RF Transmitter IC

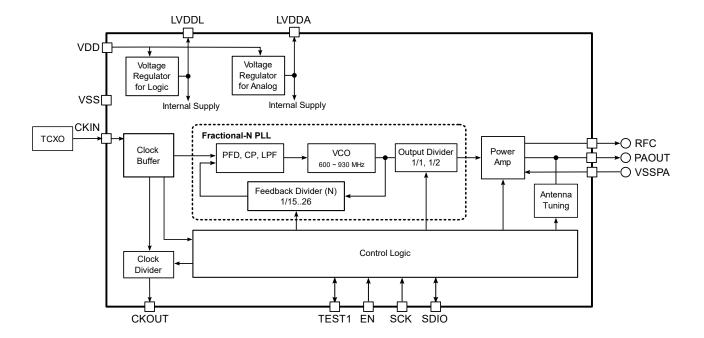
■ DESCRIPTIONS

The S1S77100 is a UHF band RF Transmitter IC. It integrates PLL and Power Amp in a 4 mm x 4 mm SQFN package, designed for applications targeting the ARIB STD-T67 wireless standard (compliance depends on customer's board, antenna, and surrounding components).

■ FEATURES

- Output frequency range: 300 MHz to 465 MHz (0.25 kHz Step), 600 MHz to 930 MHz (0.49 kHz Step)
- Δ-Σ Fractional-N PLL
- Programmable power amplifier (PA) output power:-15 dBm ~ 11 dBm, 128 steps
- Modulation types: ASK/OOK/FSK with Soft-ASK and/or Soft FSK shaping
- Multi-channel (up to 4 channels), channel hopping capability
- 3-wire/4-wire SPI interface for Special Function Register (SFR)
- SFR (Special Function Register)
- Fail-safe mechanism (PLL Loss of Lock: LOL, VCO auto-calibration error, Under Voltage Detection: UVD)
- External 32 MHz crystal oscillator by clipped sine input, supporting narrowband wireless standards
- Synchronous Transmission: Supports sync transmission mode,
- Dividing clock output via CKOUT
- Programmable voltage threshold of Under Voltage Detection (UVD): 4 step (1.8 V to 2.4 V)
- 24-pin 4 mm x 4 mm SQFN (Saw Quad Flat Non-leaded) package
- Supply voltage 1.8 V to 3.6 V
- Operating temperature: -40°C to +85°C
- Pb-free/RoHS-compliant

■ Block Diagram



S1S77100

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