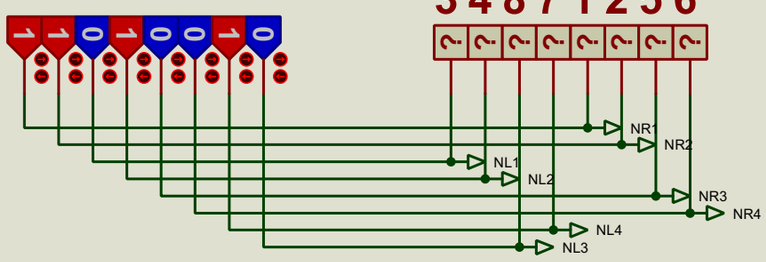
Encryption Of Plain Text (Combinational)

Input

Plain Text (8 bits)

1 2 3 4 5 6 7 8



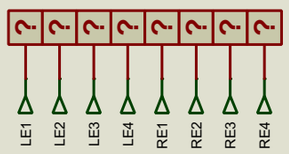
Permuted Text (8 bits)

3 4 8 7 1 2 5 6

Output

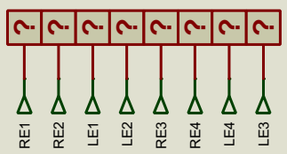
Merged Text (8 bits)

1 2 3 4 5 6 7 8

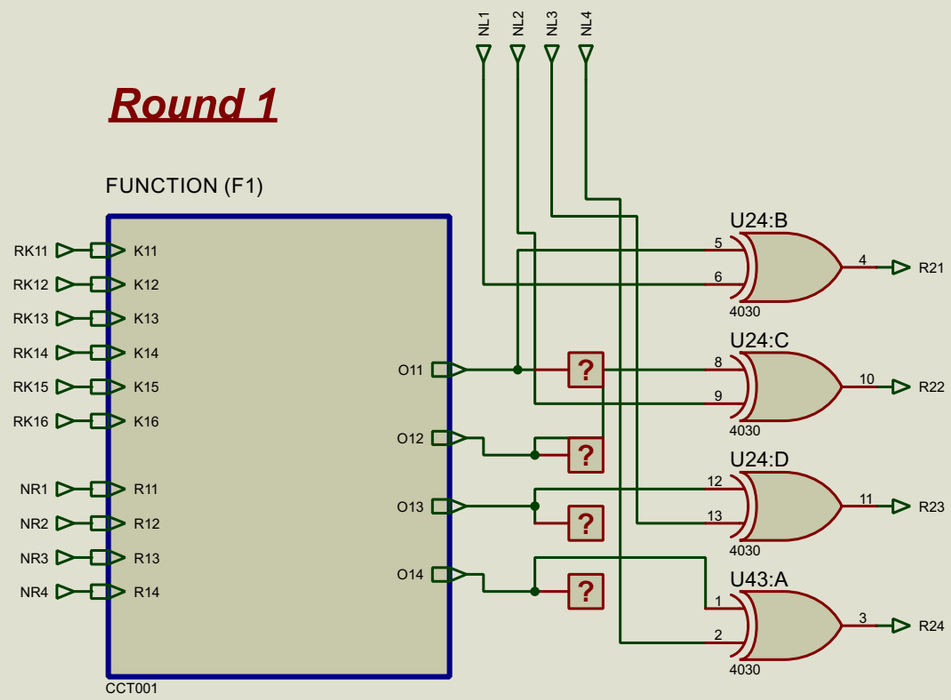


Encrypted Text (8 bits)

