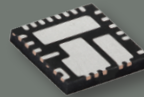




# microBUCK<sup>®</sup> / microBRICK<sup>™</sup> Integrated Circuits

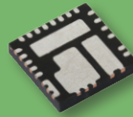
**Vishay Automotive Grade**  
-4.5 V to 60 V, Scalable 2 A,  
4 A, 6 A, and 10 A Regulators

SIC48X SERIES



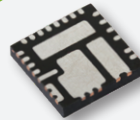
**4.5 V to 60 V,**  
Scalable 2 A, 4 A, 6 A,  
and 10 A Regulators

SIC46X SERIES



**4.5 V to 55 V,**  
Scalable 3 A, 5 A, 8 A,  
and 12 A Regulators

SIC47X SERIES



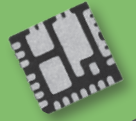
**4.5 V to 16 V, Scalable**  
15 A and 24 A Regulators  
**With Digital Interface**

SIC45X SERIES



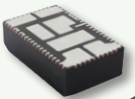
**3 V to 28 V,**  
Scalable 8 A, 12 A,  
and 24 A Regulators

SIC43X SERIES



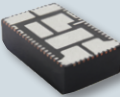
**microBRICK<sup>™</sup>** - 3 V to 28 V,  
Scalable 8 A, 12 A, and  
24 A Regulators With  
Integrated Inductor

SIC93X SERIES



**microBRICK<sup>™</sup>** - 4.5 V to 60 V,  
Scalable 2 A, 4 A, 6 A, and 10 A  
Regulators With Integrated Inductor

SIC96X SERIES





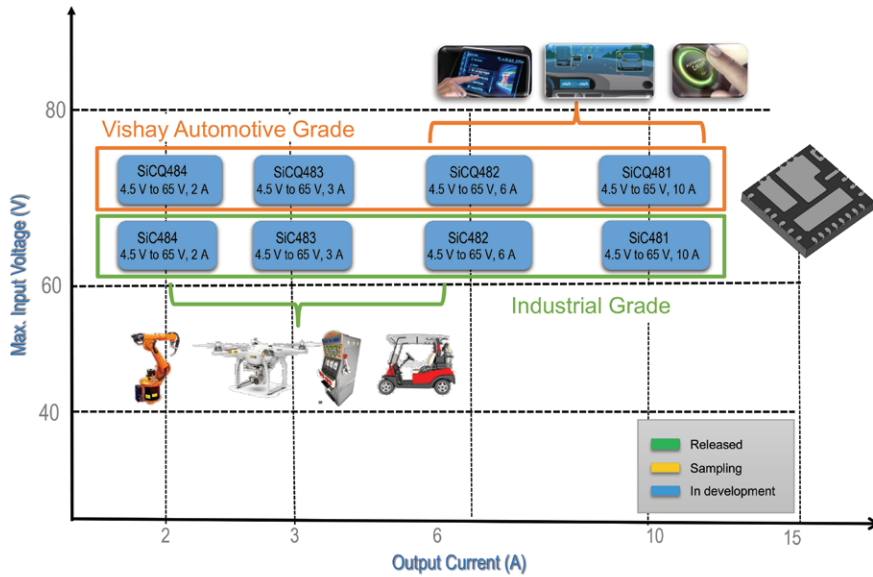
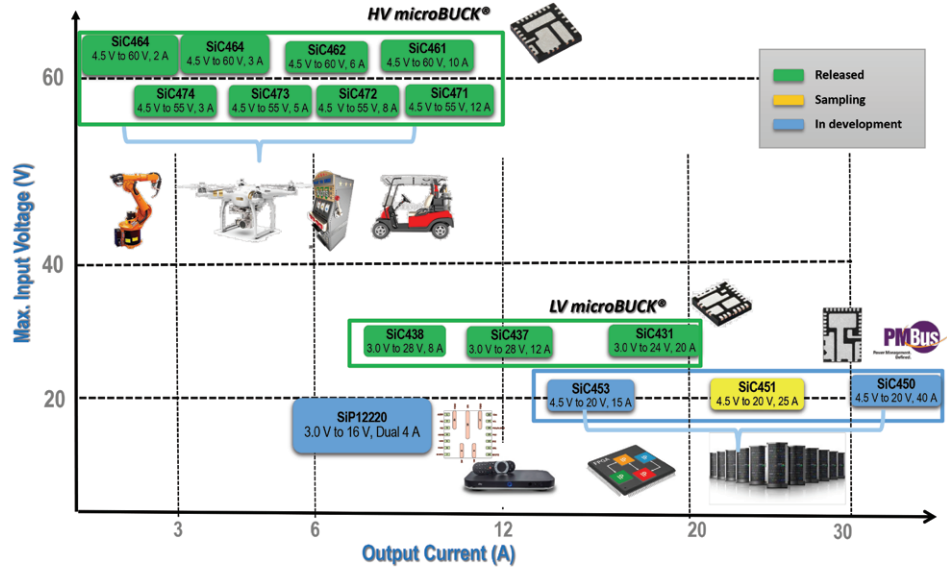
# microBUCK® AND microBRICK™

