

What: An Introduction to Qualcomm Datacenter Technologies & Centriq 2400 Processor

When & Where: March 16, 10 A.M., KD-101

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Abstract: In this talk we will provide introduction to Qualcomm's Datacenter business unit and present details of the first commercially available ARM based many-core server chip, *CentriqTM 2400*, produced by the team, which will be competing head to head against Intel's server business. Our team brings decade of experience delivering high-performance, power-efficient ARM CPU architectures for mobile platform- Qualcomm SnapdragonTM SoCs and now using its expertise to disrupt the datacenter market segment by architecting microprocessors targeted to scale-out performance/efficiency for cloud applications. The *CentriqTM 2400* focuses on true server class features and performance with aggressive power management techniques. The talk will provide a basic microarchitecture overview of the FalkorTM CPU, the brain of *CentriqTM 2400*, and the overall SoC design.

The talk will also introduce the Architecture team within QDT and how we fit into the architecture definition, pathfinding activities, and performance/power modeling. Finally, we will briefly touch upon some of the interesting design challenges that the team is tackling for next gen server chip.