

Product Overview

NCS2200: Comparator, Complementary, Low Voltage

For complete documentation, see the data sheet.

The NCS2200 series is an industry first sub-one volt, low power comparator family. These devices consume only 10 μ A of supply current. They are guaranteed to operate at a low voltage of 0.85V which allows them to be used in systems that require less than 1.0V and are fully operational up to 6.0V which makes them convenient for use in both 3.0V and 5.0V systems. Additional features include no output phase inversion and overdriven inputs, internal hysteresis, which allows for clean output switching, and rail-to-rail input and output performance. The NCS2200 series is available in the tiny SOT23-5. There are eight options featuring two industry standard pinouts. Additionally, the NCS2200 and NCS2202 are available in the SC70-5 package. The NCS2200 is also available in the tiny DFN 2x2.2 package. The NCS2200A is available in UDFN 1.2x1.0 package. When the enable pin is pulled low (output tri-state mode), current consumption is typically 0.3 μ A. This allows the user to implement these devices in power sensitive applications such as portable electronics.

Features

- Operating Voltage of 0.85 V to 6.0 V
- Rail-to-rail Input/Output Performance
- Low Supply Current of 10 μ A
- No Phase Inversion/Glitchless transitioning in or out of Tri-State Mode
- Complementary or Open Drain Output Configuration
- Available with the Enable Function

Applications

- Window Comparator
- Voltage Detector
- Zero-Crossing Detectors
- Signal Conditioning
- Sensor Interface

End Products

- Industrial Control Systems
- White Goods

Part Electrical Specifications

Product	Compliance	Status	Channels	V _{CC} Min (V)	V _{CC} Max (V)	I _O Typ (mA)	I _{CC} Typ (mA)	t _{res} Typ (ns)	V _{IO} Max (mV)	T _A Min (°C)	T _A Max (°C)	Package Type
NCS2200SN1T1G	Pb-free	Active	1	0.85	6	70	0.01	1100	5	-40	105	TSOP-5 / SOT-23-5
	Halide free											
NCS2200SN1T1GH	Pb-free	Active	1	0.85	6	70	0.01	1100	5	-40	105	TSOP-5 / SOT-23-5
	Halide free											
NCS2200SN2T1G	Pb-free	Active	1	0.85	6	70	0.01	1100	5	-40	105	TSOP-5 / SOT-23-5
	Halide free											
NCS2200SQ2T2G	Pb-free	Active	1	0.85	6	70	0.01	1100	5	-40	105	SC-88A / SC-70-5
	Halide free											
NCS2200SQ2T2GH	Pb-free	Active	1	0.85	6	70	0.01	1100	5	-40	105	SC-88A / SC-70-5
	Halide free											
NCS2200SQLT1G	Pb-free	Active	1	0.85	6	70	0.01	1100	5	-40	105	DFN-6
	Halide free											
NCV2200SN1T1G	AEC Qualified	Active	1	0.85	6	70	0.01	1100	5	-40	105	TSOP-5 / SOT-23-5
	PPAP Capable											
	Pb-free											
	Halide free											
NCV2200SN2T1G	AEC Qualified	Active	1	0.85	6	70	0.01	1100	5	-40	105	TSOP-5 / SOT-23-5
	PPAP Capable											
	Pb-free											
	Halide free											
NCV2200SQ2T2G	AEC Qualified	Active	1	0.85	6	70	0.01	1100	5	-40	105	SC-88A / SC-70-5
	PPAP Capable											
	Pb-free											
	Halide free											

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