$$f(c, b, a)_{ORG} = \overline{b} \cdot a + \overline{c} \cdot \overline{b}$$

$$f(c, b, a)_{NAND} = \overline{\overline{(a \cdot \overline{b})} \cdot \overline{(\overline{c} \cdot \overline{b})}}$$

$$f(c, b, a)_{NOR} = \overline{b + \overline{a + \overline{c}}}$$