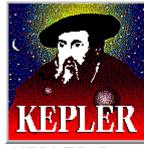TITLE

THE INSIDE NAME IN UPGRADES

Easy Reference

KEPLER Program Help

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What is KEPLER?

KEPLER stands for Kingston's Electronic Product Library and Easy Reference   (and, incidentally, is named after the 16th-century German astronomer Johannes Kepler.

KEPLER is a complete, comprehensive convenient and easy-to-use program that helps you figure out what the original configuration of your system was, identify the Kingston upgrade you need, and determine how to upgrade your system.   KEPLER provides you with all the information contained in Kingston's well-known Upgrade Manual.

Kingston hopes that KEPLER will serve you not only as an on-screen product catalogue, but as a general reference to assist you with all your upgrading needs.

As the Inside Name in Upgrading, Kingston strives to keep you informed and up to date and with various issues related to improving the compatibility, performance, reliability and connectivity of your personal computer, workstation and/or printer.

Kingston Technology's expansive product line includes Networking Adapters and Concentrators, Portable PC products, Processor Upgrades, a complete line of Storage Upgrades (disk controllers, drives, removable and portable external media enclosures and more), Fax/Modem accessories, Video Upgrades, MicroChannel products and of course, the largest lineup of Memory Products in the industry.

The sheer number of products offered by Kingston makes KEPLER a very important part of your desktop.   With easy quick and easy access to information on Kingston's product line, extending your system's lifetime and capabilities could never be so simple.

Johannes Kepler (1571-1630)

After many years of analyzing an   enormous amount of empirical data, the German astronomer Johannes Kepler formulated three laws that describe the motion of planets about the sun.   These laws may be stated as follows:

- **First Law**

   The orbit of each planet is an ellipse with the sun at one focus.

- **Second Law**

   The vector from the sun to a moving planet sweeps out area at a constant rate.

- **Third Law**

   If the time required for a planet to travel once around its elliptical orbit is T, and if the major axis of the ellipse is 2a, then T2 = ka3 for some constant k.

50 years later, Sir Isaac Newton (1642-1727) proved that Kepler's Laws were consequences of his famous Law of Universal Gravitation and Second Law of Motion.

The achievements of both men were monumental, because these laws clarified all astronomical observations that had been made up to that time.

About Us...

Kingston Technology Corporation is a designer and manufacturer of memory, processor, networking and storage upgrade products for personal computers, workstations and laser printers.   Kingston was founded in 1987 by John Tu and David Sun, and has grown from being the manufacturer of a single memory module into an international company with over 1,900 products and greater than $1 billion dollars in 1995.

According to a recent   Gallop Poll, Kingston was recognized as the leading independent third party manufacturer of memory products to the Fortune 1000 and Dun and Bradstreet businesses.   The *Washington Post* refers to Kingston as the "Return of the California Dream," and *PC Week*, *Inside* likens Kingston's management style to that of a family business to the tune of "It's a Wonderful Life."   Kingston has been featured in leading business journals and periodicals including *Fortune*, *Inc. Magazine*, *Newsweek*, *The Wall Street Journal*, and the *ElectronikPraxis*.   Ranked by *Inc. Magazine* in 1992 as the fastest growing privately held company in America, Kingston is now the world's largest manufacturer of upgrade products for PCs, laser printers, laptops and notebooks.

History

In 1987, the industry was faced with a supply shortage of memory modules for personal computers.   This shortage could have severely hampered computer manufacturer's and users' ability to get the memory necessary to upgrade their systems.   John Tu and David Sun were convinced that a solution to the shortage could be found.

Memory
Their answer was to design an industry standard Single In-Line Memory Module (SIMM) using an alternative chip that was more readily available.   Kingston soon began developing non-standard memory products for a variety of PCs, including those from IBM and Compaq, that employed proprietary memory module designs.

By 1989, the marketplace began to change.   As chips became readily available, memory upgrade products grew plentiful.   At this point, Kingston's policy of individual testing and the resulting quality assurance allowed the company to differentiate itself from its growing number of competitors.   Kingston also offered customers "Just-in-time" inventory, allowing customers to stock only what they needed.   By continuing to offer its customers reliable and cost-effective memory upgrade solutions, as well as a flexible stocking policy, Kingston solidified its leadership position in the marketplace.

Storage
Soon after the introduction of Kingston's first memory product, the company began shipping storage subsystems, a line of products that has grown to include Data Express removable disks systems and Data Silo, a family of SCSI interface storage subsystems.   The Kingston storage products group continues to grow in terms of product offerings, including storage subsystems with disk tapes, optical drives, and RAID.   In addition, revenues and share of market have consistently grown each year.

Processor Upgrades

In the fall of 1990, Kingston branched out into its second non-memory product line, processor upgrades.   Although this represented a change in its marketing strategy, processor upgrades were the next logical step in providing users with a total solution to their upgrade needs.   As of 1994, Kingston has developed nine separate processor upgrade products, and in 1995, plans to launch two new products into the market.

Networking

In the first quarter of 1993, Kingston introduced a new networking product line.   Kingston presently provides networking solutions for both Ethernet and Token-Ring environments. Kingston's Networking Group has introduced over 25 new products in the last two years. Kingston plans on at least five new networking products in the spring and summer of 1995, including a line of low-cost Ethernet hubs and adapter cards.   In the first quarter of 1995, Kingston announced that the networking unit would be recognized as a separate business unit employing a matrix management style to expand new business.

PC Storage

In the spring of 1994, Kingston introduced the Data Traveler, a portable hard disk drive, and followed with the DataPak 170 in the summer of 1994.   DataPak 170 and the newly introduced DataPak 260 are portable PC Card hard disk drives that allow portable computing users to enjoy the many advantages of PC Card technology.

