APDA France
PRIM'VERT Editions
36 rue des Etats Genereaux
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Liste Tarifaire des produits Développeur APPLE IIGS
AU 15 MARS 1990

CONDITIONS GENERALES :

Pour nous commander

Il vous faut joindre a votre courier de commande le reglement par cheque a l'ordre de PRIM'VERT Editions

Agresse a

PRIM'VERT EDITIONS
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Nous assurons la vente uniquement et directement aux Developpeurs sur Apple II ou Macintosh et de ce fait n'accordons aucune remise concessionnaire
Les Prix indiques sont TTC, port inclus, sauf pour l'Etranger
Les commandes sont expediees par poste ou sernam
Tout envoi urgent demande par chronopost ou sernam Express fait l'objet d'une majoration de 200,00 F
Les reclamations ne sont admises que dans un delai de 8 jours suivant la reception des produits

This section includes products for Apple II, Apple IIe, and Apple IIc computers, and products that apply to the entire Apple II product line. For products on the Apple IIGS, see the Apple IIGS section of the catalog.

Assembly

Also see the following products in the Apple IIGS section:
APW Assembler
ORCA/M 1.1

Merlin 8/16 Plus

Roger Wagner Publications

Merlin is an assembler for the entire Apple II family. With features like macros, macro libraries, nested macros, conditional assembly, assemble to memory or disk, linked files, dummy program segments, XREF utilities, and more, Merlin 8/16 includes four separate assemblers: Merlin 8 (DOS v. 3.3 and ProDOS) for use on standard Apple IIe or IIc computers; Merlin 16 (ProDOS 8) for the Apple IIGS but also usable on an Apple IIe or IIc computer with a 65802 or 65816 microprocessor installed; and Merlin 16+ (GS/OS), a GS-specific version.

Merlin 8/16 includes a powerful Full Screen Editor, a Relocating Linker to generate relocatable object code for both ProDOS 8 and ProDOS16, the use of Local Labels, and a GS Macro Library. The Merlin 16 linker also supports batch processing and a powerful command file to automate assemblies. Merlin 8/16 supports and assembles all 6502, 65C02, 65802, and 65816 opcodes. The product includes an APW/ORCA-to-Merlin source-code conversion utility. Merlin 8/16 also includes SOURCEROR, an easy-to-use disassembler that creates Merlin 8/16 source files from binary programs, and SOURCEROR.FP, which produces a fully labeled and commented source listing of Applesoft BASIC.

Many sample files of working Apple II programs, such as ProDOS 16 system files and desk accessories, are also included. Merlin 8/16 is unlocked, copyable, and hard disk compatible. Merlin 8 is equivalent to the earlier RWP product, Merlin Pro.

T0002LL/B 990,00 F

Micol Macro for the Apple IIe and Apple IIc

Micol Systems

Micol Macro for the Apple IIe and Apple IIc computers is a fully integrated macro assembler package. It consists of a menu, a line editor, a macro assembler, and a machine language monitor with step and trace for easy debugging. The monitor also has the ability to relocate machine-language files within memory.

Micol Macro has full macro capabilities, which means macros can accept and expand parameters.

- **System requirements:** An Apple II Plus, IIe, or IIc computer with one 5.25-inch disk drive. The minimum memory requirement is 48K for the DOS 3.3 version.
- **Product contents:** One 5.25-inch disk and one 90-page manual.

T0345LL/A

630,00 F

MicroDot

Kitchen Sink Software, Inc.

MicroDot is the logical replacement for BASIC.SYSTEM. MicroDot occupies only about 2.5K of RAM. This means you gain an extra 7K to 8K of program and variable space when using Applesoft BASIC. MicroDot uses the ampersand (&) command to access ProDOS, but it still allows you to use other ampersand routines in your programs. Extra memory is saved because MicroDot uses a much shorter syntax than BASIC.SYSTEM. All files use the same structure as BASIC.SYSTEM. Inexpensive publishers' licenses are available.

MicroDot can do anything that BASIC.SYSTEM can do. In addition, MicroDot has a module that allows packing and unpacking of Hi-Res screens directly to and from disk—no RAM buffer required. Other utility programs on the disk include 5.25-inch and 3.5-inch disk formatters, a patch so you can use Program Writer, SoftWorks (an ampersand-driven machine program that works just like the AppleWorks menu and prompt displays), and much more.

This disk contains many example programs that show how to take full advantage of ProDOS via MicroDot. One of these programs shows how to copy programs of any type from disk to disk. Two examples of new control over ProDOS are illustrated with the &.BO command, which does automatic BASIC overlays to any line number or memory address, and the &.G command, which loads directory file names, types, and auxtype bytes directly into your arrays. It is fast and is done in a simple loop just a few bytes long.

- **System requirements:** Any Apple II computer with any version of ProDOS 8.
- **Package contents:** One 5.25-inch disk, one 60-page manual, and a quick-reference sheet.

T0290LL/A 270,00 F

MON+ Symbolic Debugger

Byte Works, Inc.

MON+ supports 40 commands for debugging ORCA/M 4.1 assembly-language programs, traces programs step by step, and lets particular subroutines run at full speed. A disassembler examines the program while it is being debugged. MON+ also assigns names to locations when debugging a program, so programmers can use the same symbolic names that were used when the program was written. When an error is found, it can often be fixed from MON+ using either the hex numbers (as with the Apple monitor) or with a built-in mini-assembler.

- **System requirements:** An Apple II Plus, Apple IIe, or Apple IIc computer and ORCA/M 4.1.

T0017LL/A 270,00 F

ORCA/M 4.1

Byte Works, Inc.

ORCA/M 4.1 is a development environment for 6502, 65C02, and 65816 assembly-language programming under the ProDOS 8 operating system. The assembler supports real subroutines and data segments with true local and global labels.

The text editor offers cut, copy, and paste as well as global search and replace. The macro language calls libraries, pass parameters, defines local and global parameters, and calls other macros. The subroutine libraries include 2-, 4-, and 8-byte integer mathematics and full graphics libraries, including double Hi-Res.

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The package includes a linker (which performs automatic library searches), a command processor, a disassembler, and numerous utilities. Programs written with ORCA/M can easily be modified to run with ORCA/M 1.1 on the Apple IIGS.

√ **System requirements:** An Apple II Plus, Apple IIe, or Apple IIc computer with 64K of memory

T0018LL/A 300,00 F

ORCA/M 4.1 Floating-Point Libraries

Byte Works, Inc.

These libraries provide an alternative to SANE floating-point number crunching with ORCA/M 4.1. The large array of floating-point operations supported includes add, subtract, multiply, divide, sine, cosine, arctangent, natural log and , exponent, formatted input and output, square root, absolute value, sign function, and conversion between floating-point and integer numbers—all in IEEE floating point format and with SANE accuracy. Also included is complete source code for these floating-point libraries.

√ **System requirements:** An Apple IIe, Apple IIc, or Apple II Plus computer.

T0020LL/A 360,00 F

ORCA/M 4.1 O/S Source

Byte Works, Inc.

ORCA/M 4.1 O/S Source is a set of four disks containing source code for key parts of the ORCA/M system, including source listings for the operating system, subroutine libraries, and the XREF utility. Drivers can be added for hardware that is not currently supported by ORCA, such as configuring clock cards for slots other than #2. ORCA can be set up to automatically load these drivers. The source code provides users with the opportunity to explore the inner workings of the ORCA/M operating system. The code simplifies debugging of programs by providing programmers with more information on the subroutine libraries.

√ **System requirements:** An Apple IIe, Apple IIc, or Apple II Plus computer.

T0019LL/A 360,00 F

BASIC

Micol Advanced BASIC for the Apple IIe and Apple IIc

Micol Systems

Micol Advanced BASIC for the Apple IIe and Apple IIc, like its sister product for the Apple IIGS, is a fully integrated, structured, compiled language system. It is designed specifically to take advantage of the full power of the Apple IIe and Apple IIc.

Micol Advanced BASIC consists of an 80-column full-screen text editor, a programming shell, a compiler, a linker, and a run-time library. It has the ability to do double-high-resolution as well as double-low-resolution graphics. To allow maximum program size, it

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makes use of both memory banks. In addition, it has the unique ability to link the user's own machine-language files directly into a BASIC program, as long as a few simple rules are followed.

