Alunos: Matheus Deodato (Dattebayo) (mdo2)

Nicolau Neto (ntsn)

Emmanuel Felipe Nery (efn)

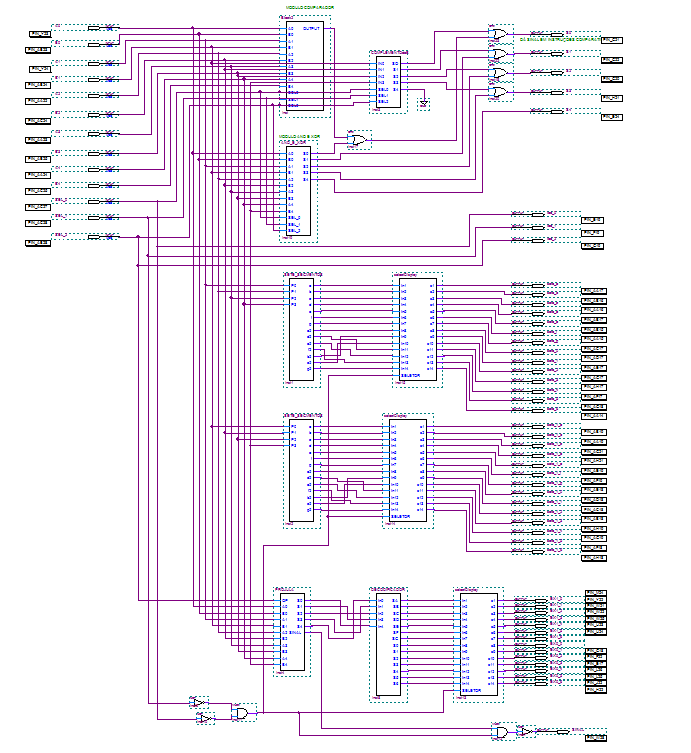
Gibson Pereira de Freitas (gpf)

Prof.: Abel Guilhermino (agsf)

Projeto de Sistemas Digitais: Unidade Lógica Aritmética

Data: 15-05-2017

Infraestrutura da ULA:



Circuito integrado em módulos que compõem o total da ULA.

Módulo comparador:

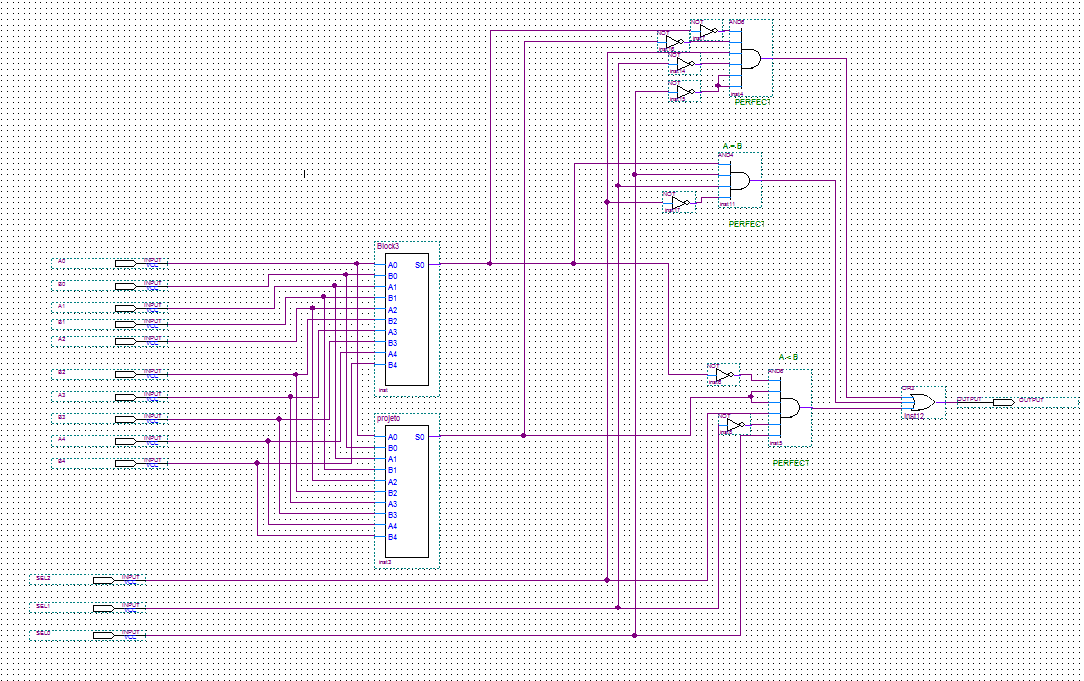


Figura Módulo comparador 1º caixinha

Reúne o bloco 3 que é o de igualdade e o bloco projeto que é o de A<B.

