

**NOT RECOMMENDED FOR NEW DESIGNS
POSSIBLE SUBSTITUTE
PRODUCT: ISL6412**

The ISL6414 is a drop-in replacement for the ISL6411 with a feature enhancement to keep the BBP/MAC operational at less than 3.0V input supply.

The ISL6411 monitors all its three outputs within regulation over 3.3V ±10% input voltage range. The ISL6411 FAULT logic monitors all three LDO drop-outs and their output regulation. When the input voltage drops below 2.9V, the ISL6411 LDO2 and LDO3 are close to their drop-outs and hence FAULT logic goes low, which in turn shuts down the power to the I/O Ring of the BBP/MAC (Please refer to the diagram below). This functionality was intended to protect the chipset operation at low input voltages and is acceptable for 3.3V ±10% input voltage operation.

However, with high density boards the drop across PCB sometimes reduces the actual available input voltage on the IC VIN pin to less than 3.0V (at minimum input conditions like discharging battery). During these conditions, the ISL6411 logic will disable the power to the I/O ring and hence the BBP/MAC can not be maintained completely functional. This need for BBP/MAC operation at lower input voltages is addressed with a minor modification on FAULT logic in its drop-in replacement part, the **ISL6414**. (Please refer to datasheet for details)

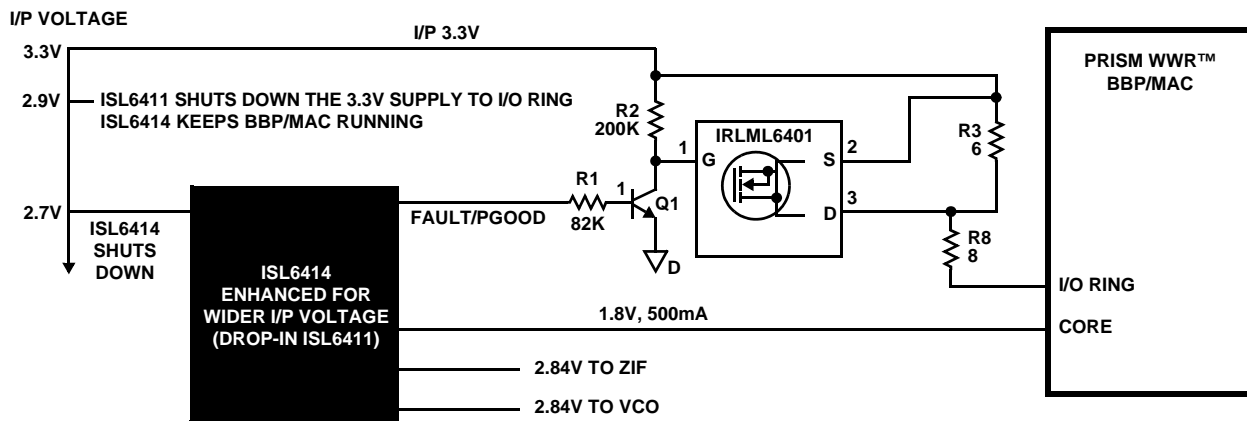
In summary - The ISL6414 is a feature enhanced drop-in replacement for ISL6411 to meet the requirement of keeping the WLAN BBP/MAC alive at less than 3.0V input supply. Similar to the ISL6411, the ISL6414 is an ultra low noise triple output LDO regulator with a microprocessor reset circuit all in a small 4x4 QFN package. ISL6414 accepts system input voltage and provides three regulated output voltages: 1.8V (LDO1), 2.84V (LDO2), and another ultra clean 2.84V (LDO3). On chip logic provides voltage sequencing between LDO1 and LDO2 outputs for BBP/MAC and the I/O. LDO3 features ultra low noise that does not typically exceed 30µV RMS to aid VCO stability.

NOTE - ISL6411 is not recommended for any future WLAN designs as it will be obsoleted in Dec '03. All customers are requested to qualify this new enhanced version (ISL6414) for all the PRISM® 3, PRISM GT™ and PRISM WWR™ reference designs. As a courtesy to our customers, the ISL6414 is available at no extra charge.

Please contact your local sales office for ISL6414 samples and EVAL boards.

Product Marketing Contact: Sarika Arora

sarika.arora@intersil.com



The ISL6414 is the drop-in replacement of the ISL6411 for PRISM® 3, PRISM GT™ (Frisbee) and PRISM WWR™ (Crossbow) WLAN Radio Platforms.

All Intersil U.S. products are manufactured, assembled and tested utilizing ISO9000 quality systems. Intersil Corporation's quality certifications can be viewed at www.intersil.com/design/quality

Intersil products are sold by description only. Intersil Corporation reserves the right to make changes in circuit design, software and/or specifications at any time without notice. Accordingly, the reader is cautioned to verify that data sheets are current before placing orders. Information furnished by Intersil is believed to be accurate and reliable. However, no responsibility is assumed by Intersil or its subsidiaries for its use; nor for any infringements of patents or other rights of third parties which may result from its use. No license is granted by implication or otherwise under any patent or patent rights of Intersil or its subsidiaries.

For information regarding Intersil Corporation and its products, see www.intersil.com