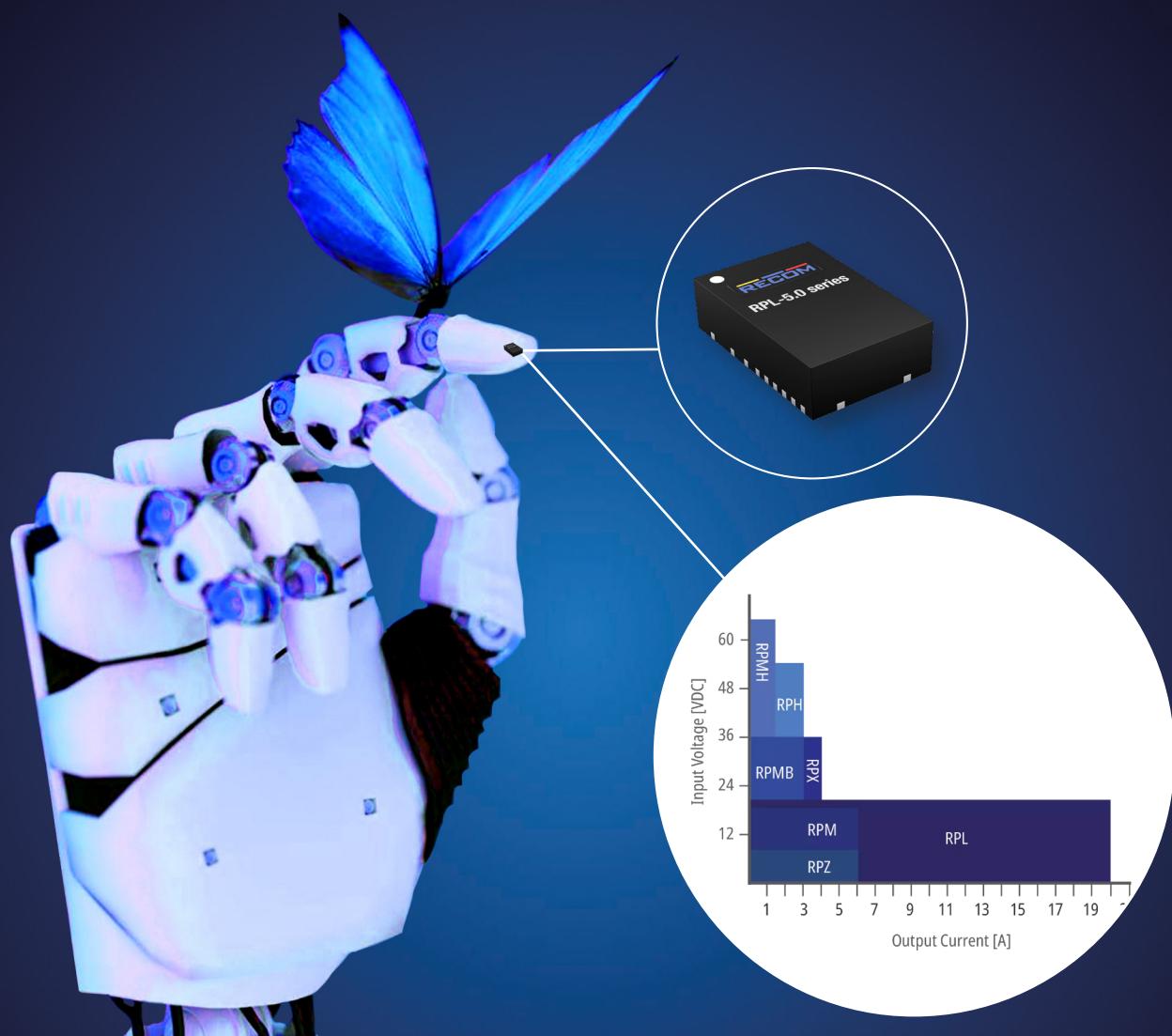




RECOM POWER MODULE COLLECTION

ISOLATED AND NON-ISOLATED MINIATURE DC/DC CONVERTERS



POWER MODULES FINALLY SHRINK DOWN IN SIZE

In 1975, Gordon Moore made a prediction: the number of transistors in a computer chip would double every two years.

Since then, innovators have squeezed more transistors into smaller footprints to satisfy the demands of today's miniature devices.

But now, devices are consuming more power than ever.

Analysts predict 45.52 billion IoT devices will sign online by 2025.

