



life.augmented

# VIPerPlus Evaluation boards

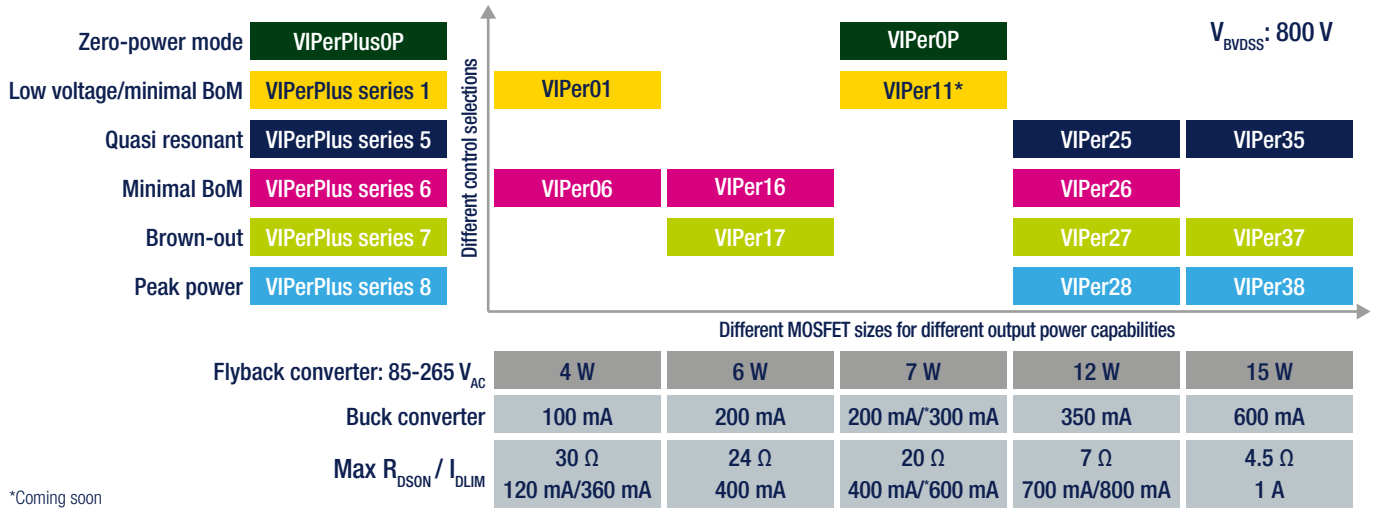
## Your SMPS design deserves a Plus





# Where every mW counts

## FAMILY PORTRAIT



## TOPOLOGIES- BEST FIT FOR THE MOST POPULAR ARCHITECTURES

Isolated flyback	Primary Side Regulation (PSR)	VIPerPlus0P	VIPerPlus series 1	VIPerPlus series 6		
	Secondary Side Regulation (SSR)	VIPerPlus0P	VIPerPlus series 1	VIPerPlus series 5	VIPerPlus series 6	VIPerPlus series 7
Non-isolated	Flyback/buck/buck boost	VIPerPlus0P	VIPerPlus series 1	VIPerPlus series 6		



# Evaluation boards

## NON-ISOLATED, INDUCTOR-BASED TOPOLOGIES - BUCK OR BUCK-BOOST UP TO I<sub>out</sub> 350 mA AT WIDE AND ULTRA-WIDE INPUT VOLTAGE RANGE

