PSoC RANGE FINDER

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A Project Report
submitted in partial fulfillment of the requirements
for the award of the Degree of
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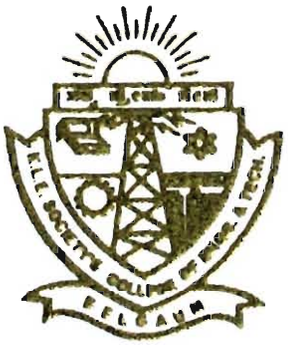

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Abstract

Some distances are more difficult to measure than others. There are several ways to measure distance without contact. Some products have laser-based systems that increase accuracy and precision. Similarly the project rangefinder is a distance measuring instrument, which uses the IR sensor as a medium of detection the project uses the programmable system on chip (PsoC). PsoC is mixed signal array having both digital and analog modules like filters, amplifiers, counters, PWM etc.

The PsoC platform has made the device more compact and also it is more accurate than the normal range finders available in the market. The PsoC device consumes very small amount of power which makes it affordable. The project has wide range of applications in fields like navigation and raging in submarines, in military application like sniper rifle ranging, in medicine for imaging and tumor detection, measuring of viscosity of blood etc.

The project "**RANGE FINDER**" is designed using the principles of RADAR. The device designed is very compact and cheaper than the devices available in the market. The design implementation and the technology used are explained in the further topics.