



AK1554

DSRC/ETC RF Transceiver

1. Features

This device is a RF Transceiver for DSRC based on ARIB STD-T75

Transmitter (TX) Block

- Modulation: ASK 1024kbps / $\pi/4$ -shift QPSK 4096kbps
- Digital Data Input for Transmit
- Internal PA: Output Power +14dBm

Receiver (Rx) Block

- Internal LNA
- Demodulation: ASK 1024kbps / $\pi/4$ -shift QPSK 4096kbps
- Demodulated Digital Data Output
- Simultaneous Demodulation for ASK and $\pi/4$ -shift QPSK

Integrated IF-Filter for adjacent channel suppression

Synthesizer

Fractional Synthesizer with integrated VCO

Master Clock

16.384MHz +/-20ppm TCXO input

Power Supply

+3.15 to +3.45V

Operating Temperature

-40 to +85°C

Package

48-pin QFN 7.0x7.0 (0.5mm pitch)

