



Upgrade to TSOP2xxx, TSOP4xxx, TSOP57xxx, TSOP6xxx, and TSOP77xxx Series IR Receivers Reduces Current Consumption, Improves Robustness Against ESD and Direct Sunlight

Product Benefits:

- 50 % lower current consumption than the original receivers — down to 0.35 mA typical — over a wider voltage supply range from 2.0 V to 5.5 V
- High ESD withstand capabilities to 12 kV (human-body model) provide increased reliability
- Provide immunity against disturbances such as IR emissions from CFL lamps and RF emissions from on-board Wi-Fi antennas
- To simplify designs, the receivers feature a photodetector, preamplifier circuit, and IR filter in a single epoxy Mold (TSOP2xxx and TSOP4xxx), Belobog (TSOP57xxx), Panhead (TSOP6xxx), or Heimdall (TSOP77xxx) package
- Available with different automatic gain control (AGC) versions for long or short burst codes
- Excellent immunity to ripple noise
- RoHS-compliant, halogen-free, and [Vishay Green](#)



Market Applications:

- IR remote control
- Consumer televisions, set-top boxes (STBs), audio and gaming systems, air conditioners, and other appliances
- Industrial automation controls, lighting systems, and more

The News:

Vishay Intertechnology announces that the company has upgraded its TSOP2xxx, TSOP4xxx, TSOP57xxx, TSOP6xxx, and TSOP77xxx series infrared (IR) receiver modules for IR remote control applications with a new Cyllene 2 IC. Designed in-house to ensure long term product availability and reduced lead times, the new IC allows designers to achieve higher performance with drastically reduced current consumption over a wider voltage supply, while offering improved robustness against ESD and direct sunlight.

- Offer designers plug and play replacements for the original receiver modules
- The devices' lower current consumption and wider voltage supply range increase battery life in mobile consumer electronics, such as robotic vacuum cleaners
- The receivers' increased robustness under direct sunlight results in improved performance for outdoor applications like garage door light barriers



The Key Specifications:

- Typical supply current: 0.35 mA
- Voltage supply range: 2.0 V to 5.5 V
- ESD withstand: 12 kV (human-body model)
- Single epoxy package
 - Mold (TSOP2xxx and TSOP4xxx)
 - Belobog (TSOP57xxx)
 - Panhead (TSOP6xxx)
 - Heimdall (TSOP77xxx)
- Carrier frequencies: 30 kHz to 56 kHz

Availability:

Samples and production quantities of the upgraded IR receiver modules are available now, with lead times of eight weeks.

To access the product datasheets on the Vishay Website, go to

- <http://www.vishay.com/ppg?82459> (TSOP22.., TSOP24.., TSOP48.., TSOP44..)
- <http://www.vishay.com/ppg?82463> (TSOP62.., TSOP64..)
- <http://www.vishay.com/ppg?82434> (TSOP572.., TSOP574..)
- <http://www.vishay.com/ppg?82471> (TSOP772.., TSOP774..)

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