√ **System requirements:** An Apple IIe or Apple IIc computer, one 5.25-inch disk drive, and a monitor capable of 80-column display.

√ **Package contents:** One 5.25-inch disk and one 225-page manual.

T0283LL/A 8-10,00 F

For Merlin 8/16 Plus, see the Apple IIGS catalog section.

C

ORCA/M 4.1 Small-C Compiler

Byte Works, Inc.

Small-C is a subset of C. It offers a learning environment for compilers with a complete source code included as well as a subroutine-by-subroutine description of the compiler in the manual.

All full C language statements are supported by ORCA/M 4.1 Small-C Compiler in addition to most operators, plus short and long integers. Small-C supports p-code for space efficiency and native code for speed. A peep-hole optimizer is included to demonstrate one of the most important code-optimization techniques in a modern compiler. Small-C is fully integrated into the ORCA/M environment. It supports libraries and partial compiles.

√ **System requirements:** ORCA/M 4.1 and an Apple II Plus, Apple IIe, or Apple IIc computer.

T0021LL/A 360,00 F

Pascal

Apple II Desktop Toolkit Pascal v. 1.0B5

Apple Computer, Inc.

Class 3

This is a library of routines that support MouseText and/or double Hi-Res graphics for the Apple II family of computers. The library also manages the desktop environment, which includes pull-down menus, windows, cursors, and event handling. The MouseText Toolkit manual and disks manage these activities in text mode. The Mouse Graphics Toolkit manual and disks provide equivalent functions in graphics mode. This package includes graphics primitives. Apple II Desktop Toolkit Pascal is intended for personal enjoyment only and should not be used to develop commercial software. It has not been upgraded or revised and does not take advantage of new features in system software releases, ROM revisions, or computer model changes.

√ **Special licensing note:** Before you can ship products that use Apple II Desktop Toolkit Pascal v. 1.0B5, you must obtain a license from Apple Computer Software Licensing, 20525 Mariani Ave., M/S 38-I, Cupertino, CA 95014

√ **System requirements:** An Apple IIc or Apple IIe computer with 128K of RAM, or an Apple IIGS computer.

√ **Package contents:** Four 5.25-inch Apple II disks and one 336-page manual.

A2Z2009 240,00 F

Apple II Pascal v. 1.3 with Device Support Tools

Apple Computer, Inc.
Class 3
This is Apple Computer's implementation of the University of California San Diego (UCSD) p-system for the Apple II family of computers. It provides a complete development and operating environment supporting the Pascal language, and includes a Pascal compiler, linker, filer (file-management utility), editor, 6502 assembler, p-code interpreter, and sample programs. The compiler generates p-code files executed by the interpreter.

The included Apple II Pascal v. 1.3 Device Support Tools provide support for writing and attaching device drivers for use with the Pascal v. 1.3 operating system. A system.attach file allows the drivers that were written for v. 1.2 to work correctly with v. 1.3.

Apple II Pascal v. 1.3 and the Device Support Tools are intended for personal enjoyment only and should not be used to develop commercial software. They have not been upgraded or revised and does not take advantage of new features in system software releases, ROM revisions, or computer model changes.

- **Special licensing note:** Before you can ship products that use Apple II Pascal v. 1.3, you must obtain a license from Apple Computer Software Licensing, 20525 Mariani Ave., M/S 38-I, Cupertino, CA 95014
- **System requirements:** The package supplies different versions of the interpreter for 64K systems (the Apple II and Apple II Plus), 128K Apple IIe computers, and Apple IIc computers. The program is compatible with the Apple IIGS computer. It calls for two 5.25-inch disk drives, or one 3.5-inch drive plus 64K of RAM.
- **Package contents:** Five 5.25-inch Apple II disks, one 3.5-inch Apple II disk, one 104-manual, and one 400-page manual.

A2Z2012/A

125,00F

ProDOS

Apple II Desktop Toolkit ProDOS v. 1.0B5

Apple Computer, Inc.
Class 3
This is a library of routines that support MouseText and/or double Hi-Res graphics for the Apple II family of computers. The library also manages the desktop environment, which includes pull-down menus, windows, cursors, and event handling. The MouseText Toolkit manual and disks manage these activities in text mode. The Mouse Graphics Toolkit manual and disks provide equivalent functions in graphics mode. This package includes graphics primitives.

- **Special licensing note:** Before you can ship products that use Apple II Desktop Toolkit ProDOS v. 1, you must obtain a license from Apple Computer Software Licensing, 20525 Mariani Ave., M/S 38-I, Cupertino, CA 95014
- **System requirements:** An Apple IIc or Apple IIe computer with 128K of RAM, or an Apple IIGS computer.
- **Package contents:** Four 5.25-inch Apple II disks and one 336-page manual.

A2Z2010

90,00F

ProDOS 8 Assembly Tools

Apple Computer, Inc.
Class 3
These up-to-date ProDOS 8 Assembly Tools enable programmers to write assembly-language programs for Apple II computers. The tools include an editor, assembler, Bugbyter debugger, and relocating loader. These tools help programmers create, debug, and execute programs for any computer in the Apple II family.

- **System requirements:** An Apple II computer with at least 64K of RAM. The ProDOS 8 Technical Reference Manual and ProDOS Utilities Manual are recommended.
- **Package contents:** One 5.25-inch Apple II disk and one 270-page manual.

A2Z2021

315,00F

SuperPILOT

Apple II SuperPILOT and Apple II SuperPILOT Special Edition v. 1.0

Apple Computer, Inc.
Class 3
SuperPILOT is a complete system for experimenting with and designing programs in the PILOT programming language. Apple II SuperPILOT is the original version of SuperPILOT and is fully documented. Included in this bundle is Apple II SuperPILOT Special Edition v. 1.0. The Special Edition document describes the differences between this edition and SuperPILOT.

Apple II SuperPILOT and Apple II SuperPILOT Special Edition v. 1.0 are intended for personal enjoyment only and should not be used to develop commercial software. These products have not been upgraded or revised and do not take advantage of new features in system software releases, ROM revisions, or computer model changes.

- **Special licensing note:** Before you can ship products that use Apple II SuperPILOT or Apple II SuperPILOT Special Edition v. 1.0, you must obtain a license from Apple Computer Software Licensing, 20525 Mariani Ave., M/S 38-I, Cupertino, CA 95014
- **Package contents:** Eleven 5.25-inch disks, two manuals, and release notes.

A0014LL/A

675,00F

System Software

Apple II System Disk v. 3.1

Apple Computer, Inc.
Class 3
This is the latest version of ProDOS 8, the system software for 8-bit Apple II computers. This product is fully compatible with the AppleShare File Server. Included in this package are release notes detailing changes in ProDOS since v. 1.1. Designed for developers, this package does not contain end-user documentation, which is available at authorized Apple dealers.

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1990 Apple II Technical Notes, Disk Version

Apple Computer, Inc.
Class 1 New!
The *1990 Apple II Technical Notes* are sent out, as released, to purchasers of this subscription. These notes cover all Apple II machines. The disk version is supplied on Apple II ProDOS disks in text file format.
A0234LL/A

225,00F

Books and References

Apple IIe Technical Reference Manual

Addison-Wesley Publishing Company—1987
by Apple Computer, Inc.
This guide for Apple programmers provides detailed descriptions of all Apple IIe hardware and firmware. It offers information on I/O features such as MouseText, memory organization, and the use of the monitor firmware. This manual has been revised to cover the 128K Apple IIe with extended keyboard. (408 pages)
A2G0053

225,00F

Apple II Memory Expansion Card Reference Manual

Apple Computer, Inc.
Class 1B
This beta manual provides a technical description of the Apple II Memory Expansion Card. The card can add as much as 1MB of RAM (in 256K increments) to any Apple II computer. The manual is written for professional programmers and technical enthusiasts who want their application programs to take advantage of the expanded memory features of the card. This manual will be reclassified to Class 1 when completed. (75 pages)
A2G0022

180,00F

Apple IIc Memory Expansion Card Reference Manual

Apple Computer, Inc.
Class 1B
This beta reference contains technical data dealing with the Apple IIc Memory Expansion Card product. It is written for technical enthusiasts who take advantage of the card's expanded memory features. This manual will be reclassified to Class 1 when completed. (78 pages)
A2G0047

