

## Re: elimination of intercharacter gap in RS232 stream?

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*Source:* <http://coding.derkeiler.com/Archive/General/comp.arch.embedded/2007-10/msg00370.html>

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- *From:* Grant Edwards <[grante@xxxxxxxx](mailto:grante@xxxxxxxx)>
  - *Date:* Wed, 10 Oct 2007 19:16:41 -0000
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On 2007-10-10, Bo <[bo@xxxxxxxxxxx](mailto:bo@xxxxxxxxxxx)> wrote:

Writing an Embedded Linux app for a PC104/Versallogic board.  
Linux 2.6.14.17.

Using write() to transmit data packets to another PC104 board.  
If I write() 30 bytes, sometimes there is a 2-5mS gap in the  
middle of the transmission, usually at about byte 15-20, but  
sometimes at byte 29—as seen on a scope.

It sounds like either your serial driver is broken or you've  
got interrupts disabled for a `_long_` time. The serial driver  
should get an interrupt when the tx fifo is low and have tons  
of time to fill it before it underflows.

Tried using low latency setting when opening the port—but  
this made no difference. This is causing difficulties for the  
receiving end—and we have yet to add two more serial ports  
to the application.

Any ideas on how to force continous transmission of the data?

Fix the serial driver or fix the other driver that's locking  
out interrupts for so long. You could try raising the tx fifo  
threshold so that the serial driver has more time to respond.  
That will increase the tolerance for high interrupt latency,  
but it will generate more frequent interrupts and result in  
higher overhead.

You could also try fixing the receive end so that a gap between  
bytes doesn't make it fall over.

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Grant Edwards [grante](mailto:grante) Yow! FEELINGS are cascading

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at over me!!!  
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