



New Product Announcement

AP3441/L
AP3445/L

High Light-Load Efficiency Synchronous Buck Converters

The AP3445 and AP3445L are 2A step-down DC-DC converters. The AP3441 and AP3441L are 3A step-down DC-DC converters.

At heavy load, the constant-frequency PWM control performs excellent stability and transient response. No external compensation components are required on AP3445/L and AP3441/L

The AP3445/L delivers 2A and the AP3441/L delivers 3A maximum output current while consuming only 55 μ A of no-load quiescent current. Ultra-low $R_{DS(ON)}$ integrated MOSFETs and 100% duty cycle operation make them an ideal choice for high output voltage, high current applications which require a low dropout threshold.

Pulse skip mode maintains high efficiency at light-load conditions.

AP3445/L is available in SOT236 package. AP3441/L is available in W-DFN2020-8 package.



The Diodes Advantage

- **Synchronous DC-DC buck converter with continued load current of 2A/3A and light-load high-efficiency**

High switching frequency operation for small external components
Current mode control provides fast transient response
Excellent line and load regulation with high efficiency

- **Protection**

Input Overvoltage Protection, Undervoltage Lock Out
Over-temperature Protection and Short Circuit Protection
AP3441L/AP3445L in Latch Off Protection
AP3441/AP3445 in Hiccup Mode Protection

- **Package - SOT236 and W-DFN2020-8**

Low-profile, small footprint industry standard package

Applications

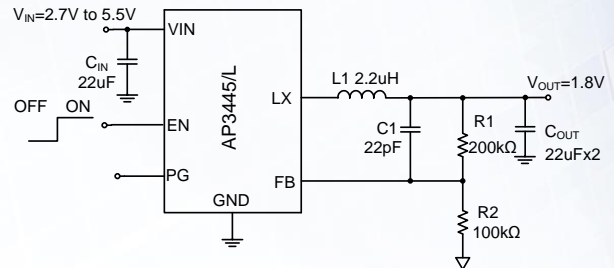
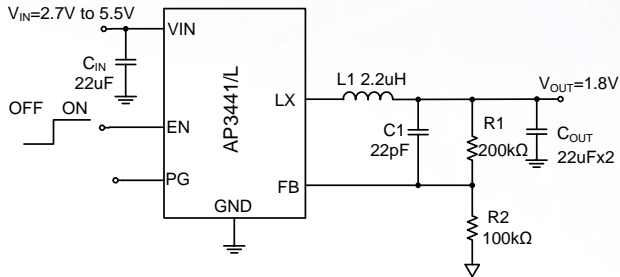
- Post DC-DC Voltage Regulation
- Set-Top-Box
- Notebook Computer
- Tablets



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AP3441/L
AP3445/L

Typical Application Schematic



Product Portfolio

Part #	Min. Input Voltage (V)	Max. Input Voltage (V)	Output Voltage (V)	Output Current (A)	Frequency (kHz) typ	Internal Vref (V) typ	Efficiency (%)	Standby Quiescent Current (uA) typ	Operating Ambient Temp Range (°C)	Features							Available Packages
										Enable Pin	Current Limit Protection	Thermal Shutdown	Adjustable Output Voltage	Under Voltage Lockout	Programmable Softstart	Power Good	
AP3419	2.5	5.5	0.7-5.5	2	1000	0.6	95	90	-40 to +85	Y	Y	Y	Y	Y	N	N	TSOT26
AP3429/A	2.5	5.5	0.7-5.5	2	1000	0.6	95	90	-40 to +85	Y	Y	Y	Y	Y	N	N	TSOT25
AP3445/L	2.5	5.5	0.6-5.5	2	1000	0.6	95	40	-40 to +85	Y	Y	Y	Y	Y	N	Y	TSOT25 U-DFN2020-6
AP3441/L	2.5	5.5	0.6-5.5	3	1000	0.6	95	40	-40 to +85	Y	Y	Y	Y	Y	N	Y	W-DFN2020-8
AP3433	2.5	5.5	0.7-5.5	3	300	0.6	94	360	-40 to +85	Y	Y	Y	Y	Y	N	N	QFN-3x3-16

Ordering Information

Device	Packaging	Identification Code	Reel Size	Quantity
AP3441SHE	W-DFN2020-8	9B	7"	3,000
AP3441LSHE	W-DFN2020-8	9C	7"	3,000
AP3445W6	SOT23-6	9B	7"	3,000
AP3445LW6	SOT23-6	9C	7"	3,000

All variants are in packages that are "Green" Molding Compound (No Br, Sb) with Lead Free Finish/RoHS Compliant (Note 1)
Notes: 1. EU Directive 2002/95/EC (RoHS). All applicable RoHS exemptions applied, see EU Directive 2002/95/EC Annex Notes