Instituto Politécnico Nacional  
Escuela Superior de Cómputo  
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Departamento de Ing. en Sistemas Computacionales   
Academia de Sistemas Digitales   
Introducción a los microcontroladores

|  |  |  |
| --- | --- | --- |
| NOTA | FRECUENCIA HZ (OCTAVA 4) | FRECUENCIA TXIF = FRECUENCIA \* 2 |
| DO | 261.625565 | 523.25113 |
| RE | 293.664768 | 587.329536 |
| MI | 329.627557 | 659.255114 |
| FA | 349.228231 | 698.456462 |
| SOL | 391.995436 | 783.990872 |
| LA | 440.000000 | 880.000000 |
| SI | 493.883301 | 987.766602 |

El valor del registro de periodo esta dado por

Para cuando se usa el oscilador interno:

Calcular para cada nota musical el valor del registro de periodo (PRx) para las diferentes

pre-escalas y seleccionar la mas adecuada. Utilice el formato de la tabla 2.

|  |  |  |
| --- | --- | --- |
| NOTA DO | | |
| Pre-escala | Fpre-escalador | PRx |
| 1 |  |  |
| 8 |  |  |
| 64 |  |  |
| 256 |  |  |

**ESCALA ELEGIDA 64**

|  |  |  |
| --- | --- | --- |
| NOTA RE | | |
| Pre-escala | Fpre-escalador | PRx |
| 1 |  |  |
| 8 |  |  |
| 64 |  | *49.0355043* |
| 256 |  |  |

**ESCALA ELEGIDA 64**

|  |  |  |
| --- | --- | --- |
| NOTA MI | | |
| Pre-escala | Fpre-escalador | PRx |
| 1 |  |  |
| 8 |  |  |
| 64 |  |  |
| 256 |  |  |

**ESCALA ELEGIDA 256**

|  |  |  |
| --- | --- | --- |
| NOTA FA | | |
| Pre-escala | Fpre-escalador | PRx |
| 1 |  |  |
| 8 |  |  |
| 64 |  |  |
| 256 |  |  |

**ESCALA ELEGIDA 1**

|  |  |  |
| --- | --- | --- |
| NOTA SOL | | |
| Pre-escala | Fpre-escalador | PRx |
| 1 |  |  |
| 8 |  |  |
| 64 |  |  |
| 256 |  |  |

**ESCALA ELEGIDA 1**

|  |  |  |
| --- | --- | --- |
| NOTA LA | | |
| Pre-escala | Fpre-escalador | PRx |
| 1 |  |  |
| 8 |  |  |
| 64 |  |  |
| 256 |  |  |

**ESCALA ELEGIDA 8**

|  |  |  |
| --- | --- | --- |
| NOTA SI | | |
| Pre-escala | Fpre-escalador | PRx |
| 1 |  |  |
| 8 |  |  |
| 64 |  |  |
| 256 |  |  |

**ESCALA ELEGIDA 1**