

POWER MODULES

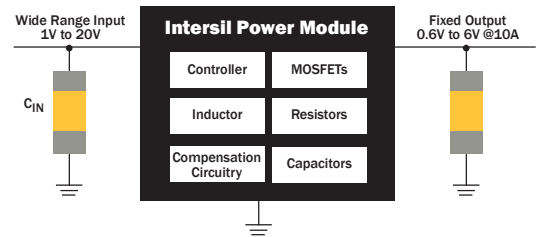
POWER MADE SIMPLE



ADVANCED POWER MODULES SMARTER, EASIER DESIGNS

1 COMPLETE POWER SOLUTION = REDUCES DESIGN TIME + LOWERS COST + SAVES SPACE

Intersil Power Modules are complete, ready-to-design solution includes PWM controller, drivers, MOSFETs, most passive components and various power management support ICs (eliminating the need to design with and layout up to 80 different components).



2 LEADING POWER TECHNOLOGY

- Efficiency >90%
- Latest power management features (Freq. Sync, Current Sharing, etc)
- Pin-to-pin compatible for changing power requirements
- Easy to use digital interface (ZL9101M)

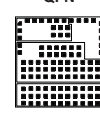
3 QFN PACKAGE TECHNOLOGY - DESIGNED SPECIFICALLY TO ENHANCE THE POWER MODULES SOLUTION

Best-in-Class Thermal Performance



- ✓ Thermal molding compound allows for even heat distribution
- ✓ Large copper islands (V_{IN}, V_{OUT}, PHASE, GND) optimize heat dissipation
- ✓ Theta J_A = 11.5 °C/W (15% better than LGA package)
- ✓ Operates at full 10A load up to 80 °C (LGA's full 10A load is at 40 °C)

Easier Design



QFN vs LGA

- ✓ All QFN pins are accessible for testing and probing
- ✓ QFN is easier to solder and greatly reduces "lift off"
- ✓ QFN better endures shock and vibration

INTERSIL POWER MODULE FAMILY

Part Number	Device Description	V _{IN} (range) (V)	V _{OUT} (range) (V)	I _{OUT} (A)	Current Share	Multi-phase	P _{GOOD}	Enable	Ambient Temp Range (°C)	Load Fault Protection	Peak Efficiency (%)	Package (mm)
ISL8200M	Complete Current Share 10A DC/DC Power Module	3 - 20	0.6 - 6	10	Y	Y	Y	Y	-40 to +85	Y	93	23 Ld QFN (15 x 15 x 2.2)
ISL8200MMREP	Full Mil-Temp Complete Current Share 10A DC/DC Power Module	3 - 20	0.6 - 6	10	Y	Y	Y	Y	-55 °C to +125 °C	Y	94	23 Ld QFN (15 x 15 x 2.2)
ISL8201M	10A, High Efficiency DC/DC Module	1 - 20	0.6 - 5	10	N	N	N	Y	-40 to +85	Y	95	15 Ld QFN (15 x 15 x 3.5)
ISL8204M*	Complete High Efficiency DC/DC Power Module	1 - 20	0.6 - 6	4	N	N	N	Y	-40 to +85	Y	95	15 Ld QFN (15 x 15 x 3.5)
ISL8206M*	Complete High Efficiency DC/DC Power Module	1 - 20	0.6 - 6	6	N	N	N	Y	-40 to +85	Y	95	15 Ld QFN (15 x 15 x 3.5)
ZL9101M	Digital DC/DC PMBus 12A Module	1 - 13.2	0.54 - 4	12	Y	Y	Y	Y	-40 to +85	N	95	21 Ld QFN (15 x 15 x 3.5)

* Lower output current pin-for-pin compatible to the ISL8201MIRZ.