

# **3GPP LTE CTC encoder Product brief**

**TurboBest**

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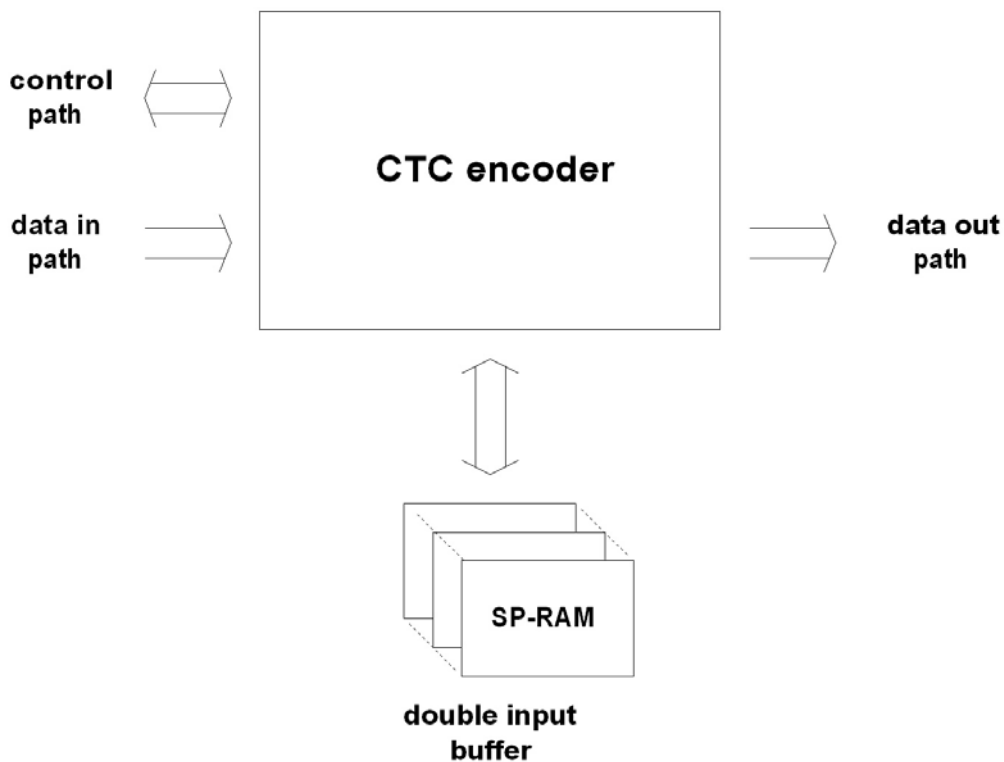
## 1. Introduction

The LTE CTC encoder designed to meet the *3GPP Mobile Communication System* specification [\[Ref 1\]](#).

CTC encoder and decoder enable an extremely effective way of transmitting data reliably over noisy data channels.

## 2. Block diagram

Below is the CTC encoder block diagram.



\* The CTC encoder does not have an output buffer, the encoded data is placed directly on the encoder output interface

Figure 1 - CTC encoder block diagram

## 3. Features

- Implements the 3GPP Long Term Evaluation (LTE) specification [\[Ref 1\]](#)
- All 188 (40–6114) 3GPP LTE block size range supported.
- Core contains the full interleaver
- Scalable architecture of X1 and X2 are available.
- Matlab bit exact model is available.

## 4. Throughput

The encoder supports throughputs equal to 1 or 2 times the clock frequency (according to the selected architecture).

## 5. Ordering information

For more information please contact us at [info@turbobest.com](mailto:info@turbobest.com)

You can visit our Web site at <http://www.turbobest.com>

We are offering hardware and software free evaluations.

## 6. References

1. 3G TS.36.212 V1.0.0 (2007-03), *Multiplexing and Channel Coding (Release 8)*, Technical Specification Group Radio Access Network, 3rd Generation Partnership Project.