

# ESP Deep Sleep

The RST pin of the ESP8266 is always HIGH while the ESP8266 is running. However, when the RST pin receives a LOW signal, it restarts the microcontroller.

If you set a Deep Sleep timer with the ESP8266, once the timer ends, GPIO 16 sends a LOW signal. That means that GPIO 16 when connected to RST pin can wake up the ESP8266 every time the timer ends.

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## Sleep Modes

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## Example Code

```
*
* ESP8266 Deep sleep mode example
* Rui Santos
* Complete Project Details http://randomnerdtutorials.com
*/

void setup() {
  Serial.begin(115200);
  Serial.setTimeout(2000);

  // Wait for serial to initialize.
  while(!Serial) { }

  // Deep sleep mode for 30 seconds, the ESP8266 wakes up by itself when GPIO 16 (D0 in NodeMCU board) is
  // connected to the RESET pin
  //Serial.println("I'm awake, but I'm going into deep sleep mode for 30 seconds");
  //ESP.deepSleep(30e6);

  // Deep sleep mode until RESET pin is connected to a LOW signal (for example pushbutton or magnetic reed
  // switch)
  Serial.println("I'm awake, but I'm going into deep sleep mode until RESET pin is connected to a LOW signal");
  ESP.deepSleep(0);
}

void loop() {
}
```

## References

Reference	URL
ESP8266 Deep Sleep with Arduino IDE	<a href="https://randomnerdtutorials.com/esp8266-deep-sleep-with-arduino-ide/">https://randomnerdtutorials.com/esp8266-deep-sleep-with-arduino-ide/</a>