

Title: Spacetime: High performance design made easy.

Abstract: Tabula is bringing to market a novel high performance and high density programmable logic solution called Spacetime. Specifics of how this technology enables very high performance and very high throughput multi-port memories will be discussed. Along with the architecture, Tabula is bringing a software development system called Stylus that has a novel timing closure mechanism called sequential timing. Sequential timing significantly speeds up the timing closure process by reducing the number of timing closure iterations by an order of magnitude. In this talk, we will show how Spacetime is being used to implement very high bandwidth 100Gb packet processing solutions and show examples of such solutions such as a 12x10 to 100Gb Ethernet bridge, a 4x100G switch and a 40Gb line rate regular expression accelerator.