

UHF RFID analog front-end in IP 0.18 μm

Description

DELTA has developed a UHF RFID transceiver front-end for tag applications that operates in the range of 860 - 950 MHz, conforming to the ISO 18000-6 Type C (EPC Class 1 GEN2) standard.

Features

- Low power topology
- EEPROM programming expected to work down to 1.62 V
- All other circuits to work down to 1.2 V
- 1.8 V voltage regulator with power-on-reset
- Edge sensitive demodulator
- PSK based modulator
- Level sensitive EEPROM program voltage detector

Technology

IBM 180 nm CMOS7SF with 6 metal levels (ML option). 3.3 V and 1.8 V MOS transistors.

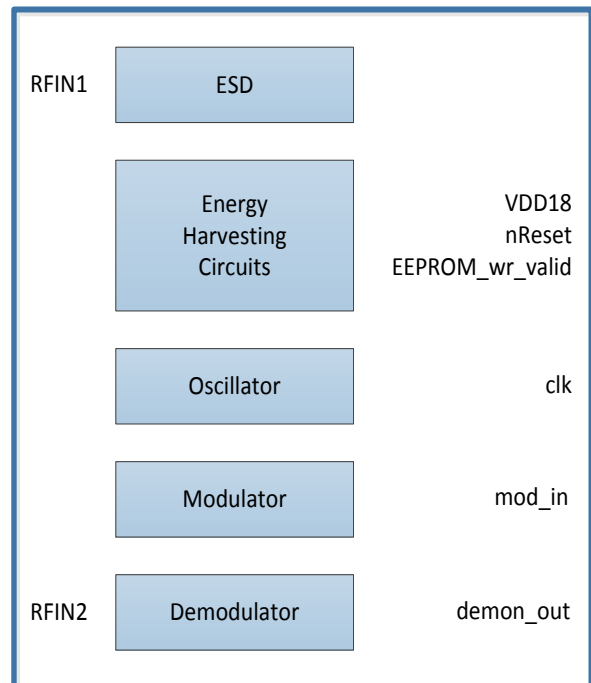
Uses dual MIM capacitors, Serpentine high value poly resistor, N-Type Schottky barrier diode in NW, Triple Well NFET, Zero Vt 3.3V NFET.

Portable to other 180 nm CMOS with Schottky diodes.

Proven in silicon.

Dimensions

675 μm x 527 μm = 0.36 mm²



For further information please contact us

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