

PACKAGE ID - 001273IBMPC00 DECOM

KWIC TITLE - Real Time Telemetry Data Capture and Storage

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LIMITATION CODE -COPY **AUDIENCE CODE** - LIM

COMPLETION DATE - 06/01/1995 **PUBLICATION DATE** - 06/01/1995

DESCRIPTION - This program is used to capture telemetry data from remote instrumentation systems. The data can be captured at the rate of 1M bit per second. The data can come in one of several formats, NRZ, RZ, and Bi-Phase. The DECOM software takes the serial data stream and locks on to a unique code word. By tracking the code word the software can strip out the information. Thus the program can display the incoming data real time while saving the data to disk.

PACKAGE CONTENTS - Media Directory; Software Abstract; Source Code; Executable Module; Sample Problem Input Data; Programmer Documentation;

SOURCE CODE INCLUDED? - Yes

MEDIA QUANTITY - 1 3.5 Diskette and 1 CD Rom

METHOD OF SOLUTION - No unique mathematical methods 0, numerical algorithms.

COMPUTER - IBM PC

OPERATING SYSTEMS - This program has been run under Windows 3.1 and Windows 95 with modification to the operating system.

PROGRAMMING LANGUAGES - C++

SOFTWARE LIMITATIONS - Slower PCs can not display data at the 1M Bit rate. The system can capture up to 200 different data channels but there is a limit to the number of calculations verses data rates. At slow speeds of 32K bits per second and a fast 200M hz. Pentium, there is no apparent limit.

SOURCE CODE AVAILABLE (Y/N) - Y

UNIQUE FEATURES - Runs within PC. Main screen is run time programmable, can be customized for any user.

RELATED SOFTWARE - This software has been used on several weapons projects over the pass ten years, W88, B61, NTB, and LWIS.

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RELATED SOFTWARE - (CONT)

HARDWARE REQS - Requires Sandia designed DECOM card. Requires Windows 3.1 or higher. Requires 2M Bytes of disk space and 16M Byte of RAM.

TIME REQUIREMENTS - Uses PC internal clocks or can use IRIG time input from an external source. Can take data indefinitely with the use of Iomega removable disks. The program will wait long enough for the user to change disks.

SUBJECT CLASS CODE - Z

KEYWORDS -

COMPUTER PROGRAM DOCUMENTATION
DATA ACQUISITION
C CODES

EDB SUBJECT CATEGORIES -

990200

SPONSOR - DOE/DP

PACKAGE TYPE - AS - IS