Innovative DC/DC Power Modules

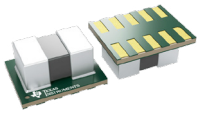
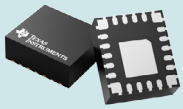
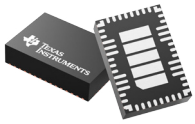
Texas Instruments

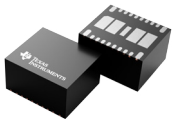
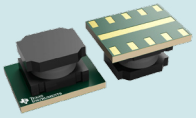
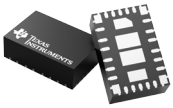
Overview

TI's broad portfolio of DC/DC power modules is designed specifically to help engineers get to market faster with validated, high-performance solutions. These power modules integrate inductors, FETs, compensation, and other passive components in a single package to reduce time spent on layout and verification, and speed up time to market with proven reliability.

To browse the entire portfolio and learn more on the latest products, visit: **ti.com/powermodules**

Featured products

TPSM82821/2/3 	• 2.4-V to 5.5-V input • 1-A, 2-A, 3-A pin-compatible family • 1% accuracy over temperature, high efficiency up to 95% • 2 mm × 2.5 mm × 1 mm package
TPSM828664A/6A 	• 2.4-V to 5.5-V input • 4-A, 6-A pin-compatible family • Selectable low-ripple-forced-PWM mode, 13 selectable fixed or adjustable V_{OUT} options • 3.5 mm × 4 mm × 1.4 mm package
TPSM5D1806 	• 4.5-V to 15-V input • Dual-channel 6-A or single 12-A I_{OUT} • Selectable software frequency with sync to external clock capability • 5.5 mm × 8.0 mm × 1.8 mm package

TPSM8A29 	• 2.7-V to 16-V input • 15-A I_{OUT} • Reduced external component count with ultra-fast transient response • 6.5 mm × 7.5 mm × 4.0 mm package
TPSM265R1 	• 3-V to 65-V input • 100-mA I_{OUT} • High light-load efficiency, fixed 3.3 V / 5 V or adjustable V_{OUT} options • 2.8 mm × 3.7 mm × 1.9 mm package
TLVM13630 	• 3-V to 36-V input • 3-A I_{OUT} • FPWM operation, high efficiency up to 95%, 1% accuracy over temperature • 4 mm × 6 mm × 1.8 mm package

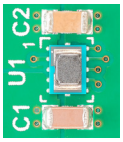
Why power modules?