Complemento a 2 de B:

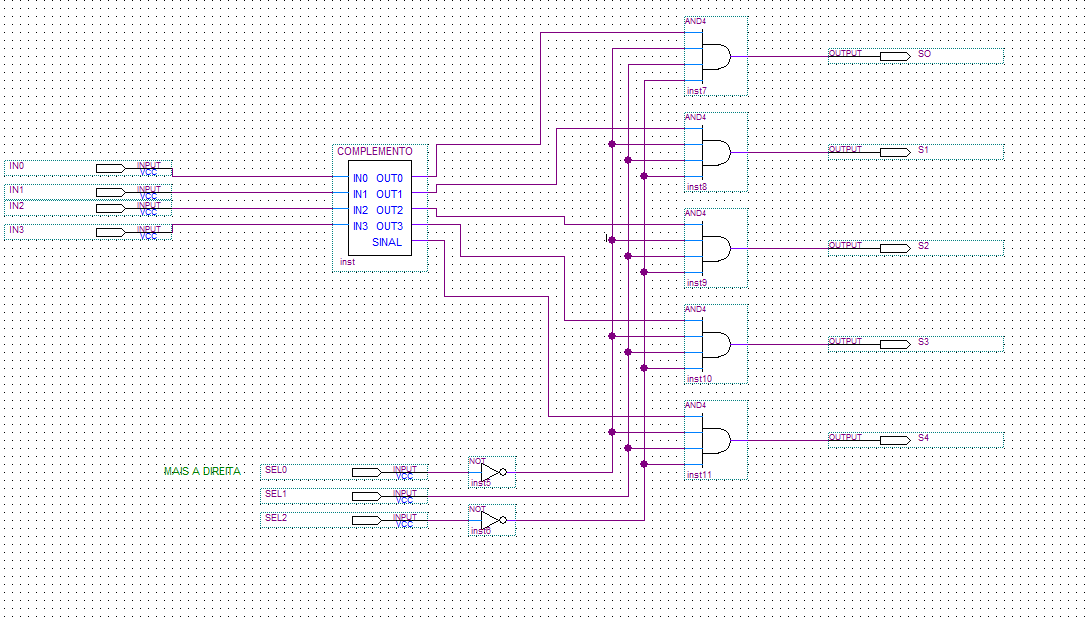


Figura Complemento a 2 em B

Ele tem entrada dos bits significativos de B e da a saída o complemento de B.

Módulo And e Xor:

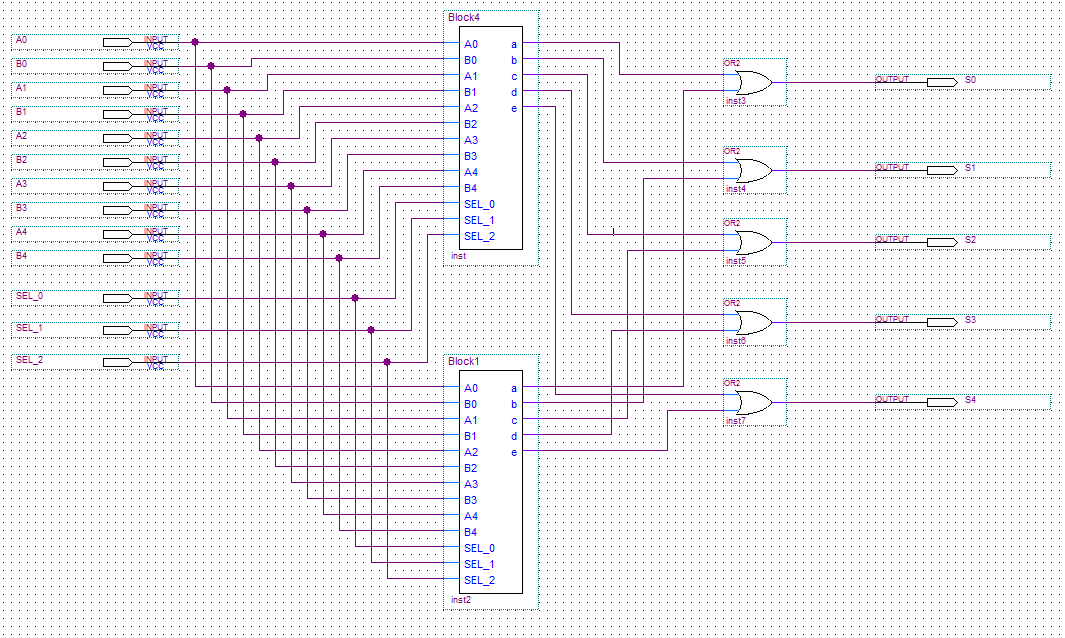


Figura MODULO AND E XOR

É composto pelos módulos de and e xor.