180,00F

Apple II SCSI Card Technical Reference Manual

Apple Computer, Inc.—1987
Class 1B
This beta guide to the Apple II SCSI Card provides a functional overview of card hardware and firmware features and operation. The manual is written for programmers, designers of peripheral devices, and computer enthusiasts who want to know what makes the card work and how to use it. The manual includes detailed descriptions of the Smartport command set plus step-by-step instructions on using non-Smartport SCSI commands. Included is information on the latest Revision C ROM, which provides support for the AppleCD SC CD-ROM drive. This reference manual will be reclassified to Class 1 when completed. (70 pages)
A2G0029

180,00F

Apple IIc Technical Reference Manual, Second Edition

Apple Computer, Inc.—1989
Class 1
This is the definitive reference guide to all members of the Apple IIc family of computers, including the Apple IIc Plus. It presents essential information on hardware, memory organization, I/O capabilities, and interrupt handling. It also describes the Apple IIc Plus microprocessor caching techniques. If you're developing software that is to run on all Apple IIc models, purchase this reference instead of the original edition published by Addison-Wesley. (685 pages)
A2G0052/A

270,00F

DOS 3.3 Programmer's Manual

Apple Computer, Inc—1982
Class 3
APDA has the only remaining copies of the discontinued DOS 3.3 Programmer's Manual. These remain valuable for history buffs, educators, and hackers who still use DOS 3.3 software. The manual describes the DOS environment, text files, programming DOS commands in Applesoft, and more; it covers the Apple II, Apple II Plus, and Apple IIe computers.

DOS 3.3 Programmer's Manual is intended for personal enjoyment only and should not be used to develop commercial software. It has not been upgraded or revised and does not take advantage of new features in system software releases, ROM revisions, or computer model changes. (216 pages)
A2G0066

180,00F

DOS 3.3 User's Manual

Apple Computer, Inc.—1983
Class 3
This manual, also discontinued, is far less detailed than the programmer's manual described in the previous listing. It contains a tutorial, covers the basics of how DOS operates, and contains information on how to use disks, files, and programs. It addresses the Apple II, Apple II Plus, and Apple IIe computer.

DOS 3.3 User's Manual is intended for personal enjoyment only and should not be used to develop commercial software. It has not been upgraded or revised and does not take advantage of new features in system software releases, ROM revisions, or computer model changes. (174 pages)
A2G0050

180,00F

- **Special licensing note:** Before you can ship products that use Apple II System Disk v. 3.1, you must obtain a license from Apple Computer Software Licensing, 20525 Mariani Ave., M/S 38-I, Cupertino, CA 95014
- **System requirements:** An Apple IIc or Apple IIe computer with 128K of RAM, or an Apple IIGS computer.
- **Package contents:** One 3.5-inch, double-sided ProDOS disk; one 5.25-inch, single-sided ProDOS disk; and one 24-page manual.

A2Z1004

180,00F

Utilities

Apple II Filecard Toolkit

Apple Computer, Inc.
Class 3
This prototype package contains a variety of user-interface utilities for the Apple II program developer. Included is the Pascal Filecard Menu Support Unit, which is a simple AppleWorks-like interface written in Pascal for screen management and menu selections.

The second utility is the Apple II Console and Keyboard Tools. This is an adaptation of the Apple III Console Driver for the Apple IIc and Apple IIe. It permits developers to use a consistent interface for display and control procedures. The driver can be carried out in Pascal, Applesoft, and assembly language. The package has release notes 1.0B1 for the console drivers and ConsoleStuff Library external reference specifications.

Apple II Filecard Toolkit is intended for personal enjoyment only and should not be used to develop commercial software. It has not been upgraded or revised and does not take advantage of new features in system software releases, ROM revisions, or computer model changes.

- **Special licensing note:** Before you can ship products that use Apple II Filecard Toolkit you must obtain a license from Apple Computer Software Licensing, 20525 Mariani Ave., M/S 38-I, Cupertino, CA 95014
- **System requirements:** An Apple IIc, Apple IIe, or Apple IIGS computer.
- **Package contents:** Five 5.25-inch Apple II disks and 100 pages of engineering release notes.

A2Z2011

315,00F

Apple II Video Overlay Card Development Kit v. 1.1

Apple Computer, Inc.
Class 1
This kit provides basic design information about the Apple II Video Overlay Card. The notes include information on how the Apple II Video Overlay Card works with application programs, descriptions of the Video I/O Interface Tool Set routines for controlling the operation of the Apple II Video Overlay Card, and an overview of the Apple II Video Expansion Bus (AVEB) architecture and a description of relevant new features incorporated into the Apple IIGS VideoMix desk accessory and the Apple IIe Video Setup program.

The disk includes interfaces for the APW and MPW IIGS development systems and an object file for Apple IIe programmers. The disk also includes Tool 33 (the Video Overlay Card tool), the VideoMix desk accessory (for the Apple IIGS), and the Apple IIe Video Setup program.

- **Special licensing note:** Before you can ship products that include the VideoMix desk accessory or the Apple IIe Video Setup program, you must get a license from Apple Computer Software Licensing, 20525 Mariani Ave., M/S 38-I, Cupertino, CA 95014
- **System requirements:** An Apple IIe or Apple IIGS computer with the Apple II Video Overlay Card.
- **Package contents:** One disk and one 96-page manual.

A0221LL/B

315,00F

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Technical Notes

1985-1988 Apple II Technical Notes

Apple Computer, Inc.
Class 1
These technical notes cover all Apple II computers and were completely revised and updated by Developer Technical Support, creating this complete set. (500 pages)

A0010LL/A

540,00F

1985–1988 Apple II Technical Notes, Disk Version

Apple Computer, Inc.
Class 1
These technical notes cover all Apple II computers and were completely revised and updated by Developer Technical Support, creating this complete set in text file format on Apple II ProDOS disks.

- **Product contents:** Two Apple II 3.5-inch disks and 60 pages.

A0020LL/A

225,00F

1989 Apple II Technical Notes

Apple Computer, Inc.
Class 1
This compilation of technical notes for 1989 covers all Apple II computer models.

A0022LL/A

225,00F

1989 Apple II Technical Notes, Disk Version

Apple Computer, Inc.
Class 1
This compilation of technical notes for 1989 covers all Apple II computers and is supplied in text file format on Apple II ProDOS disks.

A0023LL/A

180,00F

1990 Apple II Technical Notes

Apple Computer, Inc.
Class 1 New!
This compilation of technical notes are sent out, as released, to purchasers of this subscription. These notes cover all Apple II computer models.

A0233LL/A

225,00F

–more Apple II product listings on the next page

This section includes products specifically for the Apple IIGS computer. For products for Apple II, II Plus, IIe, and IIc computers, and products that apply to the entire line of Apple II computers, see the Apple II section of the catalog.

Apple IIGS Programmer's Workshop

APW: Apple IIGS Programmer's Workshop v. 1.0.2

Apple Computer, Inc.
Class 1
This is Apple Computer's native development system for the Apple IIGS. As a complete development system, it includes a command shell, a linker, utilities, and a complete 65816 macro assembler. This system is the host for other APW language products such as APW C and several third-party language products.

The command shell performs functions such as file management, directory listing, I/O redirection, and pipelining. The shell environment also provides utility programs with useful extensions to ProDOS 16. The full-screen text editor copies, moves, and deletes blocks; searches and replaces; and executes editor command macros.

The assembler produces 65816 programs that assemble into relocatable object modules. Utility macros are provided to aid programming, as are tool interface macros. You may also create your own macros and library files. Taking files created by the assembler, C, or other compatible languages, the linker resolves external references and generates load files (which include relocation dictionaries).

Various utility programs round out the package: "crunch," to combine object files into a single file; DumpObj; disk initialization; macro file generation; ProDOS 8 binary file creation; file search; directory/file compare; canonical spelling; library creation; and revised, up-to-date tool interfaces.

Version 1.0.2 contains new M16 and E16 interface files to provide call macros and equates for all tools on the Apple IIGS System Disk v. 4.0. Interfaces for all tools on Apple IIGS System Disk v. 5.0.2 can be found in the Programming Tools and Interfaces for APW v. 1.1 package.

