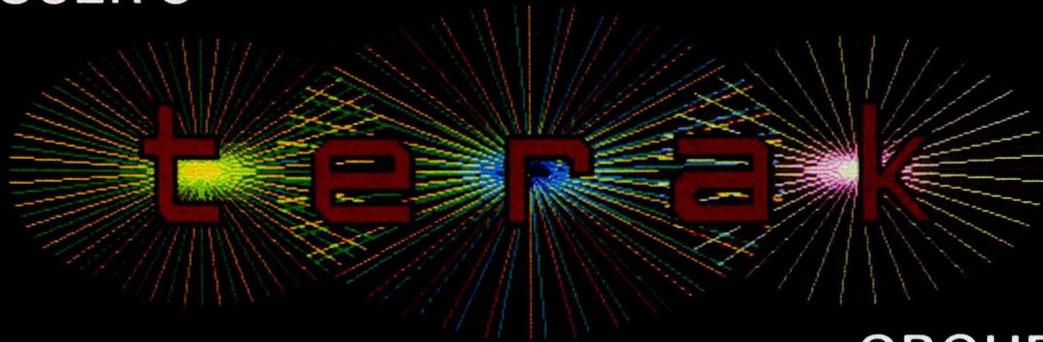


USER'S



MC

GROUP

Vol. 2, Issue 1

01-Jan.-82

**BULLETIN
OF
AVAILABLE
TERAK SOFTWARE**

(Tugboats)

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The description, service charges, and availability of software available for the Terak User's Group Library are subject to change without notice.

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Introduction

The following is a list of available software for the Terak family of stand alone Graphic Computer Systems.

Section 1 contains a list of software which runs under the RT-11 operating system which is available from the Terak User's Group Library.

Section 2 contains a list of software in the Library which runs under the UCSD Pascal operating system.

Section 3 contains software available from the Library for operating systems other than RT-11 or UCSD Pascal.

Section 4 contains a list of commercially available software for the RT-11 operating system, while Section 5 contains a list of commercially available software for UCSD Pascal. Section 6 is for commercial software under operating systems other than RT-11 or UCSD Pascal. To order this software you must contact the company or person listed with the product.

Section 7 contains a list of peripheral devices known to work on a Terak Graphics Computer System. Section 8 contains the specifications for submitting software to the Terak User's Group Library and a Software Submission Sheet. Please photocopy the Submission Sheet for all submissions and keep the original for further use.

The software in the User's Group Library is not supported by the Terak Corporation or the Terak User's Group. Users of this software run these programs at their own risk. Comments can be sent to the Terak User's Group or directly to the authors, if listed.

The Terak User's Group is a non-profit organization. All charges assessed for software distribution are to cover the costs of diskette media, shipping, handling, and costs for printing Terak User's Group publications.

Software submissions to the Library are gratefully accepted. Please read Section 8 for information on submitting software.

TUGBOATS Updates

The Terak User's Group Bulletin of Available Software (TUGBOATS) has been printed, drilled, and packaged for easy insertion into a three-ring binder. When new entries are made to the Terak User's Group Library, sheets will be mailed to all members. These update sheets can then be inserted into TUGBOATS, keeping all information up to date. Any suggestions regarding this format are gladly taken.

Additional copies of TUGBOATS may be obtained by writing to the Terak User's Group at the address listed below. A new edition of TUGBOATS will be printed at the beginning of next year. Only members who have submitted a Terak User's Group Membership Form will receive copies in the mail.

Ordering User Group Library Software

When ordering software, please refer to the disk by number and title. The following convention is used in numbering a disk:

XXXX-YY-ZZZZ

where XXXX specifies the operating system of this software
i.e. RT3B is RT-11 Version 3B
PS20 is UCSD Pascal Version 2.0

YY specifies which machine this software will operate on
i.e. 80 means the software will work on either
the 8510/a or the 8600
85 means the software will work only on the
8510/a (black and white graphics dependent)
86 means the software will work only on the
8600 (color graphics dependent)

ZZZZ specifies the sequence number of this particular disk
within this grouping.

All software from the User's Group Library is distributed on single density diskettes. Each diskette contains a README file describing the contents of the disk. Further documentation of the software may also be available on each diskette.

To order Library software, please photocopy the order form at the end of the catalog and then list the disks desired by number and title. The following price schedule is in effect for this printing of the catalog:

\$20 for the first disk ordered

\$10 for each subsequent disk in the same order.

Prices are subject to change without notice. Allow 6 to 8 weeks for delivery.

Please note that some library entries contain multiple disks. Partial orders will not be filled for these entries and a member's order will be returned with an attached note.

Make payment with check or money order payable to the Terak User's Group Software Library. Send software requests to

Terak User's Group
Software Request
14151 North 76th Street
Scottsdale, Arizona 85260

1. RT-11 Operating System

The software listed in this section is available from the Library. Programs have been compiled and linked under RT-11/85 V3B. In almost all instances, the executable files will operate under later versions of RT-11. Source files are provided, except where noted, so it is possible to regenerate the executable version of the program.

1.1 Languages

Number: RT3B-80-0001 and RT3B-80-0002 Rev 0

Title: Preliminary C Compiler

Author: Martin Minow, John Morton, Robert Denny

Description:

This is a set of two disks. It contains a preliminary C language compiler and assembler. Complete documentation for using the C compiler under RT-11 and the contents of the C support libraries is also supplied on the disks. This software was obtained from DECUS and is copyrighted thereof.

Requirements:

Software: RT-11 V3B or later operating system

Hardware: Dual drive and/or dual density 8510/a or 8600

Number: RT3B-80-0003 Rev 0

Title: FORTRAN 4 OTS Documentation

Author: Middlebury College, Vermont

Description:

This disk contains a very complete document on just about everything a Fortran programmer wants to know about the DEC Fortran OTS. This software was obtained from DECUS and is copyrighted thereof.

