

## **An Energy-Efficient LDO for Biomedical Implantable Devices**

With the development of integrated circuits, miniaturized implantable devices have been proven a prospective treatment in clinics. As these devices need to acquire weak bio-signals, the ability to reject power ripple in noise-sensitive analog front-end is highly demanded. It is necessary to design an energy efficient low dropout regulator in biomedical implantable devices. CMOS technology can be used for design.

The implanted device becomes part of a biological data acquisition system. So it must meet few requirements such as reduced size, low power consumption and the possibility of being powered by an RF link. The low power restriction is extremely important for the patient safety, by avoiding heating due to the increase of current density in the tissues surrounding the implant that could cause tissue damage.