A 1.8-V Operation RFCMOS Transceiver for Bluetooth
Hiroshi Komurasaki, Tetsuya Heima, Toshitsugu Miwa, Kazuya Yamamoto,
Hideyuki Wakada, Ikuo Yasui, Masayoshi Ono, Tomohiro Sano, Hisayasu Sato,
Takahiro Miki, and Naoyuki Kato
Mitsubishi Electric Corporation
4-1 Mizuhara
Itami, Hyogo 664-8641, Japan

This paper describes a single-chip Bluetooth transceiver LSI, which uses a standard 0.18\,\mu m bulk CMOS process. It can operate at a supply voltage of 1.8V, and includes even a low loss transmit/receive antenna switch (SW) in order to realize high level integration. For lower chip area, a channel selection filter consists of simple linearized source-coupled pairs, and the transceiver occupies 10.2\,mm$^2$. 