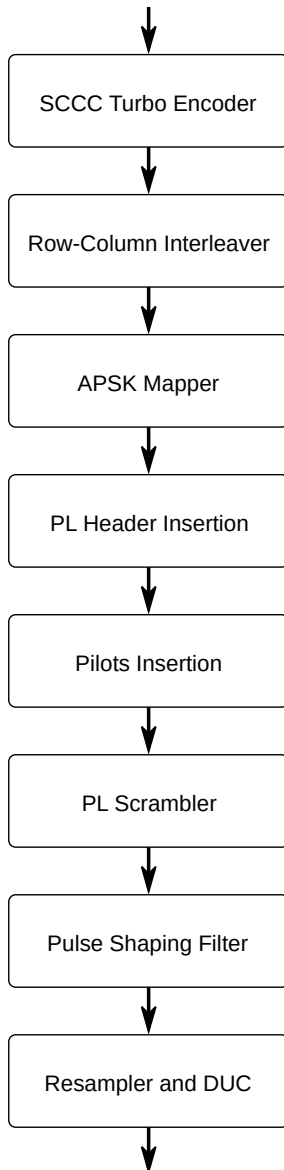


# CCSDS SCCC Modulator / Encoder IP Core

## IP Core Features

- SCCC Turbo Encoder
- QPSK to 64-APSK ACM
- Roll-off 20% to 35%
- Flexible 27 MODCODs
- Low FPGA resource usage



## Key Features

- Compliant with CCSDS 131.2-B-1 Standard:
  - Flexible Advanced Coding and Modulation Scheme for High Rate Telemetry Applications
- Supports all 27 mandatory encoding and modulation mechanisms:
  - SCCC Turbo Encoder and Interleavers
  - QPSK, 8-PSK, 16-APSK, 32-APSK, 64-APSK
- On-the-fly MODCOD block change
- Shaping filters with roll-off 35%, 30%, 25% and 20%
- Easy integration with JESD204B DAC

## Applications

- Satellite communication systems
- Systems with the need of powerful Turbo Codes
- Adaptive modems with wide range of modulation schemes
- Applications with variable code rates and encoded block sizes

## 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