√ **System requirements:** An Apple IIGS computer with at least 1.25MB of RAM and either two 3.5-inch drives or one 3.5-inch disk drive. A hard disk is highly recommended.

√ **Product contents:** Two 3.5-inch Apple II disks and one 600-page manual. A binder is included. Volume purchase discount available.

A0001LL/B

900,00F

APW C: Apple IIGS Programmer's Workshop C v. 1.0.2

Apple Computer, Inc.
Class 1
The most recent C compiler for the Apple IIGS Programmer's Workshop from Apple Computer, this compiler offers full Kernighan and Ritchie implementation of the C language. The compiler generates APW object files. Extensions include void and enumerated types as well as structure passing. The product supports source-level segmentation of load files.

APW C includes standard C I/O library interfaces and Apple IIGS tool interfaces. Version 1.0.2 contains header files for the GS/OS operating system as well as corrected and updated interfaces for all tools on the Apple IIGS System Disk v. 4.0. Interfaces for all tools on Apple IIGS System Disk v. 5.0.2 can be found in the Programming Tools and Interfaces for APW v. 1.1 package.

√ **System requirements:** APW v. 1.0 or a later. This compiler does not work with earlier versions of APW. The package requires a minimum of 1.25MB of RAM and either two 3.5-inch disk drives or one 3.5-inch disk drive and a hard disk; a hard disk is highly recommended.

√ **Product contents:** One 3.5-inch Apple II disk and a 300-page manual. A binder is included. Volume discount available.

A0003LL/B

300,00F

APW C: Apple IIGS Programmer's Workshop C Bundle v. 1.0.2

Apple Computer, Inc.
Class 1
Developers can purchase an entire APW development package for a reduced price with this bundled offering. The APW C Bundle includes:

- APW Development Environment v. 1.0.2
- APW C v. 1.0.2
- GSBug and Debugging Tools v. 4.0B1

√ **System requirements:** An Apple IIGS computer with at least 1.25MB of RAM and either two 3.5-inch disk drives or one 3.5-inch disk drive and a hard disk. A hard disk drive is highly recommended.

√ **Product contents:** Two binders are included.

B0048LL/C

~~17~~ 10,00F

Programming Tools & Interfaces for APW v. 1.1

Apple Computer, Inc.
Class 2
This product contains the APW tools that are essential to accessing the new features of Apple IIGS System Disk v. 5.0.2, revisions to several existing APW tools, and interfaces for both APW C and Assembly. The interfaces are current through Apple IIGS System Disk v. 5.0.2. The new tools in this package are a resource compiler (Rez), a resource decompiler (DeRez), a new scriptable linker (LinkIIGS), and a utility to convert existing applications into ExpressLoader-compatible applications (Express). Revised tools included with this product are the library creation utility (MakeLib), a binary file converter (MakeBin), and an OMF display utility (DumpObj). With the exception of Express, all tools are ports of their MPW IIGS counterparts.

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X-REF (Cross-Reference) of Apple II Books and Notes

Apple Computer, Inc.
Class 3
X-REF (Cross Reference) of Apple II Books and Notes is the key to all the programming books for the Apple II family of computers and to the Technical Notes from the Apple II Developer Technical Support team. The X-REF contains complete indexes to all of the books as well as a compiled glossary of terms. It is a valuable guide to Apple Computer's official programmer references for the entire family of Apple II computers. (100 pages)
A0021LL/A

Apple IIc Technical Reference Manual

Addison-Wesley Publishing Company—1987
by Apple Computer, Inc.
This manual covers all models of the Apple IIc except the Apple IIc Plus. It presents essential information on hardware, memory organization, I/O capabilities, and interrupt handling. We recommend this book to users of earlier Apple IIc systems who want to know more about their systems. However, if you're developing software that is to run on all Apple IIc models, purchase the second edition instead. (576 pages)
A2G0052

Applesoft BASIC Programmer's Reference Manual

Addison-Wesley Publishing Company—1985
by Apple Computer, Inc.
This complete reference details all the features of Applesoft BASIC and explains advanced concepts in program design. Topics covered include how to create high-resolution graphics, memory organization, and information on peeks, pokes, and calls. (368 pages)
A2Z2022

Applesoft Tutorial

Addison-Wesley Publishing Company—1985
by Apple Computer, Inc.
This classic introduction teaches Applesoft BASIC fundamentals with concise explanations and hands-on exercises. The Sampler disk provides program examples of games and programming tools.
√ **Package contents:** One Apple II 5.25-inch disk and one 304-page manual.
A2Z2023

BASIC Programming with ProDOS

Addison-Wesley Publishing Company—1985
by Apple Computer, Inc.
This book explains how to use ProDOS commands in BASIC programs. Specific topics include sequential and random accessing, binary programs, and files. An example disk contains ProDOS 8 sample programs.
√ **Package contents:** One Apple II 5.25-inch disk and one 296-page manual.
A7Z0015

ProDOS 8 Technical Reference Manual

Addison-Wesley Publishing Company—1985
by Apple Computer, Inc.
ProDOS 8 is the standard operating system for the Apple II family of computers. Written for assembly-language programmers, this manual provides detailed documentation of ProDOS 8 programming features, including memory management, operating-system calls, and file structure. An exerciser disk allows readers to practice ProDOS 8 calls before actually writing application programs.
√ **Package contents:** One Apple II 5.25-inch disk and one 208-page manual.
A7G0029

Instant Pascal Language Reference

Addison-Wesley Publishing Company—1985
by Apple Computer, Inc.
The only official reference guide to Instant Pascal, this book offers an overview as well as detailed information on every major feature of the language and system.
A7G0028

Assembly Lines: The Book, Volume I

Roger Wagner Publishing—1984
by Roger Wagner
This book is designed for the novice using assembly-language. It starts with fundamentals and works up to more sophisticated routines. It gives a clear understanding of all 6502 instructions, disk access, reading and writing lines, sound generations, basic math, keyboard and screen techniques, and more. The book also offers an extensive reference section describing all 6502 assembly-language commands with examples of the most common usage of each. The information is compatible with all Apple assemblers including Merlin, Merlin Pro, and Merlin 8/16.
T0238LL/A

The documentation included with this product consists of appropriate chapters or sections from the working draft of the APW v. 2.0 manual.

√ **System requirements:** An Apple IIGS System Disk v. 5.0 or later and APW v. 1.0 or later.

√ **Product contents:** Three 3.5-inch disks, one 148-page manual, and 17 pages of release notes.

A0228LL/A 450,00F

MPW IIGS Cross-Development System

MPW IIGS provides developers with MPW-based tools for Apple IIGS programming. For more information, please turn to the "MPW IIGS Cross-Development System" heading in the MPW section of the catalog.

Assembly

Merlin 8/16 Plus

Roger Wagner Publications

Merlin is an assembler for the entire Apple II family. With features like macros, macro libraries, nested macros, conditional assembly, assemble to memory or disk, linked files, dummy program segments, XREF utilities, and more, Merlin 8/16 includes four separate assemblers: Merlin 8 (DOS v. 3.3 and ProDOS) for use on standard Apple IIe or IIc computers; Merlin 16 (ProDOS 8) for the Apple IIGS but also usable on an Apple IIe or IIc computer with a 65802 or 65816 microprocessor installed; and Merlin 16+ (GS/OS), a GS-specific version.

Merlin 8/16 includes a powerful Full Screen Editor, a Relocating Linker to generate relocatable object code for both ProDOS 8 and ProDOS16, the use of Local Labels, and a GS Macro Library. The Merlin 16 linker also supports batch processing and a powerful command file to automate assemblies. Merlin 8/16 supports and assembles all 6502, 65C02, 65802, and 65816 opcodes. The product includes an APW/ORCA-to-Merlin source-code conversion utility. Merlin 8/16 also includes SOURCEROR, an easy-to-use disassembler that creates Merlin 8/16 source files from binary programs, and SOURCEROR.FP, which produces a fully labeled and commented source listing of Applesoft BASIC.

Many sample files of working Apple II programs, such as ProDOS 16 system files and desk accessories, are also included. Merlin 8/16 is unlocked, copyable, and hard disk compatible. Merlin 8 is equivalent to the earlier RWP product, Merlin Pro.