Decodificador de sete segmentos:

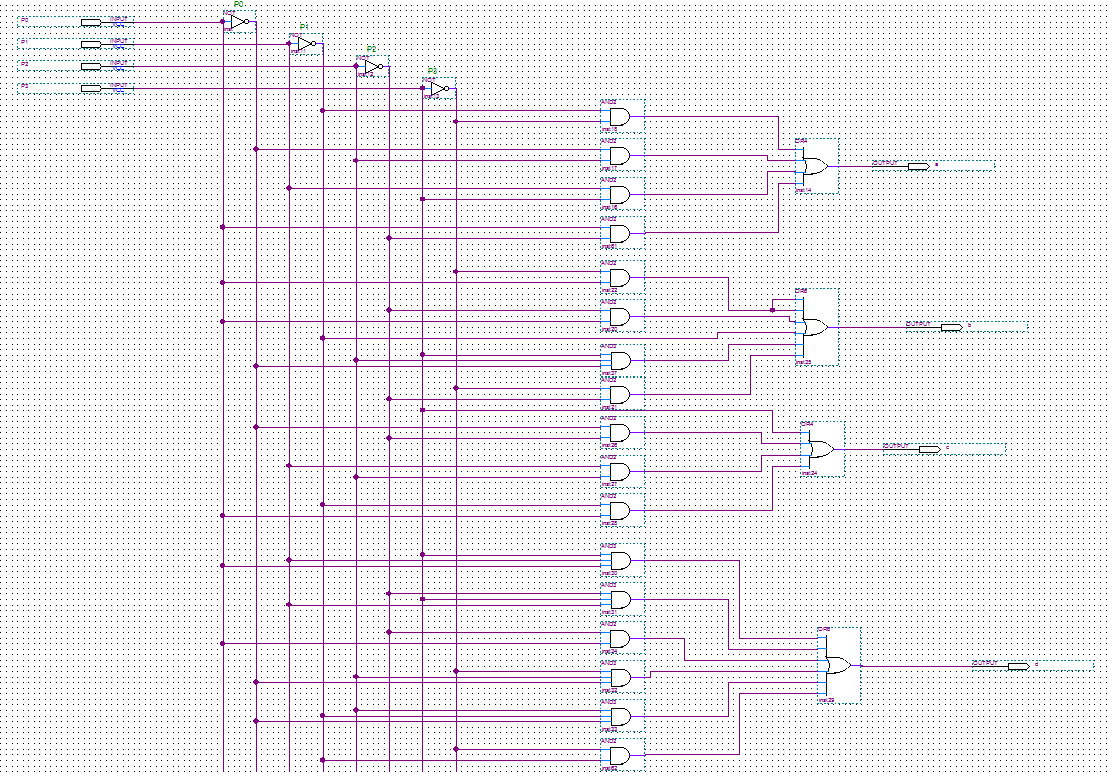


Figura sete segmentos

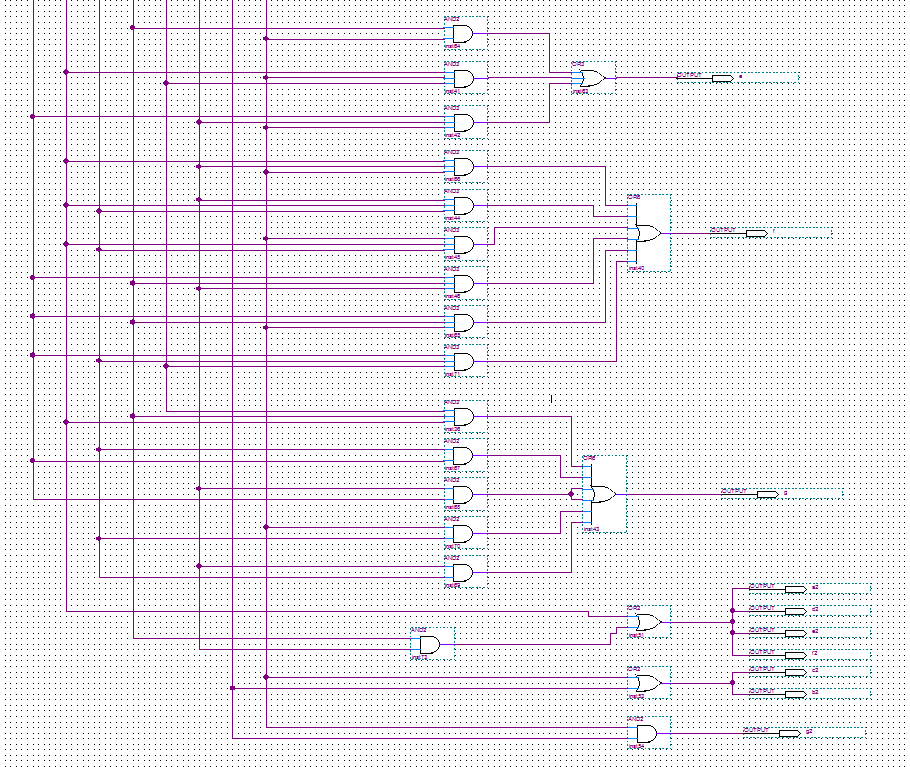


Figura sete segmentos

Decodificador de um numero de 4 bits para sete segmentos.

Display:

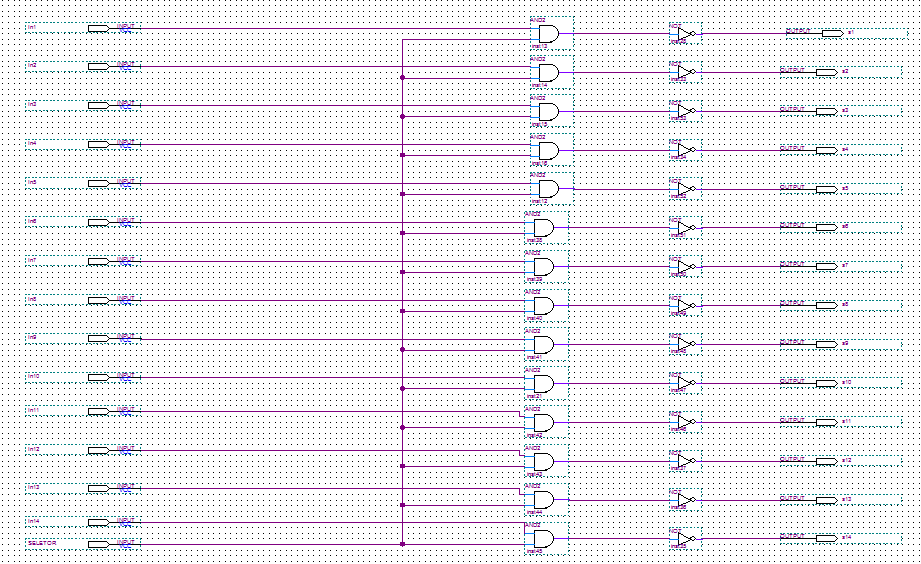


