PHYCHIPS





PD5200 5.8GHz Hybrid ASK RF Transceiver

The PD5200 is fully integrated DSRC transceiver dedicated for China ETC application. It consists of wake-up receiver, normal frame receiver and switching power amplifier with a fractional-N PLL. PD5200 uses a CMOS process to offer a complete DSRC solution with minimum external parts count, lowest power consumption, small size and high reliability.

Main Features

- GBT 20851.1-2007 Compliant (System A)
- Frequency Range
- Wake-up/Receiver : 5.83GHz/5.84GHz
- Transmitter : 5.79GHz/5.80GHz
- Data Rate
- Wake-up Mode : 14kbps
- Receive Mode : 256kbps
- Transmit Mode : 512kbps
- ASK Modulation : 50~90% index
- Sensitivity (85% ASK) -14KHz Wake-up : - 50dBm -Normal Frame : - 60dBm
- Output Power : $+5dBm \pm 1dB$
- Current Consumption
- Wake-up Mode : 10uA
- Receive Mode : 10mA
- Transmit Mode : 30mA
- Operating Temp Range : -40°C~+100°C

Applications

• OBU for China ETC System

Block Diagram

