1. Record Nr. UNINA9910697075903321

Autore	Kottke Thomas
Titolo	A simple data logging system for ballistic applications [[electronic resource] /] / Thomas Kottke
Pubbl/distr/stampa	Aberdeen Proving Ground, Md. : , : U.S. Army Research Laboratory, , [2006]
Descrizione fisica	1 online resource (vi, 62 pages) : digital, PDF file
Collana	ARL/TR ; ; 3853
Soggetti	Data loggers Ballistics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Title from title screen (viewed Nov. 2, 2010). "July 2006."
Sommario/riassunto	An economical and robust data logger is presented that is well suited to ballistic environments. This ballistic data recorder acquires two channels of analog data over a 0- to 5-V range, with acquisition times as short as 2.3 microns and record lengths as large as 0.5 MB per channel. The microcontroller-based architecture allows many data acquisition parameters such as rate, mode, triggering method, and record length to be selected and varied by the user. Onboard batteries and charging circuitry further enhance the data logger's applicability and flexibility. Complete details of the ballistic data logger's hardware and software are presented in this report. A description of the hardware begins with a broad overview of the ballistic data logger's capabilities and method of operation and increases in complexity to provide complete electronic schematics, fabrication methods, and component procurement information. A complete listing of data logger software is provided with extensive documentation. The ballistic data logger's performance is verified with an example of acquired data.