



life.augmented

# VIPer Evaluation boards Your SMPS design deserves a Plus



# Where every mW counts

## FAMILY PORTRAIT

Different features for different controllers	VIPer0P Zero-Power Mode			VIPer0P					
	VIPer series 1 Low VCC voltage	VIPer01		VIPer11			VIPer31		
	VIPer series x22 Minimal BoM		VIPer122		VIPer222				
	VIPer series 5 Quasi-resonant					VIPer25	VIPer35		
	VIPer series 6 Smart Features	VIPer06	VIPer16			VIPer26/VIPer26K <sup>(1050 V)</sup>			
	VIPer series 7 Brown-out		VIPer17			VIPer27	VIPer37		
	VIPer series 8 Peak power					VIPer28	VIPer38		
	VIPerGaN Highest frequency							VIPerGaN50	VIPerGaN65

## TOPOLOGIES- THE BEST FIT FOR THE MOST COMMON ARCHITECTURES

Isolated flyback	Primary Side Regulation (PSR)	VIPer0P	VIPer series 1		VIPer series 6				VIPer series x22
	Secondary Side Regulation (SSR)	VIPer0P	VIPer series 1	VIPer series 5	VIPer series 6	VIPer series 7	VIPer series 8	VIPer series x22	VIPerGaN
Non-isolated	Flyback/buck/buck boost	VIPer0P	VIPer series 1		VIPer series 6				VIPer series x22

# Evaluation boards

## Quasi resonant flyback-GaN HEMT transistor from 50 W to 100 W at wide input voltage range-isolated

Order code	Part number	Short description	$V_{in}$	$V_{out}/I_{out}$	Power
<b>EVLVIPGAN50PD</b>	VIPERGAN50	QR isolated Flyback convertered USB PD, multimode operation, QFN 5x6 package	85-265 $V_{AC}$	5-9-15 V@3 A, 20 V@2.25 A	50 W
<b>EVLVIPGAN50FL</b>	VIPERGAN50	QR isolated SSR Flyback convertered, multimode operation, QFN 5x6 package	85-265 $V_{AC}$	15 V@3.3 A	50 W
<b>EVLVIPGAN65PD</b>	VIPERGAN65	QR isolated Flyback convertered USB PD, multimode operation, QFN 5x6 package	80-265 $V_{AC}$	5-9-15 V@3 A, 20 V@3.25 A	65 W
<b>EVLVIPGAN100PD*</b>	VIPERGAN10	QR isolated Flyback convertered USB PD, multimode operation, QFN 5x6 package	85-265 $V_{AC}$	5-9-15 V@3 A, 20 V@5 A	100 W

Note: \*available by Q1 2023

## Non-Isolated, inductor-based topologies - Buck or Buck-Boost Up to Iout 600 mA at wide and Ultra-Wide Input voltage range

