



2051 CONVOLUTIONAL ENCODER / VITERBI DECODER



FEATURES

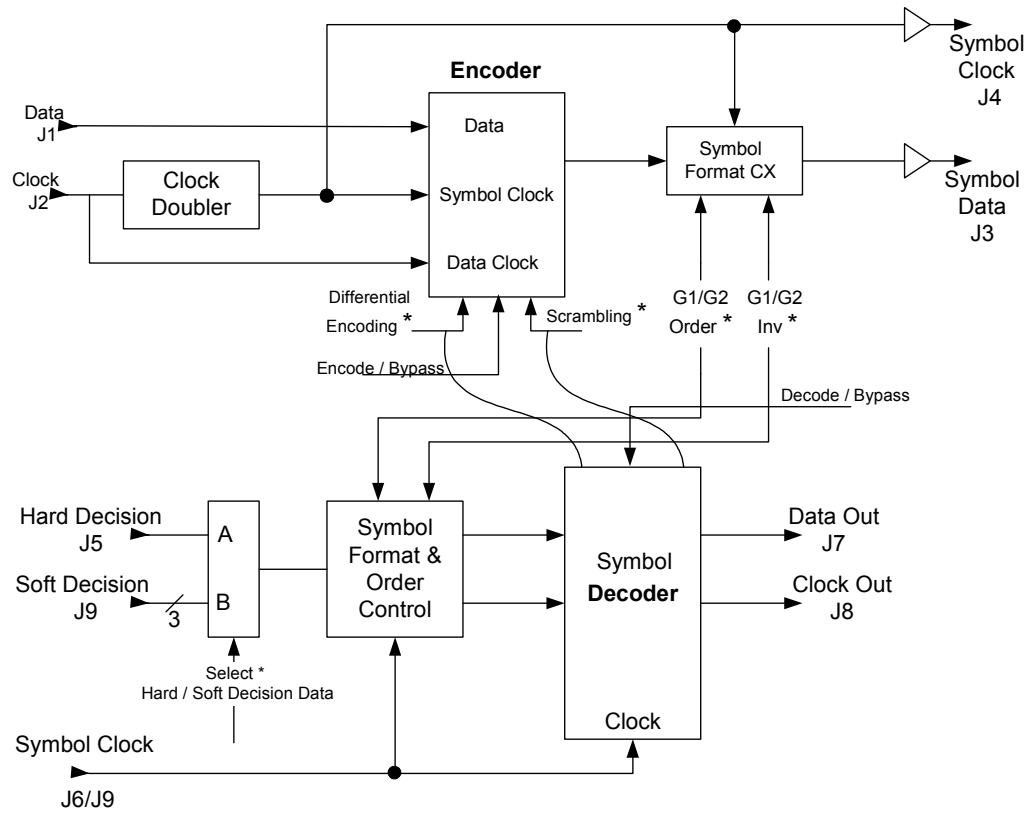
- Full Duplex Encoder/Decoder Operation
- Data Rates up to 20 Mbps
- Constraint Length $K=7$, $G1=1718$, $G2=1338$, Rate= $1/2$
- Hard or Soft (3 bit) decision decoder input; 2's complement with symbol rate 0° clock
- Symbol order and inversion dip switch selectable
- Scrambling algorithm complies with IESS-308, -309, switch selectable
- Differential encoding, switch selectable
- BNC connectors, TTL data and 0° clock interface, $50\Omega / 75\Omega$
- Requires two AL6300 series chassis slots

OVERVIEW

The VIT2 module is a Convolutional Encoder and Viterbi Decoder. The encoder accepts a stream of data and clock, doubles the clock rate, generates two symbols, and adjusts the symbol order and polarity according to switch settings made by the user. It reconstructs the standard amplitude-modulated analog time code signal for processing by an industry standard Time Code Translator.

The decoder section accepts either Hard or Soft (3-bits) decision inputs. The symbol ordering and inversions are automatically detected and the symbols are decoded into the source data. The resulting data and reconstructed bit clock are output as serial data and 0-degree clock.

FUNCTIONAL DIAGRAM



* Switch Selectable