To meet the challenges in today's high performance computing environment, Kingston Technology is continuing its commitment to meet its customer's needs by providing the most reliable, cost-effective solutions to their computing needs.

As hardware requirements growing to meet the demands of even more sophisticated computing, Kingston will remain committed to providing reliable, high-performance and cost-effective hardware products.

Distribution

Kingston's early unconventional approach to distributing its products was born of necessity. Kingston was a new company with a new type of product.   Up until Kingston began distributing their memory products in 1987, OEMs historically were the computer industry's main source for memory.   Understanding that it would take time for traditional PC distributors to embrace the new product concept, Kingston established an alternative channel.

Prior to 1987, John Tu and David Sun owned Camintonn Corporation, a manufacturer of upgrade products for DEC systems.   While at Camintonn, they had worked with a network of specialty distributors   in the workstation and minicomputer upgrade markets.   Mr. Tu and Mr. Sun persuaded these distributors to enter the PC upgrade market with Kingston products.

As Kingston's reputation for reliable products grew, so did its reputation among distributors and resellers.   As Kingston's product line grew, its distribution channels also expanded to ultimately include both traditional and non-traditional channels.

Today, Kingston's domestic channels include distributors such as Ingram Micro, Tech Data, Gates/Arrow, Merisel, major reseller chains such as CompuCom Systems, Vanstar, Entex, EDS Technical Products, Inacom, and MicroAge, and the new direct mail order channel

through catalogs as those produced by PCs Compleat and Insight.

An International Focus

Kingston also serves an international network of distributors in Europe, Asia, Africa, Australia and North and South America.   This worldwide channel currently represents over 3,000 reseller locations worldwide.   To provide technical support and marketing in the same time zones as many of our Japanese, Australian and European distributors and customers, Kingston has opened office in Japan, Australia and the latest overseas effort, a branch office in Munich, Germany which opened in January 1995.   Kingston has strategically focused on a worldwide market to expand its overall market share.

ISO 9001 Certified

With ISO 9001 (International Organization for Standardization) emerging as the worldwide standard for product and process quality, Kingston achieved certification in September, 1994.   ISO 9001 is a worldwide recognized quality system and those certified include companies such as IBM, Compaq, Digital Equipment, Hewlett-Packard and Toshiba.

Keeping in Touch with Kingston...

Contacts: A Summary

Kingston Technology Corporation

17600 Newhope Street	Main Voice: (714) 435-2600	Workstations: (800) 835-2545
Fountain Valley, CA 92708	Main Fax: (714) 435-2699	Storage Products: (800) 435-0642
		RMA: (800) 337-3719

Now, more than ever, it's easy to get important product information or talk with someone at Kingston.

You can receive useful product and technical support information as well as download software updates, including KEPLER, using any of the following four electronic methods:

World Wide Web
Our URL is: http://www.kingston.com

The Kingston BBS
Phone: (714) 435-2636
Up to 14.4Kb, 8 data, 1 stop, no parity

CompuServe
Just type: GO KINGSTON

RAMfax
Kingston's computer-generated fax data service. To learn more about any of the products Kingston offers via fax?   Dial toll-free, (800) 435-0056 (U.S. residents only)

If you would like to speak to one of our friendly Kingston Customer Service Representatives, call us toll free at (800) 337-8410.   They will be happy to answer any of your questions the over 1900 Memory, Processor Upgrades and Networking products manufactured and supported by Kingston.

Storage Products Specialists   -   Always Here to Help!

If you want to speak to one of our friendly Kingston Storage Products representatives, you can call (800) 435-0642.   They will be happy to answer any of your questions regarding any storage products Kingston manufactures and fully supports.

In addition, you can E-mail the Storage Products group via the Internet (storage@kingston.com).

Contacting Kingston - A Summary

Kingston Technology Corporation

17600 Newhope Street	Main Voice: (714) 435-2600	Workstations: (800) 835-2545
Fountain Valley, CA	Main Fax: (714) 435-2699	Storage Products: (800) 435-0642
92708		
		RMA: (800) 337-3719

To Better Assist You and Your Customers...

For...	Contact...	Telephone...
PC Memory	First Available!	(714) 435-2697 (800) 845-2545 sales@kingston.com
Workstation Memory Sales	First Available!	(714) 435-2618 workstations@kingston.com
Storage Products	First Available!	(714) 438-1850 storage@kingston.com
Technical Support	First Available!	(714) 435-2639
World Wide Web	(Online catalog, Weekly KEPLER updates, Tech support forum and helpful downloads).	http://www.kingston.com
BBS	(Weekly KEPLER updates, Tech support forum and helpful downloads).	(714) 435-2636 [8 data,1 stop, 0 parity]
Compuserve	(Weekly KEPLER updates, Tech support forum and helpful downloads).	'GO KINGSTON'
RAMfax	(Automated Fax-back on new product anouncements and informative technical articles).	(800) 435-0056 (714) 435-2677
Sales Literature	Madelyn Young	(714) 437-3349

What's New!

New Memory Products From Kingston Technology - August 1996

Kingston Technology release several new memory upgrades each week!. Some of the new products to look for in Kepler are.....