T0002LL/B 990,00F

Merlin-to-ORCA/M Source-Code Translator

Byte Works, Inc.

This program automatically converts more than 95 percent of old Merlin source code to ORCA/M source code to run on an Apple IIGS , Apple IIc, Apple IIe, or Apple II Plus computer. Merlin macros and directives are translated into their ORCA equivalents. The source code for the translator is included. This package contains both ProDOS 8 and GS/OS versions.

√ **System requirements:** An Apple IIGS computer with 512K of RAM and one 3.5-inch disk.

T0003LL/A 270,00F

Micol Macro for the Apple IIGS

Micol Systems

Micol Macro for the Apple IIGS is a fully integrated editor/shell/assembler package. It enables the user to generate Micol's own Fast-load, or S16, files. It also supports the generation of ProDOS 8 files if the user wishes to write Apple IIe/IIc software on an Apple IIGS.

Micol Macro has full macro capabilities and generates relocatable load files without having to go through a linking phase. Previously assembled files can, however, be linked in during the assembly stage if desired. The software for converting from Fast-Load to S16 files is also included.

√ **System requirements:** An Apple IIGS computer with at least 768K of RAM, one 3.5-inch disk drive, and a monitor capable of 80-column display.

√ **Product contents:** One 3.5-inch disk and one 110-page manual.

T0297LL/A 900,00F

ORCA/Desktop

Byte Works, Inc.

ORCA/Desktop is a complete programming environment for the Apple IIGS that enables easy use of any APW/ORCA-compatible compiler or assembler. ORCA/Desktop supports multiple windows, pull-down menus, and use of the mouse. Text and graphics can appear on the screen at the same time, allowing program output and source code to be viewed together. Menu commands include file operations (save, open, create, copy, delete, print), editing functions, compile and link operations, and debug commands. Programmers can talk directly to the ORCA/APW shell and do not give up any power by using the Desktop.

ORCA/Desktop contains two debuggers: a source-level debugger for use with ORCA/Pascal and a native code debugger for use with any EXE file. The package includes a standard linker, a trimmed-down version of the ORCA/APW shell, and free samples.

√ **System requirements:** An Apple IIGS computer and an APW/ORCA-compatible compiler or assembler with v. 1.1 or later of the shell.

T0004LL/A 540,00F

ORCA/M 1.1

Byte Works, Inc.

ORCA/M 1.1 is an enhanced version of APW, the standard development environment for the Apple IIGS. ORCA/M includes ASM65816, a fast and sophisticated assembler that separates programs into real subroutines and data segments, with true local and global labels, just like a high-level language. The macro language can call libraries, pass parameters, and define local and global parameters as well as call other macros.

ORCA/M 1.1 contains a UNIX-like shell with more than 50 built-in commands. New commands may also be added, and a command language enables programmers to write powerful script files. Other features include on-line help, a standard linker (which performs automatic library searches and links any standard OMF object modules), a full-screen editor with AppleWorks keystrokes, cut, copy, paste, global search and replace, user-definable macros, several utilities, extensive macro libraries, libraries for integer math and formatted I/O, and free samples.

√ **System requirements:** An Apple IIGS computer with 512K of RAM and one 3.5-inch disk.

T0005LL/A 630,00F

ORCA/M Subroutine Library Source for ORCA Products

Byte Works, Inc.

The source code in this package accesses the ORCA/M subroutine libraries and ORCA/Pascal run-time libraries. More than 3,000 lines of source code are available so these libraries can be modified. Programmers can use these libraries to help them debug or write their own libraries.

√ **System requirements:** APW and an Apple IIGS computer with 512K of RAM and one 3.5-inch disk.

T0010LL/A 360,00F

ORCA/M Utility Package #1

Byte Works, Inc.

These utilities add twelve new shell commands to the ORCA/APW shell including calendar, bad-block check, file compare, lowercase conversion, quick sort, control character strip, tab and space strip, file compare, and line/word/character count.

√ **System requirements:** An Apple IIGS computer with 512K of RAM and one 3.5-inch disk.

T0011LL/A 360,00F

BASIC

Apple IIGS BASIC v. 1.0B4

Apple Computer, Inc.

Class 3

This offering is a BASIC interpreter for the Apple IIGS. It features structured programming control structures, procedures and functions with local labels, sophisticated I/O functions, and SANE numerics. It also includes full support for the Apple IIGS Tools via a high-level, symbolic interface. The language allows use of the expanded memory of the Apple IIGS computer. It includes complete tool interface files as well as a sample program that demonstrates use of Apple IIGS BASIC to program desktop-style applications.

Apple IIGS BASIC v. 1.0B4 is intended for personal enjoyment only and should not be used to develop commercial software. It has not been upgraded or revised and does not take advantage of new features in system software releases, ROM revisions, or computer model changes.

√ **System requirements:** An Apple IIGS computer with a minimum of 512K of RAM and one 3.5-inch disk drive.

√ **Product contents:** One 3.5-inch Apple II disk.

A2Z2014 450,00F

AC/BASIC

Absoft Corporation

Written in assembly language, this BASIC compiler is compatible with Microsoft QuickBASIC and is the only compiler on the Apple IIGS that provides direct support of high-level graphics. Programs written in QuickBASIC for the Macintosh can easily be moved to the Apple II, or vice versa.

√ **System requirements:** An Apple IIGS computer with 1MB of RAM.

√ **Product contents:** One Apple 3.5-inch disk and one 420-page manual. Educational discounts are available from Absoft.

T0001LL/A 1.125,00F

Micol Advanced BASIC for the Apple IIGS

Micol Systems

Micol Advanced BASIC for the Apple IIGS , like its sister product for the Apple IIe and Apple IIc, is a fully structured, compiled language system; it allows the programmer to take advantage of the full memory, graphics, and sound capabilities of the Apple IIGS. Micol Advanced BASIC consists of an 80-column full-screen text editor, a programming shell, a compiler, a linker, and a library, as well as a significant amount of support software. It also makes it easy to link in machine-language files written under Micol's in-house macro assembler, Micol Macro.

√ **System requirements:** An Apple IIGS computer with at least 768K of RAM, one 3.5-inch disk drive, and a monitor capable of 80-column display.

√ **Product contents:** One 3.5-inch disk, one 215-page manual, and a fractal generator as an example program.

T0298LL/A 1314,00F

Debuggers and Supplemental Tools

Apple IIGS Icon Editor v. 1.1

Apple Computer, Inc.
Class 2
Due to its usefulness, the Apple IIGS Icon Editor is a tool Apple has decided to make available early in its development cycle. This product is designed to create and modify icons for display by the Apple IIGS Finder. Icons can be created for applications or for documents. Using the Icon Editor, a programmer can match application icons to document icons. When a user opens a document from the Finder, the appropriate application is launched by double-clicking on its icon.

√ **System requirements:** An Apple IIGS computer.
√ **Product contents:** One 3.5-inch disk and a 15-page reference guide.
A0015LL/A 225,00F

Apple IIGS Source Code Sampler Volume 1

Apple Computer, Inc.—September 1988
Class 1
This current sampler volume contains source code for Apple IIGS applications that use the desktop interface, an empty shell application, an animation demonstration, a custom control, custom windows, and dialogs. Additional samples offer window caching, list handling, and a sampled sound player. Also included is a Print Manager record spy, custom menus, and a math function grapher that uses SANE. C source-code samples include an empty shell application and a program lister that can print to the Apple ImageWriter and Apple LaserWriter printers. Source code is included for both the APW native development system and the MPW IIGS Cross-Development System, in both Assembly and C.

√ **System requirements:** An Apple IIGS computer for execution, plus APW native or MPW IIGS Cross-Development System.
√ **Product contents:** Two 3.5-inch Apple II disks and one Macintosh disk.
A2Z1003 270,00F

GSBug and Debugging Tools v. 4.0B1

Apple Computer, Inc.
Class 1B
This beta version of Apple Computer's machine-language debugger works on any Apple IIGS with System Software v. 4.0 or later. With GSBug, you can step through your code; save a trace history to a file on disk; define breakpoints and insert them into your code; define and use memory protection windows; and view the debugger's master display, which shows the contents of the 65816 registers, breakpoints, and memory protection ranges that you have set, portions of the stack and memory, and a disassembly of your program's code.