Figura apagar o display

Módulo que serve para apagar o Display quando ele não é solicitado pelo seletor

Somador e Subtrator:



Figura Projula

Módulo responsável pela soma e subtração do número em binário.

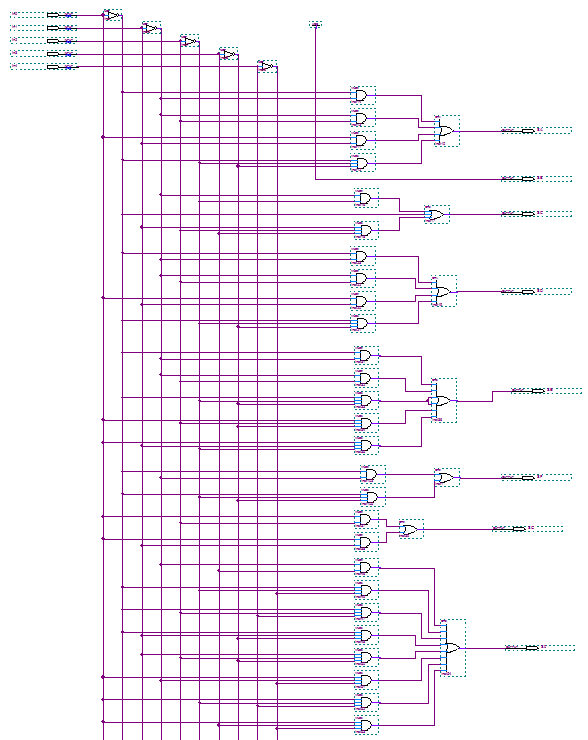
Decodificador:

