The ZLPM8014 is a power management and control solution for satellite set-top boxes (STB).

Based on an efficient boost converter, the ZLPM8014 provides an Low Noise Block (LNB) power supply over the range of 11V to 21V with superior load regulation. The ZLPM8014 provides all the control signals required by a single port satellite LNB.

The ZLPM8014 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 and with the minimal external components, the ZLPM8014 provides a high performing, efficient and cost efficient solution.

The Diodes’ Advantage

The ZLPM8014 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 current and stable output with Vboost feature
  - Optimized load and line regulation over temperature

- IC and System efficiency
  - Based on a highly efficient and stable switch converter
  - Ultra low drop LDO and low current system design
  - Standby current of only 600µA

- High performance and reliability
  - Being the market leader in LNB control ICs, Diodes has transferred its technology to the STB
  - 150% optional current boost to for 65mS
  - Multiple diagnostic and system protection features

- System Flexibility
  - I2C control gives full access to all features
  - Regional programmability, one device fits most markets
  - Pin to Pin and firmware compatible with other ZLPM8000 series parts

Applications

- Digital and analog satellite set-top boxes
- TVs with integrated satellite tuners
- Satellite PC cards

www.diodes.com
Typical ZLPM8014 Applications Circuit for a DiSEqC™ 2 Set-top Box

Highly flexible applications circuit

- DiSEqC Components can be removed for DiSEqC 1 applications
- C1/C2 and C3/C4 can be merged
- Boost converter stability is not sensitive to low ESR output capacitor types
- L2 is optional

(please refer to data sheet for further details)

Product Family

<table>
<thead>
<tr>
<th>Part Name</th>
<th>LNB Ports</th>
<th>I2C</th>
<th>Logic</th>
<th>Enable</th>
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<th>2.0</th>
<th>LNB Supply (mA)</th>
<th>Lboost</th>
<th>LNB Voltage Range (V)</th>
<th>Over Temp</th>
<th>Over Current</th>
<th>LNB Detect</th>
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Ordering Information

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<td>ZLPM8010</td>
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<td>12mm</td>
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Further Information

Further Information can be found at www.diodes.com/DBS or by emailing DBS@diodes.com

DiSEqC is a trademark of Eutlesat.
I2C is a trademark of Philips Corp.