Also included with GSBug are the Loader Dumper, Memory Mangler, and Scrambler Classic Desk Accessories (CDAs). Loader Dumper lets you see where in memory the System Loader has loaded each segment of your program and gives you information about the various tables and variables that the loader uses. Memory Mangler lets you execute a variety of Memory Manager routines and provides lists of the memory blocks that are in use, purged, and disposed of by the Memory Manager. Scrambler helps you find out if your application has incorrectly dereferenced a memory handle by not having first locked the handle.

The GS/OS Exerciser, also included in this package, lets you "exercise" GS/OS by practicing its calls from the keyboard. This utility is supplied both as an application and as a CDA.

√ **Special licensing note:** Before you can ship products that include GSBug, you must get a license from Apple Computer Software Licensing, 20525 Mariani Ave., M/S 38-I, Cupertino, CA 95014
√ **System requirements:** An Apple IIGS computer.
√ **Product contents:** One Apple II disk and one 140-page manual.
A0037LL/A 270,00F

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Programmer's Online Companion, Apple IIGS Version

Addison-Wesley Publishing Company
For those who use the Apple IIGS Toolbox, this on-line reference utility is a welcome addition to all programming tools. This is a classic desk accessory accessed from within any development system through the desk accessory menu. From there, the Toolbox calls can be accessed quickly, then copied and pasted directly into source code. The language editor remains active at all times. Typing errors are virtually eliminated.

√ **System requirements:** An Apple IIGS computer with at least 150K of memory beyond that required by the development system.
T0189LL/A 150,00F

Call Box (Toolbox Programming System)

So What Software
New!
This software is a programming enhancement for use with various languages which provides facilities for creating data template structures used by the Toolbox functions through WYSIWYG style editors. These editors are standard desktop applications. Any file type S16 application can be integrated into the system. Version 1.0 has Window, Dialog, Menu, and Image editors; the Window, Dialog and Menu editors use OMF2 relocatable code and relocatable resources as input and are able to output both Omi2 and Resource type in addition to APW/ORCA M type assembly source code. The Image editor is able to load PIC type files as well as Binary and Resource type data and output Binary, Resource and APW/ORCA M type assembly source code.

An Applesoft BASIC interface for the Toolbox is included which provides the Applesoft programmer access to the functions of the Toolbox. This driver uses a "parameter call" type of syntax and is capable of issuing specialized ProDOS 8 commands which accommodate certain toolbox functions. A superset of commonly used functions is provided with specialized syntax and full Toolbox access is also possible with the use of "generic" calls in this driver. An interactive demo/tutorial is also included in this package which demonstrates the use of this Toolbox driver.

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TML BASIC v. 1.10A

TML Systems

This complete BASIC programming environment combines a fully interactive editor and compiler with pull-down menus and windows plus complete access to the Apple IIGS Toolbox. As many as four programs can be open at any time and programs can be compiled to memory or disk. Program size is limited only to the total available internal and disk memory. Also included is a built-in debugger for error detection. TML BASIC v. 1.10A creates stand-alone BASIC applications and is GS/OS compatible.

T0013LL/A

125,00F

C

ORCA/C

Byte Works, Inc.

ORCA/C is the only ANSI C compiler available on the Apple IIGS. It is powerful enough for the professional programmer, yet so easy to use that the beginner will have no trouble using it to learn C. Sophisticated compiler optimizations enhance the speed of programs and compact the code. Debugging is fast and painless with the source-level debugger; you can view program variables and watch their values change during execution, set and clear break points, and step, trace, and execute some or all of your program at full speed.

The package comes with two environments: a Macintosh-like desktop development system and a UNIX-like shell environment. The Desktop features pull-down menus, multiple windows, and full access to the expandable and programmable shell.

ORCA/C features function prototyping and standard ANSI C libraries, plus numerous extensions to support the Apple IIGS Toolbox. A separate samples disk filled with source code provides you with examples of NDAs, CDAs, and text and desktop programs, giving you a head start on your Apple IIGS C programming.

ORCA/C is compatible with APW C so you can port your old programs with little effort.

√ **System requirements:** An Apple IIGS computer with at least 1MB of RAM and one 3.5-inch disk drive.

√ **Product contents:** Three 3.5-inch disks and one 369-page manual.

T0299LL/A

350,00F

Pascal

ORCA/Pascal

Byte Works, Inc.

ORCA/Pascal is a complete, stand-alone ISO/ANSI standard compiler plus extensions. Extensions include UCSD-style units for elegance in modularization, in-line tool calls, type casting, pointer operations, powerful compiler directives, an OTHERWISE clause in CASE statements, additional data types of longint, double precision, and byte; both C- and Pascal-type strings with numerous built-in string functions, bit-manipulation operations, and the ability to redirect output anywhere desired; and the ability to call routines written in any APW-compatible language.

ORCA/Pascal comes with both the popular Desktop environment and the traditional full-screen text editor. The Desktop features a source-level debugger: programmers can step, trace, set auto-go and break points, and specify variables they wish to track. The Desktop contains a special graphics window so users can see graphics output without having to leave their desktop. The number of open windows is limited only by available memory.

Also included are GS/OS, a standard linker, system libraries, a text editor, full support for the Apple IIGS Toolbox interface files, and a separate disk with free samples.

√ **System requirements:** An Apple IIGS computer. The text version requires 768K of RAM. The Desktop and debugger each require 1MB of RAM.

T0012LL/A

350,00F

TML Pascal II for the Apple IIGS v. 1.0

TML Systems

TML Pascal II is a complete Pascal programming language that combines a fully interactive editor and compiler with pull-down menus and windows. Complete support for Apple's System Software v. 5.0 and GS/OS is also provided. Perhaps the most significant feature of TML Pascal II is its resource editor, which enables programmers to graphically define the menus, windows, dialogs, icons, and other features that are so important to creating Apple IIGS applications.

Other features include a WYSIWYG text editor supporting an unlimited number of open windows at one time, user-selected fonts and font sizes, undo editing, support for files greater than 32K in size, and a built-in debugger for error detection. Complete GS/OS Toolbox interfaces are also included. Program size is limited only to total available internal and disk memory. Use TML Pascal II to create stand-alone Apple IIGS applications and both new and classic desk accessories.

√ **System requirements:** An Apple IIGS computer with at least 768K of RAM and one 3.5-inch disk drive.

T0343LL/A

125,00F

TML Source-Code Library II for the Apple IIGS v. 1.0

TML Systems

This library is a complete set of more than 15 example programs written in TML Pascal II, including programs using QuickDraw, menus, dialogs, Desk Manager, sound, fonts, windows, note synthesizer, desk accessories, events, and much more. TML Source-Code Library II is designed to save any TML Pascal II programmer using TML Pascal II v. 1.0 months of time learning how to program the Apple IIGS Toolbox.

T0344LL/A

150,00F

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—more Apple IIGS listings on next page

All of the separate facets of this system are tied together with a desktop style launching shell which acts as a distributor for accessing these features as well as containing several utilities to aid in the developer's programming tasks. This system is designed to be expandable in order to encompass newer functional components.

√ **System requirements:** An Apple IIGS with 1MB of RAM, Apple IIGS System Disk v.5.0 or later, one or two disk drives and/or hard drive.

√ **Product contents:** Three 3.5-inch Apple IIGS disks and one manual

T0378LL/A

ICONIX for the Apple IIGS

So What Software

ICONIX is a Super Hi-Res graphics and animation interface for Applesoft and the Apple IIGS. Sixteen new commands for Applesoft link your BASIC programs to the Super Hi-Res screen with peek, poke, and call commands. You can plot 4,096 colors in 320 mode; edit, plot, float, or animate icons; and plot Super Hi-Res fonts in any color.

Use the mouse-linked cursor and color or inverse selector boxes to create your menus or screen environments. BLOAD Super Hi-Res image files to any bank in memory from ProDOS 8. Increase the potential size of your Applesoft programs by 16K and still have room for exciting animation and graphics.

ICONIX for the Apple IIGS is menu driven and comes on a non-copy protected 3.5-inch disk. The program's instructions, tutorials, and programming tips are included on the disk.