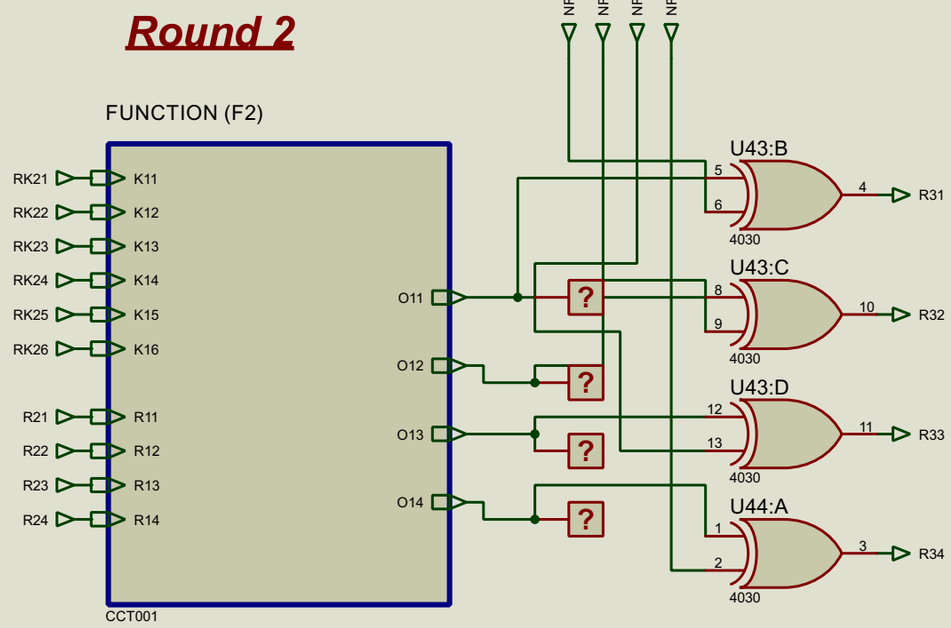
5 6 1 2 7 8 4 3



Round 1



Round 2



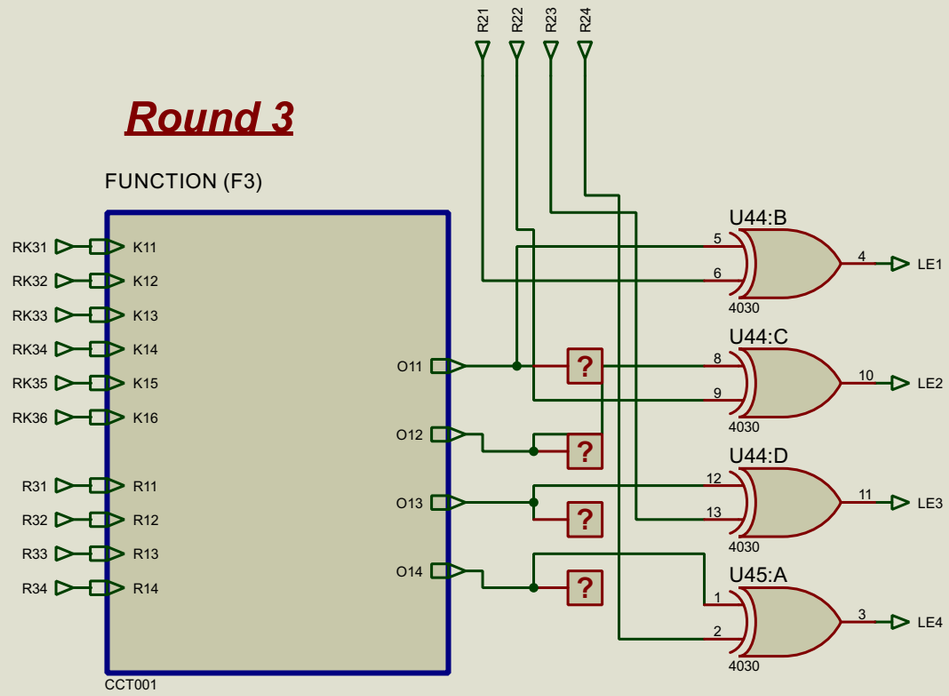
ROUND KEYS GENERATION

Input

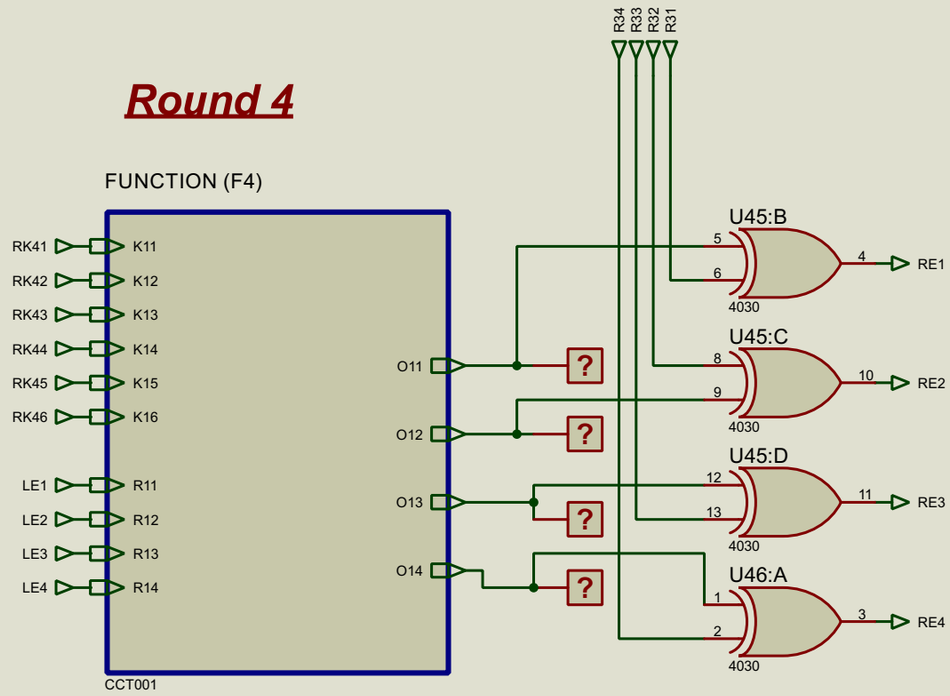
Initial Key (8 bits)

1 2 3 4 5 6 7 8

Round 3



Round 4



Encryption Of Plain Text (Sequential)

Input

Plain Text (8 bits)

1 2 3 4 5 6 7 8

Permuted Text (8 bits)

3 4 8 7 1 2 5 6

Output

Merged Text (8 bits)

1 2 3 4 5 6 7 8

Encrypted Text (8 bits)

5 6 1 2 7 8 4 3

ROUND KEYS GENERATION

Input

Initial Key (8 bits)

1 2 3 4 5 6 7 8

Round 1

FUNCTION (F1)

Round 2

FUNCTION (F2)

Round 3

FUNCTION (F3)

Round 4

FUNCTION (F4)

Encryption Or Decryption Of Text (Combinational)

