

# SIMPLE SWITCHER® Portfolio



## Power modules

### SIMPLE SWITCHER power modules

**When to use:** For low-noise designs that require an extremely fast time to market and high power density

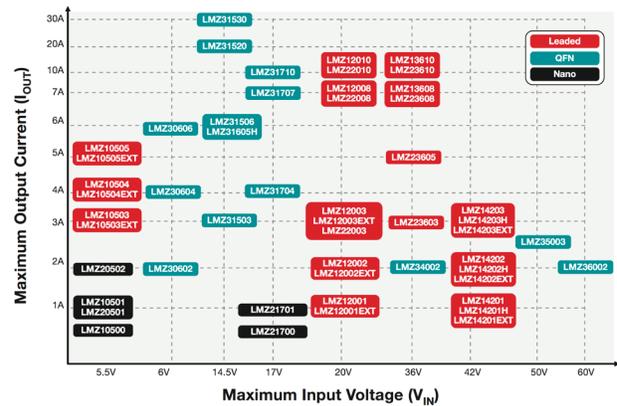
- **Best in-class thermal performance**—operates up to 85°C ambient with NO airflow
- **Superior EMI performance**—integrated shielded inductor

### SIMPLE SWITCHER nano modules

**When to use:** For space-constrained applications that require a tiny solution size in an integrated package

- **Smallest solution size**—35mm<sup>2</sup>
- **High efficiency**—up to 96%
- **Low output voltage ripple**—less than 10 mV pk-pk
- **Superior EMI performance**—integrated shielded inductor

SIMPLE SWITCHER® modules



### Nano power modules

Device	Output Current (A)	Input Voltage (V)	Output Voltage (V)	Freq (kHz)	EMI Tested	Package Size	Packaging
LMZ10500/01	0.65/1	2.7 to 5.5	0.6 to 3.6	2000	✓	2.6 x 3 x 1.5 mm	8uSip
LMZ20501/2	1/2	2.7 to 5.5	0.8 to 3.6	3000	✓	3.5 x 3.5 x 1.5 mm	8uSip
LMZ21700/1	0.65/1	3 to 17	0.9 to 6	1250 to 2500	✓	3.5 x 3.5 x 1.5 mm	8uSip

### Power modules

Device	Output Current (A)	Input Voltage (V)	Output Voltage (V)	Freq (kHz)	Freq Sync	Current Sharing	EMI Tested	Packaging
LMZ10503/04/05	3/4/5	2.95 to 5.5	0.8 to 5	1000	—	—	✓	7TO-PMOD
LMZ12001/02/03	1/2/3	4.5 to 20	0.8 to 6	1000 max	—	—	✓	7TO-PMOD
LMZ14201/02/03	1/2/3	6 to 42	0.8 to 6	1000 max	—	—	✓	7TO-PMOD
LMZ14201H/02H/03H	1/2/3	6 to 42	5 to 30	1000 max	—	—	✓	7TO-PMOD
LMZ12008/10	8/10	6 to 20	0.8 to 6	360	—	—	✓	11PFM
LMZ13608/10	8/10	6 to 36	0.8 to 6	360	—	—	✓	11PFM
LMZ22003/05	3/5	6 to 20	0.8 to 6	650 to 950	✓	—	✓	7TO-PMOD
LMZ23603/05	3/5	6 to 36	0.8 to 6	650 to 950	✓	—	✓	7TO-PMOD
LMZ22008/10	8/10	6 to 20	0.8 to 6	315 to 600	✓	—	✓	11PFM
LMZ23608/10	8/10	6 to 36	0.8 to 6	315 to 600	✓	—	✓	11PFM
LMZ30602/04/06	2/4/6	2.95 to 6	0.8 to 3.6	500 to 2000	✓	—	✓	39B1QFN
LMZ31503	3	4.5 to 14.5	0.8 to 5.5	330 to 780	✓	—	✓	47B1QFN
LMZ31506/H	6	4.5 to 14.5	0.6/1.2 to 5.5	250 to 780	✓	✓	✓	47B1QFN
LMZ31704/07/10	4/7/10	2.95 to 17	0.6 to 5.5	200 to 2000	✓	✓	✓	42B3QFN
LMZ31520/30	20/30	2.95 to 15	0.6 to 3.6	300 to 800	—	—	✓	72B2QFN
LMZ35003	2.5	7 to 50	2.5 to 15	400 to 1000	✓	—	✓	41B1QFN
LMZ36002	2	4.5 to 60	2.5 to 7.5	200 to 1000	✓	—	✓	43B3QFN
LMZ34002	2	4.5 to 40	-3 to -17	500 or 800	✓	—	✓	41B1QFN

# Regulators

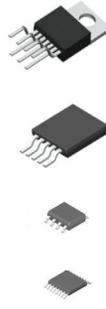
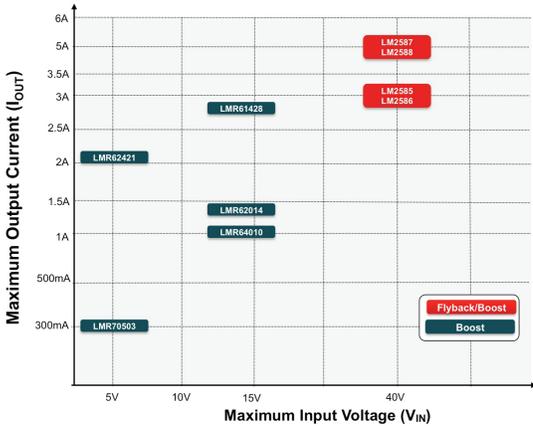
## SIMPLE SWITCHER regulators

