

普誠科技股份有限公司 FS8170 2.5 GHz Low Power Phase-locked Loop IC

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Description

The FS8170 IC is a serial data input, fully programmable phase-locked loop with a 2.5 GHz prescaler for use in the local oscillator subsystem of radio transceivers. Multi-modulus division ratios of 32/33 and 64/65 are selectable thru serial programming to enable pulse swallowing operation. When combined with an external VCO, the FS8170 becomes the core of a very low power frequency synthesizer well-suited for mobile communication applications, such as 2.4 GHz ISM-band wireless data links and cellular GSM and PCS. **The FS8170 is also pin compatible with Fujitsu's MB15E07SL IC.**

Features

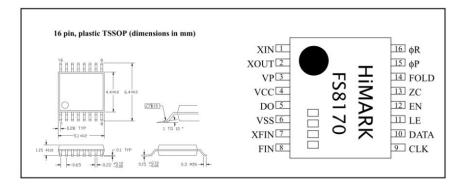
- Maximum input frequency: 2.5 GHz
- Supply voltage range from 2.4 V to 3.6 V
- Low current consumption in locked state: 3.5 mA typ. $(V_{CC} = V_P = 2.7 \text{ V}, T_A = +25 \text{ °C})$

4.0 mA typ. $(V_{CC} = V_p = 3.0 \text{ V}, T_A = +25 \text{ °C})$

10 µA max. in asynchronous power-down mode

- Digitally-filtered lock detect output
- ◆ 18-bit programmable input frequency divider using ÷ 32/33/64/65 multi-modulus prescaler with divide ratio range from 992 to 65631 for ÷ 32/33 mode and from 4032 to 131135 for ÷ 64/65 mode
- ◆ 14-bit programmable reference frequency divider with divide ratio range from 3 to 16383
- Programmable charge pump current: 1.5 mA or 6 mA
- Pin compatible with Fujitsu MB15E07, MB15E07L, MB15E07SL
- ◆ 16 pin, plastic TSSOP (0.65 mm pitch)

Package and Pin Assignment



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