Order code	Part number	Short description	V <sub>in</sub>	V <sub>out</sub> /I <sub>out</sub>	Document
STEVAL-ISA010V1	VIPER16LN	Not-isolated buck converter, 60 kHz, DIP7 package	85-500 V <sub>AC</sub>	12 V ±10%, 5 V ±4%, 150 mA	AN2872
STEVAL-ISA096V1	VIPER06XS	Not-isolated buck boost converter, 30 kHz, SS010 package	85-265 V <sub>AC</sub>	-12 V/150 mA	UM1470
STEVAL-ISA114V1	VIPER06XS	Not-isolated buck converter, 30 kHz, SS010 package	80-265 V <sub>AC</sub>	5 V/160 mA	AN4273
STEVAL-ISA115V1	VIPER06XS	Not-isolated buck converter, 30 kHz, SS010 package	85-265 V <sub>AC</sub>	12 V/150 mA	AN4260
STEVAL-ISA116V1	VIPER26LD	Not-isolated buck converter, 60 kHz, S016N package	85-265 V <sub>AC</sub>	16 V, 5 V/300 mA	AN4562
STEVAL-ISA119V1	VIPER16LD	Not-isolated buck converter, 60 kHz, S016N package	85-265 V <sub>AC</sub>	12, 5 V/150 mA	AN4345
STEVAL-ISA130V1	VIPER06XN	Not-isolated buck converter, 30 kHz, DIP7 package	85-375 V <sub>AC</sub>	12 V/140 mA	DN0009
STEVAL-ISA178V1	VIPER013XS	Non-isolated buck converter, jittered 30 kHz, SS010 package	85-265 V <sub>AC</sub>	5 V/200 mA	AN4858
STEVAL-ISA179V1	VIPER0PLD	Non-isolated buck converter, jittered 60 kHz, S016N package	85-265 V <sub>AC</sub>	15 V/150 mA	AN4857
STEVAL-ISA195V1*	VIPER115XS	Not isolated buck converter, 30 kHz, SS010 package	85-265 V <sub>AC</sub>	5V/350mA	Coming soon

## FLYBACK UP TO 4.5 W AT WIDE INPUT VOLTAGE RANGE - NON ISOLATED

Order code	Part number	Short description	V <sub>in</sub>	V <sub>out</sub> /I <sub>out</sub>	Document
STEVAL-ISA112V1	VIPER06HN	Flyback, 115 kHz, DIP7 package	85-265 V <sub>AC</sub>	12 V/350 mA	AN4116
STEVAL-ISA113V1	VIPER06HS	Flyback, 115 kHz, SS010 package	85-265 V <sub>AC</sub>	12 V/350 mA	AN4164
STEVAL-ISA177V1	VIPER013LS	Flyback, jittered 60 kHz, SS010 package	85-265 V <sub>AC</sub>	5 V/800 mA	AN4855

## UP TO 4.5 W AT WIDE INPUT VOLTAGE RANGE - ISOLATED

Order code	Part number	Short description	V <sub>in</sub>	V <sub>out</sub> /I <sub>out</sub>	Document
STEVAL-ILLO17V1	VIPER17HN	Flyback (LED driver), 115 kHz DIP7 package	220 ±20%	7 V/500 mA	AN2811
STEVAL-ISA134V1	VIPER06HN	Flyback, 115 kHz, DIP7 package	85-265 V <sub>AC</sub>	12 V/330 mA	AN4372
STEVAL-ISA135V1	VIPER06HS	Flyback, 115 kHz, SS010 package	85-265 V <sub>AC</sub>	12 V/330 mA	AN4404
STEVAL-ISA136V1	VIPER06HN	Flyback, 115 kHz, DIP7 package	85-265 V <sub>AC</sub>	5 V/600 mA	AN4410
STEVAL-ISA137V1	VIPER06HS	Flyback, 115 kHz, SS010 package	85-265 V <sub>AC</sub>	5 V/600 mA	AN4418

