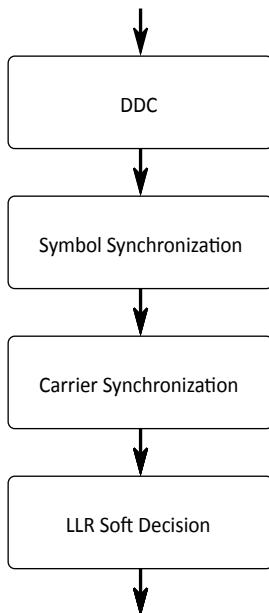


SOQPSK-TG Demodulator IP Core

IP Core Features

- SOQPSK-TG
- Digital demodulation
- Variable symbol rate
- Low implementation loss
- Low FPGA resource usage



Key Features

- Compliant with the Telemetry IRIG 106-22 Standard
- Different SOQPSK variants:
 - SOQPSK-TG
 - SOQPSK-MIL
 - SOQPSK-A
 - SOQPSK-B
- Coherent demodulation
- Digital dynamic range of 40 dB
- Symbol rates from $F_{clk}/4$ to $F_{clk}/65536$
- Low implementation loss
- LLR soft decision for LDPC and Turbo FEC
- Easy integration with JESD204B ADC

Applications

- Satellite communication systems
- Aeronautical telemetry systems
- Power-efficient modems with nonlinear amplifiers
- Telemetry modems

Deliverables

- Encrypted Netlist or Complete RTL Source Code versions
- IP Core testbench scripts and design examples for evaluation boards
- Comprehensive integration guide
- Free 1 year technical support and maintenance updates

Product Options

- IP customization and integration services available on request
- Royalty-free license without quantitative restrictions
- Off-the-shelf Xilinx and Analog Devices evaluation boards support