New vehicles roll off the lot capturing data for 60-100 sensors.

Devices are getting smaller, and components are packed closer together, with increased power requirements—but voltage regulators remain bulky, devouring much-needed board space.

Until now. **New RECOM power modules are shrinking in size, packing power into footprints as small as 1.5 x 2.0 mm.**

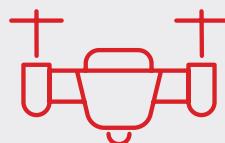
THE MINIATURIZATION TREND IS HERE TO STAY: GET STARTED WITH A SMALLER POWER FOOTPRINT



45.52 billion
IoT devices by 2025¹



Automotive smart sensors
will transmit 1000x more
data per month by 2025²



The drone market will hit
\$47.38 billion by 2030³

¹ https://www.huawei.com/minisite/giv/Files/whitepaper_en_2018.pdf

² Automotive Edge Computing Consortium, "General Principle and Vision Report": https://aecc.org/wp-content/uploads/2020/02/AECC_White_Paper_v3.0.pdf

³ <https://www.globenewswire.com/en/news-release/2022/12/30/2581124/0/en/Commercial-Drone-Market-Report-on-47-38-Billion-Industry-Opportunity-Increasing-Usage-of-Small-Drones-in-Commercial-Applications-Remote-Sensing-Technologies-to-propel-the-industry-.html>

RECOM POWER MODULES: AS SMALL AS AN APPLE SEED

FLEXIBILITY → → → FIT & FORGET

Customization options that range from DIY to drop-in.

FIT & FORGET: TURN-KEY, BOARD-LEVEL DC POWER SOLUTIONS

With **Fit & Forget Power Modules**, you won't need to shop around for diodes, transistors, or thermal materials—everything you need ships ready inside a power supply as small as an apple seed.

JUST DROP IT IN

With ready-to-go designs, there's little complexity on your end. You won't need to perform extensive testing or engage multiple vendors—let us do the legwork.

VERIFIED FILTERS AND LAYOUTS PROVIDE FULL EMI PROTECTION

Six-sided shielding for a built-in safeguard against electromagnetic interference.

HEAT MANAGEMENT HANDLED

No extra heat sinks or other thermal management materials to source. Fit & Forget modules include everything you need to protect against heat.

Faster time to market. Lightweight. Small footprint. Less design complexity. Just drop it in.

NEED MORE DESIGN FLEXIBILITY?

Build a system to suit your needs. **Flexible Power Modules** let you change the power requirements of the module without redesigning the board.

RECOM POWER MODULES: THE BEST IN 3D POWER PACKAGING

When in doubt—go up. Instead of restricting power configurations to side-by-side layouts, 3D Power Packaging uses all available space. By stacking components, RECOM takes advantage of the z-axis to increase power density.

WHERE YOU'LL FIND RECOM POWER MODULES



HANDHELD DEVICES

From battery-powered warehouse scanners to non-isolated medical equipment, the miniature power footprint is ideal for products on the go.



DRONES

Last-mile delivery. Capturing the bird's-eye perspective on a movie set. Drone demand is soaring higher than ever. Support lighting, navigation sensors, and cameras with compact power modules ready to fly.



IoT SENSORS

Every device, vehicle, home, and manufacturing facility is alive with an armada of smart sensors. Sensing components are squeezed closer together than ever, requiring power modules that fit.



INDUSTRIAL MOBILITY

Robots, drones, and autonomous guided vehicles are taking over busy warehouse floors. Industrial mobility and automation is on the move. Ultra-reliable, lightweight power modules improve up-time to keep businesses running no matter what.



AUTOMOTIVE

Modern cars are mini data centers, piloting traction control systems, heated seats, and self-driving sensors. RECOM is qualified under AEC-Q and ISO/TS 16949 specifications to supply automotive manufacturers with power modules that keep the industry driving forward.



TAP INTO RECOM'S GLOBAL MANUFACTURING NETWORK



When it comes to manufacturing timelines, you can rely on RECOM to deliver. With an expansive manufacturing network in Italy, Mainland China, and Taiwan (plus subcontracted facilities in Asia and Europe), supply chain disruptions won't derail your deadlines. Whether you're looking for a readily available product or exploring a custom solution, RECOM works quickly and efficiently around the world.

ONE-STOP SHOP FOR YOUR POWER NEEDS



Engaging multiple vendors can complicate power designs—and delay project timelines. Reduce compatibility issues by reducing the list to one. RECOM manufactures over 30,000 power supplies, converters, switching regulators, and LED drivers. You'll have access to everything you need in one place.

