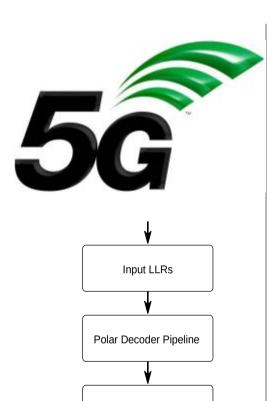
# 100 Gbps Polar Encoder / Decoder IP Core

#### **IP Core Features**

- Flexible code rate
- 100 Gb/s throughput
- Variable payload length
- Successive Cancellation
- Fully-parallel and unrolled



Output bits

## **Key Features**

- Fully customizable to any standard, including 3GPP 5G
- Successive-Cancellation algorithm
- Soft-decision LLR decoding
- Throughput up to 100 Gbits/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 communication systems
- Optical links
- Wireless modems
- Systems with the need of high-throughput 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

