Power Management in Embedded Systems

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Abstract text The importance of power management in today's embedded designs has been steadily growing as an increasing number of battery powered devices are developed. Often power optimizations are left to the very end of the project cycle, almost as an afterthought. In this paper we will discuss design considerations that should be made when starting a new power sensitive embedded design, which include choosing the hardware with desired capabilities, defining a hardware architecture that will allow software to dynamically control power consumption, defining appropriate power usage profiles, making the appropriate choice of an operating system and drivers, choosing measurable power goals and providing these goals to the software development team to track throughout the development process.