## UP TO 7 W AT WIDE INPUT VOLTAGE RANGE - NON ISOLATED

Order code	Part number	Short description	V <sub>in</sub>	V <sub>out</sub> /I <sub>out</sub>	Document
STEVAL-ISA071V2	VIPER16LN	Flyback (negative), 60 kHz, DIP7 package	85-265 V <sub>AC</sub>	-5 V/400 mA, +7 V/160 mA	UM0920
STEVAL-ISA118V1	VIPER16LN	Flyback, 60 kHz, DIP7 package	85-265 V <sub>AC</sub>	16 V/280 mA	AN3028
STEVAL-ISA129V1	VIPER16HN	Flyback, 115 kHz, DIP7 package	85-265 V <sub>AC</sub>	16 V/280 mA	
STEVAL-ISA174V1	VIPER0PLD	Flyback, jittered 60 kHz, S016N package, Zero-Power	85-265 V <sub>AC</sub>	7 V, -5 V 7 W	AN4836
STEVAL-ISA192V1	VIPER0PLD	Flyback, jittered 60 kHz, S016N package, Zero-Power with Tactile switches and STM32L	85-265 V <sub>AC</sub>	-5 V/800 mA, +7 V/400 mA	AN4941
STEVAL-ISA196V1*	VIPER114LS	Flyback, 60 kHz, S016N package	85-265 V <sub>AC</sub>	5V/1.2 A	Coming soon

## UP TO 8 W AT WIDE INPUT VOLTAGE RANGE - ISOLATED

Order code	Part number	Short description	Vin	Vout/Iout	Document
STEVAL-ISA060V1	VIPER17HN	Flyback, 115 kHz, DIP7 package	85-265 V <sub>AC</sub>	12 V/500 mA	AN2753
STEVAL-ISA062V1	VIPER17HN	Flyback (double out), 115 kHz, DIP7 package	85-265 V <sub>AC</sub>	5 V, 12 V/750 mA	AN2934
STEVAL-ISA117V1	VIPER16LN	Flyback, 60 kHz, DIP7 package	85-265 V <sub>AC</sub>	12 V/400 mA	AN4259
STEVAL-ISA124V1	VIPER17HN	Flyback (CC/CV charger), 115 kHz, DIP7 package	85-265 V <sub>AC</sub>	5 V/1 A	AN2840
STEVAL-ISA125V1	VIPER28LN	Flyback (PEAK Power), 60 kHz, DIP7 package	85-265 V <sub>AC</sub>	5 V/2.4 A	Databrief
STEVAL-ISA126V1	VIPER28HN	Flyback (PEAK Power), 115 kHz, DIP7 package	85-265 V <sub>AC</sub>	5 V/2.4 A	AN2950
STEVAL-ISA180V1	VIPER0PHD	Flyback, 60 kHz, SO16N package, Zero Power	85-265 V <sub>AC</sub>	12 V/0.5 A	AN4905
STEVAL-ISA181V1	VIPER0PHD	STM32L151C6, Flyback, 120 kHz, SO16N package, Zero Power, Remote control	85-265 V <sub>AC</sub>	12 V/0.5 A	AN4940
STEVAL-ISA197V1*	VIPER114LS	Fly-back (iso), 60 kHz, SO16N package	85-265V <sub>AC</sub>	12V/0.65A	Coming soon

## UP TO 12 W AT WIDE INPUT VOLTAGE RANGE - NON ISOLATED

Order code	Part number	Short description	Vin	Vout/Iout	Document
STEVAL-ISA110V1	VIPER26LN	Flyback, 60 kHz, DIP7 package	85-265 V <sub>AC</sub>	12 V/1 A	AN4106
STEVAL-ISA111V1	VIPER26HN	Flyback, 115 kHz, DIP7 package	85-265 V <sub>AC</sub>	12 V/1 A	AN4165

## UP TO 12 W AT WIDE INPUT VOLTAGE RANGE - ISOLATED

Order code	Part number	Short description	Vin	Vout/Iout	Document
STEVAL-ISA081V1	VIPER26LN	Flyback (PRIMARY reg), 60 kHz, DIP7 package	85-265 V <sub>AC</sub>	12 V, 3.3 V/1 A	UM0984
STEVAL-ISA103V1	VIPER27LN	Flyback, 60 kHz, DIP7 package	85-265 V <sub>AC</sub>	5 V/2.4 A	AN2929
STEVAL-ISA122V1	VIPER27HN	Flyback, 115 kHz, DIP7 package	85-265 V <sub>AC</sub>	5 V/2.2 A	AN3011
STEVAL-ISA162V1	VIPER25HD	Quasi-resonant flyback, 225 kHz frequency limit, SO16N package	85-265 V <sub>AC</sub>	12 V/830 mA	AN4685
STEVAL-ISA175V1	VIPER26HD	Three outputs, flyback for Smart meter and Power Line Communication system	85-440 V <sub>AC</sub>	16 V/500 mA (700mA pk) 5 V/100 mA, 3.3 V/200 mA	AN4878
STEVAL-ISA182V1	VIPER38HD	Flyback (PEAK Power), 115 kHz, SO16N package	85-132 V <sub>AC</sub>	12 V/0.7 A (2.5 A peak for 10 ms)	AN4924