Kingston Technology
New Product Release Index
For the last 30 days as of : 08/05/96

Memory for Sun's Ultra Enterprise 1 - new model supported   (DOC: 4900)

Released	Kingston Part#	Description	Equiv Part#
07/10/96	KTS7001/32	32MB Kit	X7001A
07/10/96	KTS7001/64	64MB Kit	X7002A
07/10/96	KTS7001/128	128MB Kit	X7003A

Memory for Sun's Ultra Enterprise 2 - new model supported   (DOC: 4950)

Released	Kingston Part#	Description	Equiv Part#
07/10/96	KTS7001/32	32MB Kit	X7001A
07/10/96	KTS7001/64	64MB Kit	X7002A
07/10/96	KTS7001/128	128MB Kit	X7003A

Memory for IBM's Aptiva C23, C33, C55, C62, C67, C73, and C77 - New Models Supported. (DOC: 3727)

Released	Kingston Part#	Description	Equiv Part#
07/12/96	KTM7318/8	8MB Module	92G7318
07/12/96	KTM7318/16	16MB Module	92G7320
07/12/96	KTM7318/32	32MB Module	92G7322
07/12/96	KTM7318/64	64MB Module	92G7324

Memory for IBM's PC Server 720 (6842-xEx) and (6842-xDx) - New Models Supported.   (DOC: 3650)

Released	Kingston Part#	Description	Equiv Part#
07/12/96	KTM2939/8	8MB Module	94G2939, SM6008Y
07/12/96	KTM2939/16	16MB Module	94G2940, SM6016Y
07/12/96	KTM2939/32	32MB Module	94G2941, SM

Memory for Digital's HiNote VP Models LSS 5100, LSS 5120, and LTS5120 - New Models Supported.
(DOC: 2616)

Released	Kingston Part#	Description	Equiv Part#
07/16/96	KTV-HNVP/8	8MB Module	FR-PCP9M-AA
07/16/96	KTV-HNVP/16	16MB Module	FR-PCP9M-AB

32MB Module Now Available for Digital's HiNote Ultra II Series.   (DOC: 2662)

Released	Kingston Part#	Description	Equiv Part#
07/16/96	KTV-ULTRAII/32	32MB Module	n/a

Memory for Lexmark's Optra LaserPrinter N - New Model Supported.   (DOC: 3704)

Released	Kingston Part#	Description	Equiv Part#
07/16/96	KTM4079/4	4MB Module	1328363
07/16/96	KTM4079/8	8MB Module	1328365
07/16/96	KTM-OPT/16	16MB Module	1427322
07/16/96	KTM-OPT/32	32MB Module	1427323

Memory for Fujitsu's Milan, Monte Carlo, and Montego Notebook Computers   (DOC: 3100)

Released	Kingston Part#	Description	Equiv Part#
07/17/96	KFJ-MLN/8	8MB Module	FPCEM01A
07/17/96	KFJ-MLN/16	16MB Module	FPCEM02A

128MB Module for Apple's Power Macintosh 9500 Series   (DOC: 1714)

Released	Kingston Part#	Description	Equiv Part#
07/17/96	KTA604/128	128MB Module	n/a

256MB Kit for Compaq's ProLiant 5000 Series   (DOC: 2551)

Released	Kingston Part#	Description	Equiv Part#
07/17/96	KTC9282/256	256MB Kit	219284-001

128MB Kit for Compaq's Deskpro XL 6000 Series   (DOC: 2532)

Released	Kingston Part#	Description	Equiv Part#
07/17/96	KTC8417/128	128MB Kit	228419-001

32MB Kit Now Available for Texas Instruments' Extensa 510 and 515.   (DOC: 5204)

Released	Kingston Part#	Description	Equiv Part#
07/18/96	KTI-EXT510/32	32MB Kit	9805763-0003

Memory for Hitachi's C Series Notebook Computers   (DOC: 4200)

Released	Kingston Part#	Description	Equiv Part#
7/19/96	KHI-C/8	8MB Module	D3041A
7/19/96	KHI-C/16	16MB Module	D3042A

256MB Kit for Compaq's Deskpro XL 6000 Series   (DOC: 2532)

Released	Kingston Part#	Description	Equiv Part#
7/19/96	KTC8417/256	256MB Kit	228420-001

Memory for Acer's AcerNote Light 356, 358, 359, and 361   (DOC: 1231)

Released	Kingston Part#	Description	Equiv Part#
7/19/96	KAC361/8	8MB Kit	91.45010.010
7/19/96	KAC361/16	16MB Kit	91.45010.011
7/19/96	KAC361/32	32MB Kit	91.45010.012

Memory for Sun's Ultra Enterprise 150 - new model supported   (DOC: 4900)

Released	Kingston Part#	Description	Equiv Part#
7/19/96	KTS7001/32	32MB Kit	X7001A

```
7/19/96        KTS7001/64          64MB Kit                X7002A
7/19/96        KTS7001/128         128MB Kit               X7003A
```

32MB Module now available for IBM's ThinkPad 365X, 365XD, and 560. (DOC: 3623)
```
Released       Kingston Part#      Description             Equiv Part#
7/19/96        KTM760ELD/32         32MB Module            92G7342
```

Memory for Hewlett Packard's Vectra VA 6/180 and 6/200. (DOC: 3412)
```
Released       Kingston Part#      Description             Equiv Part#
7/19/96        KTH-VL4/8           8MB Kit                 D3646B
7/19/96        KTH-VL4/16          16MB Kit                D3647B
7/19/96        KTH-VL4/32          32MB Kit                D3648B
7/19/96        KTH-VL4/64          64MB Kit                D4543A
```

Memory for Hewlett Packard's Vectra XA 6/180 and 6/200. (DOC: 3416)
```
Released       Kingston Part#      Description             Equiv Part#
7/19/96        KTH-VL4/8           8MB Kit                 D3646B
7/19/96        KTH-VL4/16          16MB Kit                D3647B
7/19/96        KTH-VL4/32          32MB Kit                D3648B
7/19/96        KTH-VL4/64          64MB Kit                D4543A
7/19/96        KTH-WRAM/2          2MB Video Upgrade       D3557A
```

Memory for Dell's Latitude LM P100SD and P133ST. (DOC: 2825)
```
Released       Kingston Part#      Description             Equiv Part#
7/19/96        KTD-LM/8            8MB Kit                 n/a
7/19/96        KTD-LM/16           16MB Kit                n/a
7/19/96        KTD-LM/32           32MB Kit                n/a
```

