



Product Overview

NCV8605: LDO Regulator, CMOS Low I_{GND}, 500 mA, with Enhanced ESD Protection

For complete documentation, see the data sheet

Product Description

The NCV8605/NCV8606 provide in excess of 500 mA of output current at fixed voltage options or an adjustable output voltage from 5.0 V down to 1.25 V. These devices are designed for space constrained and portable battery powered applications and offer additional features such as high PSRR, low noise operation, short circuit and thermal protection. The devices are designed to be used with low cost ceramic capacitors and are packaged in the DFN6 3x3.3. NCV8605 is designed without enable pin, NCV8606 is designed with enable pin.

Features

- Output Voltage Options:Adjustable, 1.5 V, 1.8 V, 2.5 V, 2.8 V, 3.0 V, 3.3 V, 5.0 V
- Adjustable Output by External Resistors from 5.0 V down to 1.25 V
- Current Limit 675 mA
- Low I_{GND} (Independent of Load)
- 1.5% Output Voltage Tolerance Over All Operating Conditions(Adjustable)
- 2% Output Voltage Tolerance Over All Operating Conditions(Fixed)
- NCP605 Fixed is Direct Replacement LP8345
- Typical Noise Voltage of 50 Vrms without a Bypass Capacitor
- Enhanced ESD Ratings: 4 kV Human Body Mode (HBM)
400 V Machine Model (MM)

Applications	End Products
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| <ul style="list-style-type: none">• Battery Power Electronics• Portable Instrumentation | <ul style="list-style-type: none">• Hard Disk Drivers• Notebook Computers |
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Product	Compliance	Status	Output	Polarity	V _O (V)	I _O Typ (A)	V _I Max (V)	V _{DO} Typ (V)	I _q Typ (mA)	PSRR (dB)	Noise (μV _{rms})	Package Type
NCV8605MN15T2G	AEC Qualified PPAP Capable Pb-free Halide free	Active	Single	Positive	1.5	0.5	6	0.29	0.145	62	50	DFN-6
NCV8605MN18T2G	AEC Qualified PPAP Capable Pb-free Halide free	Active	Single	Positive	1.8	0.5	6	0.25	0.145	62	50	DFN-6
NCV8605MN25T2G	AEC Qualified PPAP Capable Pb-free Halide free	Active	Single	Positive	2.5	0.5	6	0.2	0.145	62	50	DFN-6
NCV8605MN28T2G	AEC Qualified PPAP Capable Pb-free Halide free	Active	Single	Positive	2.8	0.5	6	0.19	0.145	62	50	DFN-6
NCV8605MN30T2G	AEC Qualified PPAP Capable Pb-free Halide free	Active	Single	Positive	3	0.5	6	0.18	0.145	62	50	DFN-6
NCV8605MN33T2G	AEC Qualified PPAP Capable Pb-free Halide free	Active	Single	Positive	3.3	0.5	6	0.17	0.145	62	50	DFN-6
NCV8605MN50T2G	AEC Qualified PPAP Capable Pb-free Halide free	Active	Single	Positive	5	0.5	6	0.15	0.145	62	50	DFN-6
NCV8605MNADJT2G	AEC Qualified PPAP Capable Pb-free Halide free	Active	Single	Positive	Adjustable	0.5	6	0.45	0.145	62	50	DFN-6
NCV8606MN15T2G	AEC Qualified PPAP Capable Pb-free Halide free	Active	Single	Positive	1.5	0.5	6	0.29	0.145	62	50	DFN-6
NCV8606MN18T2G	AEC Qualified PPAP Capable Pb-free Halide free	Active	Single	Positive	1.8	0.5	6	0.25	0.145	62	50	DFN-6
NCV8606MN25T2G	AEC Qualified PPAP Capable Pb-free Halide free	Active	Single	Positive	2.5	0.5	6	0.2	0.145	62	50	DFN-6

NCV8606MN28T2G	AEC Qualified	Active	Single	Positive	2.8	0.5	6	0.19	0.145	62	50	DFN-6
	PPAP Capable											
	Pb-free											
	Halide free											
NCV8606MN30T2G	AEC Qualified	Active	Single	Positive	3	0.5	6	0.18	0.145	62	50	DFN-6
	PPAP Capable											
	Pb-free											
	Halide free											
NCV8606MN33T2G	AEC Qualified	Active	Single	Positive	3.3	0.5	6	0.17	0.145	62	50	DFN-6
	PPAP Capable											
	Pb-free											
	Halide free											
NCV8606MN50T2G	AEC Qualified	Active	Single	Positive	5	0.5	6	0.15	0.145	62	50	DFN-6
	PPAP Capable											
	Pb-free											
	Halide free											
NCV8606MNADJT2G	AEC Qualified	Active	Single	Positive	Adjustable	0.5	6	0.45	0.145	62	50	DFN-6
	PPAP Capable											
	Pb-free											
	Halide free											

For more information please contact your local sales support at www.onsemi.com

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