

$$AB + A\bar{B} = [A] = A(B + \bar{B}) = A(1) = A$$

$$A + AB = [A] = A + AB = A(1+B) = A(1) = A \quad (\text{È GIÀ ASSORBIMENTO})$$

$$A + \bar{A}B + \bar{A}\bar{B} = [1] \quad A + \bar{A}(B + \bar{B}) = A + \bar{A}(1) = A + \bar{A} = 1$$
$$\overline{A+B}(\overline{\overline{A+B}}) = [0] = \overline{(A+B)} + (\overline{\overline{A+B}}) = (\overline{A+B}) + (A+B) = 1+1 = \overline{1} = 0$$
$$\bar{A} \cdot (\overline{ABCD}) = [\bar{A}] = \bar{A} \cdot (\bar{A} + \bar{B} + \bar{C} + \bar{D}) = A\bar{A} + \bar{A}\bar{B} + \bar{A}\bar{C} + \bar{A}\bar{D} = \bar{A}\bar{B} + \bar{A}\bar{C} + \bar{A}\bar{D} = \overline{A+B} + \overline{A+C} + \overline{A+D} = \overline{(A+B) \cdot (A+C) \cdot (A+D)} = \overline{(A+A \cdot C + AB + BC) \cdot (A+D)} = \overline{(A+AB+BC) \cdot (A+D)} = \overline{(A+AB+BC) \cdot (A+D)} = \overline{(A+BC) \cdot (A+D)} = \overline{A+AD+ABD+ABD} = \bar{A}$$

$$\bar{A}B + AB\bar{C} + ABC = [B] = \bar{A}B + A\bar{B}\bar{C} + A\bar{B}C + ABC = B(\bar{A} + A\bar{C}) + AB(\bar{C} + C) = B(\bar{A} + A\bar{C}) + AB = B(\bar{A} + A + A\bar{C}) = B(1 + A\bar{C}) = B$$

$$\overline{A + B} = \bar{A}\bar{B} \quad 1$$

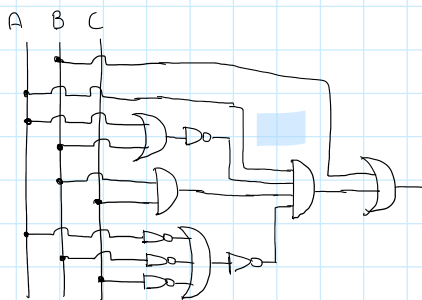
$$\overline{AB} = \bar{A} + \bar{B} \quad 2$$

$$A + \overline{AB}(C + B) + \overline{AB}\overline{C} = [\overline{AB}\overline{C}]$$

$$B + A \cdot \overline{A + B} \cdot C \cdot \overline{\overline{A + B} + \overline{C}} = [B]$$

1)

A	B	A+B	$\overline{A+B}$	$\overline{A} \overline{B}$	$\overline{A \cdot B}$
V	V	V	F	F	F
V	F	V	F	F	F
F	V	V	F	V	F
F	F	F	V	V	V



2)

A	B	AB	$\overline{A}B$	$A\overline{B}$	$\overline{A}\overline{B}$	$\overline{A+B}$
V	V	V	F	F	F	F
V	F	F	V	F	V	V
F	V	F	V	V	F	V
F	F	F	V	V	V	V

$$3) A + \overline{AB}(C+B) + \overline{\overline{A}\overline{B}\overline{C}}$$

A	B	C	$\bar{A}$	$\bar{B}$	$\bar{C}$	AB	$\overline{AB}$	C+B	$\overline{AB}(C+B)$	$\bar{A}\bar{B}\bar{C}$	$\overline{\bar{A}\bar{B}\bar{C}}$	M
V	V	V	F	F	F	V	F	V	F	F	V	V
V	V	F	F	F	V	V	F	V	F	F	V	V
V	F	V	F	V	F	F	V	V	V	F	V	V
V	F	F	F	V	V	F	V	F	F	F	V	V
F	V	V	V	F	F	F	V	V	V	F	V	V
F	V	F	V	F	V	F	V	V	V	F	V	V
F	F	V	V	V	F	F	V	V	V	F	V	V
F	F	F	V	V	V	F	V	F	F	V	F	F

4)  $B + A \cdot \overline{A+B} \cdot CB \cdot \overline{A+B+C} = [B]$

A	B	C	$\bar{A}$	$\bar{B}$	$\bar{C}$	A+B	$\overline{A+B}$	CB	$\overline{A+B+C}$	$\overline{A+B+C}$	max	y
V	V	V	F	F	F	V	F	V	F	V	F	V
V	V	F	F	F	V	V	F	F	V	F	F	V
V	F	V	F	V	F	V	F	F	V	F	F	F
V	F	F	F	V	V	V	F	F	V	F	F	F
F	V	V	V	F	F	V	F	V	V	F	F	V
F	V	F	V	F	V	V	F	F	V	F	F	V
F	F	V	V	V	F	F	V	F	V	F	F	F
F	F	F	V	V	V	F	V	F	V	F	F	F

$A + B \cdot \overline{A+B+C} \cdot \overline{\bar{A}\bar{B}\bar{C}} \cdot AC \cdot \overline{AB}$

A	B	C	$\bar{A}$	$\bar{B}$	$\bar{C}$	A+B+C	$\overline{A+B+C}$	$\bar{A}\bar{B}\bar{C}$	$\overline{\bar{A}\bar{B}\bar{C}}$	AC	AB	$\overline{AB}$	m	y
V	V	V	F	F	F	V	F	F	V	V	V	F	F	V
V	V	F	F	F	V	V	F	F	V	F	V	F	F	V
V	F	V	F	V	F	V	F	F	V	V	F	V	F	V
V	F	F	F	V	V	V	F	F	V	F	F	V	F	V
F	V	V	V	F	F	V	F	F	V	F	F	V	F	F
F	V	F	V	F	V	V	F	F	V	F	F	V	F	F
F	F	V	V	V	F	V	F	F	V	F	F	V	F	F
F	F	F	V	V	V	F	V	V	F	F	F	V	F	F

CIRCUITO → ESPRESSIONE

$ABC + \bar{A}\bar{B} + \overline{AB(C+\bar{A}+\bar{B})} + \overline{\bar{A}\bar{B}\bar{C}}$

A B C