32MB Module now available for IBM's ThinkPad 760E,760ED,760EL, and 760ELD. (DOC: 3622)
```
Released       Kingston Part#      Description             Equiv Part#
7/23/96        KTM760ELD/32         32MB Module            92G7342
```

Memory for Compaq's Deskpro 2000 Series   (DOC: 2534)
```
Released       Kingston Part#      Description             Equiv Part#
7/25/96        KTC-V3922/1         1MB Video Upgrade       213922-001
7/25/96        KTC2430/8           8MB Kit                 243011-002
7/25/96        KTC2430/16          16MB Kit                243012-002
7/25/96        KTC2430/32          32MB Kit                243013-002
7/25/96        KTC2430/64          64MB Kit                243014-002
```

Memory for Compaq's Deskpro 2000 6180/1200/CD   (DOC: 2535)
```
Released       Kingston Part#      Description             Equiv Part#
7/25/96        KTC-V3922/1         1MB Video Upgrade       213922-001
7/25/96        KTC2430/8           8MB Kit                 243011-002
7/25/96        KTC2430/16          16MB Kit                243012-002
7/25/96        KTC2430/32          32MB Kit                243013-002
7/25/96        KTC2430/64          64MB Kit                243014-002
```

Memory for Compaq's Deskpro 2000 6200/2500/CD   (DOC: 2536)
```
Released       Kingston Part#      Description             Equiv Part#
```

7/25/96	KTC2430/8	8MB Kit	243011-002
7/25/96	KTC2430/16	16MB Kit	243012-002
7/25/96	KTC2430/32	32MB Kit	243013-002
7/25/96	KTC2430/64	64MB Kit	243014-002
7/25/96	KTC-VML/2	2MB Video Upgrade	223335-001
7/25/96	KTC-VML/6	6MB Video Upgrade	223336-001

Memory for Compaq's Deskpro 4000 Series and 6000 Series   (DOC: 2533)

	Kingston Part#	Description	Equiv Part#
7/25/96	KTC2430/8	8MB Kit	243011-002
7/25/96	KTC2430/16	16MB Kit	243012-002
7/25/96	KTC2430/32	32MB Kit	243013-002
7/25/96	KTC2430/64	64MB Kit	243014-002
7/25/96	KTC-VML/2	2MB Video Upgrade	223335-001
7/25/96	KTC-VML/6	6MB Video Upgrade	223336-001

Kingston Networking Products

[Overview...]

• **EtheRx Family**

EtheRx PCMCIA Adapters

EtheRx 2100 Series Hardware- and Software-Configurable Ethernet Network Interface Adapters

EtheRx 2000+ Series Ethernet Network Interface Adapters

EtheRx EISA Architecture Bus Mastering Network Interface Adapters

EtheRx Pocket LAN - Dual Interface Pocket Ethernet Adapter

EtherRx Connectivity   -   Ethernet and Tranceivers

Ethernet PCI Network Interface Adapters
Ethernet LC Network Interface Adapters
Apple AAUI Adapters

• **TokenRx Family**

TokenRx Token Ring Network Interface Adapters for ISA and Micro Channel Systems

TokenRx PCMCIA Token Ring Network Interface Adapter

TokenRx Connectivity   - Token Ring Multistation Access Units

Networking Products Overview

In today's fast-paced world, reliable network connections are imperative.   When your network is down, your connection to those inside and outside your organization is broken.

Kingston's EtheRx family of certified, high-performance, cost effective, ISA and EISA Ethernet products offers dependable solutions to your connectivity needs. In addition to the 10Base-T, Thin-Coaxial, and Dual-Interface combination network interface cards, Kingston also offers network hubs, and transceivers.   The evolving EtheRx product line now includes a full line of Ethernet stackable and non-stackable hubs.

TokenRx is Kingston's family of IBM compatible Token Ring products that includes Adapters and MAUs. All TokenRx products are 100% IBM compatible and support IBM OS/2 Extended Edition, LAN Server, PC LAN, Novell Netware and all major network operating systems.

Kingston's networking adapters are individually tested and backed by a lifetime warranty. Call Kingston Sales for an update on this rapidly growing product line.

Kingston Solutions for Portable Computing

 EtheRx Pocket LAN - Dual Interface Pocket Ethernet Adapter

EtheRx PC CARD Type II Ethernet Adapters

TokenRx PC CARD Type II Token Ring Adapters

DataRex PC CARD Type II Data and Fax Modem

DataPak PC CARD Type III 170 and 260 MB Plug-In Hard Drives

Data Traveler "Hot-Swapable" Portable Hard Drive System

Portable Products Overview

As mobile computing has become more commonplace, Kingston has developed products designed to fill the needs of the portable user.

Like our new CD Anywhere. CD Anywhere easily installs into the parallel printer port of any IBM
PC-compatible desktop, laptop or notebook system providing quick and easy access to today's popular CD-ROM titles.

CD Anywhere Product Highlights

> The Easiest way to add a CD-ROM drive to your system
> Fastest quad speed CD-ROM drive solution in its class
> User-friendly QStartTM installation program and easy-to-follow user's manual
> Includes FastCDTM device drivers for maximum CD-ROM drive performance
> Equipped with parallel port 'pass-through' connection for uninterrupted printer use
> Portable, compact design makes it ideal for desktops, notebooks and laptops
> Easy front loading with no CD-caddy needed
> MPC-2 certified, Photo CD and CD Audio compliant
> Supports IBM PC-DOS and Microsoft MS-DOS 5.0 (and higher), Microsoft Windows 3.1 (and higher), OS/2 v.2.0 (and higher) and Microsoft Windows '95
> Equipped with both "Power" and "Active" LED indicators
> Supports SPP, BPP and EPP parallel port modes
> Optional EPP (Enhanced Parallel Port) available for optimum quad speed CD- ROM drive performance
> Free technical support

Systems Supported

> IBM PC-compatible 386SX and higher desktop, laptop and notebook systems

Data Traveler.......