RECOM MAKES IT EASY AS POSSIBLE

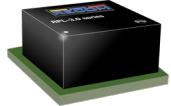
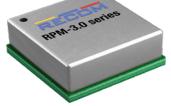


RECOM is well-known for making your project as easy as possible. From start to finish, RECOM engineers are at your side to help integrate power modules into your designs. With access to RECOM's state-of-the-art R&D center and laboratory wing, you're well supported.

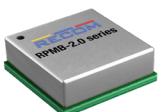
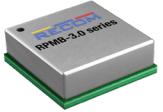
RECOM POWER MODULES COLLECTION

	Series	Iout	Vin	Vout	Case/DIM	Other Features
5VIN BUCK						
	RPZ-0.5	0.5	2.3-5.5	0.6-5.375	QFN 2.0 x 2.0 x 1.6 mm (.08" x .08" x .06")	SCP, OCP, OVP, and UVLO efficiency up to 91% operating temperature range: -40°C to +125°C (with derating)
	RPZ-1.0	1	2.3-5.5	0.6-5.25	QFN 2.0 x 2.0 x 1.6 mm (0.08" x 0.08" x 0.06")	SCP, OCP, and UVLO efficiency up to 88% operating temperature range: -40°C to +125°C (with derating) ultra-compact design with low profile (1.6mm)
	RPZ-2.0	2	2.75-6	0.6-5.74	QFN 2.5 x 3.5 x 1.6 mm (0.1" x 0.14" x 0.06")	SCP, OCP, and UVLO efficiency up to 90% operating temperature range: -40°C to +90°C (full load) ultra-compact design with low profile (1.6mm)
	RPZ-3.0A	3	2.75-6	0.6-5.5	QFN 2.5 x 3.5 x 1.6 mm (0.1" x 0.14" x 0.06")	SCP, OCP, OTP, and UVLO efficiency up to 92% operating temperature range: -40°C to +125°C (with derating)
	RPZ-6.0	6	2.75-7	0.6-6.65	QFN 4.0 x 6.0 x 1.6 mm (0.2" x 0.2" x 0.6")	SCP, OCP, OTP, and UVLO efficiency up to 90% operating temperature range: -40°C to +125°C (with derating)

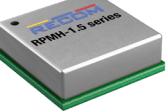
RECOM POWER MODULES COLLECTION

	Series	Iout	Vin	Vout	Case/DIM	Other Features
12VIN BUCK						
	RPL-1.0	1	3-22	0.6 -12	LGA-11 3.0 x 3.0 x 2.0 mm (0.12" x 0.12" x 0.08")	SCP, OCP, OTP, and UVLO efficiency up to 84% operating temperature range: -40°C to +125°C (with derating) compact design with low profile (2mm)
	RPM-1.0	1	3-17	3.3, 5 trimmable 0.9-6.0	LGA-25 12.19 x 12.19 x 3.75 mm (0.5" x 0.5" x 0.2")	Operating temperature range: -40°C to +107°C at full load very high efficiency up to 99% 6-sided shielding for low EMI
	RPM-2.0	2	3-17	3.3, 5 trimmable 0.9-6.0	LGA-25 12.19 x 12.19 x 3.75 mm (0.5" x 0.5" x 0.2")	Operating temperature range: -40°C to +105°C at full load very high efficiency up to 98% 6-sided shielding for low EMI
	RPL-3.0	3	4-18	0.8-5.2	LGA-10 3.0 x 3.0 x 1.45 mm (0.1" x 0.1" x 0.06")	Very high power density 3A maximum output current very low 1.45mm profile enable, sense, and power good functions
	RPM-3.0	3	3-17	3.3, 5 trimmable 0.9-6.0	LGA-25 12.19 x 12.19 x 3.75 mm (0.5" x 0.5" x 0.2")	Operating temperature range: -40°C to +105°C at full load very high efficiency up to 97% 6-sided shielding for low EMI
	RPL-5.0	5	2.75-17	0.6-12	QFN 4.0 x 6.0 x 1.6 mm (0.2" x 0.2" x 0.6")	SCP, OCP, and UVLO efficiency up to 90% operating temperature range: -40°C to +125°C (with derating)
	RPM-6.0	6	4-15	3.3, 5 trimmable 0.9-6.0	LGA-25 12.19 x 12.19 x 3.75 mm (0.5" x 0.5" x 0.2")	Operating temperature range: -40°C to +90°C at full load very high efficiency up to 99% 6-sided shielding for low EMI
	RPL-10	10	4-16	0.6-5.5	LGA-29 7.0 x 7.0 x 4.4 mm (0.3" x 0.3" x 0.2")	SCP, OCP, OTP, and UVLO efficiency up to 94% operating temperature range: -40°C to +125°C (with derating)
	RPL-20	20	4-16	0.6-5.5	LGA-29 7.0 x 7.0 x 4.4 mm (0.3" x 0.3" x 0.2")	SCP, OCP, OTP, and UVLO efficiency up to 94% operating temperature range: -40°C to +125°C (with derating)

