1. Record Nr. UNINA9910791873803321 Autore Zhu Yu Titolo CAN and FPGA communication engineering [[electronic resource]]: implementation of a CAN bus based measurement system on an FPGA development kit / / Yu Zhu Pubbl/distr/stampa Hamburg, : Diplomica Verlag, c2010 **ISBN** 3-8428-1604-9 3-8366-4925-X Descrizione fisica 1 online resource (93 p.) Disciplina 621.39/5 Soggetti Field programmable gate arrays Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Description based upon print version of record. Nota di bibliografia Includes bibliographical references. Nota di contenuto CAN and FPGA Communication Engineering; Preface; Contents; 1 Introduction; 2 CAN Introduction; 3 CAN and MCU Serial Port Effective Data Study: 4 Experiment Components and Setup: 5 Software Development; 6 Experiments and Results; 7 Conclusion; References; **Appendix** Sommario/riassunto Hauptbeschreibung The Controller Area Network (CAN), invented by Bosch in 1983, is a serial field bus protocol which was originally used in road vehicles and now is widely applied in other industrial fields. Since its birth automotive electronic engineers have been use Microcontrollers (MCU) to control the CAN bus. Today, as the Fieldprogrammable Gate Array (FPGA) has become very advance, this book introduces a new method which uses an FPGA and a MCU jointly instead of a single MCU is to design a CAN bus measurement system.

Furthermore the designed system should be able to work at