Kingston's Data Traveler portable storage system provides increased disk capacity and storage portability for desktop, laptop and notebook systems. Available in 127MB or 209MB capacities, Data Traveler delivers unsurpassed storage expansion and flexibility.

The DataPak is Kingston's Type III PC Card Hard Drive that is available in 170MB and 260MB capacities.

EtheRx PC Card Ethernet adapters are available with 10Base-T and 10Base-2 interfaces and support all popular PC Card Type II compliant systems.

Kingston's   Dual-Interface Pocket Ethernet Adapter features both 10Base-Tand 10Base-2 connectors.

The DataRex PC Card 14.4Kbps Fax/Modem is the fastest, easiest and most inexpensive fax/modem available today. DataRex guarantees 100% seamless compatibility with your PC Card Type II compliant notebook or sub-notebook. All Kingston portable products offer free technical support and each are backed by Kingston's extensive warranties.

Kingston Processor Upgrades

Lightning 486:   DX2/66   Power for IBM PS/2 Models 70 and 80

MCMaster: 486DX2/50 Upgrade for IBM PS/2 Models 55, 56, 57 and 65

SLC Now!:   486SLC2/50, and 386SLC/20,25 Upgrades for IBM PS/2 Models 25/286, 30/286, 50, 50Z and 60

486/Now!:   33Mhz DX and SX Upgrades for IBM PS/2 Model P70 and Compaq Deskpro 386 Systems

New!!!
Lightning/486 for Clones - Provides 486 clock-doubled power for 386DX-based 25 and
          33mhz systems and provides 486 clock-tripled performance for 386DX-based
          16 or 20mhz systems.

TurboChip! - Provides 486 clock-tripled power for 486-based 16, 20, 25, or 33MHz desktop
          computers, converting these single-clocked systems into 486 powerhouses.

Processor Upgrades Overview

Kingston, the leader in processor upgrades, continues to find ways to save your system while saving you money and time. Rather than replacing your entire computer, simply install a Kingston processor upgrade to increase performance by up to ten times.

With MCMaster, Lightning 486, TurboChip and the IBM-designed SLC/Now!, you can easily boost your 286 or 386 computer to 486 performance.

Kingston's processor upgrades provide the power needed for today's software applications without the enormous expense and time investment of buying a new computer. All of Kingston's processor upgrades are backed by Kingston's lifetime warranty.

Kingston Storage Products

[Overview...]

- **Data Express DE100i**

- **Data Express DE300i**

- **Data Express DE100i-ex**

- **Data Express DE300i-ex**

- **Data Silo**

- **Data Silo Junior DS50**

- **Data Silo Midi DS75**

- **Data Silo Maxi DS100**

- **DataPak**   PC CARD Type III 170 and 260 MB Plug-In Hard Drives

- **Data Traveler** "Hot-Swapable" Portable Hard Drive System

- **Data Card**: Hard Disk and Memory on a single Micro Channel Expansion Board

Storage Products Overview

Kingston has created a full line of mass storage products that satisfy your need for dependable storage expansion devices at a maximum value.

Manufactured to endure the rigors of today's demanding computing environments, Kingston's Data Silo storage enclosures are designed for half-height, full-height 5.25" or 3.5" SCSI peripherals. Data Silo cabinets include support for single-ended and differential SCSI devices such as hard drives, optical drives and other SCSI devices including Kingston's Data Express removable mass storage subsystem.

The Data Express is a removable hard disk or DAT (Digital Audio Tape) subsystem that allows you to add a removable 2.5" or 3.5" hard drive or SCSI 4mm DAT device to your 5.25" half-height expansion bay, perfect for archiving your large files. Data Keeper storage devices are 4mm DAT or 8mm cartridge tape drives and subsystems specifically designed to satisfy the increasing demand for portable, secure, high-capacity tape backup systems.

Kingston's family of mass storage expansion products also includes the Data Card, a single expansion board that features up to 340MB of storage expansion along with up to 64MB of memory. If you need to easily transport your files and are using multiple systems, Data Traveler, Kingston's portable, hot-swapping storage expansion product, is perfect for all of your portable storage needs.

Kingston Micro Channel Products

Overview...

Lightning 486: - DX2/66   Power for IBM PS/2 Models 70 and 80

MCMaster - 486DX2/50 Upgrade for IBM PS/2 Models 55, 56, 57 and 65

SLC Now! - 486SLC2/50, and 386SLC/20,25 Upgrades for IBM PS/2 Models 25/286, 30/286, 50, 50Z and 60

TokenRx Token Ring Network Interface Adapters for ISA and Micro Channel Systems

TokenRx PCMCIA Token Ring Network Interface Adapter

Data Card - Hard Disk and Memory on a single Micro Channel Expansion Board

Micro Channel Products Overview

Kingston manufactures products that keep millions of Micro Channel systems up-to-date with memory upgrades, processor upgrades, storage enhancements and Token Ring networking products.

Add Kingston's experience with Micro Channel products dating back to the introduction of the architecture, and Kingston becomes the one manufacturer to count on for all of your Micro Channel requirements.

EtheRx **PCMCIA** Adapters

Compatibility, both system and network is the cornerstone of Kingston's EtheRx PCMCIA Ethernet adapters.   With Kingston's EtheRx, compatibility with all popular PCMCIA Type II compliant systems is guaranteed.   Our innovative dual-interface adapter is the only one of its kind to support both Twisted-Pair and Thin-Coaxial media within just one product.

