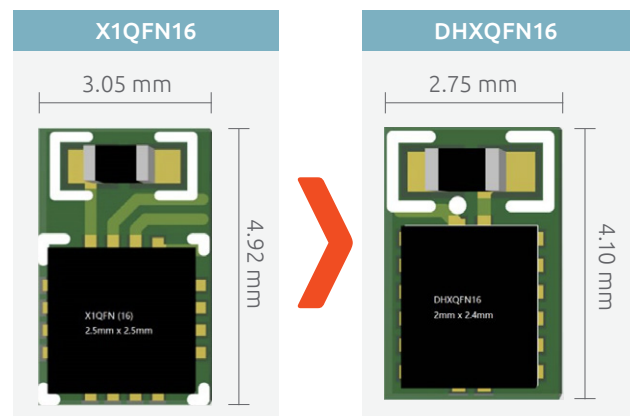


*based on 16 pins package

The 16 pin DHXQFN package not only has smaller footprint compare to a closest competitor but also it offers 25% savings in PCB area.

Space saving on PCB

Further, the small footprint enables it to be placed closer to the bypass capacitor. This can be a significant advantage in designs with limited board space for glue logic parts, and also results in increased performance in high frequency applications since the trace between logic device and capacitor are shorter.







Earlier incorporating large logic functions into a system with a small form factor was difficult because of the large footprint of the devices. However, significantly small footprint of DHXQFN package enables functions such as 74HC595 shift registers to fit into hand held, portable and internet connected industrial devices.

Package details:

DHXQFN package is available in 14,16,20 and 24 pins pack with 0.4mm pitch and 0.45 mm high, identified with suffix BZ.

Features and benefits:

- › Smallest and thinnest package in 14,16,20 and 24 pins
- › Significant space savings up to 25% on PCB area compare to competitors' package.
- › 45% of space saving compare to industry standard DQFN package.
- › Small footprint and thinness of the package makes it perfect for space constrained application.
- › Delivers better performance in high frequency applications due to closer placement of supply bypass capacitor C.
- › Control plan in place for process, product & package.
- › RoHS and dark-green compliant.

Pins	Package	Sot #	Suff.	Footprint (W x L xH) {mm}	Lead pitch {mm}	
14	DHXQFN14	SOT8014	BZ	2.0 x 2.0 x 0.48	0.4	
16	DHXQFN16	SOT8016	BZ	2.0 x 2.4 x 0.48	0.4	
20	DHXQFN20	SOT8020	BZ	2.0 x 3.2 x 0.48	0.4	
24	DHXQFN24	SOT8024	BZ	2.0 x 4.0 x 0.48	0.4	

Function in DHXQFN package:

Portfolio of DHXQFN comprises of some of the most popular functions in the industry. It includes Schmitt-triggers, shift registers with output latches, translating transceivers, octal buffer/line drivers, octal bus transceivers; and 8-bit dual supply translating transceivers.

Part Type	Details
74LV14ABZ	hex inverting Schmitt-trigger
74LVC14ABZ	hex inverting Schmitt-trigger
74HC595BZ	8-bit SIPO shift register with output latches; 3-state
74AVC4T245BZ	4-bit dual supply translating transceiver; 3-state
74LVC244ABZ	octal buffer/line driver; 3-state
74LVC245ABZ	octal bus transceiver; 3-state
74LVC8T245BZ	8-bit dual supply translating transceiver; 3-state
74AVC8T245BZ	8-bit dual supply translating transceiver; 3-state

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