

# **Single Carrier**

#### **Features**

- Supports QPSK constellation
- Modulator-Demodulator platform
- Supports IF and RF transmission
- Supports adjustable symbol rate as low as 2608 Baud, as high as 7 M Baud
- Supports adjustable band width as low as 3 KHz, as high as 8 MHz
- Supports different operation modes such as analog base band, IF, and RF

### Overview

- The designed Single Carrier is working at adjustable sampling rate as low as 83.457 KHz, as high as 56 MHz
- It supports adjustable band width as low as 3 KHz, as high as 8 MHz
- It works at adjustable IF frequency as low as 53.651 KHz, as high as 36 MHz
- Roll-off factor is 0.15
- Oversampling factor (between symbol and sampling rates) is 32
- Pulse shaping filter length is 257 taps
- The modulation order is QPSK and others, upon request

## **Application Areas**

- Public safety communication
- Transportation
- Utilities
- Digital Radio

## **Deliverables**

- Synthesizable Verilog
- System Model (Matlab)
- Verilog Test Benches
- Documentation

A comprehensive Single Carrier datasheet can be provided under an NDA, please contact <u>info@globalipc.com</u>.