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EGR-304

Professor De Boer

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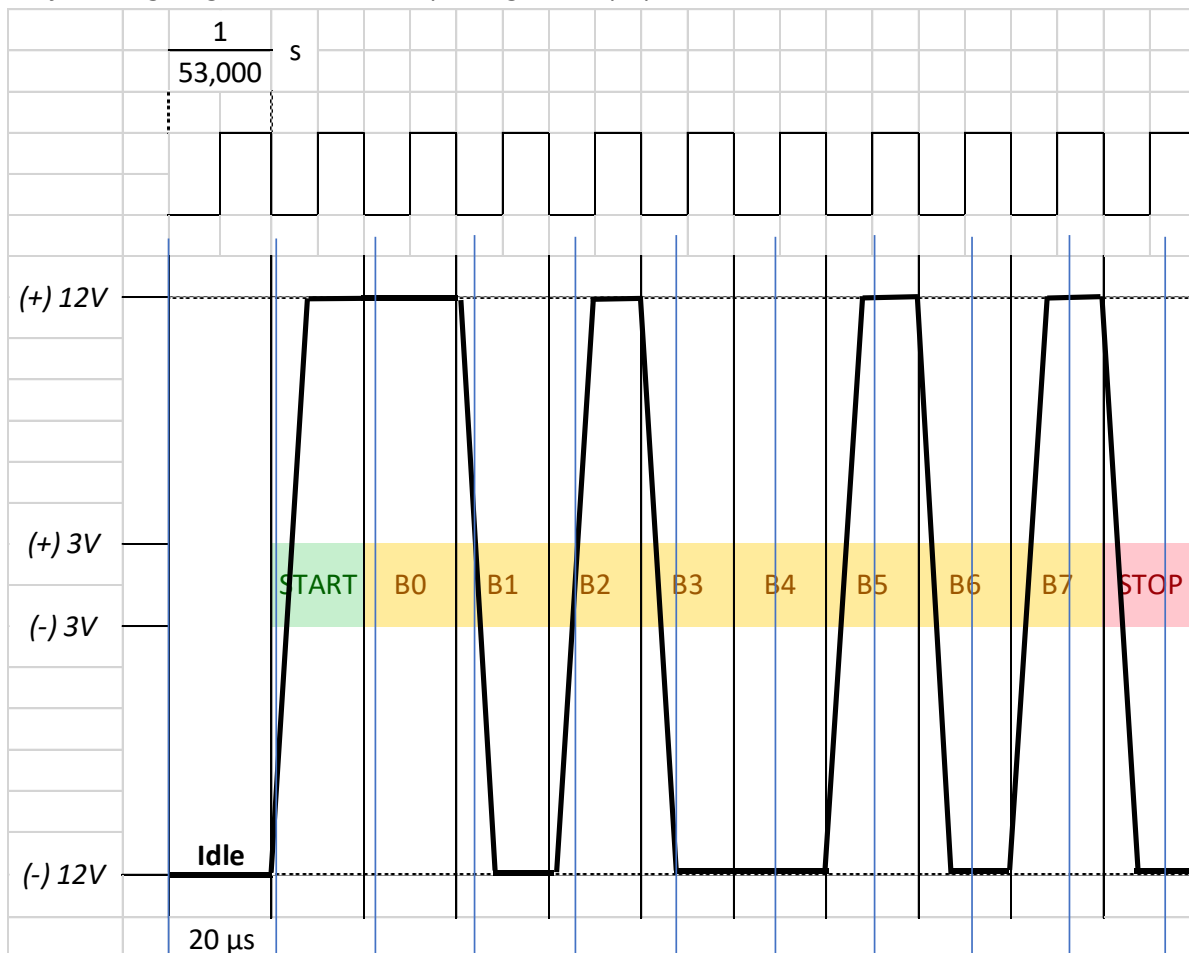
PS #7

Plot voltage vs. time of the Tx line in RS-232 for sending this text: "Z#" (without the quotation marks, with a capital "Z"). Assume ± 12 V signal voltages, 53 kbaud, eight data bits, and one stop bit. Be sure to label your axes properly. An ASCII table can be found in many places, e.g. <http://www.asciitable.com>. Note that the illustration in the Wikipedia reading does not have properly labeled axes. Specifically, the independent axis lacks scale and units.

Character	Decimal	Binary
Z	90	1011010
#	35	0100011

53 kbaud for a 2 symbol system = bit rate

Note: This would not fit on one page so the following graph is just for "Z". The "STOP" bit will continue on the following diagram. Blue lines depict regular $20 \mu\text{s}$ pulses.



Note: This would not fit on one page so the following graph is just for “#”. The “STOP” before refers to the stop bit from the previous diagram. Blue lines depict regular 20 μ s pulses.