Requirements:

Software: RT-11 operating system

Hardware: 8510/a or 8600

Number: RT3B-80-0012 and RT3B-80-0013 Rev 0

Title: RATFOR

Author:

Description:

This two disk set contains a RATFOR preprocessor that runs under RT-11. RATFOR is fully documented in "Software Tools" by Kernighan and Plauger. RATFOR produces ANSI standard FORTRAN which can then be compiled, linked, and run under the normal RT-11 operating system. This version of RATFOR features switch selection of 1) Preprocess RATFOR source only; 2) Preprocess RATFOR and compile the resulting output FORTRAN code; or 3) Preprocess RATFOR, compile FORTRAN, link and execute. Normal FORTRAN subroutines and functions can be called, allowing RATFOR to use Terak Graphics Subroutines. This software was obtained from DECUS and is copyright thereof.

Requirements:

Software: RT-11 operating system and FORTRAN compiler

Hardware: 8510/a or 8600 with 1 Mbyte minimum online storage

1.2 Editors

Number: RT3B-80-0004 Rev 0

Title: ASOTE - A Screen Oriented Text Editor Ver 1.1j

Author: Sohail Hussain

Description:

This disk contains the source files and an executable version of a screen oriented text editor for use under RT-11. A short file documents the features and use of ASOTE.

ASOTE is a very functional subset of the UCSD Screen Editor. The method of interaction and display of text within ASOTE is equivalent to the UCSD Editor.

Requirements:

Software: RT-11 operating system, TK emulator in monitor

Hardware: 8510/a or 8600

1.3 Device Handlers

Number: RT3B-80-0005 Rev A
Title: Handlers and Output Pagination Program
Author: Dennis Kodimer

Description:

This disk contains the source files for several useful handlers including line printer handlers for the following protocols: ETX/ACK and XON/XOF, DTR monitoring, and for the NEC Spinwriter. The source for DEC's standard LP.SYS is also supplied. Two handlers (HS and PH) from the University of Arizona do handshaking or act as a pseudo-handler. Also included is a handler for the serial port and two callable subroutines to retrieve information from a Summagraphics BitPad.

A list of printers supported by these handlers is given in Section 4 of this catalog.

A program, LPOUT, will paginate and print headers on files that are output to a line printer. Part of this software was obtained from DECUS and is copyrighted thereof.

Requirements:

Software: RT-11 operating system
Hardware: 8510/a or 8600

1.4 Statistical Routines

Number: RT3B-80-0006, RT3B-80-0007, and RT3B-80-0008 Rev 0 Title: Scientific Subroutine Package Description:

This set of three disks contains the FORTRAN IV source code for a comprehensive set of useful scientific subroutines. Included are routines for polynomial solution, Eigen values, curve fitting, Runge-Kutta, Bessel functions, matrix manipulation, and numerous statistical routines. The source files contain a complete description of each routine, its use, and how to call it. This package was originally written for use on IBM equipment and is well known in most computer centers.

Requirements:

Software: RT-11 operating system and RT-11 FORTRAN IV

Hardware: 8510/a or 8600

1.5 Disk Formatting

Number: RT3B-80-0009 Rev 0
Title: Disk Formatting and EDIT07
Author: Storm Johnson

Description:

Every once in a while, a disk that has not been formatted properly or formatted on a DEC RX01 drive comes into a user's possession. These disks cannot be properly read on the QB variable density disk controllers. A blank disk may be reformatted using the program FORMAT while a disk containing valuable information may be modified using EDIT07 to set the density bytes properly on the disk. Information on how to use EDIT07 is on the disk in EDIT07.DOC. FORMAT is self explanatory.

Requirements:

Software: RT-11 Operating System
Hardware: 8510/a QB system or 8600 QB system

1.6 Utilities

Number: RT3B-85-0001 Rev 0

Title: Least Squares Curve Fitting

Author: Leonel Campoy

Description:

This disk contains a program to perform exponential or polynomial least squares curve fitting. The program LEAST will graph the curve fit to the input data points. Multiple order polynomials can be used to find best curve fit and a summary of results can be printed. A file SAMPLE is include to show the curve fit for 10 data points.

Requirements:

Software: RT-11/85 V3B and FORTRAN IV

Hardware: 8510/a

Number: RT3B-80-0011 Rev 0

Title: MACRO Disassembler and FORTRAN Renumbering

Author: Storm Johnson

Description:

This disk contains two utility programs: a .SAV file disassembler for MACRO-11 programs and a FORTRAN renumbering program. The disassembler will output a source listing for .SAV files created from MACRO-11 source files in the form of instruction mnemonics, ASCII interpretation, and Radix 50 interpretation. Labels are generated and assigned to all decoded addresses and constant values.

The FORTRAN renumbering program, RENFOR, will resequence numeric statement labels in FORTRAN subroutines, functions, and main programs. All references to the resequenced label are updated as well. No sources for this program are provided.

Requirements:

Software: RT-11 V3B or later operating system

Hardware: 8510/a or 8600

1.7 Games

Number: RT3B-80-0014

Rev 0

Title: Adventure and Chess

Description:

This disk contains the classic FORTRAN Adventure program as originally written at the University of Arizona and distributed over almost all DEC hardware systems in the world. Adventure is an exercise in artificial intelligence and leads the player into the depths of Colossal Cave to seek out hidden treasures while battling trolls and pirates.

Chess is a simplistic game of chess pitting the player against the computer. Not much challenge for a Master but good for beginners and intermediate chess players.

Requirements:

Software: RT-11 operating system

Hardware: 8510/a or 8600

Number: RT3B-86-0015

Rev 0

Title: Checkers on the 8600

Description:

This disk contains a program to play checkers on the Terak 8600. Checker pieces are loaded as an alternate character set and a board is painted on the screen. The player has the option of playing the computer or having the computer play against itself. This program was originally written in OMSI Pascal and modified to use the 8600 Color graphics. LSI-11/2 and -11/23 versions are provided, along with the sources. This program also gives an example of how to use Terak color graphics with OMSI Pascal. This software was originally written by Oregon Software and is copyright thereof.

