

4b) CTR modifiziert

$$Enc_k = F_k(m_i \oplus (IV+i))$$

$$\underline{Dec_k} = F_k^{-1}(c_i) \oplus (IV+i)$$

Korrektheit:

$$Dec_k(Enc_k(m_i)) = m_i$$

$$Dec_k(F_k(m_i \oplus (IV+i))) = m_i$$

$$F_k^{-1}(F_k(m_i \oplus (IV+i)) \oplus (IV+i)) = m_i$$

$$m_i \oplus (IV+i) \oplus (IV+i) = m_i$$

$$\underline{m_i} = m_i$$