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.

For further information please contact us
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