



# Opto-Acoustic Oscillator Using Silicon Mems Optical Modulator

Suresh Sridaran, Sunil A. Bhave

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We show operation of a silicon MEMS based narrow-band optical modulator with large modulation depth by improving the electro-mechanical transducer. We demonstrate an application of the narrowband optical modulator as both the filter and optical modulator in an opto-electronic oscillator loop to obtain a 236.22 MHz Opto-Acoustic Oscillator (OAO) with phase noise of -68 dBc/Hz at 1 kHz offset.

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