TVSOP48 – 48-pin package for 32% footprint reduction over TSSOP48

Smaller-footprint 16-bit logic with advanced features

TVSOP48 is a 48-pin package that offers a 32% footprint reduction over TSSOP48, allowing existing functions to be shrunk into a smaller package. TVSOP48 is a high-density package with a 0.4mm pitch, helping reduce board size and associated cost.

Part of the very small-outline package family which supports the package miniaturization trend, TVSOP48 finds applications in PCMCIA cards and various standard PCB applications.

TVSOP48 has a lower pitch than TSSOP48, yet it enables low-defect design and remains easy to handle at assembly stage.

At Nexperia, a dozen 16-bit asynchronous logic solutions are available in the TVSOP48 package, encompassing both LVC(H) and AVC(H) technologies. Most of our TVSOP48 portfolio is also proposed in Automotive-qualified options.

Key features & benefits

- > Footprint reduced by 32% compared to TSSOP48 (SOT362-1)
- > 5V overvoltage tolerance & 3-state outputs for logic interfacing

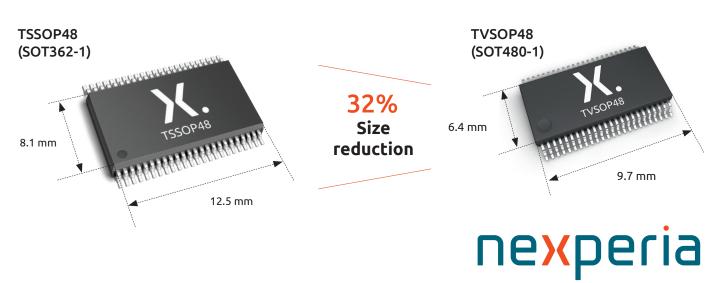
NSOP48

EFFICIENCY WINS.

- > Buffers/line drivers, transceivers & latches solutions available
- > Low-voltage CMOS LVC(H) and AVC(H) technology families
- > Automotive-qualified types within our Q100 portfolio

Applications

- Industrial
- > Automotive
- > Servers, computing & peripherals
- > Telecom & networking



Suffix	Package name	Package version	Dimensions (L x W x H, pitch – in mm)	
DGV	TVSOP48	SOT480-1	9.7 x 6.4 x 1.1, 0.4	X.

Available functions

Our TVSOP48 portfolio is comprised of buffers/line-drivers, transceivers and latches.

Product type		Туре	
74LVC16244A	\$	16-bit buffer/line driver; 5 V input/output tolerant; 3-state	
74LVCH16244A	\$	16-bit buffer/line driver; 5 V input/output tolerant; 3-state with Bus hold	
74LVC162244A		16-bit buffer/line driver; 30 Ω series termination resistors; 5 V tolerant input/output; 3-state	
74LVCH162244A		16-bit buffer/line driver; 30 Ω series termination resistors; 5 V tolerant input/output; 3-state with Bus Hold	
74LVC16245A		16-bit bus transceiver with direction pin; 5 V tolerant; 3-state	
74LVCH16245A		16-bit bus transceiver with direction pin; 5 V tolerant; 3-state with Bus Hold	
74LVC162245A	6	16-bit transceiver with direction pin; 30 Ω series termination resistors; 5 V tolerant input/output; 3-state	
74LVCH162245A		16-bit transceiver with direction pin; 30 Ω series termination resistors; 5 V tolerant input/output; 3-state with Bus Hold	
74LVC16373A		16-bit D-type transparent latch with 5 V tolerant inputs/outputs; 3-state	
74LVCH16373A		16-bit D-type transparent latch with 5 V tolerant inputs/outputs; 3-state with Bus Hold	
74AVC16T245		16-bit dual supply translating transceiver with configurable voltage translation; 3-state	
74AVCH16T245		16-bit dual supply translating transceiver with configurable voltage translation; 3-state with Bus Hold	

Types carrying this symbol are available as Automotive-qualified variants (-Q100 logic portfolio)

Types releasable upon request

Additional functions in ABT, ALVC, ALVT, LVC & LVT logic technologies can be released in TVSOP48 package.

LVC(H) features

Bus Hold

LVCH bus interface solutions from Nexperia include the Bus Hold feature. Bus Hold defines inputs and ensures that oscillations and excessive current consumption, due to floating inputs, are avoided. The Bus Hold feature defines the input by latching in the last logic level applied to the input which eliminates the external components required to define the inputs -saving space as well as placement cost.

Source Termination

74LVC(H)162244A & 74LVC(H)162245A feature integrated Source Termination. Source termination improves impedance matching in distributed systems and eliminates the need for external termination resistors. Integrated source termination solves signal-integrity issues associated with distributed systems without the need for external components, thus reducing BOM and cost.

Browse all types in our TVSOP48 package: nexperia.com/packages/SOT480-1.html

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