Order code	Part number	Short description	$V_{in}$	$V_{out}/I_{out}$	Document
<b>STEVAL-ISA010V1</b>	VIPER16LN	Not-isolated buck converter, 60 kHz, DIP7 package	85-500 $V_{AC}$	12 V $\pm$ 10%, 5 V $\pm$ 4%, 150 mA	AN2872
<b>STEVAL-ISA096V1</b>	VIPER06XS	Not-isolated buck boost converter, 30 kHz, SS010 package	85-265 $V_{AC}$	-12 V/150 mA	UM1470
<b>STEVAL-ISA114V1</b>	VIPER06XS	Not-isolated buck converter, 30 kHz, SS010 package	80-265 $V_{AC}$	5 V/160 mA	AN4273
<b>STEVAL-ISA115V1</b>	VIPER06XS	Not-isolated buck converter, 30 kHz, SS010 package	85-265 $V_{AC}$	12 V/150 mA	AN4260
<b>STEVAL-ISA116V1</b>	VIPER26LD	Not-isolated buck converter, 60 kHz, S016N package	85-265 $V_{AC}$	16 V, 5 V/300 mA	AN4562
<b>STEVAL-ISA119V1</b>	VIPER16LD	Not-isolated buck converter, 60 kHz, S016N package	85-265 $V_{AC}$	12, 5 V/150 mA	AN4345
<b>STEVAL-ISA130V1</b>	VIPER06XN	Not-isolated buck converter, 30 kHz, DIP7 package	85-375 $V_{AC}$	12 V/140 mA	DN0009
<b>STEVAL-ISA178V1</b>	VIPER013XS	Non-isolated buck converter, jittered 30 kHz, SS010 package	85-265 $V_{AC}$	5 V/200 mA	AN4858
<b>STEVAL-ISA179V1</b>	VIPER0PLD	Non-isolated buck converter, jittered 60 kHz, S016N package	85-265 $V_{AC}$	15 V/150 mA	AN4857
<b>STEVAL-ISA195V1</b>	VIPER115XS	Not-isolated buck converter, 30 kHz, SS010 package	85-265 $V_{AC}$	5 V/350 mA	AN5081
<b>STEVAL-LL003V1</b>	VIPER0PLD	Not-isolated buck converter, 60 kHz, S016N package	85-275 $V_{AC}$	8 W/130 mA	AN5107
<b>STEVAL-VP013B1B</b>	VIPER013BLS	Non-isolated buck converter, jittered 60 kHz, SS010 package	60-300 $V_{AC}$	5 V/100 mA	AN5396
<b>STEVAL-VP12201B</b>	VIPER122LS	Non-isolated buck converter, 60 kHz, SS010 package	85-265 $V_{AC}$	15 V/200 mA	AN5401
<b>STEVAL-VP26K01B</b>	VIPER265KD	Non-isolated buck converter, 60 kHz, S016N package	90-600 $V_{AC}$	15 V/100 mA	AN5380
<b>STEVAL-VP22201B</b>	VIPER222XS	Non-isolated buck converter, 30 kHz, SS010 package	85-265 $V_{AC}$	5 V/360 mA	AN5401
<b>STEVAL-VP319X1B</b>	VIPERP319X	Non-isolated buck converter, 30 kHz, S016N package	85-265 $V_{AC}$	5 V/600 mA	AN5521

## Flyback - up to 4.5 W at wide input voltage range - non isolated

Order code	Part number	Short description	$V_{in}$	$V_{out}/t_{out}$	Document
STEVAL-ISA112V1	VIPER06HN	Flyback, 115 kHz, DIP7 package	85-265 $V_{AC}$	12 V/350 mA	AN4116
STEVAL-ISA096V1	VIPER06HS	Flyback, 115 kHz, SS010 package	85-265 $V_{AC}$	12 V/350 mA	AN4164
STEVAL-ISA114V1	VIPER013LS	Flyback, 60 kHz, SS010 package	80-265 $V_{AC}$	5 V/800 mA	AN4855

## Up to 4.5 W at wide input voltage range - isolated

Order code	Part number	Short description	$V_{in}$	$V_{out}/t_{out}$	Document
STEVAL-ILL017V1	VIPER17HN	Flyback (LED driver), 115 kHz DIP7 package	220 $\pm$ 20%	7 V/500 mA	AN2811
STEVAL-ISA134V1	VIPER06HN	Flyback, 115 kHz, DIP7 package	85-265 $V_{AC}$	12 V/330 mA	AN4372
STEVAL-ISA135V1	VIPER06HS	Flyback, 115 kHz, SS010 package	85-265 $V_{AC}$	12 V/330 mA	AN4404
STEVAL-ISA136V1	VIPER06HN	Flyback, 115 kHz, DIP7 package	85-265 $V_{AC}$	5 V/600 mA	AN4410
STEVAL-ISA137V1	VIPER06HS	Flyback, 115 kHz, SS010 package	85-265 $V_{AC}$	5 V/600 mA	AN4418
STEVAL-VP26K01F	VIPER267KD	Isolated triple output flyback converter, 60 kHz, S016N package	90 to 440 $V_{AC}$	15 V@0.55 Arms (0.7 A peak), 3.3 V at 200 mA, 5 V at 100 mA	AN5303
STEVAL-VP26K02F	VIPER267KD	Isolated double output flyback converter, 60 kHz, S016N package	85 to 500 $V_{AC}$	12 V@0.7 Arms (1 A peak), 6 V at 200 m	AN5374
STEVAL-VP26K03F	VIPER267KD	Isolated double output flyback converter, 60 kHz, S016N package	85 to 498 $V_{AC}$	12 V@0.7 Arms (1 A peak), 6 V at 200 mA	AN5375