Highlights

- Compatible with all popular PCMCIA Type II compliant systems

- Available in two versions: 10Base-T compatible and a dual-interface,version that supports both 10Base-T and 10Base-2 media

- Supports all popular Network Operating Systems including: Novell Netware, Microsoft, LAN Manager and Windows for Workgroups, Windows' 95 IBM LAN Server, Banyan Vines, FIFP PC/TCP and DEC Pathworks

- Rugged, laser-welded stainless steel case

- Lifetime Warranty

- Free Technical Support

Specifications

NETWORK INTERFACE STANDARDS   IEEE 802.3

NETWORK CONNECTIONS
     KNE-PCM/T   RJ-45/10Base-T
     KNE-PCM/M   RJ-45/10Base-T & BNC/Thin Coaxial

CABLE TYPE SUPPORTED
     KNE-PCM/T   Unshielded Twisted-Pair AWG 22, 24, 26
     KNE-PCM/M   Unshielded Twisted-Pair AWG 22, 24, 26 & RG-58/Coaxial Cable

PCMCIA STANDARD   PCMCIA Release 2.x Compliant

PCMCIA DRIVERS PROVIDED   Industry recognized Release 2.01 Card and Socket Services that support Hot Swapping for DOS and Windows

DIAGNOSTIC LEDS
     KNE-PCM/T   Data Traffic, Link Status
     KNE-PCM/M   Transmit, Receive, Collision, Link Status

DATA BUS WIDTH   16-bit

BUFFER MEMORY   16KB

DATA TRANSFER   Shared Memory (default) or Programmed I/O

SOFTWARE COMPATIBILITY	Novell Netware, Personal Netware, Microsoft LAN Manager, Windows for Workgroups, IBM LAN Server, Banyan Vines, PC/TCP, DEC Pathworks, as well as other Network Driver Interface Specifications (NDIS) compliant Network Operating Systems.
FORM FACTOR	Type II, 3.370" x 2.126" x 0. 196" (85nim x 54mm x 5mm)

WEIGHT
KNE-PCM/T	Card: 1. I oz., Media Access Module: 1.38oz.
KNE-PCM/M	Card: 1. I oz., Media Access Module: 1. 83 oz.

POWER CONSUMPTION
KNE-PCM/T	0.8 watts (typical), 1.2watts (maximum)
KNE-PCM/M	0.8watts (typical), 1.7 1 watts (maximum) Twisted-Pair 0.76watts(typical), 1.84 watts (maximum) Thin-Coaxial

ENVIRONMENTAL LIMITS:
Operating Temperature:	32°F to 122°F (0°C to 50°C)
Humidity:	10% to 80% non-condensing
Altitude:	3050m (10,000 feet) maximum
GOVERNMENT APPROVALS:	Part 15 FCC Rules for Class A certification, CISPR-22 Europe
WARRANTY:	Lifetime

EtheRx 2100 Series Hardware- and Software-Configurable Ethernet Network Interface Adapters

Kingston's EtheRx 2100 series of Network Interface Cards feature bus mastering technology for the utmost in Ethernet NIC performance.   EtheRx 2100 series NICs are available in either software or hardware configurable versions.   Both are available with three interface options: 10Base-T with an RJ-45 interface, 10Base-2 with a BNC interface, and a dual-interface version with both RJ-45 and BNC interfaces EtheRx NICs are supported by free technical support and a lifetime warranty.

Highlights

- Bus Master Direct Memory Access (DMA) for optimum performance

- Available in three versions: 10Base-T with an RJ-45 interface, 10Base-2 with a BNC interface and a ual-interface version that supports 10Base-T and 10Base-2 media with RJ-45 and BNC interfaces

- Both software configurable and jumper configurable versions available

- Support for all popular network operating systems with ODI, NDIS drivers for DOS and OS/2 packet drivers, SCO UNIX driver

- Lifetime warranty

- Free technical support

2100TH Series Hardware-Configurable Ethernet Network Interface Card Specifications

NETWORK INTERFACE STANDARD   IEEE 802.3

NETWORK INTERFACE CARDS
    KNE2100TH   RJ-45/Twisted-Pair
    KNE2102H   BNC/Thin-Coaxial
    KNE2121H   RJ-45/Twisted-Pair and BNC/Thin-Coaxial

CABLE TYPE SUPPORTED
    KNE2100TH   Unshielded Twisted-Pair (UTP) AWG 22, 24, 26
    KNE2102H   RG-58/Thin-Coaxial
    KNE2121H   Unshielded Twisted-Pair (UTP) and RG-58/Thin-Coaxial

OPERATING DISTANCE
    KNE2100TH   100m (328') maximum hub to node length
    KNE2102H   185m (600')
    KNE2121H   185m for RG-58 coaxila cable & I 00m UnshieldedTwisted-Pair

DATA TPANSFEP/BUS WIDTH & TYPE:
    KNE2100TH, KNE2102H,   Bus Master DMA/ 16 bit, AT Bus

KNE2121H

DIAGNOSTIC LEDS:	Link and Polarity Status
IRQ SETTINGS:	3, 4, 5, 9, 10, 11, 12 or 15 (Hardware Configured)
DMA:	3, 5, 6 or 7
I/O BASE ADDPESS:	300h, 320h, 340h or 360h
SOFTWARE COMPATIBILITY:	Novell Netware v4.x, 3.x, 2.x, Personal Netware Lite, Microsoft LAN Manager, Windows NT, Windows for Workgroups, IBM LAN Server, Artisoft LANtastic v4.x, 5.0 & 6.0, DEC's Pathworks, SCO UNIX v3.2.4 and Open Desktop v2.0
REMOTE BOOT PROM:	Optional
EMI:	FCC Class A
WARRANTY:	Lifetime

2100+ Series Software-Configurable Ethernet Network Interface Card Specifications

NETWORK INTERFACE STANDARD:	IEEE 802.3
NETWORK INTERFACE CAPDS:	
	RJ-45 Twisted Pair BNC, Thin Coaxial RJ-45 Twisted Pair and BNC/Thin Coaxial

