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标题: High-capacity radio frequency identification-based radio over fiber system

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摘要: We present the use of a serial ring resonator system for multichannel radio frequency generation that can be used to form the radio frequency identification (RFID) application. A system consists of a serial nonlinear microring resonator system for generating pulse and selecting signals that can be filtered by using the add/drop filter. The input pulse is a Gaussian pulse with center wavelength at 1,500 nm. By using suitable simulation microring parameters, the generation of signal with the center wavelength or frequency at 2.15 nm or 285 GHz is achieved, where the high frequency RFID with 91 channels is generated and noted. The use of THz frequency enhancement and RFID-based wireless communication is discussed. (C) 2012 Wiley Periodicals, Inc. Microwave Opt Technol Lett 54:16371642, 2012; View this article online at wileyonlinelibrary.com. DOI 10.1002/mop.26899

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