

# Analysis and Design of Base Band Circuit on Wireless Range Finding

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## ABSTRACT

The global economy, science and technology are growing and developing rapidly these years. Most of people ask for more comfortable and safety way in driving. Furthermore the ITS ( Intelligent Transportation System ) and No Driver Automatic Transportation System have become one of the most important policy for most of countries and major car makers. The car collision avoidance is the most important auxiliary equipment to achieve ITS and No Driver Automatic Transportation System. And the core technology of the car collision avoidance is wireless range finder. There is a brief introduction for the existing wireless range finder, such as ultrasonic and image processing in this thesis. Because of the FMCW radar has better detection capability, simpler design and lower cost, we choose it for detail study on the practicability for the car collision avoidance.

Keywords : FMCW、car collision avoidance、No driver car

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