CABLE TYPE SUPPORTED
KNE2100T+	Unshielded Twisted-Pair (UTP) AWG 22, 24, 26
KNE2102+	RG-58 / Thin-Coaxial
KNE2121+	Unshielded Twisted-Pair (UTP) and RG-58 / Thin-Coaxial

OPERATING DISTANCE:
KNE2100T+	100m (32 8') maximum hub to node length
KNE2102+	185m (600')
KNE2121 +	185m for RG-5 8 coaxila cable & I 00m Unshielded Twisted-Pair

DATA TPANSFER/BUS WIDTH & TYPE:
KNE2100T+, KNE2102+, KNE2121+	Bus Master DMA/ 1 6 bit, AT Bus

DIAGNOSTIC LEDS:	Link and Polarity Status
IRQ SET-FINGS:	3, 4, 5, 9, 10, 11, 12 or 15 (Software

Configured)

DMA:	3, 5, 6 or 7
I/O BASE ADDRESS:	300h, 320h, 340b or 360h
SOFTWARE COMPATIBILITY:	Novell Netware v4.x, 3.x, 2.x, Netware Lite, Microsoft LAN Manager, Windows NT, Windows for Workgroups, IBM LAN Server, Artisoft LANtastic v4.x. 5.0 & 6.0, DEC's Pathworks, SCO UNIX v3.2.4 and Open Desktop v2.0
REMOTE BOOT PROM:	Optional
EMI	FCC Class A
WARRANTY:	Lifetime

EtheRx 2000+ Series Ethernet Network Interface Adapters

Kingston brings together time-tested NE2000 compatibility and the ease of software configuration resulting in a Ethernet Network Interface Card that exceeds the requirements of today's network administrator.   The EtheRx 2000 series is available in three versions to fit any media requirement: a 10Base-T/twisted pair, 10Base-2/BNC and a triple interface version that supports all three Ethemet media types.   EtheRx 2000 NICs are supported by free technical support and a lifetime warranty.

Highlights

- Based on ATLANLtic NE2000 chipset for unquestioned Netware compatibility

- Available in three versions: 10Base-T with an RJ-45 interface, 10Base-2 with a BNC interface and a triple interface version that supports 10Base-T, 10Base-2 and 10Base-5 with RJ-45, BNC and AUI interfaces

- Software configuration for easy installation

- Support for all popular Network Operating Systems with ODI and NDIS drivers for DOS and OS/2 packet driver, SCO UNIX driver

- Lifetime warranty

- Free technical support

2000+ SERIES Specifications

NETWORK INTERFACE STANDARD: IEEE 802.3

NETWORK INTERFACE CARDS:
    KNE2000T+   RJ-45 / Twisted-Pair
    KNE2002+   BNC / Thin-Coaxial
    KNE2031+   RJ-45 / Twisted-Pair, BNC / Thin-Coaxial & AUI / Thick Coaxial

CABLE TYPE SUPPORTED:
    KNE2000T+   Unshielded Twisted-Pair (UTP) AWG 22, 24, 26
    KNE2002+   RG-58 / Thin Coaxial
    KNE2031+   Unshielded Twisted-Pair (UTP) and RG-58 / Thin-Coaxial & RG1 I / Thick-Coaxial

OPERATING DISTANCE:
    KNE2000T+   I00m (32 8') maximum hub to node length
    KNE2002+   185m (607')
    KNE2031+   185m for RG-58 coaxial cable, 100@ Unshielded Twisted-Pair, 500m RGI 1

DATA TPANSFER:
    KNE2000T+, KNE2002+,   Shared Memory Mode (WD8013 compatible) or
    KNE2031+   I/O Port Mode (NE200OPlus compatible)

BUS WIDTH AND TYPE:
    KNE-2000T+, KNE2002+,   16-bit ISA
    KNE2031+

DIAGNOSTIC LEDS;   Link and Polarity Status

IRQ SETTINGS: 3, 4, 5, 9, 10, 11, 12 or 15 (Software Configurable)

BUFFER MEMORY: 16KB

DMA: 3, 5, 6 or 7

I/0 BASE ADDRESS: 300h, 320h, 340h or 360h (Software Configurable)

SOFTWARE COMPATIBILITY: Novell Netware v4.x, 3.x, 2.x, Personal Netware, Microsoft LAN Manager & Windows for Workgroups,   SCO LTNIXv3.2.4, IBM LANserver, Artisoft LANtastic V.4.x, V5.0, and V6.0, and DEC's Pathworks

REMOTE BOOT ROM: Optional

EMI   FCC Class A

WARRANTY   Lifetime

EtheRx EISA Architecture Bus Mastering Network Interface Adapters

EtheRx EISA Ethernet Network Interface Cards lead the industry in both performance and value.   EtheRx EISA features Bus Mastering DMA providing leading edge throughput.   Two versions are available: a dual interface NIC with a 10Base-T/RJ-45 interface and a 10Base-5/AUI interface as well as a triple interface version that supports 10Base-T, 10Base-5 and 10Base-2/BNC interface.

Highlights

- Bus mastering DMA for leading edge throughput and performance

- Two versions are available: Dual interface with a 10Base-T/RJ-45 and 10Base-5/AUI interface or a triple interface version with   10Base-T/RJ-45, 10Base-5/AUI and 10Base-2/BNC interface

- Support for all popular operating systems which includes ODI, NDIS for DOS and OS/2, Packet and SCO UNIX drivers

- Lifetime warranty

- Free technical support

Specifications

NETWORK INTERFACE STANDARD	IEEE 802.3

NETWORK INTERFACE CARDS:

KNE3221	RJ-45/Twisted Pair and AUYMick Coaxial
KNE3233	RJ-45/Twisted Pair, BNC/Thin Coaxial and AUI/Thick Coaxial

CABLE TYPE:

KNE3221	Unshielded Twisted-Pair (UTP) AWG 22,24,26 RGI 1/Thick Coaxial
KNE3233	Unshielded Twisted-Pair (UTP) AWG 22,24,26, RG-58/Thin-Coaxial and RG-11 /Thick Coaxial

DATA TRANSFER:

KNE3221 & KNE3233	Bus Master DMA

BUS WIDTH & TYPE.