Figura decodificador

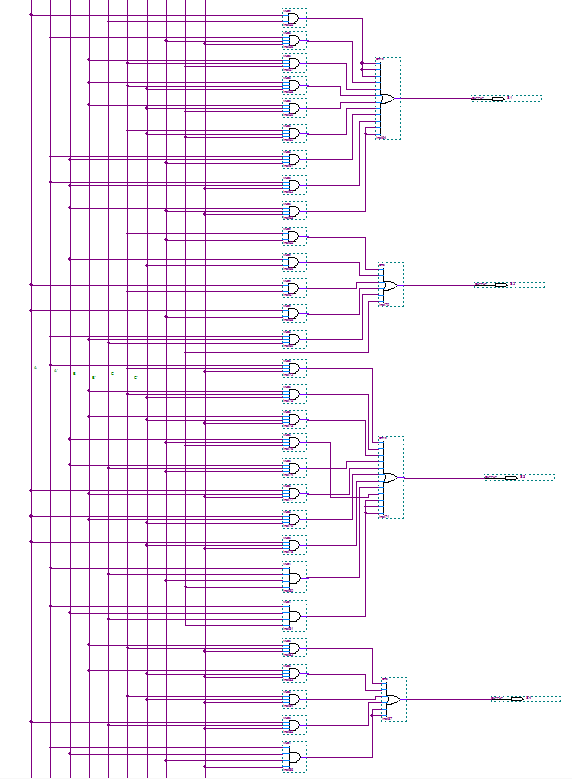


Figura decodificador

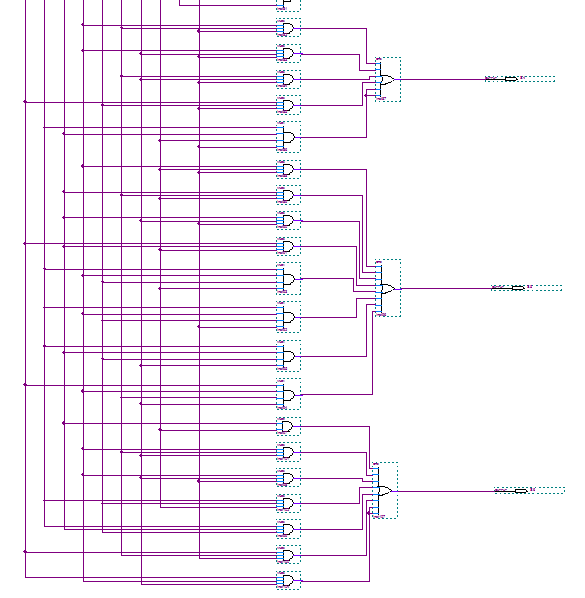
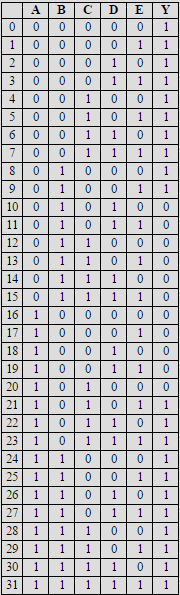


Figura decodificador

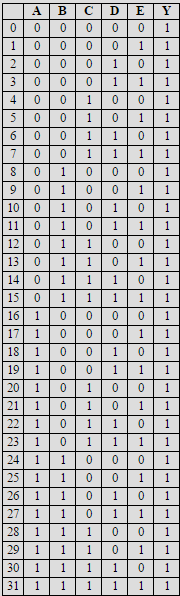
Decodificador para o display de sete segmentos que receberá o resultado em binário e dará a saída no display de sete segmentos.

Tabelas Verdade:

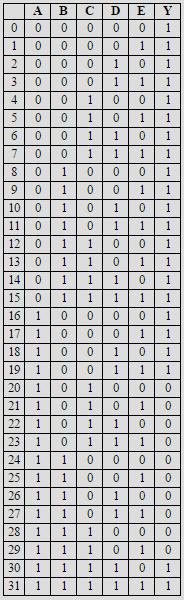
(A) table



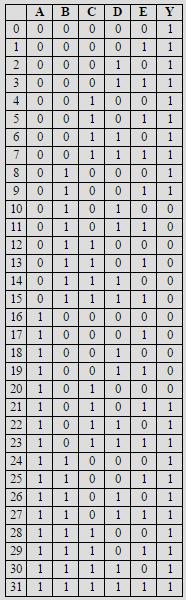
(B) table



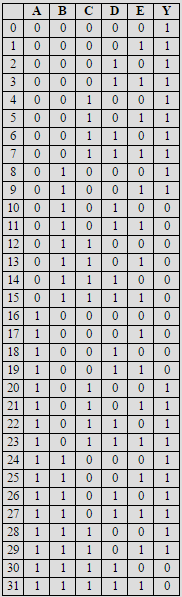
(C) Table



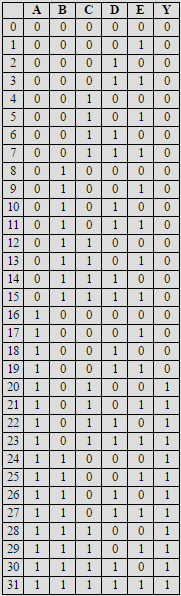
(D) Table



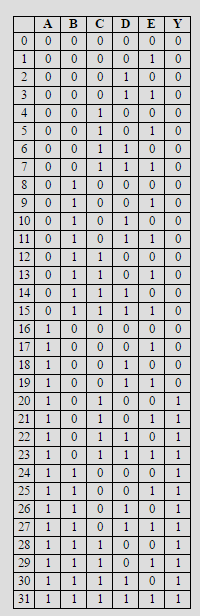
(E) Table



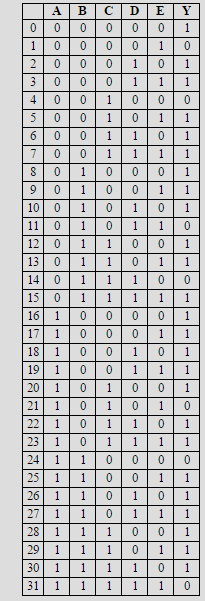
(F) table



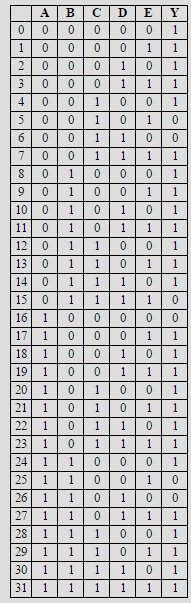
(G) table



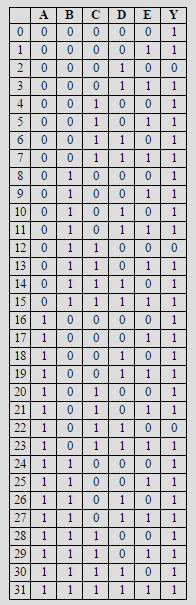
A1 table



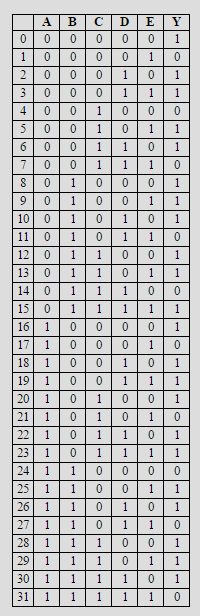