## Up to 7 W at wide input voltage range - non isolated

Order code	Part number	Short description	$V_{in}$	$V_{out}/t_{out}$	Document
STEVAL-ISA071V2	VIPER16LN	Flyback (negative), 60 kHz, DIP7 package	85-265 $V_{AC}$	-5 V/400 mA, +7 V/160 mA	UM0920
STEVAL-ISA118V1	VIPER16LN	Flyback, 60 kHz, DIP7 package	85-265 $V_{AC}$	16 V/280 mA	AN3028
STEVAL-ISA129V1	VIPER16HN	Flyback, 115 kHz, DIP7 package	85-265 $V_{AC}$	16 V/280 mA	
STEVAL-ISA174V1	VIPER0PLD	Flyback, 60 kHz, S016N package, Zero-Power	85-265 $V_{AC}$	7 V, -5 V 7 W	AN4836
STEVAL-ISA192V1	VIPER0PLD	Flyback, 60 kHz, S016N package, Zero-Power with Tactile switches and STM32L	85-265 $V_{AC}$	-5 V/800 mA, +7 V/400 mA	AN4941
STEVAL-ISA196V1	VIPER114LS	Flyback, 60 kHz, S016N package	85-265 $V_{AC}$	5 V/1.2 A	AN5072

## Up to 8 W at wide input voltage range - isolated

Order code	Part number	Short description	$V_{in}$	$V_{out}/t_{out}$	Document
STEVAL-ISA062V1	VIPER17HN	Flyback (double out), 115 kHz, DIP7 package	85-265 $V_{AC}$	5 V, 12 V/750 mA	AN2934
STEVAL-ISA117V1	VIPER16LN	Flyback, 60 kHz, DIP7 package	85-265 $V_{AC}$	12 V/400 mA	AN4259
STEVAL-ISA124V1	VIPER17HN	Flyback (CC/CV charger), 115 kHz, DIP7 package	85-265 $V_{AC}$	5 V/1 A	AN2840
STEVAL-ISA125V1	VIPER28LN	Flyback (PEAK Power), 60 kHz, DIP7 package	85-265 $V_{AC}$	5 V/2.4 A	Databrief
STEVAL-ISA126V1	VIPER28HN	Flyback (PEAK Power), 115 kHz, DIP7 package	85-265 $V_{AC}$	5 V/2.4 A	AN2950
STEVAL-ISA180V1	VIPEROPHD	Flyback, 60 kHz, S016N package, Zero Power	85-265 $V_{AC}$	12 V/0.5 A	AN4905
STEVAL-ISA181V1	VIPEROPHD	STM32L151C6, Flyback, 120 kHz, S016N package, Zero Power, Remote control	85-265 $V_{AC}$	12 V/0.5 A	AN4940
STEVAL-ISA197V1	VIPER114LS	Fly-back (iso), 60 kHz, S016N package	85-265 $V_{AC}$	12 V/0.65 A	AN5057
STEVAL-VP12201F	VIPER122LS	Flyback, 60 kHz, SS010 package	85-265 $V_{AC}$	2 V/416 mA	AN5441

## Up to 12 W at wide input voltage range - non isolated

Order code	Part number	Short description	$V_{in}$	$V_{out}/t_{out}$	Document
STEVAL-ISA110V1	VIPER26LN	Flyback, 60 kHz, DIP7 package	85-265 $V_{AC}$	12 V/1 A	AN4106
STEVAL-ISA111V1	VIPER26HN	Flyback, 115 kHz, DIP7 package	85-265 $V_{AC}$	12 V/1 A	AN4165

