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Controlling output signal of frequency generator for NMR

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NMR frequency generator was built using digital frequency generator (PTS310) and AVR microcontroller. The microcontroller was programmed to receive a frequency value from computer. After processing, the microcontroller sent 24 parallel data bits to control the digital frequency generator (PTS310). The frequency value is restricted between 0-16 MHz. It was found that the output frequency can be controlled from 0.00000 MHz to 9.70129 MHz. The error of output frequency is 0.20%.

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