

Bit Time Calculations for the Microchip CAN

Setup Criteria

Oscillator Frequency	8.000 MHz
Target CAN Bus Baud Rate	250.000 kbps

Selected Options

BRP-1 (Baud Rate Prescaler)	0
Tq (Time Quanta)	250.000 ns
Number of Time Quanta	16
% Error of Target Baud Rate	0.0 %

Bit Timing Setup in Tq

Propagation Delay	1
Phase Segment 1	8
Phase Segment 2	6
Synchronization Jump Width (SJW)	1

Multiple bit sampling is off. Wakeup filter is off.

Bit Timing Diagram**Configuration Register Setup (PIC18/MCP251X) (neoVI blue/green, ValueCAN 2)**

Register	Binary	Hexadecimal
CNF1/BRGCON1	b'00000000'	0x00
CNF2/BRGCON2	b'10111000'	0xB8
CNF3/BRGCON3	b'00000101'	0x05

Configuration Register Setup (dsPIC33F,PIC24H,dsPIC30) (neoVI Red/Fire/Test/Yellow/ECU, ValueCAN 3)

Register	Binary	Hexadecimal
C1CFG1	b'0000000000000000'	0x0000
C1CFG2	b'0000010110111000'	0x05B8