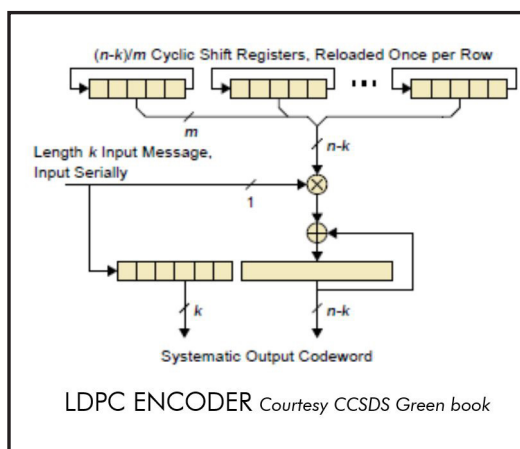


Low Density Parity Check (LDPC) Encoder

U R Rao Satellite Centre (URSC) of Indian Space Research Organisation (ISRO) has developed Low Density Parity Check (LDPC) Encoder (8176, 7156) for Near Earth Applications.

LDPC codes are error correcting codes. These are large block codes with a very sparse Parity Check Matrix. These codes are the best performing to Quasi – cyclic LDPC codes form an important subclass of LDPC Codes. The parity-check matrix of a QC-LDPC Code is given as an array of sparse circulants of the same size. Based on the generator matrix in systematic circulant form, encoding of a QC LDPC code can be accomplished with an array of shift registers. The encoder was implemented with SARA (Shift Register Adder Accumulator) Encoder circuit.



Salient Features

- ✦ Approaching Shannon limit.
- ✦ Good Block Error Correcting Performance.
- ✦ Low Error Floor.
- ✦ Less transmission overhead.

Major Specifications

- ✦ (LDPC) Encoder (8176, 7156) for Near Earth Applications.
- ✦ CCSDS recommended standard.

Technology Transfer

URSC/ISRO offers to transfer this technology of Low Density Parity Check (LDPC) Encoder (8176, 7156) for Near Earth Applications developed by URSC to industries in India with adequate experience and facilities. Industries interested in obtaining knowhow may write giving details of their present activities, infrastructure and facilities.

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