B1 table



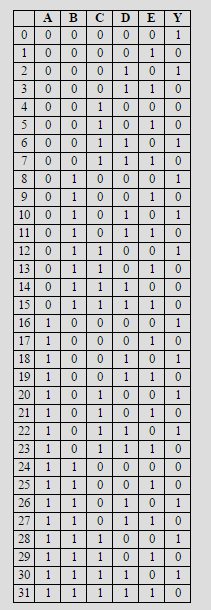
C1 table



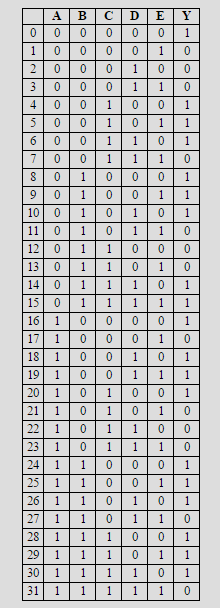
D1 table



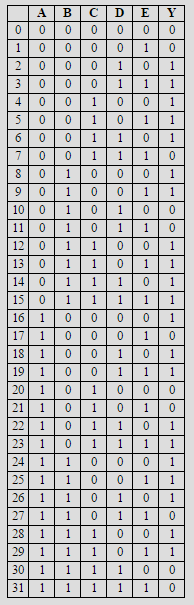
E1 table



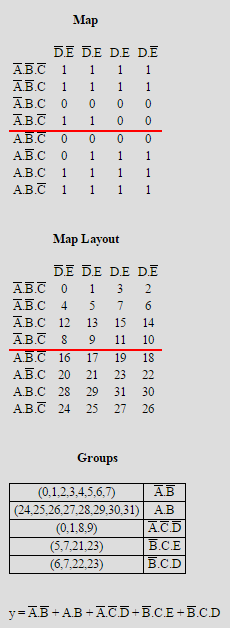
F1 table



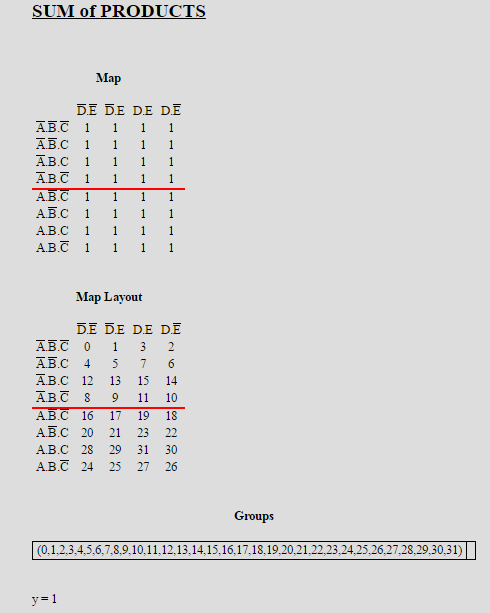
G1 table



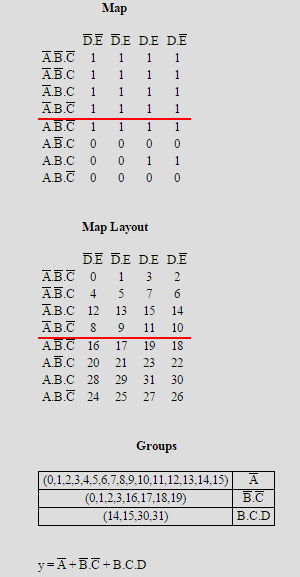
Mapa K de A



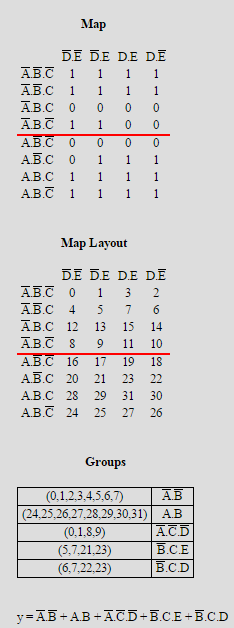
Mapa K de B



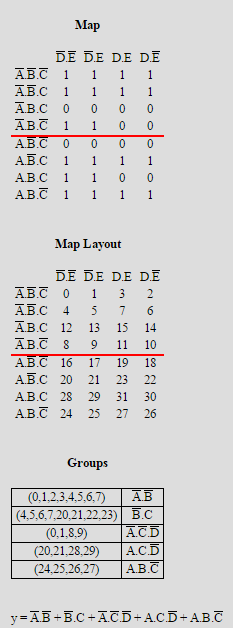
Mapa K de C



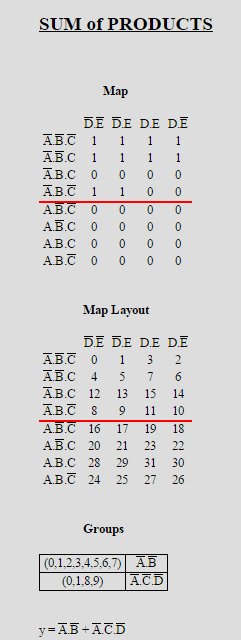