## Focus Products

### microBUCK® Commercial

#### Features

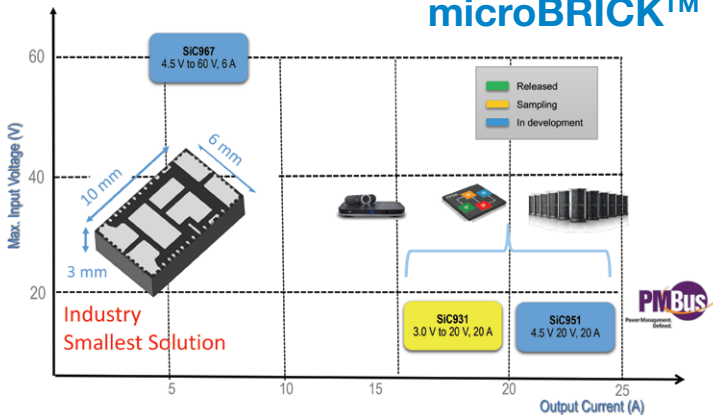
- Ultra low quiescent current
- Ultrafast transient response
- Internal regulator
- Power-saving mode
- Rugged and reliable



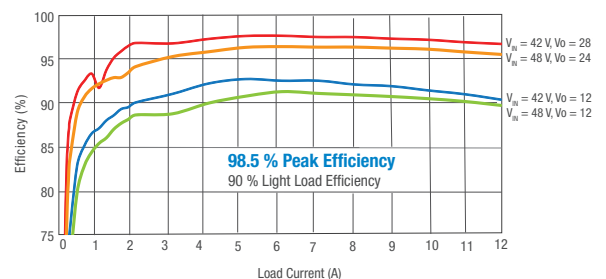
### microBUCK® Automotive and Industrial

The Whole Family Offers Flexibility and Integration While Maintaining the Best Efficiency on the Market

### microBRICK™



Measured Efficiency for SiC471 @ Fsw=300kHz





# microBUCK® AND microBRICK™

Focus Products

## microBUCK®

Family	P/N	Input Voltage	V <sub>out</sub> Voltage	Maximum Current	Compensation		Features			Protections				Package
					Internal	External	PGOOD	SYNC	PMBUS	VCC-UVLO	OCP	OVP/UVP	OTP	
SiC43x	SiC438	4.5 V to 18 V	0.6 V to 0.9* V <sub>IN</sub>	8 A	√	-	√	-	-	√	√	√	√	4 mm x 4 mm
	SiC437	4.5 V to 18 V		12 A	√	-	√	-	-	√	√	√	√	
	SiC431	4.5 V to 18 V		24 A	√	-	√	-	-	√	√	√	√	
SiC45x	SiC453	4.5 V to 8 V	0.3 V to 5.5 V	15 A	√	-	√	√	√	√	√	√	√	5 mm x 7 mm
	SiC451			25 A	√	-	√	√	√	√	√	√	√	
	SiC450			40 A	√	-	√	√	√	√	√	√	√	
SiC46x	SiC469	4.5 V to 60 V	0.8 V to 0.92* V <sub>IN</sub>	2 A	√	-	√	-	-	√	√	√	√	5 mm x 5 mm
	SiC468			4 A	√	-	√	-	-	√	√	√	√	
	SiC467			6 A	√	-	√	-	-	√	√	√	√	
	SiC466			10 A	√	-	√	-	-	√	√	√	√	
	SiC464			2 A	-	√	√	-	-	√	√	√	√	
	SiC463			4 A	-	√	√	-	-	√	√	√	√	
	SiC462			6 A	-	√	√	-	-	√	√	√	√	
	SiC461			10 A	-	√	√	-	-	√	√	√	√	
SiC47x	SiC479	4.5 V to 55 V	0.8 V to 0.92* V <sub>IN</sub>	3 A	√	-	√	-	-	√	√	√	√	5 mm x 5 mm
	SiC478			5 A	√	-	√	-	-	√	√	√	√	
	SiC477			8 A	√	-	√	-	-	√	√	√	√	
	SiC476			12 A	√	-	√	-	-	√	√	√	√	
	SiC474			3 A	-	√	√	-	-	√	√	√	√	
	SiC473			5 A	-	√	√	-	-	√	√	√	√	
	SiC472			8 A	-	√	√	-	-	√	√	√	√	
	SiC471			12 A	-	√	√	-	-	√	√	√	√	
SiC48x	SiC482	4.5 V to 55 V	0.8 V to 0.92* V <sub>IN</sub>	6 A	-	√	√	-	-	√	√	√	√	5 mm x 5 mm Wettable Flank
	SiC481			10 A	-	√	√	-	-	√	√	√	√	

