$$
\begin{aligned}
(m = \text{Interleave}(F_u(\ell), \mu_x, \mathbb{Z}(\sigma))) \stackrel{\text{def}}{=} \\
\exists m_{off}, m_{p-1}, \ldots, m_0 : \\
0 \leqslant m_{p-1}, \ldots, m_0 \leqslant 1 \wedge m \geqslant 0 \wedge \\
m = \mu_x + m_{off}\beta_x \wedge F_u(\ell) = \mathbb{Z}(\sigma)M \wedge \\
m_{off} = \sum_{k=0}^{p-1} m_k 2^k
\end{aligned}
\tag{10}
$$