
Re: Send Variable Size Data to Serial Port [ref:_00Di0Ha1u._5000ZrwCSj:ref]

2 messages

David Ding <support@mathworks.com>
To: "tug39574@temple.edu" <tug39574@temple.edu>

Fri, Sep 15, 2017 at 5:01 PM

Hi Tongdi,

My name is David, and I am writing in reference to your Technical Support Case #02752054 regarding 'Send Variable Size Data to Serial Port'.

I understand that you are trying to send variable-sized data to serial port but is getting an error because of it.

Unfortunately, the Serial Send block does not currently support inputs with variable size vectors. The input data width is set upon compilation time, and will not change during execution. However, I can provide to you some workarounds.

The clearest workaround is avoid the issue by setting all of the array sizes to the max array size and padding the arrays with some sort of null character that the hardware will ignore, although this solution depends on the hardware.

A more complicated workaround is required to use the Simulink Serial blocks. One could encapsulate the Serial Send block in a Function Call block with one input. Then, in the Stateflow chart, create two parallel states: one for the controller, and one for a serial interface. The controller adds data into a buffer, and the serial interface reads the buffer and sends data out one at a time along with an output event to activate the Serial Send block.

Please preserve the Reference ID in further correspondence on this query. This allows our systems to automatically associate your reply to the appropriate Case.

If you have a new technical support question, please submit a new request here:

<http://www.mathworks.com/support/servicerequests/create.html>

Sincerely,

David Ding
MathWorks Technical Support Department

Self-Service: <http://www.mathworks.com/support>

File Exchange and MATLAB Answers: <http://www.mathworks.com/matlabcentral/>

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ref:_00Di0Ha1u._5000ZrwCSj:ref

Tongdi Zhou <tug39574@temple.edu>
To: tuf76885@temple.edu

Tue, Sep 19, 2017 at 3:54 PM

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