New from Digital Research® for FlexOS™ Users
FlexOS Release 2 -- Fast Screen Updates, VGA Support
FlexVIEW™-- Faster, Easier Application Debugging
X/GEM®™ 1.0 -- Multitasking Graphics

Dear FlexOS User

Since the 1.42 release, FlexOS has undergone major improvements and enhancements. Most of the effort was focused on the console system--rebuilding the resource manager and drivers and developing the X/GEM graphics extension. And of course we've fixed a lot of bugs too. We're sure you'll be pleased with the results. In addition, we've produced a source level debugger to help you produce better applications faster. Each of the new products and ordering instructions are explained below.

FlexOS 2.1

Those of you familiar with FlexOS will be astounded by the improvements from the new console system:
- screen updates over twice as fast
- a driver that automatically identifies the display adaptor and sets the resolution accordingly
- VGA, EGA, CGA, Hercules™, and monochrome adaptors support
- Expanded WRITE and SPECIAL functions with comprehensive drawing and VDI primitives
- an open architecture designed to take full advantage of graphics coprocessors

We've also been working on the programming environment. Additional new features you'll find in FlexOS 2.1 include:
- Expanded shared run-time library (SRTL) support, including inter-SRTL cross-referencing and a SRTL status table to help you monitor their use.
- An overlay manager that reduces the overhead of coding and using overlays
- Support for subtasks--processes spawned by applications that share the same memory but in all other respects have their own context
- Streamlined on-line reference system
- Updated documentation

Of course FlexOS 2.1 is 100% compatible with previous versions so existing applications and drivers are portable to the new system without modification.

FlexOS 2.1 update kits are available today. Each update kit includes complete replacement software--system, tools, and utilities--for your Programmer's Toolkit (PTK) or System Builder's Kit (SBK) and a new set of manuals. In each FlexOS 286 PTK, FlexOS 286 SBK, and FlexOS 386 SBK update, we also include a free MetaWare™ High C™ 286 update to the recently released version 1.5 (a $90 value). The price of the FlexOS update kit is $250. You must use the attached form to order the update.

FlexVIEW

FlexVIEW is our source level debugger for FlexOS applications. Many software tools force programmers to fit their program and work habits into the paradigm the tools themselves use. We designed FlexVIEW to let you program and debug in your own style. While traditional debuggers support just a machine-language interpretation of program code and display data in inconvenient, restricted formats, FlexVIEW lets you see your source code alongside the binary code to see the correspondence between the two. Another key feature: FlexVIEW displays the data at a location specified according to its type; if the named data is a structure, for example, the entire structure is displayed.

Other FlexVIEW features include:

- Individually selectable and sizable windows for the source code, assembly code, data structures, error messages, register contents, memory locations, application output, and help information
- Comprehensive set of commands to control program execution, manage breakpoints, display code and data, watch and manipulate memory, and more.
- Individually definable command macros
- Executable command scripts

Two versions of FlexVIEW have been developed: one for application development based on our IOMF tools and the other for applications based on our COFF tools. Both versions are provided when you purchase FlexVIEW.

Note: The FlexVIEW version for use with IOMF-based applications requires version 1.5 of the MetaWare High C compiler for the 286. For a limited time, we will include a free MetaWare 1.5 update with your purchase of FlexVIEW. You must use the accompanying form to take advantage of this offer.

X/GEM

Another exciting addition to FlexOS is **X/GEM**, a graphics extension designed to be portable to any multitasking operating system with graphics. The X/GEM graphics environment is based on the GEM function set--a two layered architecture that provides Virtual Device Interface (VDI) graphics primitives in one set and another set of Application Environment Services (AES) for application, window, menu, event, object, resource, and shell management. Applications developed for the GEM® environment are ported quickly and easily to X/GEM. The first implementation of X/GEM is on FlexOS. Programmer's Toolkits and System Builder's Kits will be available in May. Both kits include

- FlexOS system with graphics device drivers
- shared run-time libraries for the VDI and AES functions
- an application server for loading and managing graphics- and character-based applications
- Desktop and Output applications
- Resource Construction Set, a handy utility for creating menus, forms and alerts

If you want to see X/GEM running before you buy a kit, order a **X/GEM for FlexOS Evaluation Kit**. The kit contains a diskette with loadable X/GEM on FlexOS executable on a standard personal computer with Hercules, EGA, or VGA adaptors, sample applications demonstrating multitasking graphics, and full FlexOS and X/GEM user and programmer documentation. The kit cost is $195 and fully creditable toward the purchase of a FlexOS or X/GEM Programmer's Toolkit or System Builder's Kit.

FlexOS has come a long way since the first release in 1985. FlexOS 2.1 gives you a flexible and powerful platform for a broad range of applications. Where else can you get
- multitasking in protected mode
- fast real-time response
- sophisticated file security features
- comprehensive windowing and graphics functions
- connectivity to DOS and UNIX environments
- flexible, open architecture with dynamic configuration

If you have any questions about FlexOS, the update kits and their contents, FlexVIEW, X/GEM, or any of the Digital Research products please call the sales office nearest you. In the US, call our Santa Clara office at 408-982-0700.