√ **System requirements:** An Apple IIGS computer with a 3.5-inch drive.

√ **Product contents:** One 3.5-inch disk and a user manual.

T0295LL/A

SONIX for the Apple IIGS

So What Software

SONIX for the Apple IIGS enables you to use all the features of the Apple IIGS computer's built-in Ensoniq synthesizer from BASIC under ProDOS 8.

SONIX's two powerful editors and three special user interfaces create a full-function sound and music environment you can control from your own BASIC programs with just a peek, poke, and a call. Included are a waveform editor, 30-voice music editor, 30-voice sequencer, our exclusive Longloader data-handling utility, BASIC interface, and construction plans for an inexpensive and reliable digitizer pre-amp for sampling sound.

SONIX for the Apple IIGS is menu driven and comes on a non-copy-protected 3.5-inch disk. Full instructions, tutorials, sound library, and programming tips are all on the SONIX disk.

√ **System requirements:** An Apple IIGS computer and a 3.5-inch disk drive.

√ **Product contents:** One 3.5-inch disk and a user manual.

T0296LL/A

System Software

Apple IIGS System Disk v. 5.0.2

Apple Computer, Inc.

Class 1

This product contains the most recent release of the Apple IIGS system software, including GS/OS. This version supports networking with the Apple IIGS AppleShare File Server. The package contains a 30-page release note that summarizes program bug fixes and additions to the system software.

For complete information on GS/OS, you need the *GS/OS Reference*, Volumes 1 and 2, Beta Drafts. For complete information on all tool call changes since the compilation of the Apple IIGS Toolbox Reference, you need the *Apple IIGS Toolbox Reference*, Volume 3, Beta Draft. All these documents are available separately from APDA.

√ **Special user note:** This product is designed for developers and does not contain the end-user documentation. The end-user product is available from your authorized Apple dealers.

√ **Special licensing note:** Before you can ship Apple IIGS System Software v. 5.0.2 with your product, you must obtain a license from Apple Computer Software Licensing, 20525 Mariani Ave., M/S 38-I, Cupertino, CA 95014

√ **System requirements:** An Apple IIGS computer with 512K of RAM; 768K of RAM total is required for AppleShare.

√ **Product contents:** Two 3.5-inch Apple IIGS disks and 44 pages of release notes.

A2Z1002/B

Apple IIGS Video Keyboard v. 1.0B1

Apple Computer, Inc.

Class 1B New!

Use

The Apple IIGS Video Keyboard is a new desk accessory for the Apple IIGS that provides on-screen emulation of a physical keyboard. Its main purpose is to provide an alternative means for entering text data into Apple IIGS desktop applications using only a pointing device.

Audience

The Apple IIGS Video Keyboard has been introduced for developers who have requested information on this product's adaptability with their specific software applications. This is an adaptive tool, allowing people who can not use a standard keyboard to use the mouse to click keys on a keyboard from the screen of the computer.

Description

Video Keyboard has all the functionality of a physical keyboard and its use is transparent to the system, making it useful in situations where a hardware keyboard is impractical (i.e. adaptive access situations).

√ **Special user note:** This product is being made available for developers to test their software for compatibility.

√ **System requirements:** An Apple IIGS computer with at least 1MB of RAM and running System 5.0.2 or later.

√ **Product contents:** One 10-page manual and one 3.5-inch disk.

A0028LL/A

Technical Notes

1985-1988 Apple II Technical Notes
Apple Computer, Inc.
Class 1
These technical notes cover all Apple II computers and were completely revised and updated by Developer Technical Support, creating this complete set. (500 pages)
A0010LL/A

1985–1988 Apple II Technical Notes, Disk Version
Apple Computer, Inc.
Class 1
These technical notes cover all Apple II computers and were completely revised and updated by Developer Technical Support, creating this complete set in text file format on Apple II ProDOS disks.
√ **Product contents:** Two Apple II 3.5-inch disks and 60 pages.
A0020LL/A

1989 Apple II Technical Notes
Apple Computer, Inc.
Class 1
This compilation of technical notes for 1989 covers all Apple II computer models.
A0022LL/A

1989 Apple II Technical Notes, Disk Version
Apple Computer, Inc.
Class 1
This compilation of technical notes for 1989 covers all Apple II computers and is supplied in text file format on Apple II ProDOS disks.
A0023LL/A

1990 Apple II Technical Notes
Apple Computer, Inc.
Class 1 New!
This compilation of technical notes are sent out, as released, to purchasers of this subscription. These notes cover all Apple II computer models.
A0233LL/A

1990 Apple II Technical Notes, Disk Version
Apple Computer, Inc.
Class 1 New!
The *1990 Apple II Technical Notes* are sent out, as released, to purchasers of this subscription. These notes cover all Apple II machines. The disk version is supplied on Apple II ProDOS disks in text file format.
A0234LL/A

Books and References

Apple IIGS Assembler Toolbox Quick Reference
Apple Computer, Inc.—1988
Class 1
The *Apple IIGS Assembler Toolbox Quick Reference* is a summary of the Toolbox calls, shown as used from assembly language, up to date for System Disk 3.2. The entries include the call name, parameters, and a short description of the call. This quick reference summarizes the 1,476 pages of the *Apple IIGS Toolbox Reference* in a compact document, but does not replace it: not enough detail is supplied to use this reference as a stand-alone product. (150 pages)
A0018LL/A

Apple IIGS C Toolbox Quick Reference
Apple Computer, Inc.—1988
Class 1
The *Apple IIGS C Toolbox Quick Reference* is the most recent summary of the Toolbox calls, shown as used from C, for System Disk v. 3.2. The entries include the call name, parameters, and a short description of the call. This quick reference summarizes the 1,476 pages of the *Apple IIGS Toolbox Reference* in a compact document, but does not replace it: not enough detail is supplied to use this reference as a stand-alone product. (150 pages)
A0019LL/A

Apple IIGS Firmware Reference
Addison-Wesley Publishing Company—1987
by Apple Computer, Inc.
The *Apple IIGS Firmware Reference* provides an extensive description of the internal operations of the Apple IIGS and its firmware facilities. It begins with an overview of the firmware and then offers in-depth information on how to use the firmware to access the system monitor, mini-assembler, disassembler, keyboard, mouse, video displays, serial ports, and disk drives. Appendixes demonstrate methods of including firmware calls in programs. (352 pages)
A2G0054

Apple IIGS Firmware Reference 1MB Apple IIGS Update
Apple Computer, Inc.
Class 1 New!
The firmware of the new 1MB Apple IIGS is somewhat different than the firmware of the original Apple IIGS. This reference describes all the new features including the System Monitor and Mini-Debugger commands as well as the changes made to the SmartPort firmware and the keyboard interface. For a complete description of all firmware features you will also need the *Apple IIGS Firmware Reference* (Addison-Wesley, 1989–see A2G0054 above). (58 pages)
A2G0054/A

Apple IIGS Hardware Reference
Addison-Wesley Publishing Company—1987
by Apple Computer, Inc.
Illustrated with photographs and detailed schematics, this reference presents a comprehensive description of the Apple IIGS hardware. In

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addition, the manual provides detailed information on the use of input devices, video displays, disk drives, serial ports, and sound and graphics capabilities. This volume, along with the *Apple IIGS Firmware Reference*, provides authoritative information for assembly language programmers and hardware designers. (312 Pages)
A2G0055/A

Apple IIGS ProDOS 16 Reference

Addison-Wesley Publishing Company—1987
by Apple Computer, Inc.
This guide documents the ProDOS 16 operating system. In addition, it describes the System Loader, a programming tool that works with ProDOS 16 to load, unload, and manipulate program segments. The 3.5-inch disk included with the book contains ProDOS 16 and an exerciser program that allows programmers to practice ProDOS calls without writing a system program.
Product contents: One 3.5-inch Apple II disk and a 360-page manual.
A2G0056

Apple IIGS Toolbox Reference, Volumes I and II

Addison-Wesley Publishing Company—1987
by Apple Computer, Inc.
Together, these two volumes provide a comprehensive guide to the Apple IIGS Toolbox which is composed of over 800 ready-to-use routines that enable programmers to comply with the Apple desktop interface standards and access the capabilities of the Apple IIGS. Organized alphabetically by tool set name, each chapter includes an overview of all the routines in the set, a complete description of each routine, and a summary of constants, data structures, and errors. Volume I contains 776 pages. Volume II contains 700 pages.
***Apple IIGS Toolbox Reference*, Volume I A2G0057**

***Apple IIGS Toolbox Reference*, Volume II A2G0058**

Apple IIGS Toolbox Reference, Volume 3, Beta Draft

Apple Computer, Inc.
Class III
This manual supplements the *Apple IIGS Toolbox Reference*, Volumes I and II listed on the previous page. It covers changes to the Apple IIGS Toolbox since Apple IIGS System Software v. 3.2, and includes new features of Apple IIGS System Software versions 4.0 and 5.0.

