Divyang D. Vyas, Time Multiplexed Switched Capacitor Circuits, M. Tech. Thesis, Department of Electrical Engineering, Indian Institute of Technology Bombay, 2005.

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Abstract **-** Switched capacitor (SC) circuits provide an efficient way to design MOS compatible analog circuits. Time multiplexing helps reducing the number of components in an SC circuit making it more economical for MOS realisation. In this report, general conditions necessary for time multiplexing of SC circuits are reviewed. In view of these conditions, two commonly used SC biquads are compared for their suitability in the design of time multiplexed SC filters and programmable SC filters. Time multiplexing of SCs, operational amplifiers (OAs) and subnetworks within an SC circuit are discussed. Compensation techniques for reducing the nonideal effects in SC circuits are studied. Practical implementations of various SC circuits and their results are discussed.