**When to use:** For designs that require input voltage up to 75V and a balance between EOU and flexibility

- **Exceptional flexibility**—Adjustable or synchronizable frequency, adjustable current limit, precision enable, soft start
- **Versatile portfolio**—Both buck and boost devices that can be optimized for solution size or simple scalability

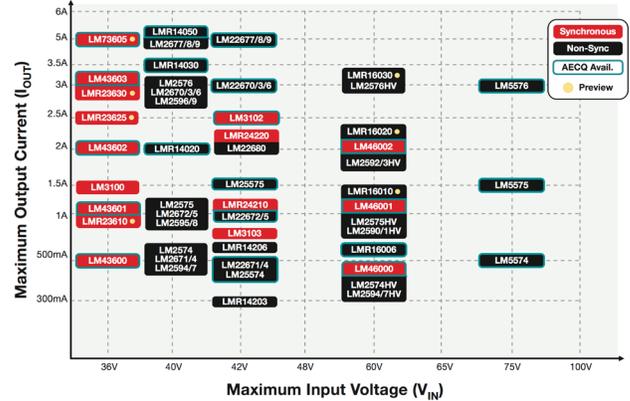
## SIMPLE SWITCHER® regulators

Step up, buck-boost, SEPIC, flyback



## SIMPLE SWITCHER® regulators

Step down



## Step up, buck-boost, SEPIC, flyback regulators

Device	Switch Current (A)	Input Voltage (V)	Output Voltage (V)	Frequency (kHz)	Freq Sync	Enable	Soft Start	Packaging
LMR62421	2.1	2.7 to 5.5	3 to 24	1600	—	✓	✓	5SOT-23, 6WSON
LMR62014	1.4	2.7 to 14	3 to 20	1600	—	✓	—	5SOT-23
LMR61428	2.85	1.2 to 14	3 to 14	2000	—	✓	—	8VSSOP
LMR64010	1	2.7 to 14	3 to 40	1600	—	✓	—	5SOT-23
LMR70503	0.32	2.7 to 5.5	-0.9 to -5.5	500 min	—	✓	—	8DSBGA
LM2585	3	4 to 40	1.23 to 60	100	—	—	—	5DDPAK/TO-263, 5TO-220
LM2586	3	4 to 40	1.23 to 60	100 to 200	✓	✓	—	7DDPAK/TO-263, 7TO-220
LM2587	5	4 to 40	1.23 to 60	100	—	—	—	5DDPAK/TO-263, 5TO-220
LM2588	5	4 to 40	1.23 to 60	100 to 200	✓	✓	—	7DDPAK/TO-263, 7TO-220

## Step-down regulators

Device	Output Current (A)	Input Voltage (V)	Output Voltage (V)	Frequency (kHz)	Freq Sync	Enable	Soft Start	Synchronous	Fixed Output Versions Available	AEC-Q100	Packaging
LM2676/7	3/5	8 to 40	1.23 to 37	260	—	—	—	—	3.3/5/12	—	14VSON, 7DDPAK/TO-263, 7TO-220
LM2675/4	1/0.5	6.5 to 40	1.23 to 27	260	—	—	—	—	3.3/5/12	—	16WSON, 8PDIP, 8SOIC
LM2596/5	3/1	4.5 to 40	3.3 to 37	150	—	—	—	—	3.3/5/12	—	5DDPAK/TO-263, 5TO-220
LM2594	0.05	4.5 to 40	3.3 to 37	150	—	—	—	—	3.3/5/12	—	8PDIP, 8SOIC
LM2576/5/HV	3/1	4 to 60	3.3 to 37	63	—	—	—	—	3.3/5/12/15	—	5DDPAK/TO-263, 5TO-220
LM2574HV	0.5	4 to 60	3.3 to 37	63	—	—	—	—	3.3/5/12/15	—	14SOIC, 8PDIP
LM22671/4	0.5	4.5 to 42	1.285 to 37	200 to 1000	✓/-	✓	✓/-	—	5	✓	8SO PowerPAD
LM22672/5	1	4.5 to 42	1.285 to 37	200 to 1000	✓/-	✓	✓/-	—	5	✓	8SO PowerPAD
LM22680	2	4.5 to 42	1.285 to 37	200 to 1000	✓	✓	✓	—	—	✓	8SO PowerPAD
LM22670/73/76	3	4.5 to 42	1.285 to 37	200 to 1000	✓/-/-	✓/-/✓	/- / ✓/-	—	5	✓	8SO PowerPAD, 7TO-263
LM22677/78/79	5	4.5 to 42	1.285 to 37	200 to 1000	✓/-/-	✓/✓/-	/- /- / ✓	—	5	✓	7TO-263
LMR14006/6006	0.6	4 to 40/60	.8 to 30/55	700 or 2100	—	—	—	—	—	✓	6SOT
LMR14020/30/50	2/3/5	4 to 40	1 to 36	200 to 2500	✓	✓	✓	—	—	✓	8SO PowerPAD
LM43600/01/02/03	0.5/1/2/3	3.5 to 36	1 to 28	200 to 2200	✓	✓	✓	✓	—	✓	16HTSSOP
LM46000/01/02	0.5/1/2	3.5 to 36	1 to 28	200 to 2200	✓	✓	✓	✓	—	✓	16HTSSOP

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