New information in this manual covers resources, menus, controls, text edit, and windows. This package also covers the sound tools in more detail than previous notes. (940 pages)
A0229LL/A

GS/OS Reference, Volume 1, Beta Draft

Apple Computer, Inc.—1988
Class III
This beta reference volume describes how applications interact with GS/OS, the new Apple IIGS operating system. This draft details all application-level GS/OS calls and documents the file system translators (FSTs).

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GS/OS replaces ProDOS 16 as the preferred operating system for the Apple IIGS. GS/OS offers faster execution, multiple file-system access, file access to character devices, and direct device access. The new operating system also provides for device-independence and compatibility with large GS/OS memory space, as well as compatibility with standard Apple II (ProDOS 8–based) and early Apple IIGS (ProDOS 16–based) applications. Included with this package is a GS/OS call exerciser. This program allows developers to experiment with the new file system calls.
Product contents: One 3.5-inch Apple II disk and one 352-page manual.
A2F2037

GS/OS Reference, Volume 2, Beta Draft

Apple Computer, Inc.—1989
Class III
This beta reference volume describes the GS/OS application interface to drivers and documents all device calls, describes the individual GS/OS device drivers that applications can call, and describes the driver interface to GS/OS. The draft shows how to design and write a device driver and documents all calls a driver must accept. Additionally, it describes how a driver can get needed information from GS/OS, the procedures to write and install GS/OS interrupt and signal handlers, and the code segments that execute automatically in response to hardware or software requests. (548 pages)
A0008LL/A

Programmer's Introduction to the Apple IIGS

Addison-Wesley Publishing Company—1988
by Apple Computer, Inc.
This guide explains essential concepts and provides practical advice for programming the Apple IIGS. Three versions of a functioning sample program in 65816 assembly language, C, and Pascal demonstrate crucial Apple IIGS programming topics such as event-driven programming, the Apple Desktop Interface, and effective use of the Apple IIGS Toolbox. Other topics include file handling, memory management, and writing specialized programs such as desk accessories. (544 pages)
A2G0060

Technical Introduction to the Apple IIGS

Addison-Wesley Publishing Company—1986
by Apple Computer, Inc.
The Technical Introduction to the Apple IIGS provides programmers and sophisticated users with numerous insights into the inner workings of the Apple IIGS. The book presents an overview of the general design, system architecture, programming environments, Toolbox, graphics modes, and sound capabilities. It also serves as an introduction to the entire series of Apple IIGS technical manuals.
A2G0062

Apple IIGS Assembly-Language Programming

Bantam Books—1987
by Leo J. Scanlon
Providing a comprehensive introduction to assembly-language programming for the Apple IIGS computer, this book includes complete coverage of the 65816 microprocessor's instruction set,

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arranged in logical groups for quick learning and easy reference; step-by-step procedures for using APW (Apple IIGS Programmer's Workshop); access to the built-in Apple IIGS Toolbox, which can save you hours of programming time with its pre-programming functions and capabilities; practical programming examples for displaying graphics, windows, menus, and controls; and valuable reference tables and helpful illustrations.

For the reader who has done some programming in BASIC or another high-level language, this book provides a complete, easy-to-read introduction to the machine's Toolbox and shows how to harness its full power through assembly language. (448 pages)
T0135LL/A

225,00F

Apple IIGS Technical Reference

Osborne/McGraw-Hill—1987
by Michael Fischer
This book looks inside the Apple IIGS and gives serious programmers detailed information on all aspects of its architecture. It covers the software features of the entire system, including the powerful Toolbox of the Apple IIGS. It also covers programming with color graphics, sound, and desk accessories are thoroughly covered. (695 pages)
T0136LL/A

180,00F

Exploring the Apple IIGS

Addison-Wesley Publishing Company—1987
by Gary B. Little
This is an in-depth guidebook to Toolbox programming on the Apple IIGS , for assembly-language programmers. It includes a discussion of the architecture and capabilities of the 65816 microprocessor, software development environments and utilities, APW (Apple IIGS Programmer's Workshop), file management with ProDOS 16, memory management, use of Super Hi-Res windows and menus, and event handling. (552 pages)
T0137LL/A

207,00F

Exploring Apple GS/OS and ProDOS 8

Addison-Wesley Publishing Company—1989
by Gary B. Little
This guide presents sophisticated programming techniques for the new GS/OS operating system for the Apple IIGS, as well as for the ProDOS 8 operating system for the Apple IIe and Apple IIc. It is a comprehensive guide to the many features of the GS/OS and ProDOS 8 operating systems and presents techniques for experienced assembly-language programmers. It covers such essential topics as file management, the Machine Language Interface, BASIC.SYSTEM programming, communicating with the Smartport controller, interrupts, disk drivers, and clock drivers. (384 pages)
T0190LL/A

198,00F

Programming the 65816, Including the 6502, 65C02, and 65802

Brady Books—1986
by Ron Lichty and David Eyes
The next generation of the 6500 series is discussed in this book, which covers advanced programming topics. The book details the programming strengths and differences of the 16-bit 65816, 6502 and 65C02; explains how to take advantage of the 16-bit capabilities of the 65816; and discusses how to program with minimal frustration. This resource includes a brief review of basic concepts, architecture, and logical operations. (611 pages)
T0139LL/A

225,00F

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Programming the Apple IIGS in Assembly-Language

Brady Books—1989
by Ron Lichty and David Eyes
Whether in the hands of a hobbyist or a professional programmer, this step-by-step approach provides fundamental tools necessary each time an Apple IIGS application is created in 65816 assembly language. It covers 65816 assembly-language programming concepts; using the APW development environment to develop for the Apple IIGS Toolbox; and Apple IIGS system architecture for advanced project development. The learning process is managed through the development (in stages) of a "Hello World" program into a complete Apple IIGS desktop application with the now-standard menu bar and multiple, sizable, scrollable windows. (550 pages)
T0252LL/A

198,00F

The Disk: Programming the Apple IIGS in Assembly-Language

Programmer's Source—1989
by Ron Lichty and David Eyes
The book *Programming the Apple IIGS in Assembly-Language*, by Ron Lichty and David Eyes, provides an easy-to-follow, complete, step-by-step guide to creating full-fledged Apple IIGS applications. This product is the disk containing the book's "Hello World" program, which is developed in stages from an eight-line program that prints on the text screen to a full-blown desktop program with menu bar, dialogs, icons, and multiple, sizable, scrollable windows.

This disk contains assembly source for "Hello World" for every point at which the book suggests that source code can be assembled and linked, from Chapter 3 through Chapter 9. In addition, the disk contains the EXEC file MACGENIT and the macro file M16.MYUTILS. The disk also contains assembled versions of the "Hello World" program.

- **System requirements:** An Apple IIGS computer running v. 1.0 or later of either APW or ORCA/M.
- **Product contents:** One 3.5-inch Apple II disk and three pages of notes.

T0294LL/A

190,00F

Programming the Apple IIGS in C and Assembly Language

Howard Sams Publishing Company—1987
by Mark Andrews
Readers are allowed to take advantage of the added power, speed, graphics, and sound capabilities of the Apple IIGS. Programmers will read how to program the Apple IIGS in C as well as how to integrate assembly language to speed up or "supercharge" programs. The first half of the book is devoted to basic programming techniques and to an overall look at the Apple IIGS. The second half concentrates on intermediate and advanced programming techniques and is complete with useful type-and-run programs. (448 pages)
T0140LL/A

171,00F