Requirements:

Software: RT-11 operating system

Hardware: 8600 or 8600/23

1.8 Graphics Editors

Number: RT40-85-0016

Rev 0

Title: Monochrome Graphics Editor

Author: Storm Johnson

Description:

This disk contains a monochrome (8510/a) graphics editor. The user has the ability to paint images on the screen such as circles, boxes, triangles, and cross hatch patterns. Flooding enclosed boundaries is possible, as well as inverting the entire display. The screen image may be saved as a FOTO file at any time and a FOTO file may be retrieved for editing. If it is necessary to recompile this program, the new Terak Monochrome Graphics Library released with RT-11 V4.0 and the subroutines contained therein must be used.

Requirements:

Software: RT-11 operating system

Hardware: 8510/a

2. UCSD Pascal Operating System

The software listed in this section is available from the Library. All programs have been compiled or assembled under UCSD Pascal Version 2.0. It is highly likely that these programs will not work with any other version of UCSD Pascal. Program sources are provided, except where noted, so it is possible to recompile the programs under a different version of UCSD Pascal.

2.1 Languages

Number: PS20-85-0002

Rev 0

Title: L1-Ada

Version: 0.8

Author: Robert Mathis

Description:

This disk contains a subset compiler for the Department of Defense Ada Language. On the disk are an Ada compiler, a document describing the grammar of the subset, some help files, and several source files demonstrating the use of Ada.

Requirements:

Software: UCSD Pascal V2.0

Hardware: 8510/a

2.2 Printer Software

Number: PS20-80-0001 Rev 0

Title: Printer related programs.

Author: Sohail Hussain

Description:

This disk contains a menu driven text file printing utility, which features the ability to work with different printers. The program will work with a NEC SPINWRITER, MALIBU 165, PAPER TIGER 440, PAPER TIGER 460, PRINTRONIX, and many others. The program will work with any printer that can be attached to a TERAk by either a DEC LP-11 line printer interface or an RS-232 serial interface. The following printer protocols have been implemented: ETX/ACK, XON/XOFF, and DTR monitoring.

The disk also contains programs for printing the graphics from the Terak 8510/a on the following printers: PAPER TIGER 440, MALIBU 165, PRINTRONIX 300, and NEC SPINWRITER. Finally the disk contains a program that will print text on a MALIBU 165 using the character set displayed on a Terak 8510/a.

Requirements:

Software: UCSD Pascal V2.0

Hardware: 8510/a or 8600

2.3 Intelligent Terminal Emulators

Number: PS20-80-0002 Rev A

Title: Intelligent Terminal Emulators.

Authors: Joe Einweck, Sohail Hussain, Robert Mathis

Description:

This disk contains a number of different programs that enable the TERAk to act as an intelligent terminal to other computers. The disk contains a very general program with complete documentation describing how the program can be tailored to work with any system. Also on the disk are programs that work with DEC-10's, PDP-11's, DEC-20's, VAX 11/780, APL, TERAk's, HARRIS's, CDC's, UNIX, IBM TSO, and IBM CMS.

These programs support bidirectional file transfer of text files between the Terak computer system and a host computer.

Requirements:

Software: UCSD Pascal V2.0

Hardware: 8510/a or 8600

2.4 Peripheral Driver Software

Number: PS20-80-0003 Rev 0

Title: Bitpad and Plotter software

Description:

This disk contains a library unit that provides a SIGGRAPH Core 2D level 1 interface to the Terak Graphic Computer System and a Houston Instruments DMP-2 or DMP-7 plotter. This unit enables a user to draw graphics on the Terak computer and then obtain a plot of the graphics. Libraries to drive the HIPlot 8 1/2" x 11" plotter and the HIPlot 11" x 17" Intelligent plotter are given. The source provided for the library units may be modified to drive other plotters.

The disk also contains programs and library routines that aid in interfacing the Terak to the SummaGraphics BitPad 1 and the HIPad digitizers.

Requirements:

Software: UCSD Pascal V2.0

Hardware: 8510/a or 8600, plotter or digitizer.

2.5 Games

Number: PS20-85-0001 Rev A

Title: Pascal Games Disk 1

Description:

This disk contains several games good for use on the 8510/a black and white graphics system. The disk includes source and Pascal 2.0 code files for the following games:

ALIEN - A program written at Cornell by Dr. Joseph Bates this is the popular alien invaders game.

BREAKOUT - Program to have player "breakout" of a wall.

SPACE - Two player program of deadly battle in space.

OTHELLO - A one player game that pits the user against the computer in a game of strategy and skill.

TANK- A two player game of military tanks blasting away at each other.

CHASE - A two player game where each player chases the other during an allotted time. The other player must avoid contact during that time.

Requirements:

Software: UCSD Pascal V2.0

Hardware: 8510/a

2.6 Computer Aided Learning

Number: PS20-85-0003 Rev 0

Title: Naval Academy CAL

Author: Ron Lambert

Description:

This disk contains two programs making use of the Terak 8510/a for Computer Aided Learning. The first program allows the student to dock a ship at port using full Naval terminology. The second program provides a preliminary lesson on nuclear physics and fission.

Requirements:

Software: UCSD Pascal V2.0

Hardware: 8510/a

2.7 Color Graphics Demonstrations

Number: PS20-86-0001 Rev 0

Title: 8600 Color Demos

Author: Sohail Hussain

Description:

This disk contains three programs to demonstrate the color graphics on the Terak 8600 Color Graphics Computer System. These programs are

COLORS - A program to display the available range of 512 colors in a color wheel.

PIES- A program to graph raw data with labels in a bar chart, pie chart and tabular fashion.

DOODLE - A color graphics editor. This program allows the user to create screen images with such options as Circle, Triangle, Box, Flood, and Hatching. The screen image may be saved as an ASCII text file for regeneration of the image at a later time. The available color palette is available to the user through cursor selection.

Requirements:

Software: UCSD Pascal V2.0 and Gemini V2.0 or later

Hardware: 8600

2.8 8600 Character Editor

Number: PS20-86-0002

Version 3.0

Title: 8600 Character Editor

Author: Jerry Grady

Description:

This disk contains the sources for Version 3.0 of the 8600 Character Editor, COLOR_EDIT. This program is used to create or modify character sets for the Terak 8600 color system. Due to the complexity of the sources, only the most serious of UCSD Pascal users should attempt to modify this program.

Requirements:

Software: UCSD Pascal V2.0 and Gemini V2.0 or later

Hardware: 8600

3. Other Operating Systems

The programs provided here are available from the Library. These programs work with the listed operating system. If possible a copy of the operating system is available from the Library or is included on the diskette. Sources are provided, except where noted, for application programs only.

4. Commercial Software For RT-11/85

Whereas the previous sections listed software available from the Terak User's Group Library for handling and media costs, the following sections list software that is charged for by the companies or individuals listed as contacts for that software.

4.1 Data Base Management

Subject: Data Base Management

Title: RTFILE

Contact:

Robert Natale
Product Manager
International Computing Company
4330 East-West Highway
Bethesda, Maryland 20014
(301) 654-9120

Description:

RTFILE is a fully integrated data management system designed to extend the user's access to and control of his data under the RT-11 operating system. The major features of RTFILE include security and access logging, data directory/dictionary, data base creation and modification, automatic multiple indexing, CRT display and data entry application generation, transaction processing, record- and file- level data manipulation, report generation and printing, record sorting and selection, and applications interfacing.

Requirements: RT-11 Operating System

4.2 Networking

Subject: Networking

Title: STAR-11

Contact:

Robert Natale
Product Manager
International Computing Company
4330 East-West Highway
Bethesda, Maryland 20014
(301) 654-9120

Description:

STAR-11 implements a multi-user RT-11 system by using multiple processors. With this approach, none of the advantages of a single user system are lost. Physically STAR-11 is implemented as a host/satellite star-shaped computer network. STAR-11 1) Supports fourteen independent RT-11 users; 2) Uses RT-11 keyboard monitor commands; 3) Supports RT-11 programs and requests; 4) Full 27K word partition for each user; 5) Each user gets full memory protection; 6) Shared access to all system peripherals; 7) Permits separate and shared directories; 8) Fully automatic line-printer spooling; 9) Intra-job message and command services; 10) Satellites can support real-time applications.

Requirements: RT-11 Operating System

Subject: Networking

Title: DECnet-RT

Contact:

Digital Equipment Sales Representative
Local Digital Equipment office

Description:

DECnet-RT allows a suitably configured RT-11 system to participate as a Phase II DECnet node in point-to-point computer networks. DECnet-RT offers task-to-task communications, network file transfer and network resource sharing capabilities, using the DIGITAL Network Architecture (DNA) protocols. DECnet-RT communicates with adjacent nodes over synchronous and asynchronous communications lines. Access to DECnet-RT is supported for RT-11 user programs written in MACRO-11 and FORTRAN

Requirements: RT-11 Operating System

4.3 Word Processing

Subject: Word Processing

Title: CID

Contact:

Marketing
Terak Corporation
14151 North 76th Street
Scottsdale, Arizona 85260
(602) 998-4800

Description:

CID (Computer Imaged Document) is a program designed to generate "camera ready" documents, manuals, form letters, memos, etc., for one or more user written files. These files consist of text, optionally interspersed with CID format control directives. Outstanding features of CID include: 1) Automatic TABLE OF CONTENTS generation; 2) Input from several different files simultaneously, particularly useful for name/address files for form letter generation; 3) Text substitution, useful for personalized form letters; 4) Automatically numbered topic titles and sub-titles; 5) Text printed as entered or formatted by CID via word and space manipulation, with or without right margin justification; 6) Tabsets, centering, underlines, and right adjusts; 7) Forcing page ejection with optional facility to skip to next odd or even numbered page; 8) Dynamic top and bottom titles with auto substitution of current page number where desired; 9) Pagewidth control via indentation, margin, and linelength directives; 10) Arithmetic expression evaluation.

Requirements: RT-11 Operating System

Subject: Word Processing

Title: WP Saturn

Contact:

Saturn Systems
Box 764
Hopkins, Minnesota 55343
(612) 944-2452

Description:

WP Saturn is an automated office system designed to run on the DEC family of computers. It creates standard ASCII files using a simple and fast screen editor. A powerful formatter is integrated with the editor to form your documents. It has prompted data entry, sort/select, record searches, wraparound, automatic hyphenation, index and table of contents generation, and many other features to assist you.

Requirements: RT-11 Operating System

Subject: Word Processing

Title: LEX-11

Contact:

Eric Dickman
EEC Systems
286 Boston Post Road
Wayland, MA 01778
(617)358-7781

Description

LEX-11 offers the user word processing and a whole lot of other features all designed to help the user run a business more easily and more efficiently. LEX-11 features such things as use for personalized mass mailing, contracts, standard forms, manuals, and statistical tables. It can be utilized for invoice production, list processing, generating custom forms and data management. It can also be used in conjunction with a typesetting machine. LEX-11 can run simultaneously or alternately on small computers, and with other commercial data-processing programs. Hence LEX-11 is well suited for use in distributed processing systems. Other features of LEX-11 are 1) Menu driven; 2) Screen Editing; 3) Custom and single keystroke functions; 4) Cut and paste; 5) Scroll; 6) Search; 7) Word wrap; 8) Rulers; 9) Automatic titling and pagination; 10) System files; and 11) Record listings.

Requirements: RT-11 operating system and 512 Kbytes of online storage.

4.4 Programming Languages

Subject: Programming Languages

Title: RT-11 FORTRAN IV

Contact:

Marketing
Terak Corporation
14151 North 76th Street
Scottsdale, Arizona 85260
(602) 998-4800

Description:

FORTAN IV is an extended FORTRAN implementation based on ANSI FORTRAN X3.9 - 1966. It operates under the RT-11 operating system. The PDP-11 FORTRAN IV language includes the following extensions to the ANSI standard: 1) General expressions in all meaningful context; 2) Mixed-mode arithmetic; 3) BYTE data type for character manipulation; 4) ENCODE, DECODE statements; 5) PRINT, TYPE, ACCEPT input/output statements; 6) Direct-access unformatted input/output DEFINE FILE statement; 7) Comments allowed at end of each source line; 8) OPEN and CLOSE file access control statements.

Requirements: RT-11 Operating System

Subject: Programming Languages

Title: RT-11 BASIC-11

Contact:

Marketing
Terak Corporation
14151 North 76th Street
Scottsdale, Arizona 85260
(602) 998-4800

Description:

BASIC-11 is a conversational programming language developed at Dartmouth College that uses simple English-like statements and familiar mathematical notations to perform operations. BASIC-11 is an incremental, interactive, interpretive compiler operating under the RT-11 operating system. BASIC-11 features include: 1) A variety of program manipulation commands including commands for saving, editing, running, and retrieving BASIC programs; 2) Support for real, integer, double precision, and string data types; 3) Immediate mode statements for debugging and desk calculator usage; 4) Sequential data storage using the RT-11 file system; 5) Disk virtual arrays for string, integer, and real data types; 6) CALL facility for invoking assembly language subroutines; 7) Formatted output using the PRINT USING statement.

Requirements: RT-11 Operating System

Subject: Programming Languages

Title: OMSI Pascal

Contact:

Oregon Software
2340 S.W. Canyon Road
Portland, Oregon 97201
(503) 226-7760

Description:

OMSI Pascal is a native code compiler running under the RT-11 operating system. It conforms to Standard Pascal as defined by Jensen and Wirth and has several extended features. Among these features is the ability to compile inline assembly code, a facility to call FORTRAN subroutines, high level debug capability, and independent module compilation. The FORTRAN call feature allows access to Terak Graphics routines.

Requirements: RT-11 Operating System

4.5 Cross Assemblers

Subject: Cross Assemblers

Title: BSO High-Speed Cross-Assemblers For Microprocessors

Contact:

Patrick Q. Fennessey
Boston Systems Office
469 Moody Street
Waltham, Massachusetts 02154
(617) 894-7800

Description:

The CA/MICRO series of high-speed cross-assemblers satisfies the need for rapid generation of machine code for microprocessors manufactured by AMD, AMI, Fairchild, Intel, MOS Technology, MOSTEK, Motorola, National Semiconductor, NEC, Rockwell, RCA, Texas Instruments, Zilog, and others. By using a more powerful machine than the microprocessor itself, the programmer can take advantage of the higher speed, larger memory, more powerful editing capability and high-speed peripherals of the host computer. The cross-assembler itself is written in host computer assembly language, resulting in rapid conversion of source code into the microprocessor's object code with minimal use of computer resources. Input to the cross assembler is the assembly language of the microprocessor.

Requirements: RT-11 Operating System

4.6 Statistical Packages

Subject: Statistical Packages

Title: MINITAB

Contact:

Minitab Project
215 Pond Laboratory
University Park, Pennsylvania 16802
(814) 865-1595

Description:

Minitab is a very easy to use, flexible, and powerful statistical computing system. It is machine compatible, and runs in batch or interactively. Minitab is a statistical computing system intended primarily for 1) Students taking elementary or intermediate statistics courses, or other courses using statistics; 2) Researchers who are analyzing small to medium sized data sets. Minitab's features include: 1) Easy to learn; 2) Easy to use; 3) Flexible; 4) Well documented; 5) Runs in both interactive and batch modes; 6) Inexpensive; 7) Extensively tested in classroom and research use.

Requirements: RT-11 Operating System and minimum Dual Density Capacity.

Subject: Statistical Packages

Title: SPSS-11

Contact:

Susan Phelan
SPSS, Inc.
444 N. Michigan
Suite 3300
Chicago, Illinois 60611
(312) 329-2400

Description:

SPSS-11 is a powerful subset of the well known Statistical Package for Social Sciences (SPSS), developed with the minicomputer user in mind. Release 3.0 of SPSS-11 contains facilities for descriptive statistics, contingency tables, correlation analysis, regression analysis, and analysis of variance. Statistical routines include FREQUENCIES, CROSSTABS, BREAKDOWN, T-TEST, SCATTERGRAM, PERASON CORR, PARTIAL CORR, ANOVA, and REGRESSION.

Requirements: RT-11 Operating System, FORTRAN IV, and hard disk capacity of at least 5 Mbytes.

5. Commercial Software For UCSD Pascal Version 2.0

The software listed in this section is available only from the company or individual listed as a contact. All of the software listed is charged for. Prices and terms are established by the seller.

5.1 Data Base Management

Subject: Data Base Management

Title: Pascal Data Management System

Contact:

Pascal & Associates
105 Phipps Street
Carrboro, North Carolina 27510
(919) 942-1411

Description:

PDMS is a software system that computer owners use to solve their information needs in minimal time by applying generalized programs to structured data files. PDMS data has rows corresponding to entities such as people, places, things, or events and columns corresponding to attributes such as names, address, date or amounts. The fields at the intersections of rows and columns contain single values such as character strings and numbers. The number of possible data structures is infinite. PDMS is written in a highly portable subset of UCSD Pascal. This means that the installation procedure can be quickly and easily accomplished with little or no modification to the software system. The installation procedure is well documented and need only be done once. PDMS features screen independence; ability to create data files and enter the data; sorting on multiple indices; merging of data tables; moving columns from one table to another, optionally expanding or shrinking field width; report generation; and mailing label generation.

Requirements: UCSD Pascal V2.0

5.2 Data Entry

Subject: Data Entry

Title: Data Entry System

Contact:

Marketing
Terak Corporation
14151 North 76th Street
Scottsdale, Arizona 85260
(602) 998-4800

Description:

The Data Entry Package is a series of programs that allows easy design of data entry forms, easy operator entry of data, and strict type checking of all data entered. Using FORMEDIT, a data entry document is created and can consist of multiple screen forms. Data typing and checking is easily selected by a keystroke menu method. Form layout is accomplished by moving the cursor on the screen and then selecting the position to specify a field. The program ENTRY is used by data entry operators to enter, verify, and edit data. All data entered is saved on files on diskette and may then be processed by user programs locally or may be sent to a remote host computer for processing.

Requirements: None

5.3 Tektronix Terminal Emulators

Subject: Tektronix Terminal Emulators

Title: TEKSIM

Contact:

Marketing
Terak Corporation
14151 North 76th Street
Scottsdale, Arizona 85260
(602) 998-4800

Description:

The TEKSIM program is a Tektronix 4010 emulator. It maps the visible portion of a Tektronix screen onto the Terak 8510/a or Terak 8600 screen, appropriately scaled to match the Terak 8510/a or Terak 8600 hardware. Graphic crosshairs input behaves the same as a 4010 through the use of cursor arrow keys.

Requirements: UCSD Pascal V2.0

5.4 Word Processing

Subject: Word Processing

Title: RSI PROFF and FORML

Contact:

Renaissance Systems, Inc.
Software Products Department
11760 Sorrento Valley Rd.
San Diego, California 92121
(714) 452-0681

Description:

PROFF is a text formatting and printing program designed for use with ASCII source text files to assist the user in document preparation. PROFF, patterned after NROFF in UNIX (trademark of Bell Labs Inc.), is used for formatting and printing text by including text lines with PROFF control commands into any text file prepared with the system editor. PROFF commands control: 1) Margin settings; 2) Page numbering and page number position; 3) Text formatting and justification; 4) Special commands to include other files in the printed document; 5) Built-in feature of proportional spacing between letter of a line is effective if the DIABLO printer is used. FORML is a document editing and printing program for generating form letters. FORML uses three files to generate form letters: 1) A FRAME file containing the single document with generic 'labels' used for text substitution; 2) A LABELS file containing text to be inserted into FRAME document; 3) An ERRORS file to be used to print any document marked as incorrect during production of a series of documents.

Requirements: UCSD Pascal V2.0

5.5 Programming Languages

Subject: Programming Languages

Title: SVS FORTRAN '77

Contact:

Marketing
Terak Corporation
14151 North 76th Street
Scottsdale, Arizona 85260
(602) 998-4800

Description:

SVS FORTRAN '77 is a subset of ANSI FORTRAN X3.9 - 1978. It operates under the UCSD P machine architecture. SVS FORTRAN includes the following features: 1) Compiler directives have been added to convey certain compile-time information to the FORTRAN system about the current compilation; 2) The ability to include various files with subprograms; 3) Produce cross reference listings at the end of each procedure; 4) Access to all UCSD Pascal Library routines, including graphics.

Requirements: UCSD Pascal V2.0

5.6 Computer Aided Learning Packages

Subject: Computer Aided Learning Packages

Title: University of Utah VCLP

Contact:

Barbara Knapp
Manager, Product Group
Video Learning Project
Physics Department
University of Utah
Salt Lake City, Utah 84112
(801) 581-5290

Description:

The University of Utah Video Learning Project, under the direction of Dr. Richard Brandt, has developed a package of programs which facilitate the development of Computer-Assisted learning materials. This package, called the VIDEO COMPUTER AUTHORING SYSTEM, allows an instructor to create interactive lessons without doing any programming. Using the authoring system, an instructor can easily create and edit text, graphics, and animation; build a lesson; manage a course; and revise lessons. The system supports the integration of video material on either videodisc or videotape. During the lesson, author selected video information is displayed under computer control.

Requirements: None

5.7 Computer Aided Design

Subject: Computer Aided Design

Title: T-Square

Contact:

T & W Systems, Inc.
18437 Mt. Langley, Suite B
Fountain Valley, California 92708
(714) 963-3913

Description:

T-Square is an ideal tool for preparing piping isometrics. The designer inputs to the computer using a digitizer or typewriter keyboard. Through the graphics CRT, he may immediately see the results. If the computer-drawn figure is not to his liking, he may change it right on the screen. Once correct, the illustration may be sent directly to the plotter while the next isometric is begun. Applications include Computer Aided Instruction, 2D Drafting, tool geometry, and engineering calculations.

Requirements: Dual Density capacity. Optionally a digitizer and plotter.

5.8 Utility Software

Subject: Utility Software

Title: Bitpad and Plotter Software

Contact:

Thomas Hughes
Director, Decentralized Computer Services
Uris Hall
Cornell University
Ithaca, New York 14853
(607) 256-4981

Description:

The Bitpad and Plotter Software is a library unit which interfaces to the Summagraphics BitPad 1 via a parallel interface port. The unit also facilitates the use of a Houston Instruments HIPlot plotter. Programs BPEDIT and DIGITIZE make use of the BitPad for graphics and data input respectively.

Requirements:

Software: UCSD Pascal

Hardware: Terak 8510/a, parallel interface, BitPad 1, HIPlot plotter

6. Other Commercial Operating Systems

6.1 Program Synthesizers

Subject: Program Synthesizers

Title: PLCS

Contact:

Cornell Program Synthesizer Project
Department of Computer Science
Upson Hall
Cornell University
Ithica, New York 14853

Description:

The Cornell Program Synthesizer is a system to develop structured programs on the TERAK 8510/a. The system provides a self-contained programming environment with integrated facilities to create, modify, file, execute, and debug programs. The principle innovation of the system is its syntax-directed editor: the entry and modification of program text is guided by a grammar for the host programming language. Because the parser is incorporated in the editor, it is normally impossible to create a syntactically incorrect program.

Requirements: None

6.2 Operating Systems

Subject: Operating System

Title: UCSD Pascal Version 4.0

Contact:

PCD Systems, Inc.
P.O. Box 143
418 North Main Street
Penn Yan, New York 14527
(315) 536-3734

Description:

The UCSD Pascal Version 4.0 operating system combines the favorite features of Version 2.0 and 3.0 releases with the addition of spectacular new system capabilities. Version 4.0 features: new dynamic memory allocation and overlays to allow compilation of very large programs; automatic swapping of operating system segments with optional user control of segment residency; program chaining to greatly expand flexibility; multi-tasking primitives permit asynchronous I/O processing which can be used for "background/foreground" processing; P-code debugger; a procedural cross-referencer; redirection of standard I/O routines (command files); upward compatibility of source programs written for Version 2.0 and 3.0. Upgrade licenses are available for registered users of Versions 1.5 and 2.0. Contact PCD Systems for details.

Requirements: None

7. Terak Graphics Computer Systems Compatible Peripherals

The following list is a collection of peripheral devices that are being used by someone on a Terak Graphics System. Having a particular product listed does not endorse that product. I.e. all printers will work with the Terak through the serial I/O port, but some programming may be required to utilize all the features of the printer. If a piece of hardware is being used that is not listed here, send a description and address in the format given for each entry. Only those peripherals that require NO modification should be sent.

7.1 Disks

Type: Winchester Disk
Name: 8518 Disk Subsystem
Contact:

Marketing
Terak Corporation
14151 North 76th Street
Scottsdale, Arizona 85260

Description:

The 8518 is an 8-inch, Winchester technology, hard disk system. The 8518 is available in 8.9, 17.8, and 35.6 Megabytes formatted capacities. The 8518 is supported under the RT-11 V4.0 (or later) and UCSD Pascal V2.0 operating systems.

Requirements: 8510/a or 8600

Type: Winchester Disk
Name: DSD 880
Contact:

Data Systems Design
2241 Lundy Avenue
San Jose, California 95131
(408) 727-9353

Description:

This winchester disk subsystem is an RL01 look alike. Using a dual wide card to interface to the LSI backplane, this disk gives a maximum of up to 7.8 Mbytes of storage. This disk will only work with the RT-11 V4.0 or later operating system.

Requirements:

Software: RT-11 V4.0

Hardware: 8510/a or 8600 with one free dual wide backplane slot.

Type: Winchester Disk

Name: Corvus

Contact:

Corvus Systems, Inc.

2029 O'Toole Ave

San Jose, CA 95131

Description:

The Corvus Winchester Disk system is an RL01 look alike. Using a quad wide card to interface to the Q-Bus backplane, this disk gives a maximum of 5.2 Mbytes of storage. This disk will only work with the RT-11 V4.0 or later operating system.

Requirements:

Software: RT-11 V4.0

Hardware: 8510/a or 8600 with one free quad wide backplane slot.

7.2 Printers

All printers listed here have handlers available on RT3B-80-0005 under RT-11 or can be output to with the PRINTOUT program on PS20-80-0001 under UCSD Pascal.

Type: Printer

Name: IDS Paper Tiger

Contact:

Integral Data Systems
Milford, New Hampshire 03055
1-800-258-1386

Description:

The IDS Paper Tiger printers are matrix printers, capable of graphics and several character sizes. Uses RS-232 communications.

Type: Printer

Name: Malibu 165 or Malibu 200

Contact:

Malibu Electronics Corporation
2301 Townsgate Road
Westlake Village, California 91361
(805) 496-1990

Description:

The Malibu printers are high speed matrix printers, capable of graphics and multiple fonts. Uses RS-232 communications.

Type: Printer

Name: NEC Spinwriter

Contact:

NEC Information Systems
5 Militia Drive
Lexington, MA 02173
(617) 862-3120

Description:

The Spinwriter is a fully formed character printer. Output is letter quality, and many fonts are available on different print thimbles. The Spinwriter also has a graphics mode and uses RS-232 communications.

Type: Printer

Name: Centronics Model 730

Contact:

Centronics
Hudson, New Hampshire 03051
(603) 883-0111

Description:

The 730 is a low cost matrix printer. Uses RS-232 communications.

Type: Printer
Name: QUME Printers
Contact:

QUME Corporation
2350 Qume Drive
San Jose, California 95131
(408) 942-4000

Description:

The QUME is a fully formed character printer. Output is letter quality, and many fonts are available using different print wheels. Uses RS-232 communications.

Type: Printer
Name: Printronix Model 300
Contact:

Printronix, Inc.
17421 Derian Ave.
PO Box 19559
Irvine, California 92713
(714) 549-7700

Description:

The Model 300 is a high speed matrix printer capable of graphics. Uses parallel or RS-232 communications.

Type: Printer
Name: Media 12/7
Contact:

Sanders Technology
Box 1226
Nashua, New Hampshire
(603) 882-1000

Description:

The Media 12/7 is a matrix printer capable of high quality print output and graphics. Uses RS-232 communications.

Type: Printer
Name: TI 810 and TI 820
Contact:

Texas Instruments
PO Box 1444, M/S 7884
Houston, Texas 77001
(713) 373-1050

Description:

The TI 810 and 820 are high speed matrix printers. Uses RS-232 communications.

Type: Printer
Name: Diablo 1620 and 1640
Contact:

Diablo Systems
Hayward, California

Description:

The 1620 and 1640 are fully formed character printers for letter quality output. Many fonts are available with different printwheels. Uses RS-232 communications.

7.3 Interface cards

Type: RS-232C Serial Input/Output
Name: Terak RS-232C Serial Interface
Contact:

Marketing
Terak Corporation
14151 North 76th Street
Scottsdale, Arizona 85260
(602) 998-4800

Description:

The RS-232C serial interface is a DEC DLV-11 compatible serial interface card. It features an external interface board with a 25 pin DIB connector for DTE or DCE as well as a Molex connector for 20 mA current loop. Switch selectable baud rates from 110 to 19.2K, and switch selectable physical unit numbers.

Type: Parallel Input/Output
Name: Terak Parallel Interface
Contact:

Marketing
Terak Corporation
14151 North 76th Street
Scottsdale, Arizona 85260
(602) 998-4800

Description:

The Terak parallel interface allows input and output over two parallel 40 pin cables. Equivalent to a DEC DRV-11C, the parallel interface requires the user to build his own parallel interface cables.

Type: IEEE 488
Name: IBV11-A Instrument Bus Interface
Contact:

Digital Equipment Corporation
Local DEC Representative

Description:

The IBV11-A is an option that interfaces the LSI-11 bus with the instrument bus as described in IEEE Standard 488-1975. The IBV11-A consist of an M7954 interface module and a BN11A-04 cable for connecting the first instrument.

7.4 Printer/Plotters

Type: Printer/Plotter

Name: Versatec V-80

Contact:

Versatec
2805 Bowers Avenue
Santa Clara California 95051
(408) 988-2800

Description:

The Versatec V-80 is an electrostatic printer/plotter. May be used for high quality printer or plotter or CRT hard copy. Requires controller and handler available from Versatec. Software also available from Versatec for plotting functionality. Works only with RT-11 operating system.

7.5 Plotters

Type: Plotter

Name: HIPlot 1

Contact:

Houston Instrument
One Houston Square
Austin, Texas 78753
1-800-531-5205

Description:

The HIPlot 1 is an inexpensive pen plotter. Uses RS-232 communications. Software to drive this plotter available on PS20-80-0003.

Type: Plotter

Name: HP 7221

Contact:

Hewlett Packard
16399 West Bernardo Drive
San Diego, California 92127
(714) 487-4100

Description:

The HP 7221 is a pen plotter with up to 8 pens available for plotting a single graph. Uses RS-232 communications.

7.6 Digitizers

Type: Digitizer

Name: BitPad 1

Contact:

SummaGraphics Corporation
35 Brentwood Avenue
Fairfield, Connecticut 06430
(203) 384-1344

Description:

Digitizing tablet. Uses RS-232 communications. Software drivers available for this device on PS20-80-0003 and RT3B-80-0005.

Type: Digitizer

Name: HiPad

Contact:

Houston Instrument
One Houston Square
Austin, Texas 78753
1-800-531-5205

Description:

Digitizing tablet. Uses RS-232 communications. This device useable with software from T & W Systems.

8. Standards for Library Submissions

The following guidelines must be followed for all software submitted to the Terak User's Group. Failure to do so shall result in forfeiture of the software submitted.

- 1) All software must be in the public domain or original to the submitting author. The attached Terak Library Software Specification Sheet should be filled out completely and the release statement at the bottom signed.
- 2) All software should be submitted in source form where possible. Each disk should contain a file detailing all software on the disk in the file README.TXT or README.TEXT. Complete documentation on the use of a program should be included in a file program.DOC or program.DOC.TEXT. If special handling is required to compile, assemble, or otherwise make a runnable program, instructions should be provided in a file called BUILD.TXT or BUILD.TEXT.
- 3) All programs should contain the author's name, address, date, and version. Programs should display the version (or revision level) and date of last modification. The following paragraphs should be included at the beginning of each program:

Copyright (C) Terak User's Group

Program Name:

Author:

Address:

Version:

Date:

The above author submits this software for general use to the Terak User's Group. It is believed that the information contained herein is accurate. In no event shall the author be liable for any losses or damage whether direct or indirect resulting from the use of this software, including, without limitation, losses arising from claims of patent, copyright, or trademark infringement.

General permission to copy or modify, but not for profit, is hereby granted, provided that the above copyright notice is included and references made to the fact that reproduction privileges were granted by the Terak User's Group.

- 4) Programs should be commented for clarity. An overabundance of comments will sometime confuse more than help. Be concise. Remember you may want to modify software submitted by someone else. Do unto others, as the saying goes.
- 5) Software will be collected by the Terak User's Group Librarian and added to the User's Group Library, categorized as seen fit by the Librarian. If other considerations are required, please address these in an attached letter with the software.
- 6) Software will be made available to other Terak Users as specified in the

beginning of the Catalog. All submitted software is for non-profit purposes.

- 7) Users submitting accepted software will be allowed to request one disk of library software for each disk required to submit their software. Please include an order form with the submission and enter "EXCHANGE" for total amount enclosed.
- 8) Commercial software vendors wishing to be listed in the Terak User's Group Bulletin of Available Terak Software should submit a demonstration copy of all software and complete documentation. These materials will not be returned.

Return to

Terak User's Group
Software Submission
14151 North 76th Street
Scottsdale, Arizona 85260

(Please Type: All submissions will be photocopied.)

1. Operating System

RT-11/85 V4 RT-11/85 V3B
 UCSD Pascal V2.0 UCSD Pascal V1.5e
 Other _____

2. Source Language

UCSD Pascal OMSI Pascal
 SVS FORTRAN RT-11 FORTRAN IV
 BASIC C
 MACRO-11 Other _____

3. Program Name _____

Version/Revision Level _____

Date _____ New Revision

4. Approximate Disk Requirements

Single Density (256 KBytes)
 Double Density (512 KBytes)
 Hard Disk (____ MBytes)
 None Other _____

5. Sources Provided YES NO

6. Is Documentation provided on machine readable media: YES NO

7. Primary Use _____

Secondary Use _____

8. Program Abstract _____

8. Restrictions, Deficiencies, Problems _____

9. Software Libraries Required: NO _____ YES _____
Library _____

10. Other Software Required _____
Other Hardware Required _____

11. Current Author _____ Affiliation _____
Address _____ Phone _____
_____ Contact _____
City _____ State _____ ZIP _____
Country _____

12. Is there a charge for this software? NO _____ YES _____
If YES this software will be considered COMMERCIAL. Please submit
complete documentation and a demonstration copy plus a name and
address of person to contact regarding the software.

I hereby release the above described software to the Terak User's
Group for distribution and non-profit use. The Terak User's Group
will not be held responsible for unauthorized use of this software.

Signature _____ Date _____

Terak User's Group Software Order Form

Item No.	Quantity	Number (Catalog)	Title (Catalog)

Total Number of Disks in this order: _____

Amount Enclosed: \$ _____

(To figure cost, add \$20 to (\$10 times number of disks minus 1),
i.e. $20 + (10 * (nd-1))$)

Orders cannot be completed without full payment.
Make payment with check or money order payable to Terak User's Group
Software Library. Allow 6 to 8 weeks for delivery.

Signature _____ Date _____

Shipping Address: _____ Ship Via: ___ UPS ___ U.S. Mail

Name: _____

Address: _____

City: _____ State: _____

Country: _____ Zip: _____