Firmware interfaces for power management vs direct control of resources

Thursday, 15 November 2018 10:55 (25 minutes)

While new technologies in platform power management continue to evolve, we need to look at ways to ensure it’s independent of the OSPM. Custom vendor solutions for power management and device/system configuration lead to fragmentation.

ACPI solved the problem for some market segments by abstracting details, but we still need an alternative for the traditional embedded/mobile market. ARM SCMI continues to address concerns in a few of these functional areas, but there still is a lot of resistance to move away from direct control of power resources in the OS. Examples include:

a. Voltage dependencies for clocks (DVFS) [1] - genpd and performance domain integration
b. Generic cpufreq governor for devfreq [2]
c. On-chip interconnect API [3]

This session aims at reaching some consensus and guidelines going forward to avoid further fragmentation.


I agree to abide by the anti-harassment policy

Presenter: HOLLA, Sudeep (ARM)
Session Classification: Power Management and Energy-awareness MC