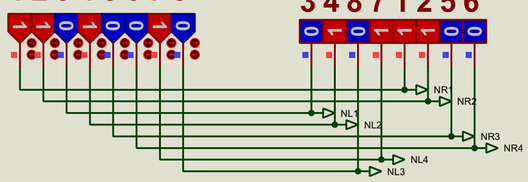
INPUT

Plain Text / Cipher text

1 2 3 4 5 6 7 8

Permuted Text

3 4 8 7 1 2 5 6

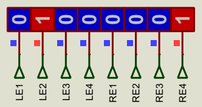


MODE

OUTPUT

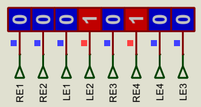
Merged Text

1 2 3 4 5 6 7 8



Encrypted/ decrypted Text

5 6 1 2 7 8 4 3

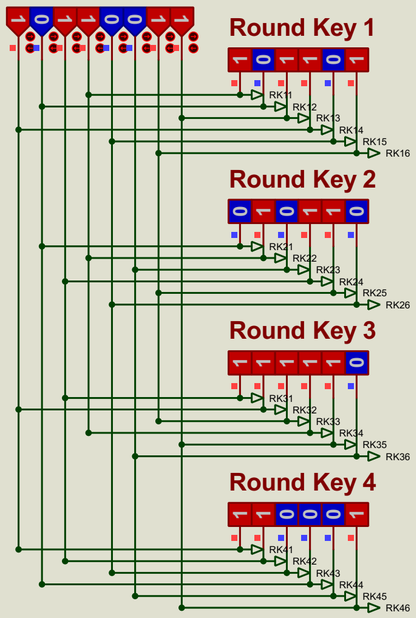


ROUND KEYS GENERATION

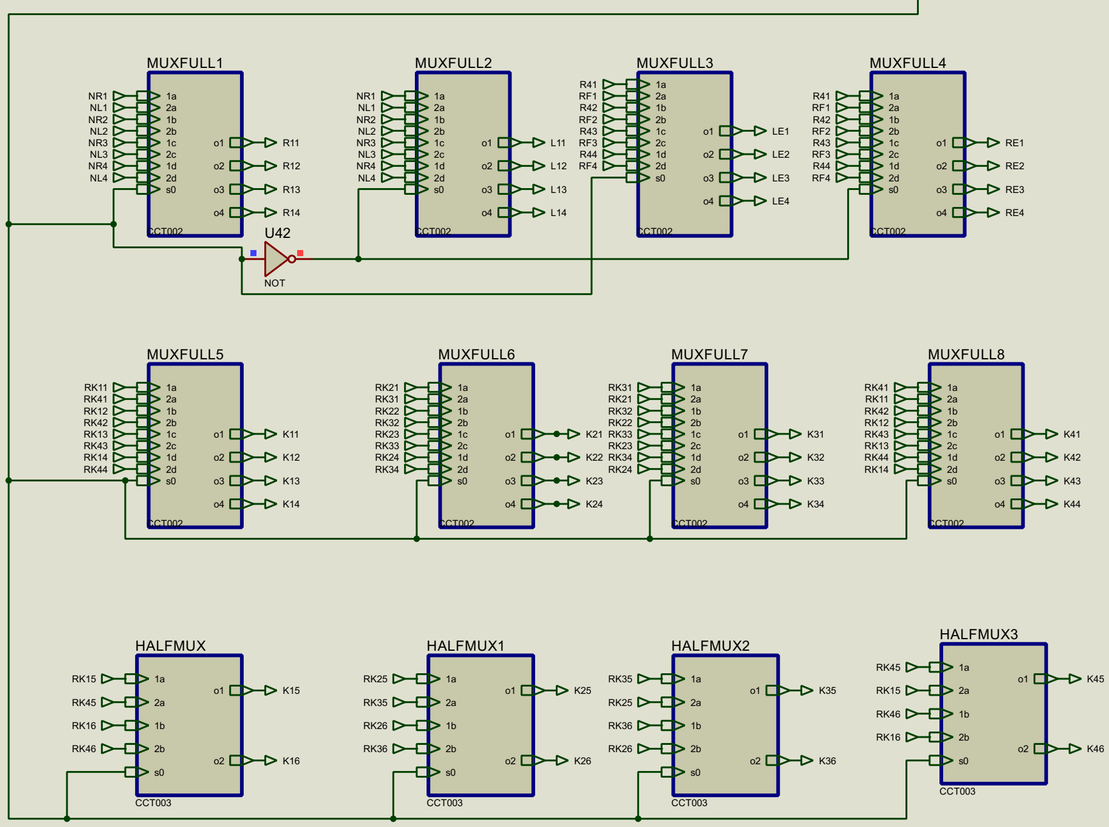
INPUT

Initial Key (8 bits)