Mapa K de D



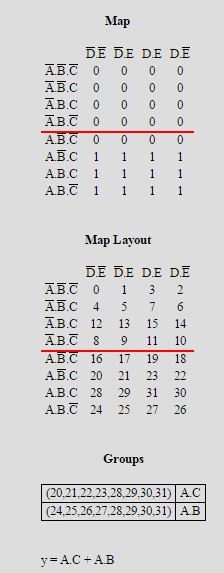
Mapa K de E



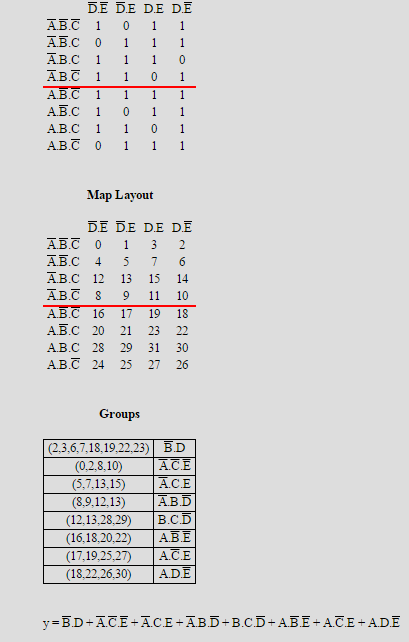
Mapa K de F



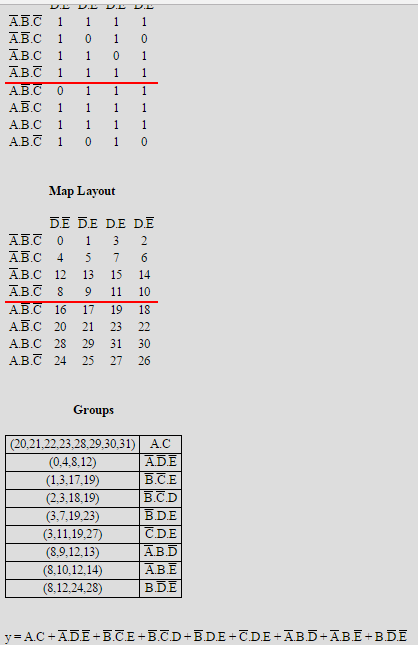
Maka K de G



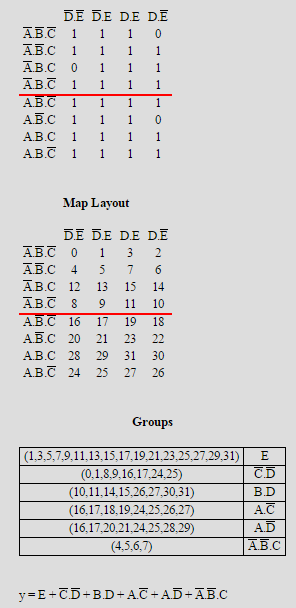
Mapa K de A1



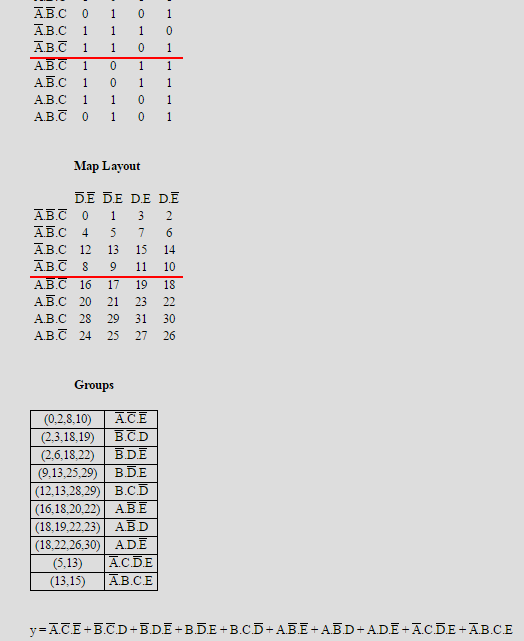
Mapa K de B1



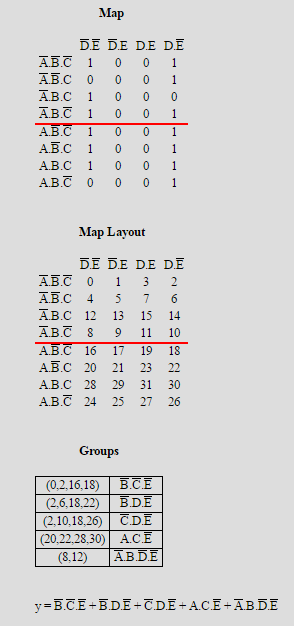
Mapa K de C1



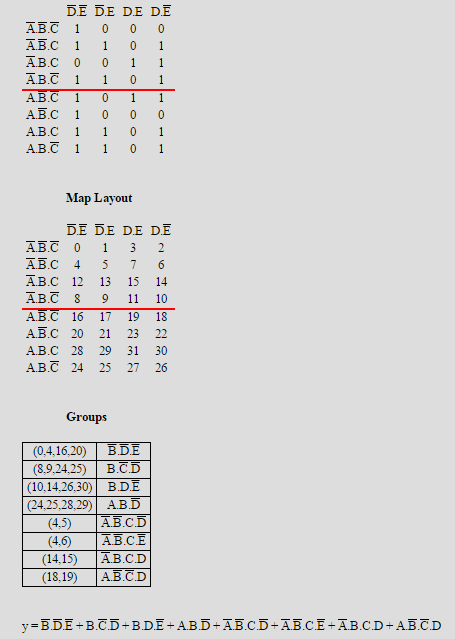
Mapa K de D1



Mapa K de E1



Mapa K de F1



Mapa K de G1