RECOM POWER MODULES COLLECTION

	Series	Iout	Vin	Vout	Case/DIM	Other Features
24VIN BUCK						
	RPX-0.5Q	0.5	4-36	0.8-30	QFN 3.0 x 5.0 x 1.6 mm (0.1" x 0.2" x 0.06")	AEC-Q100 Grade 1, wettable flank, SCP, OCP, OTP, and UVLO protection, operating temperature range: -40°C to +125°C trimmable output
	RPX-1.0	1	4-36	0.8-30	QFN 3.0 x 5.0 x 1.6 mm (0.1" x 0.2" x 0.06")	SCP, OCP, OTP, and UVLO protection operating temperature range: -40°C to +125°C trimmable output
	RPX-1.5	1.5	4-36	0.8-30	QFN 3.0 x 5.0 x 1.6 mm (0.1" x 0.2" x 0.06")	SCP, OCP, OTP, and UVLO protection operating temperature range: -40°C to +125°C trimmable output
	RPX-1.5Q	1.5	4-36	0.8-30	QFN 3.0 x 5.0 x 1.6 mm (0.1" x 0.2" x 0.06")	AEC-Q100 Grade 1, wettable flank, SCP, OCP, OTP, and UVLO protection, operating temperature range: -40°C to +125°C trimmable output
	RPY-1.5Q	1.5	4-36	0.8-34.8	QFN 3.0 x 5.0 x 1.6 mm (0.1" x 0.2" x 0.06")	AEC-Q100 Grade 1, wettable flank, constant current module with integrated shielded inductor, 1.5A output with 0-100% PWM dimming, enable, fault thermal shutdown, and soft-start functions
	RPMB-2.0	2	4-36	3.3, 5, 12, 15	LGA-25 12.19 x 12.19 x 3.75 mm (0.5" x 0.5" x 0.2")	Operating temperature range: -40°C to +100°C with derating, convection cooled adjustable output up to 24V
	RPX-2.5	2.5	4.5-28	1.2-6	QFN 4.5 x 4.0 x 2.0 mm (0.2" x 0.1" x 0.07")	Very high power density with SCP, OCP, OTP, OVP, and UVLO protection efficiency up to 91% trimmable output
	RPMB-3.0	3	4-36	3.3, 5, 12, 15	LGA-25 12.19 x 12.19 x 3.75 mm (0.5" x 0.5" x 0.2")	Operating temperature range: -40°C to +100°C with derating, convection cooled adjustable output up to 24V
	RPX-4.0	4	3.8-36	1-7	QFN 5.0 x 5.5 x 4.0 mm (0.2" x 0.2" x 0.2")	Very high power density excellent thermal performance power good, enable, and trimmable output

RECOM POWER MODULES COLLECTION

	Series	Iout	Vin	Vout	Case/DIM	Other Features
HIGH VOLTAGE BUCK						
	RPMH-0.5	0.5	4.3-65	3.3, 5, 12, 15, 24	LGA-25 12.19 x 12.19 x 3.75 mm (0.5" x 0.5" x 0.2")	Wide input range operating temperature range: -40°C to +95°C at full load on/off, sense, trim, power good, and sequencing functions
	RPMH-1.5	1.5	5-60	3.3, 5, 12, 15, 24	LGA-25 12.19 x 12.19 x 3.75 mm (0.5" x 0.5" x 0.2")	Wide input voltage range operating temperature range: -40°C to +100°C at full load
	RPH-3.0	3	4.5-55	1-15	QFN 10.0 x 12.0 x 4.0 mm (0.4" x 0.5" x 0.2")	SCP, OCP, OVP, and UVLO efficiency up to 91% operating temperature range: -40°C to +125°C (with derating)