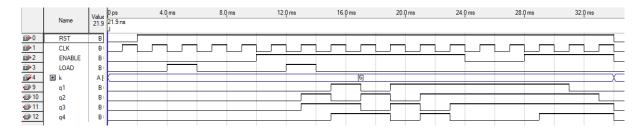
Sesión 3: LFSR

Mario Arias Espinosa Jorge Rodríguez Fraile

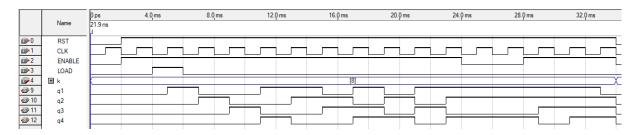
Pregunta 1:

El cronograma obtenido al simular el circuito es el siguiente:



Pregunta 2:

La simulación del LFSR con la carga del valor 8:



BCD(1000)=LSB DNI

Pregunta 3:

El periodo de nuestro reloj son 2ms, por lo que la frecuencia al ser la inversa de este, sería 0,5kHz=500Hz.

Pregunta 4:

ENABLE Pin 16 LOAD Pin 41 **RST** Pin 1 Claves Pin 37 k4 k3 Pin 17 k2 Pin 40 k1 Pin 18 CLK Pin 43

Todos los pines.

| Pin Name/Usage | : | Location | : | Dir. : | : | I/O Standard : | Voltage | : I/O Bank : | User | Assignment |
|-----------------|---|----------|---|----------|---|-----------------|---------|--------------|------|------------|
| RST | | | : | input : | - | ПТL : | | : : | N | |
| GND+ | | 2 | | : | | | | | | |
| VCC | | 3 | | power : | | | | : : | | |
| RESERVED | | 4 | | · : | | | | : : | | |
| RESERVED | | 5 | | : | | | | : : | | |
| RESERVED | | 6 | | : | | | | : : | | |
| TDI | : | 7 | : | input : | | TTL : | | : : | N | |
| q1 | : | | | output : | | | | : : | N | |
| q4 | : | | | output : | | | | : : | N | |
| GND | | | | gnd : | | | | : | | |
| q3 | | | | output : | | TTL : | | | N | |
| q2 | | | | output : | | | | | N | |
| TMS | | | | input : | | | | | N | |
| RESERVED | | | : | : Input | | | | : | | |
| VCC | | | | power : | | | | : | | |
| ENABLE | | | | input : | | . : | | | N | |
| k3 | | | | input : | | | | | N | |
| k1 | | | | | | TTL : | | | N | |
| RESERVED | | | | input : | | ''' | | : : | IN | |
| RESERVED | | | | : | | | | : : | | |
| | | 21 | | : | | | | : : | | |
| RESERVED GND | | | | and : | | | | : : | | |
| VCC | | 23 | | | | | | : : | | |
| | | | | power : | | | | : : | | |
| RESERVED | | | | • | | | | : : | | |
| RESERVED | | | | : | | | | : : | | |
| RESERVED | | | | | | | | : : | | |
| RESERVED | | | | | | • | | : : | | |
| RESERVED | | 28 | : | • | | | | : : | | |
| RESERVED | | | | | | : | | : : | | |
| GND | | | | gnd : | | : | | : : | | |
| RESERVED | | | | : | | | | : : | | |
| TCK | | | | input : | | IIIL : | | : : | N | |
| RESERVED | | | | : | | | | : : | | |
| RESERVED | | | | : | | | | : : | | |
| VCC | | | | power : | | | | : : | | |
| RESERVED | | | | ; : | | | | : : | | |
| k4 | | | | input : | | | | | N | |
| TD0 | | | | output : | | ITL : | | | N | |
| RESERVED | | | | : | | | | : : | | |
| k2 | | | | input : | | | | | N | |
| LOAD | | | | input : | | ITL : | | : : | N | |
| GND | | | | gnd : | | | | : : | | |
| CLK | | | | input : | | | | : : | N | |
| GND+ | | 44 | | : | | | | : : | | |

Esquemático del circuito

