

DATA PROCESSING APPARATUS AND DATA PROCESSING METHOD

ABSTRACT

The present technology relates to a data processing apparatus and a data processing method which enable provision of an LDPC code that achieves good error-rate performance.

An LDPC encoding unit performs encoding using an LDPC code having a code length of 64800 bits and a code rate of $24/30$, $25/30$, $26/30$, $27/30$, $28/30$, or $29/30$. The LDPC code includes information bits and parity bits, and a parity check matrix H is composed of an information matrix portion corresponding to the information bits of the LDPC code, and a parity matrix portion corresponding to the parity bits. The information matrix portion of the parity check matrix H is represented by a parity check matrix initial value table that shows positions of elements of 1 in the information matrix portion in units of 360 columns. The present technology may be applied to LDPC encoding and LDPC decoding.

Figure 8