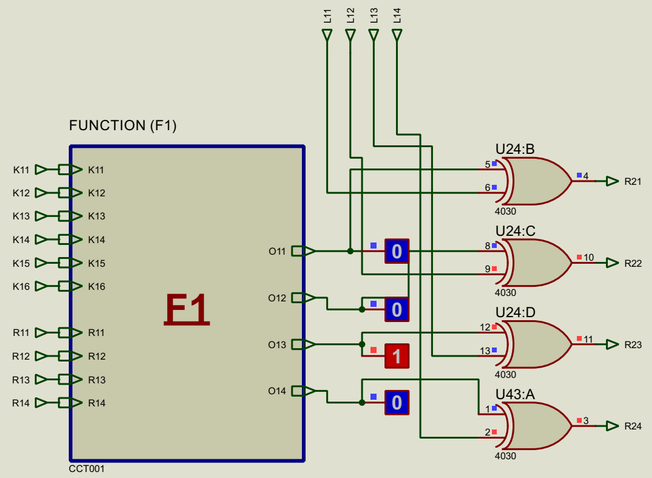
1 2 3 4 5 6 7 8

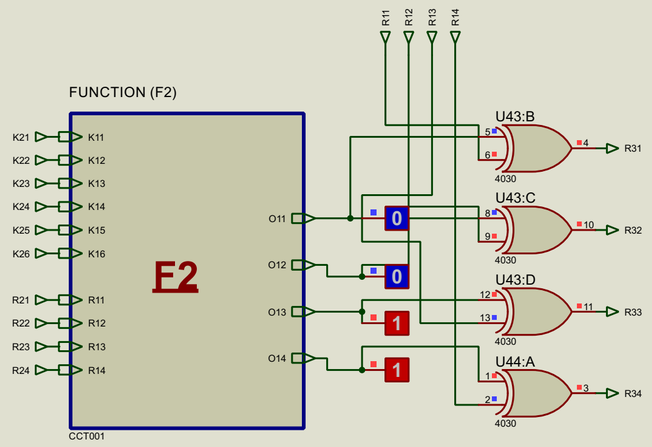


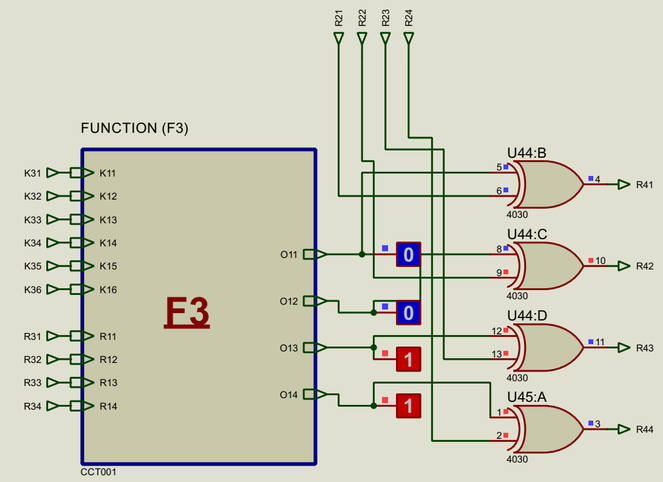
ROUND KEYS SELECTION

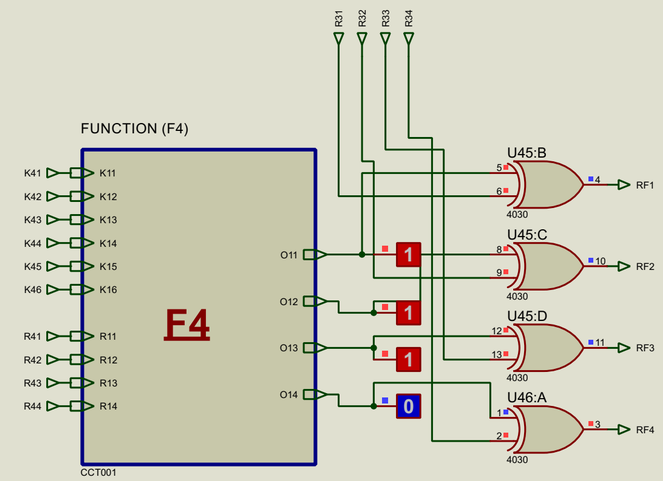


PERFORMING FUNCTIONS









Encryption Or Decryption of Text (Sequential)

ROUND KEYS GENERATION

INPUT

Initial Key (8 bits)

1 2 3 4 5 6 7 8

MODE

CLK

S0

S1

INPUT

Plain Text (Mode = 0)

Cypher Text (Mode = 1)

1 2 3 4 5 6 7 8

Permuted Text (8 bits)

3 4 8 7 1 2 5 6

Merged Text (8 bits)

1 2 3 4 5 6 7 8

OUTPUT

Encrypted/ decrypted Text (8 bits)

5 6 1 2 7 8 4 3

PERFORMING FUNCTIONS

ROUND KEYS SELECTION