## Up to 12 W at wide input voltage range - isolated

Order code	Part number	Short description	$V_{in}$	$V_{out}/t_{out}$	Document
STEVAL-ISA081V1	VIPER26LN	Flyback (PRIMARY reg), 60 kHz, DIP7 package	85-265 $V_{AC}$	12 V, 3.3 V/1 A	UM0984
STEVAL-ISA122V1	VIPER27HN	Flyback, 115 kHz, DIP7 package	85-265 $V_{AC}$	5 V/2.2 A	AN3011
STEVAL-ISA162V1	VIPER25HD	Quasi-resonant flyback, 225 kHz frequency limit, S016N package	85-265 $V_{AC}$	12 V/830 mA	AN4685
STEVAL-ISA175V1	VIPER26HD	Three outputs, flyback for Smart meter and Power Line Communication system	85-440 $V_{AC}$	16 V/500 mA (700 mA pk) 5 V/100 mA, 3.3 V/200 mA	AN4878
STEVAL-ISA182V1	VIPER38HD	Flyback (PEAK Power ),115 kHz, S016N package	85-132 $V_{AC}$	12 V/0.7 A (2.5 A peak for 10 ms)	AN4924
STEVAL-VP26K01F	VIPER267KD	Flyback, 60 kHz, S016N package	85-440 $V_{AC}$	15 V/550 mA (700 mA pk) 5 V/100 mA, 3.3 V/200 mA	AN5303
STEVAL-VP26K02F	VIPER267KD	Flyback, 60 kHz, S016N package	85-500 $V_{AC}$	12 V/700 mA (1 A pk) 6 V/200 mA	AN5374
STEVAL-VP26K03F	VIPER267KD	Flyback (Primary reg.), 60 kHz, S016N package	85-500 $V_{AC}$	12 V/700 mA (1 A pk) 6 V/200 mA	AN5375

## Up to 18 W at wide input voltage range - isolated

Order code	Part number	Short description	$V_{in}$	$V_{out}/t_{out}$	Document
STEVAL-ISA121V1	VIPER37LE	Flyback, 60 kHz, SDIP10 package	85-265 $V_{AC}$	5 V, 3 A	AN4407
STEVAL-ISA140V1	VIPER37HE	Flyback, 60 kHz, SDIP10 package	85-265 $V_{AC}$	12 V/1.2 A	AN4419
STEVAL-ISA153V1	VIPER38LE	Flyback (PEAK Power), 60 kHz, SDIP10 package	90-265 $V_{AC}$	12 V/1.2 A peak 1.8 A	AN4479
STEVAL-ISA171V1	VIPER35HD	Quasi-resonant flyback, 225 kHz frequency limit, S016N package	85-265 $V_{AC}$	12 V/1.25 A	AN4812
STEVAL-ISA191V1	VIPER37LE	Flyback double output, 60 kHz, SDIP10 package	85-265 $V_{AC}$	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 $V_{AC}$	12 V/1 A, 15 V/0.2 A 5 V/0.2 A	AN5030
STEVAL-ISA184V1	VIPER37LD	Flyback double output, 60 kHz, S016N package	85-265 $V_{AC}$	5 V/1.2 A, 12 V/0.75 A	AN4830
STEVAL-VP318L1F	VIPER318LD	Flyback, 60 kHz, S016N package	85-265 $V_{AC}$	15 V/1.2 A	AN5558
STEVAL-VP318L2F	VIPER318LD	Flyback (Primary reg.), 60 kHz, S016N package	90-265 $V_{AC}$	15 V/1.2 A	AN5642

# Available in a click

## SURFACE-MOUNT AND THROUGH-HOLE PACKAGES



QFN 5x6



S016N



SDIP10

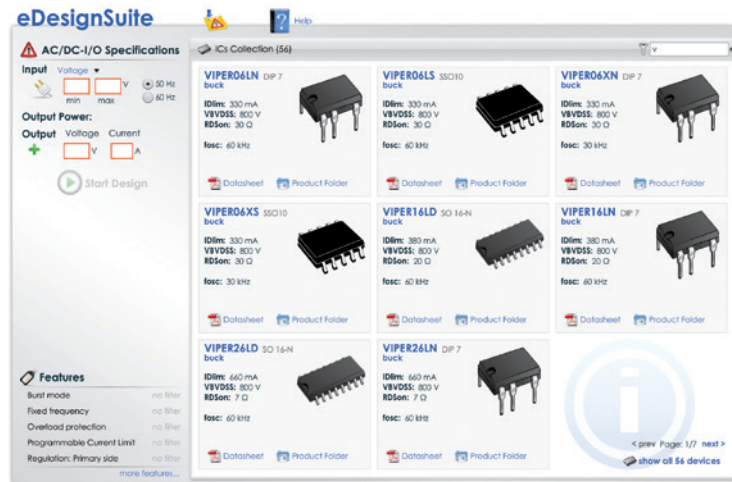


DIP7



SS010

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