## UP TO 15 W AT WIDE INPUT VOLTAGE RANGE - ISOLATED

Order code	Part number	Short description	Vin	Vout/Iout	Document
STEVAL-ISA121V1	VIPER37LE	Flyback, 60 kHz, SDIP10 package	85-265 V <sub>AC</sub>	5 V, 3 A	AN4407
STEVAL-ISA140V1	VIPER37HE	Flyback, 60 kHz, SDIP10 package	85-265 V <sub>AC</sub>	12 V/1.2 A	AN4419
STEVAL-ISA153V1	VIPER38LE	Flyback (PEAK Power), 60 kHz, SDIP10 package	90-265 V <sub>AC</sub>	12 V/1.2 A peak 1.8 A	AN4479
STEVAL-ISA171V1	VIPER35HD	Quasi-resonant flyback, 225 kHz frequency limit, SO16N package	85-265 V <sub>AC</sub>	12 V/1.25 A	AN4812
STEVAL-ISA191V1	VIPER37LE	Flyback double output, 60 kHz, SDIP10 package	85-265 V <sub>AC</sub>	5 V/1.2 A, 12 V/0.75 A	AN4830
STEVAL-ISA183V1	VIPER35LD	Quasi resonant triple output flyback, 136 kHz frequency limit	175-275 V <sub>AC</sub>	12 V/1 A, 15 V/0.2 A 5 V/0.2 A	AN5030
STEVAL-ISA184V1	VIPER37LD	Flyback double output, 60 kHz, SO16N package	85-265 V <sub>AC</sub>	5 V/1.2 A, 12 V/0.75 A	AN4830

\* Coming soon



# Available in a click

## SURFACE-MOUNT AND THROUGH-HOLE PACKAGES



S016N



SDIP10

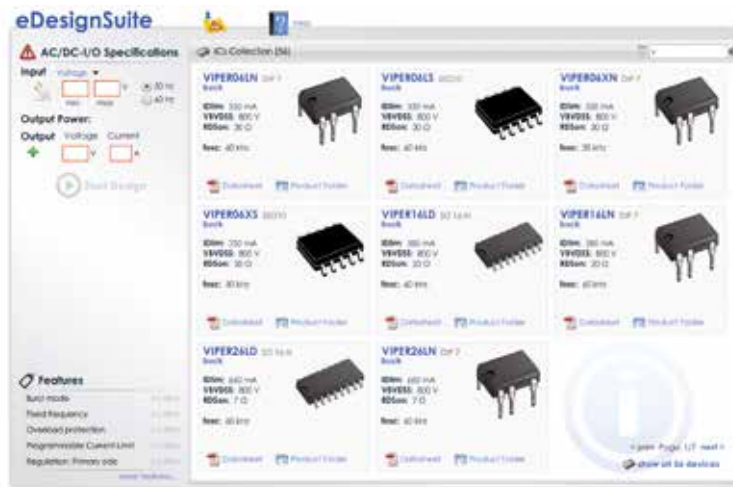


DIP7



SS010

## MAKE YOUR DESIGN EASILY USING EDESIGNSUITE



For technical documentation, samples and on-line ordering, visit us at: [www.st.com/viperplus](http://www.st.com/viperplus)

# life.augmented



© STMicroelectronics - August 2017 - Printed in United Kingdom - All rights reserved  
The STMicroelectronics corporate logo is a registered trademark of the STMicroelectronics group of companies  
All other names are the property of their respective owners