## microBRICK™

Family	P/N	Input Voltage	V <sub>out</sub> Voltage	Maximum Current	Compensation		Features			Protections				Package
					Internal	External	PGOOD	SYNC	PMBUS	VCC-UVLO	OCP	OVP/UVP	OTP	
SiC9xx	SiC931	4.5 V to 18 V	0.6 V to 0.9 x V <sub>in</sub>	20 A	√		√			√	√	√	√	10 mm x 6 mm x 3 mm
	SiC951	4.5 V to 24 V		20 A	√		√	√	√	√	√	√	√	
	SiC967	4.5 V to 60 V		6 A	√		√			√	√	√	√	



# Achieve **High Efficiency** While **Reducing Costs** by Using Vishay's microBUCK® and microBRICK™ Scalable DC/DC Regulators

## **Advantages** of Vishay's microBUCK® and microBRICK™

- Compact and scalable family
- High efficiency at both light and full loads
- Ultrafast transient response
- Fully protected against voltage, current, and temperature overstress

## For the Following **Applications**

- POL regulation for low power processors, network processors, DSPs, FPGAs, and ASICs
- Servers and telecom
- Computing, broadband, networking, LAN / WAN
- A/V, high density cards, storage, DSL, STB, DVR, and DTV
- Industrial power supplies
- ebike
- Automotive



Use Vishay's compact 2 A to 24 A microBUCK® regulators to efficiently power your next-generation server and telecommunications designs



To save board space, use Vishay's microBRICK™ regulators in your next industrial power supply design

## Useful Links

- SiC46x and SiC47x microBUCK® Series  
[www.vishay.com/doc?48238](http://www.vishay.com/doc?48238)
- SiC43x microBUCK® Series  
[www.vishay.com/doc?48283](http://www.vishay.com/doc?48283)
- High Output Power Capability of the SiC46X Family  
[www.vishay.com/doc?48285](http://www.vishay.com/doc?48285)
- Simulation Tool  
[vishay.transim.com](http://vishay.transim.com)



**RoHS**  
COMPLIANT

**HALOGEN**  
**FREE**

A **WORLD OF**  
**SOLUTIONS™**

## X-ON Electronics

Largest Supplier of Electrical and Electronic Components

*Click to view similar products for [Switching Voltage Regulators](#) category:*

*Click to view products by [Vishay](#) manufacturer:*

Other Similar products are found below :

[TLF30682QVS01XUMA1](#) [TPSM84209RKHR](#) [FAN53526UC106X](#) [FAN53526UC128X](#) [MP1587EN-LF](#) [FAN48610BUC33X](#)  
[FAN48617UC50X](#) [FAN53526UC89X](#) [MIC45116-1YMP-T1](#) [NCV891234MW50R2G](#) [AST1S31PUR](#) [16017](#) [A6986FTR](#) [NCP81103MNTXG](#)  
[NCP81203PMNTXG](#) [MAX17242ETPA+](#) [MAX16935RATEB/V+](#) [MP2313GJ-Z](#) [NCP81208MNTXG](#) [MP8759GD-Z](#) [FAN53526UC100X](#)  
[FAN53526UC84X](#) [PCA9412AUKZ](#) [MP2314SGJ-Z](#) [AS1340A-BTDM-10](#) [MP3421GG-P](#) [NCP81109GMNTXG](#) [MP6003DN-LF-Z](#)  
[MAX16935BAUES/V+](#) [LT8315IFE#PBF](#) [SCY1751FCCT1G](#) [NCP81109JMNTXG](#) [MAX16956AUBA/V+](#) [AP3409ADNTR-G1](#)  
[FAN48623UC36FX](#) [MPQ2454GH](#) [MPQ2454GH-AEC1](#) [MP21148GQD-P](#) [AS3701B-BWLM-68](#) [MPQ2143DJ-P](#) [MP9942AGJ-P](#)  
[MP8759GD-P](#) [MP5610GQG-P](#) [MP28200GG-P](#) [MP2451DJ-LF-Z](#) [MP2326GD-P](#) [MP2314SGJ-P](#) [MP2158AGQH-P](#) [MP2148GQD-18-P](#)  
[MP1470HGJ-P](#)