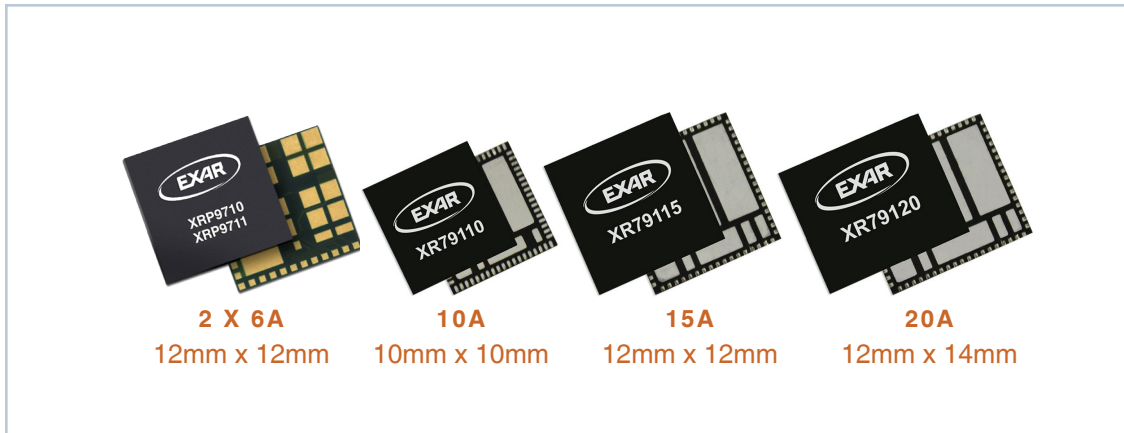




Power Modules for Embedded Solutions

- Easy to use
- High efficiency
- Exceptional Thermal Performance



World Class Power Density Modules

Exar power modules provide easy-to-use high density power solutions. They include single, dual and quad output versions with output current ratings from 6A to 20A. These products have world class power density, efficiency and thermal performance. The programmable power modules are members of the universal PMIC family which

offer a wide range of configurability, dynamic control and telemetry. The single output modules use a patented emulated current-mode COT control that simplifies the design by requiring no external compensation when using ceramic output capacitors.

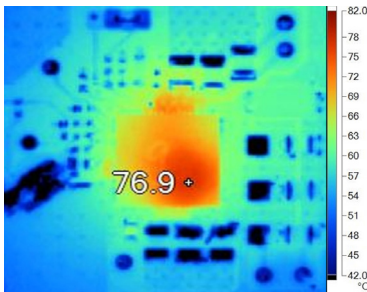
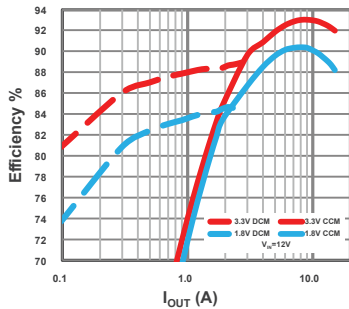
Part Number	I _{OUT}	V _{IN} Range	V _{OUT} Range	Frequency	Efficiency	Package	Features
XRP9710	6A	3V – 22V	0.6V – 5.5V	500kHz–750kHz	92%	12mm x 12mm x 2.75mm LGA	Dual programmable module with differential sensing, Flash, five GPIOs.
XRP9711	6A	3V – 22V	0.6V – 5.5V	(500kHz – 750kHz) + (124kHz – 1.23MHz)	92%	12mm x 12mm x 2.75mm LGA	Dual programmable module with integrated dual switching controller, four outputs, Flash, five GPIOs.
XR79110	10A	4.5V – 22V	0.6V – 18V	400kHz – 600kHz	95%	10mm x 10mm x 4 mm QFN	Exceptional thermal performance with patented COT provides fast line and load transient response using ceramic output capacitors. UVLO, OTP, soft start, adjustable hiccup current limit and short circuit protection.
XR79115	15A	4.5V – 22V	0.6V – 18V	400kHz – 600kHz	93%	12mm x 12mm x 4 mm QFN	
XR79120	20A	4.5V – 22V	0.6V – 18V	400kHz – 600kHz	93%	12mm x 14mm x 4 mm QFN	

XR79110/15/20

The XR79110/15/20 are synchronous step-down controllers for point-of-load supplies up to 20A.

With a proprietary emulated current mode Constant-On-Time (COT) control scheme, the XR79110 provides extremely fast transient response using ceramic output capacitors. It requires no loop compensation hence simplifying circuit implementation and reducing overall component count. The control loop also provides exceptional load and line regulation and maintains constant operating frequency. A selectable power saving mode allows the user to operate in discontinuous mode (DCM) at light current loads thereby significantly increasing the converter efficiency.

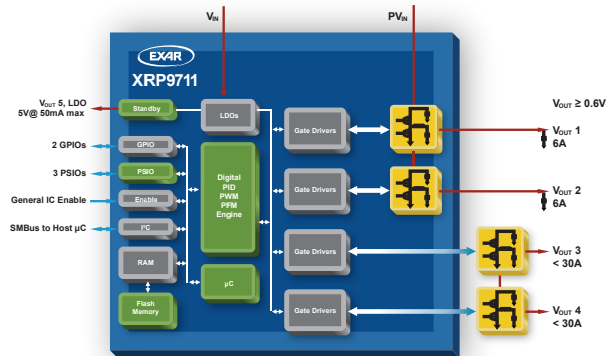
- 95% peak efficiency
- 260°C lead solder temperature
- 10A, 15A, 20A capable step-down modules
- Wide input voltage range: 3V – 22V
 - Low range: 4.5V – 5.5V
 - High range: 5.0V – 22V
 - With external 5V: 3.0V – 22V



XRP9710/11

The XRP9710 and XRP9711 are programmable step down power modules providing two 6A outputs. The module package contains the switching controller, power MOSFETs, inductors and support components. As a result, external components are minimal. A wide input voltage range allows for single supply operation from standard power rails.

- Programmable power technology
- CISPR22 level B radiated emission classification
- Best in class JEDEC MSL 2A
- Wide input voltage range: 4.75V – 22V
 - Low range: 4.75V – 5.5V
 - High range: 5.5V – 22V
 - With external 5V: 3.0V – 22V
- Output voltage range: 0.6V – 5.5V
- SMBus compliant I²C interface with full power monitoring and reporting



EXAR Corporation reserves the right to make changes to the products contained in this publication in order to improve design, performance or reliability. EXAR Corporation conveys no license under any patent or other right and makes no representation that the circuits are free of patent infringement. While the information in this publication has been carefully checked, no responsibility, however, is assumed for inaccuracies.

Reproduction, in part or whole, without the prior written consent of EXAR Corporation is prohibited. Exar, XR and the XR logo are registered trademarks of Exar Corporation. All other trademarks are the property of their respective owners.

©2015 Exar Corporation



www.exar.com

48760 Kato Road
Fremont, CA 94538
USA

Tel.: +1 (510) 668-7000
Fax: +1 (510) 668-7001
Email: Support@exar.com