PCI/ISA/PCMCIA to Serial: I need to use a custom speed on your PCI card, can I do it?

The serial ports on the PCI-devices of VScom
provide many more speed configurations as are offered for
selection in typical programs. Especially when connecting
very special hardware there is always the question, whether
the requirements of the hardware are supported by the serial
ports. To get your answer quick just use the new Online Speed Calculator for VScom products.

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There is a formula to calculate the bitrates, which can be configured
on serial ports. This is for serial ports based on UARTS 16C450 and
compatible chips. Such are used in most products on the market.

Speed = (16*Bmax) / TCR / (CPR / 8) / Divisor, divide from left to right.

Speed
:
 resulting bitrate (bit per seconds)

Bmax
:
 maximum bitrate in 16C550 mode (bit per seconds)

TCR
:
 signal sample count

CPR
:
 Prescaler

Divisor
:
 a 16 bit Integer number

The Divisor always ranges from 1 to 65535.

These parameters have different allowed ranges or values on certain .

VScom L-Series

VScom H-Series
VScom Industrial
VScom PCI Express

Bmax
921600
Bmax
921600
Bmax
921600
Bmax
3906250

TCR
16
TCR
4 to 16
TCR
16
TCR
4 to 16

CPR
8
CPR
8 to 255
CPR
8
CPR
8 to 511

You need to try parameter configurations to find your target bitrate as
the result, TCR should be as high as possible. A resulting bitrate is generally considered acceptable, if
the deviation from the target bitrate is less than 2%.

For the L- and Industrial series the formula reduces to

Speed = Bmax / Divisor

Divisor = Bmax / Target

Test the integer numbers nearest to the resulting Divisor in the upper formula.

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Also note: On some products the Bmax may be changed by a configuration jumper.

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And here are instructions how to use the speed inWindows. They are for the programmers of your application. [How to configure the serial card for my baudrate? It is not available in the Device Manager.](#)

Unique solution ID: #1020
Author: Support
Last update: 2016-02-22 18:21