ARTICLE

THEORETICAL DESIGN OF HYPERSECANT SOLITON BASED DEMUX

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For the design of a communication circuit, we need to propose a high speed and low dispersion model. But we can design de MUX circuit using soliton-based logic gates. A deMUX is a design where single channel can be connected with multi-channel. We analyses the deMUX using solition pulse as a signal and the control line as a trigger pulse. The input pulse is a hypersecant pulse like $f(z,t) = E_0 \sec(h\sigma T)e^{-imz}$. This pulse superposed with trigger pulse under different phase condition.