

# Fractional-N PLL Product Highlights

1. The power current of each device is set according to its maximum operating frequency in order to accommodate a variety of cellular telephone systems (GSM, W-CDMA, TDMA, etc.).
  - MB15F83UL (Modulo: fixed at 13; frequencies: 2.0/0.6GHz)  
Power-saving current: 5.8mA @Vcc=3.0V
  - MB15F86UL (Modulo: variable from 3 to 16; frequencies 2.0/0.6GHz)  
Power-saving current: 5.8mA @Vcc=3.0V
  - MB15F88UL (Modulo: selects 5 or 8; frequencies 2.6/1.2GHz)  
Power-saving current: 6.0mA @Vcc=3.0V
2. High speed lock-up time: about 50% faster than previous models (FxxSL/F7xSP series)
3. Low-power voltage operating range: Vcc=2.7 to 3.6V
4. Stable-current charge pump circuit capable of dual current switching through serial data transfer:  $\pm 1.5\text{mA}$ ,  $\pm 6.0\text{mA}$
5. High-sensitivity fin inputs: Pfin (min.)= -15dBm (50-ohm series)
6. Ultra thin small package: TSSOP-20 pins and BCC10-20 balls with standard width of 0.55 mm
7. Easily interchangeable with the current MB15F7xSP and F7xUL series due to common pin layout