



New Product Announcement

AP7366EA

Low Quiescent Current, 600mA Low Dropout Regulator for Low Voltage POL Applications

The DIODES™ AP7366EA is a 600mA low dropout (320mV) linear regulator available in adjustable and fixed output voltage options.

It has an active-high EN pin which reduces its supply current from only 60µA to 0.1µA when brought low.

The AP7366EA's low dropout voltage and low quiescent current make it suitable for low-power applications such as battery-powered devices.

Built-in current-limit and thermal-shutdown functions protect the IC from damage in fault conditions.

This device is available with an adjustable output from 0.8V to 5.0V; and fixed versions with 1.0V, 1.2V, 1.5V, 1.8V, 2.0V, 2.5V, 2.8V, 3.0V, 3.3V, 3.6V, and 3.9V outputs (*other voltage options may be available on-request*).

The AP7366EA is available in the SOT25 and U-DFN2020-6 packages with industry-standard pin outs.



The DIODES™ Advantage

The AP7366EA is a cost-effective 600mA LDO available in industry-standard packages for consumer and industrial point-of-load (POL) applications.

- **Low Dropout (320mV): Vout=3.3V Iout=600mA**
Maximizes usable supply voltage range – especially in battery-powered applications
- **Wide 2.2V to 6V Input Voltage Range**
Supports POL regulation from 5-V, 3.3-V rails as well as core-core applications
- **Wide Range Of Output Voltages: ADJ 0.8V to 5.0V; Fixed 1.2V, 1.5V, 1.8V, 2.0V, 2.5V, 2.8V, 3.0V, 3.3V, 3.6V, 3.9V**
Covers standard I/O voltage levels
- **1.0% Output Accuracy at Room Temperature**
Maintains +/-1% accuracy $1.5V \leq V_{OUT} \leq 3.9V$
- **Industry-Standard SOT25 and DFN2020-6 Packages**
Ease of layout and high-power density

Applications

- Servers
- Notebook/computers
- Tablets
- Industrial 5-V POL devices
- FPGA and DSP core and I/O power rails
- Industrial I/O power rails

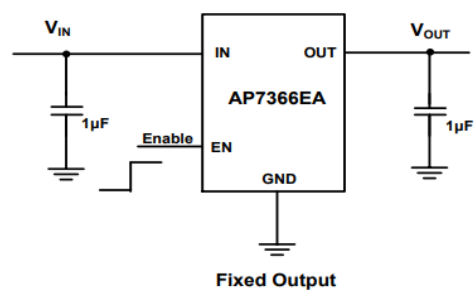
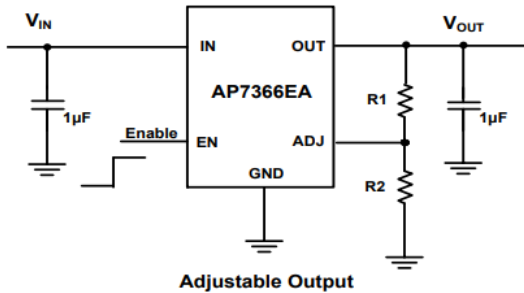
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Typical Application Circuit



Product Portfolio

Part Number	Max Vin	I _{out}	V _{out}	I _q	Output Accuracy	V _{DROP} @ Full Load	PSRR (@ 1kHz)	Ambient Temperature Range	Enable Active	Package
	V	A	V	µA	%	mV	dB	°C		
AP7366EA	6	0.6	Fixed: 1.0 to 3.9 Adjustable: 0.8 to 5.0	60	1	290	75	-40 to +85	H	SOT25, U-DFN2020-6
AP7361EA	6	1	Fixed 1.0 to 3.3 Adjustable: 0.8 to 5.0	60	1	528	75	-40 to +85	H	SO-8EP, SOT223, TO252, U-DFN3030-8, SOT89
AP7353	5.5	0.25	Fixed: 1.8 to 4.5	18	1	117	90	-40 to +85	H	X1-WLB0707-4, X2-DFN1010-4
AP7343	5.25	0.3	Fixed: 0.9 to 3.6	35	1	290	75	-40 to +85	H	SOT25, X2-DFN1010-4
AP7330	5.5	0.3	Adjustable: 0.8 to 5.0	45	1	310	80	-40 to +85	H	SOT25
AP7315	5.25	0.15	Fixed: 1.1 to 3.3	35	1	290	75	-40 to +85	H	SOT23, SOT25, X2-DFN1010-4

Ordering Information

Part Number	V _{OUT}	Compliance	Package	Moisture Sensitivity	Packing	
	V				Quantity	Carrier
AP7366EA-xxW5-7	xx : V _{OUT} Blank : ADJ 10 : 1.0V 12 : 1.2V 15 : 1.5V 18 : 1.8V 20 : 2.0V 25 : 2.5V 28 : 2.8V 30 : 3.0V 33 : 3.3V 36 : 3.6V 39 : 3.9V	Standard	SOT25	MSL-1	3,000	7" Tape & Reel
AP7366EA-xxSN-7		Standard	U-DFN2020-6	MSL-1	3,000	7" Tape & Reel