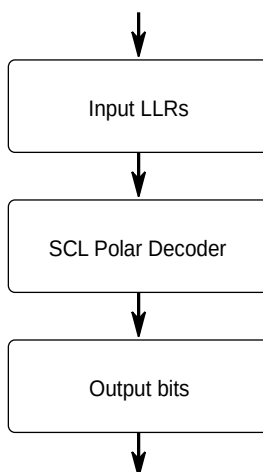


SCL Polar Encoder / Decoder IP Core

IP Core Features

- Flexible code rate
- 10 Mbit/s throughput
- Variable payload length
- Efficient SC List decoding
- List size 2, 4 or 8



Key Features

- Fully customizable to any standard, including 3GPP 5G-NR
- Successive-Cancellation List Polar decoding algorithm
- Throughput up to 10 Mbit/s
- On-the-fly block type change
- Code block length (N) of 1024
- Payload length (K) from 100 to 1000
- Variable code rates from 1/10 to 9/10
- Variable "frozen bits" mask

Applications

- 5G-NR Base stations
- 5G-NR User equipment
- Wireless modems
- Systems with the need of powerful FEC Codes

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