



#### SET-TOP BOX SERIES SINGLE LNB CONTROLLER AND POWER SUPPLY IC

## **Summary**

The ZLPM8010 is a power management and control solution for satellite set-top boxes (STBs). Based on an efficient boost converter the ZLPM8010 provides the power supply and all the control signals required by a single port satellite Low Noise Block (LNB). The ZLPM8010 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 IC includes a DiSEqC detector with unwanted signal rejection. Controlled by an I²C™ compatible interface or logic inputs and with the minimal external components the ZLPM8010 provides a high performing, efficient cost efficient solution.

#### **Features**

Notes:

- · High system efficiency with standby mode
- Efficient boost converter and LDO providing an accurate adjustable power supply for LNBs
- Provides a protected output of up to 750mA
  - Programmable current limit for system flexibility
- Designed for stability with low power LNBs
- Provides standard voltage / tone and DiSEqC control signals and allows for regional variations such as Japan.
  - Internal tone generator for DiSEqC control and traditional band switching
  - Tone maintains shape across all load conditions
- Internal reliable tone detector for DiSEqC 2.0 systems
- Controlled by I<sup>2</sup>C interface or independent logic control
- Built in multiple diagnostics and protection for IC and LNB protection
- Minimal external components for a simple, reliable and cost effective solution
- Totally Lead-Free & Fully RoHS Compliant (Notes 1 & 2)
- Halogen and Antimony Free. "Green" Device (Note 3)

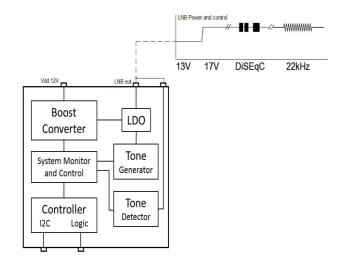
### 1. No purposely added lead. Fully EU Directive 2002/95/EC (RoHS) & 2011/65/EU (RoHS 2) compliant.

- 2. See http://www.diodes.com for more information about Diodes Incorporated's definitions of Halogen- and Antimony-free, "Green" and Lead-free.
- 3. Halogen- and Antimony-free "Green" products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.

## **Applications**

- Single tuner Satellite Set-top boxes
  - High current LNBs
  - Stability with minimal current LNBs
- Satellite PC Cards
- TVs with integrated satellite tuners
- Hybrid Set-top boxes
- Suitable for Digital and Analog satellite systems

## **System Diagram**







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