



## New Product Announcement

ZLPM8010, ZLPM8011  
ZLPM8012

# ZLPM8000 series – High Efficiency LNB Power Management and Control IC for Set-top Boxes

The ZLPM8000 series provides a cost effective, highly efficient and reliable power management and control solution for satellite set-top boxes (STBs).

Based on an efficient boost converter, the ZLPM8000 series provides the power supply and all the control signals required by a single port satellite Low Noise Block (LNB).

The ZLPM8000 series includes an accurate 22kHz tone generator to provide DiSEqC™ control words or continuous tone for band switching control. To provide a reliable DiSEqC™ 2.0 solution the ZLPM8010 and ZLPM8011 include a DiSEqC™ detector with unwanted signal rejection.

Controlled by an I2C™ compatible interface or logic inputs and with the minimal external components, the ZLPM8000 series provides a high performing, efficient and cost efficient solution.



### The Diodes Advantage

The ZLPM8000 has been design to provide STB designers with one of the most power efficient solutions as well as providing regional flexibility and enhanced system reliability.

#### ▪ Fully featured LNB power management and control IC

- Single Channel LNB power supply and control
- Providing high (ZLPM8010) and normal (ZLPM8011/12) output currents
- Suitable for both DiSEqC™ 2 and DiSEqC™ 1.x applications

#### ▪ IC and System efficiency

- Based on a highly efficient and stable switch converter with integrated low  $R_{DS(on)}$  switching FET
- Ultra low drop LDO and low current system design
- Standby current of only 600uA

#### ▪ High performance and reliability

- Being the market leader in LNB control ICs, Diodes Zetex has transferred its technology down the cable to the STB
- Reliable control and signal detection under any operating condition
- Multiple diagnostic and system protection features

#### ▪ System Flexibility

- I2C or Logic controls allow any system architecture to be used
- Regional programmability, one device fits most markets
- The ZLPM8010 and ZLPM8011 are pin compatible for system flexibility

### Applications

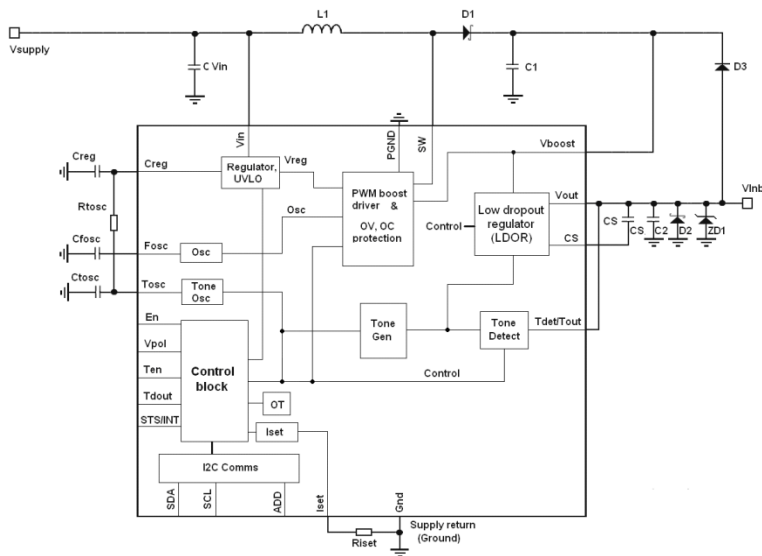
- Digital and Analog Satellite Set-top boxes
- TV's with integrated Satellite tuners
- Satellite PC cards



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## Typical ZLPM8010/11 Applications Circuit for a DiSEqC™ 1 Set-top Box



## Product Family

Part Name	LNB Ports	I2C	Logic	Enable	1.x	2.0	LNB Supply (mA)	LNB Voltage Range (V)	Over Temp	Over Current	LNB Detect
ZLPM8010	1	Yes	Yes	Yes	Yes	Yes	750	10.25 to 19.5	150°C	Adj	Yes
ZLPM8011	1	Yes	Yes	Yes	Yes	Yes	450	10.25 to 19.5	150°C	Adj	Yes
ZLPM8012	1	Yes	Tone Only	Yes	Yes	No	450	10.25 to 19.5	150°C	Adj	Yes

## Ordering Information

Device	Packaging <sup>(1)</sup>	Part mark ID	Reel size	Tape width	Quantity
ZLPM8010JB20TC	U-QFN4040-20	ZLPM8010	13"	12mm	3000
ZLPM8011JB20TC	U-QFN4040-20	ZLPM8011	13"	12mm	3000
ZLPM8012JB20TC	U-QFN4040-20	ZLPM8012	13"	12mm	3000

Notes: 1. "Green" mold compound with Lead Free Finish/RoHS Compliant packages.

EU Directive 2002/95/EC (RoHS) & 2011/65/EU (RoHS 2) compliant. No purposely added lead. Halogen and Antimony free. Please visit our website at [http://www.diodes.com/products/lead\\_free.html](http://www.diodes.com/products/lead_free.html).

## Further Information

Further Information can be found at [www.diodes.com/DBS](http://www.diodes.com/DBS) or by emailing [DBS@diodes.com](mailto:DBS@diodes.com)

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