

Requirements of a real-time multiprocessor operating system for multimedia applications

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ABSTRACT

Many modern embedded applications need the execution support of a real-time operating system. Such applications have usually critical or hard timing requirements, but giving the high presence of multimedia devices, real-time operating systems can also be used to manage the tasks that execute within multimedia devices. This paper focuses on identifying the requirements of a real-time operating system capable of fulfilling the needs of the multimedia applications typically executed on multiprocessor, mobile-oriented systems such as the Movidius platform.