How to Order

Use the attached order form to purchase the FlexOS™ 286 or FlexOS™ 386 2.1 update, FlexVIEW, or X/GEM kits. You must use this form to get the High C 286 update with your FlexOS or FlexVIEW order. The FlexOS 2.1 update kits and FlexVIEW are available today. The X/GEM for FlexOS Evaluation Kit and X/GEM development packages will be available in May. To file your order, mail it to the address listed on the form. Do not phone the order in.

Ordering Dependencies

FlexOS 2.1: The updates are sold according to the software you purchased in the past. For example, if you originally purchased a FlexOS 286 System Builder's Kit, order the FlexOS 286 System Builder's Kit Update. Similarly, if you originally purchased a FlexOS 386 Programmer's Toolkit, order the FlexOS 386 Programmer's Toolkit Update. Note that you cannot purchase a System Builder's kit update if you originally purchased a Programmer's Toolkit.

FlexVIEW 1.0: FlexVIEW runs on computers running FlexOS versions 1.42 and later. Separate versions of the debugger are provided in the package for IOMF and COFF development environments. You must have version 1.5 of the High C/286 (IOMF) compiler to use FlexVIEW; you must have at least the 1.4 version of High C/386 (COFF) to use FlexVIEW.

X/GEM for FlexOS: To run this software you need an IBM or compatible personal computer with at least 2.5 megabytes of RAM and an EGA, VGA, or Hercules graphics adaptor.

X/GEM Development Packages: You must have a FlexOS version 2.1 Programmer's Toolkit to purchase an X/GEM Programmer's Toolkit; a FlexOS version 2.1 System Builder's Kit to purchase an X/GEM System Builder's Kit. We recommend a minimum of 2.5 megabytes RAM for X/GEM application and/or driver development.

Important: Each FlexOS 286 and FlexOS 386 Programmer's Toolkit and System Builder's Kit update and FlexVIEW includes a free version 1.5 update for your High C 286 (a $90 value). To get the update, we must have the serial number of your compiler. Please enter the serial number on the order form. The updates will be shipped to you by MetaWare.

If paying by check or money order, please enclose payment with the order. Checks and money orders must be in U.S. currency and drawn on a U.S. bank. No CODs accepted. If using a purchase order, the purchase order must accompany this form. Allow 3 - 4 weeks for delivery. For faster delivery, use a credit card. Limit of one update kit for each existing Programmer's Toolkit or System Builder's Kit. Prices, terms, and conditions of upgrade offer, Programmer's Toolkits, and System Builder's Kits are subject to change without notice.These prices are valid only in the US.

FlexOS 2.1 Update, FlexVIEW & X/GEM Order Form

	Product Code	Price	Qty	
FlexOS 286 V2.1 Programmer's Toolkit Update	1160-DA-BA	$250	___	_____
High C 286 serial number _____	4519-DA-BA			
FlexOS 286 V2.1 System Builder's Kit Update	1161-DA-BA	$250	___	_____
High C 286 serial number _____	4519-DA-BA			
FlexOS 386 V2.1 Programmer's Toolkit Update	1162-DA-BA	$250	___	_____
High C 286 serial number _____	4519-DA-BA			
FlexOS 386 V2.1 System Builder's Kit Update	1163-DA-BA	$250	___	_____
High C 286 serial number _____	4519-DA-BA			
FlexVIEW source level debugger	1164-AA-BA	$595	___	_____
High C 286 serial number _____	4519-DA-BA			
X/GEM for FlexOS Evaluation Kit	1161-AE-BA	$195	___	_____
X/GEM 286 Programmer's Toolkit	1170-AA-BA-01	$795	___	_____
X/GEM 286 System Builder's Kit	1170-AA-BA-02	$795	___	_____
X/GEM 386 Programmer's Toolkit	1171-AA-BA-01	$995	___	_____
X/GEM 386 System Builder's Kit	1171-AA-BA-02	$995	___	_____

If you are ordering from any of these states please add the following sales tax:

CA	6%	MD	5%
DC	6%	NY	8.25%
IL	8%	TX	7.5%
MA	5%	VT	4%

Tax _____

Shipping & Handling
UPS ground $10.00
UPS Blue $15.00

Shipping _____

Total _____

Charge to:

☐ Check enclosed   ☐ Purchase order (must accompany order)
☐ American Express   ☐ Master Card   ☐ Visa

Card No. _____ Expiration date _____

Name of card holder _____

Signature _____

Name _____ Day time phone _____

Company _____

Shipping address _____
(Must be street address, kits cannot be shipped to a PO box.)

City _____ State _____ Zip _____

Mail orders to:

**Digital Research
Attention Order Processing
Box DRI
Monterey, CA 93942**