Smaller size

LM5165

120 mm²

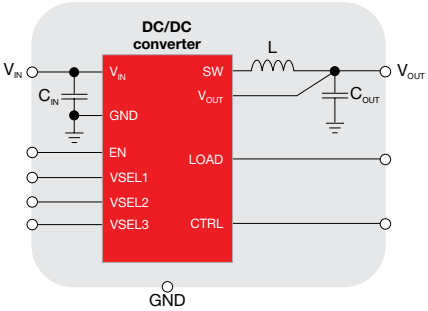
TPSM265R1



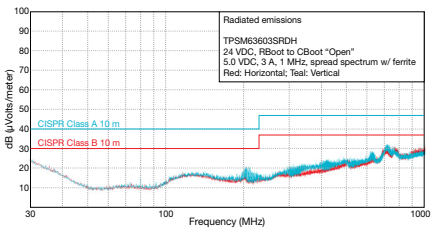
60 mm²

Simple solutions

TPS82740

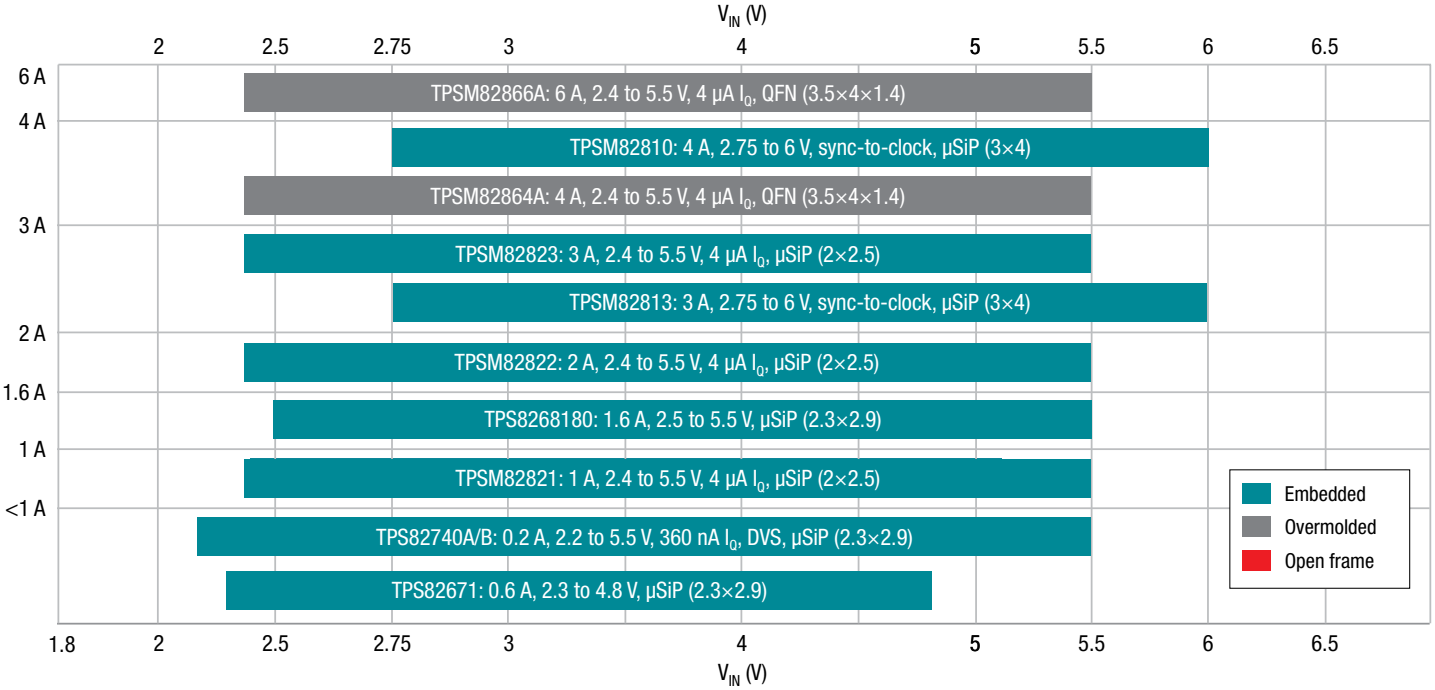


Low EMI

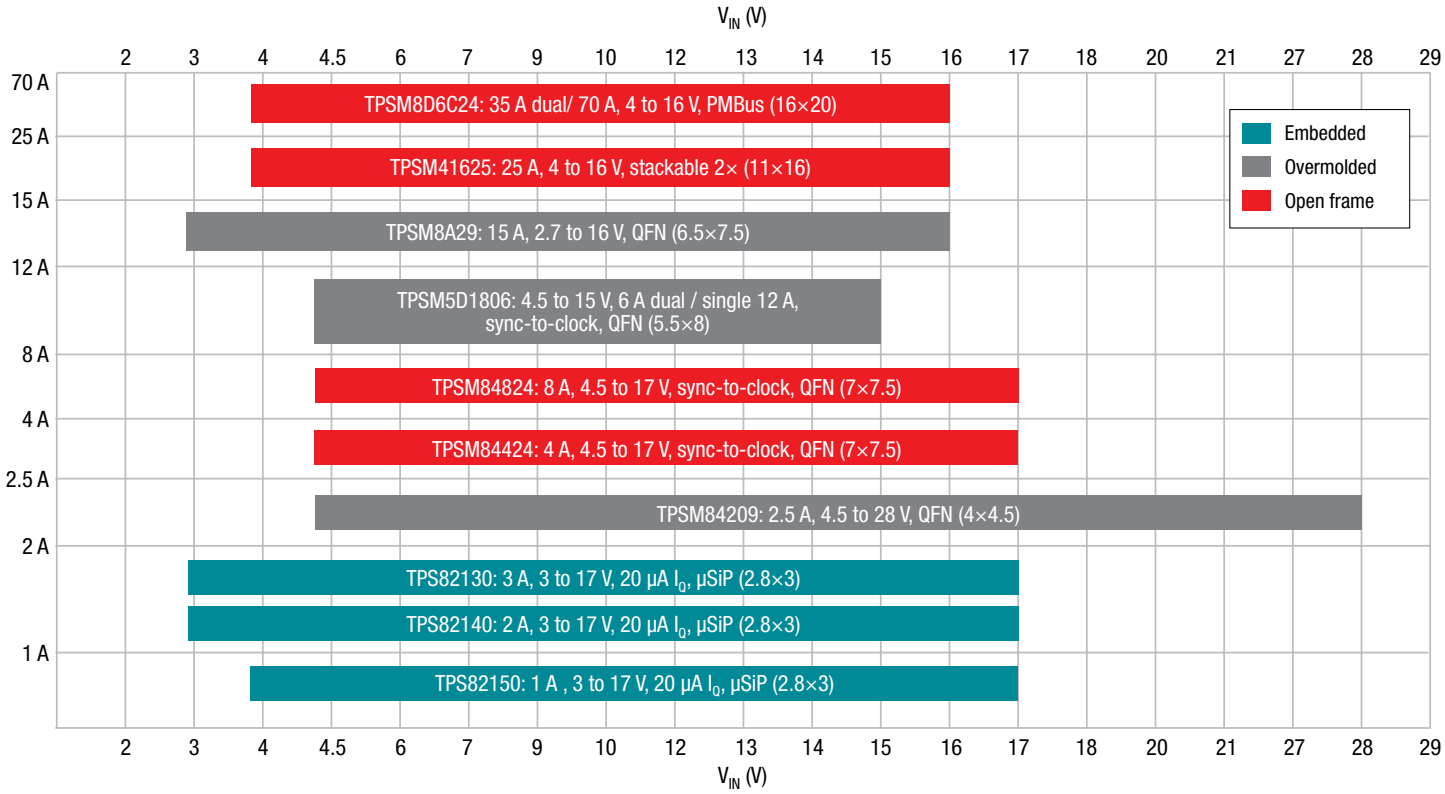


TI POWER

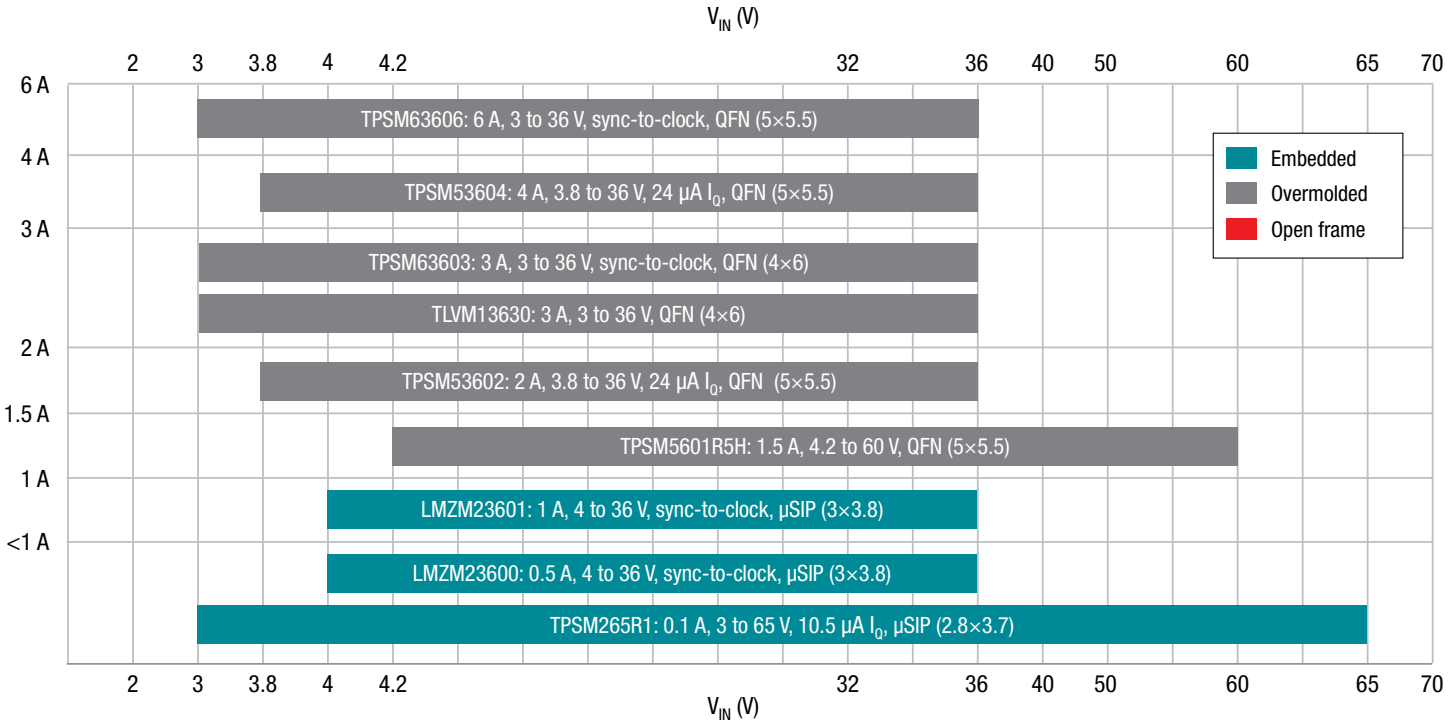
Low V_{IN} (<7 V)



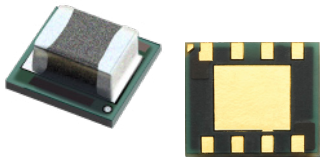
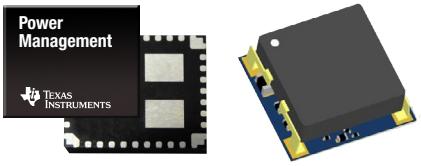
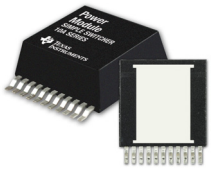
Mid V_{IN} (7 V to 30 V)



Wide V_{IN} (>30 V)



TI module packages

	Embedded	QFN	Leaded
Package outline	**BGA / LGA (QFN-like)** 	**QFN style** 	**TO-style** 
Description	• LGA QFN pinless package • Embedded die in FR laminate (LGA or BGA pads) • MSL2/3 • Highest-density package	• QFN-style pinless package • Single copper leadframe • MSL3 • Size-optimized package • Excellent thermals	• TO-style pinned package • Dual copper leadframe • 7- and 11-pin versions • MSL3 • Large single-thermal pad • Easy to use