

```

ENTITY na2_x1 IS
GENERIC (
    CONSTANT area          : NATURAL := 1000;
    CONSTANT cin_i0        : NATURAL := 11;
    CONSTANT cin_i1        : NATURAL := 11;
    CONSTANT rdown_i0_nq   : NATURAL := 2850;
    CONSTANT rdown_i1_nq   : NATURAL := 2850;
    CONSTANT rup_i0_nq     : NATURAL := 3720;
    CONSTANT rup_i1_nq     : NATURAL := 3720;
    CONSTANT tphl_i0_nq    : NATURAL := 59;
    CONSTANT tphl_i1_nq    : NATURAL := 111;
    CONSTANT tplh_i1_nq    : NATURAL := 234;
    CONSTANT tplh_i0_nq    : NATURAL := 288;
    CONSTANT transistors   : NATURAL := 4
);
PORT (
    i0      : IN  BIT;
    i1      : IN  BIT;
    nq      : OUT BIT;
    vdd     : IN  BIT;
    vss     : IN  BIT
);
END na2_x1;

ARCHITECTURE vbe OF na2_x1 IS

BEGIN
    ASSERT ((vdd and not (vss)) = '1')
        REPORT "power supply is missing on na2_x1"
        SEVERITY WARNING;
    nq <= NOT ((i0 AND i1) AFTER 900 ps;
END;

```