Smart Home Application

Description:

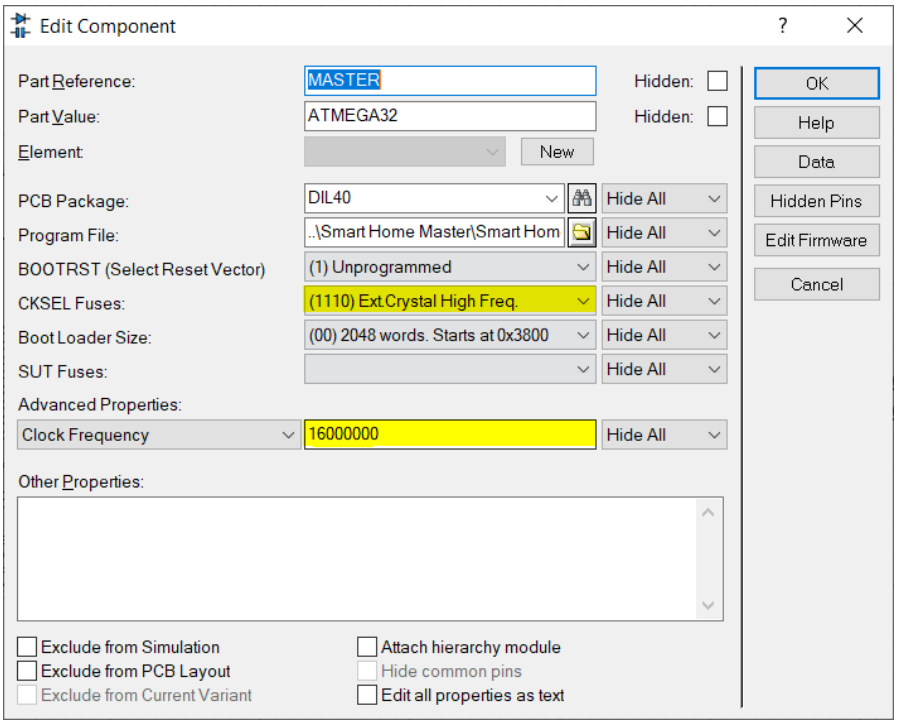
- This is a simple smart home app using ATmega32a MCU with external frequency 16 MHz
- The master MCU interface with the user using Bluetooth Module.
- UART is the type of communication between MCU and Bluetooth Module with 8-bit data, no parity and 1 stop bit.
- SPI is used to communicate between master MCU and slave MCU.

Components:

- 2 * ATmega32a.
- 2 * Crystal 16 MHz
- 2 * Led.
- 2 * 330 Ω Resistor.
- 1 * Bluetooth Module.

Note:

In Proteus, in the ATmega32a properties, choose these highlighted properties to run the simulation correctly.



Truth Table:

Data	Function
1	Toggle LED_0
2	Toggle LED_2
3	Close all LEDs

Flowchart: