

TURBO-PASCAL-TOOLBOX

Hans Lohninger, TU-Wien

Seit einigen Monaten ist nun die vierte Version meiner Turbo Pascal Toolbox in Form zweier Bücher auf dem Markt und erfreut sich großer Beliebtheit. Da ich selbst langjähriges Mitglied des PCC-TGM bin, möchte ich den Mitgliedern des PCC-TGM diese Toolbox in einer Sonderaktion verbilligt zur Verfügung stellen.

Jeder Band umfaßt ca. 320 Seiten und enthält eine umfangreiche Dokumentation einschließlich zahlreicher Beispielprogramme. Die Toolbox-Units und die Beispielprogramme sind als Source-Code auf der beige packten Diskette enthalten.

Teil 1: Hans Lohninger
Turbo Pascal 7.0 Toolbox
IWT-Verlag 1993
327 Seiten, ISBN 3-88322-434-0

Teil 2: Hans Lohninger
Borland Pascal 7.0 Graphik Toolbox
IWT-Verlag 1993
324 Seiten, ISBN 3-88322-435-9

Jeder Band kann unabhängig vom anderen Teil benutzt werden und kostet öS 608,-. Für PCC-TGM-Mitglieder kann ich die Bücher um je öS 480,- zur Verfügung stellen.

Als erste Information für Sie ist im folgenden eine kurze englische Zusammenfassung des Inhalts wiedergegeben.

I want to announce a Turbo/Borland Pascal 7.0 library which may be of general interest for BP DOS-programmers. It supports a lot of various topics, such as XMS control, interrupt-driven serial lines, data structures, numerical table editors, mathematical routines, input masks, a graphical user interface for DOS-based programs, HPGL output, PostScript (EPS) hardcopy, a mouse interface, routines to display charts, etc. Part of the units are based on OOP technology.

The following gives a short summary of the features of the library:

Unit UTIL

A collection of 'mixed pickles' and basic routines: a bell, string handling routines, directory and file name support, alphanumeric cursor control, some binary de(en)coding routines, a stop watch, video attributes, system time and date,

Unit DSTRUC

This unit holds two classes to handle bit arrays and FIFO data structures.

Unit XMS

The unit XMS supports the usage of extended memory by DOS based programs. XMS-Memory as well HMA and UMBs can be allocated. This unit needs a 386 PC and HIMEM.SYS or something like that.

Unit MATH1

MATH1 contains a collection of simple mathematical routines which are not contained in the Borland Pascal libraries: format conversion (binary, octal, hexadecimal), cot, tg, tgh, cosh, sinh, decimal logarithms, some simple sorting routines, Min, Max, Sign, ...

Unit MATRICES

This unit defines two classes for handling real-valued vectors and two dimensional matrices without loading the data segment of BP programs. The matrices and vectors are maintained on the heap. Also a routine for matrix inversion is included.

Unit MATH2

The unit MATH2 contains some routines for more involved mathematical stuff like covariance matrices, eigenvectors, eigenvalues, simple statistics, linear regression, and principal components.

Unit ALPHAMSK

This unit provides a very simple mask generator for the alpha-numerical screen. It will be of little use if one is acquainted with Turbo Vison (tm).

Unit TABLES

This unit defines a class which is inherited from the class 'Matrix' (unit MATRICES) and supports the handling of numerical tables. In addition, a versatile table editor is contained.

Unit SERIAL

The unit SERIAL supports the use of interrupt-driven serial lines. In fact this is the only way to communicate via the RS-232 lines using a Pascal program.

Unit VGACARD

VGACARD supports the control of the color palette of VGA cards.

Unit GDRIVER

This unit supplies the basis (graphics drivers, HPGL and PostScript drivers, and other low level routines) of all other graphics routines as well as some self-contained routines like a hardcopy routine, the support of slides and the storing of graphics in the extended memory.

Unit GMOUSE

The unit supports the control of a mouse cursor on the graphics screen. Several high level features of mouse based user interfaces are supported (e.g. point snap, several types of cursors, rubber bands, confining the mouse motion, etc.).

Unit GRAFFONT

This unit supports a special graphics font which can be XORed with the graphics background.

Unit IM4

IM4 contains a lot of routines in order to draw on a hardware-independent virtual graphics screen. Using the routines of this unit (instead of the BP unit GRAPH) enables the program to adjust to a given graphics hardware (HGC,EGA,VGA) automatically WITHOUT changing the extents of the graphics (basically all graphics look like the same on each of the three above-mentioned adapters)

Unit IGWIND

The unit IGWIND defines two classes which support rectangular areas on the screen. These classes support automatic background saving.

Unit CHARTS

This unit provides a system of graphical windows (using classes inherited from IGWIND) which gives the user the possibility to display real-valued data within these windows. The scaling can be adjusted almost unrestricted. In addition, the automatic drawing of axes and several types of charts (lines, charts, contour plots, etc.) are supported.

Unit GRAFIN

Last not least the unit GRAFIN provides a system to create menus and command entry boxes on the graphical screen. Several input devices are supplied (e.g. menus, potentiometers, a pocket calculator, a file selection box, etc.). □

Anm.: Interessenten für die Turbo-PASCAL-Toolbox bitten wir, sich mit dem Autor direkt in Verbindung zu setzen. (siehe Autoren, Seite 5).