

 $s_{t+16} = \alpha(s_t \oplus s_{t+3} \oplus s_{t+9})$ $z_t = f_t \oplus s_t = (s_{t+15} \boxplus L_t) \oplus R_t \oplus s_t$ $L_{t+1} = L_t \oplus ROT(f_t \boxplus R_t, 7)$

 $R_{t+1} = S(L_t)$