

Ultra-Low Power Logic for Energy Harvesting Systems

Thomas Scarsbrook

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This project aims to identify and compare a number of different low power technologies. The desired forms of technologies will use minimal power usage at the cost of providing limited speed and throughput. One of the situations in which this type of technology would be desirable is energy harvesting, where power available at any given time can be restricted.

In this project a number of different low power technologies will be analysed and compared, giving the various advantages and disadvantages for use in an energy harvesting system. Two of the main forms of technology used, sub-threshold logic and adiabatic logic, will be particularly focussed on. Examples of where these technologies are used will be analysed, and their successes discussed. Other technologies, existing or theoretical, will also be discussed.