KNE3221 & KNE3233	32-bit EISA

SOFTWARE COMPATIBILITY:

KNE3221 & KNE3233	Novell Netware 3.x, 2.x & 4.x, Personal Netware, Microsoft LAN Manager, Windows NT V3.1, v3.5 & Windows for Workgroups, I13M LANserver SCO UNIX v3.2.4 & Open Desktop 2.0

DIAGNOSTIC LEDS:	Link Status
EMI:	FCC Class A

WARRANTY;   Lifetime

EtheRx Pocket LAN - Dual Interface Pocket Ethernet Adapter

Kingston's EtheRx Dual Interface Pocket Ethemet Adapter provides portable computer users with a networking solution that is easy to install on any laptop, notebook or desktop system with Enhanced Parallel Port (EPP) support.   It provides interface for both Twisted-Pair or Thin-Coaxial interfacing.   The EtheRx Pocket adapter features easy access to 10Base-T/RJ-45 and 10Base-2/BNC networks, and supports all popular Network Operating Systems.

Highlights

- Supports Twisted-Pair and Thin-Coaxial media with both 10BaseT/RJ-45 and 10Base-2/BNC interfaces. No external power supply required: both keyboard port and AC converter are supplied

- Supports all popular Network Operating Systems including: Novell Netware, Microsoft LAN Manager and Windows for Workgroups, and Artisoft LANtastic

- Supports all parallel port types including Enhanced Parallel Port (EPP)

- Compact Design: Just 2.4" x 0.9" x 4.3" (61mm x 22mm x 108mm)

- Lifetime warranty

- Free technical support

Specifications

KNE-PKL2	Dual-Interface Pocket Ethemet Adapter
NET'WORK INTERFACE STANDARD	IEEE 802.3
STANDARD SUPPORT:	10Base-T & 10Base-2
OPERATING VOLTAGE:	IA at 5V
POWER CONSUMPTION:	1.5W (max)
DIMENSIONS (W X H X L):	2.4" x 0.9" x 4.3" 6 1 mm x 22mm x 108mm
OPERATING TEMPERATURE:	41°F to 104°F (5°C to 40°C)
WEIGHT:	0.26lbs. (120g)
EMI:	FCC Class A
OPERATING SYSTEM COMPATIBILITY:	Novell Netware, Personal Netware, Microsoft LAN Manager, Windows for Workgroups, Artisoft LANtastic, as well as other Network Driver Interface Specification (NDIS) compliant Network Operating Systems.
WARRANTY:	Lifetime

EtherRx Connectivity: Ethernet and Tranceivers

Kingston provides a full range of products for Ethernet connectivity.   The EtheRx line of hubs are ideal for departmental and, enterprise Ethernet networks with their compact, low-profile design and easy scalability EtheRx hubs are available in stackable and non-stackable eight-port versions as well as a sixteen-port version.

EtheRx transceivers are available in 10Base-T and 10Base-2 versions, and other cost effective network expansion solutions.

Highlights

are available in a stackable eight port version, a non-stackable eight port version and a sixteen port version.

- Hub design is compact and ideal for departmental and workgroup Ethernets

- feature RJ-45 ports in back of unit for orderly cabling

- have diagnostic LEDs for power, collision and link/activity status

- Five-year warranty

- Free Technical support

Hub Specifications

PART NUMBER:

KNF8TP/WG	Non-Stackable 8 Port Network Concentrator
KNE8TP/S	Stackable 8 Port Network Concentrator
KNE16TP/WG	16 Port Network Concentrator

COMPLIANCE: IEEE 802.3 Basic Repeater Functions

DIMENSIONS (H X L X D):

KNE8TP/WG & KNE-8TP/S	(2.4" x 7.2" x 9.3") 28mm x 165nim x 155mm
KNE16TP/WG	(I. I" x 6.5" x 6. 1") 28 mm x 3 33 mm x 155 mm

WEIGHT:

KNE8TP	0.91 kg (2.Olbs.)
KNE16TP/WG	1.6 kg (3.6lbs)

OPERATING TEMPERATURE.   32° to 113°F / 0° to 45°C

INPUT VOLTAGE:

KNE8TP	90 to 260 VAC, 45 to 65 Hz (auto switching)
KNE16TP/WG	120 VAC / 60 Hz to 320 VAC / 50 Hz

DC OUTPUT:

KNE8TP	12V AC
KNE16TP/WG	12V AC

TWISTED-PAIR CABLE INTERFACE: UTP (Unshielded Twisted-Pair)

NUMBER OF UTP PORTS:
    KNE8TP   8, RJ-45 female
    KNE16TP/WG   16, RJ-45 female

ADDITIONAL PORTS:
    KNE8TP   Thin-Coaxial (port 9)
    KNE16TP/WG   1 AUI / Thick-Coaxial (Port 17) & 1 BNC Thin-
                                  Coaxial (Port 18)

LEADS: Link, Activity, Collision, Power

EMI:
    KNE8TP   FCC Class A
    KNE16TP/WG   FCC Class A

WARRANTY: Lifetime

Transceiver Specifications

ETHERNET STANDARDS   IEEE 802.3

NETWORK INTERFACES:
    KNE-TRN/T   DB-15 AUI & RJ-45/Twisted-Pair
    KNE-TRN/2   DB-15 AUI & BNC/Thin-Coaxial

OPERATING TEMPERATURE: OIF to 158°F (OC to 70°C)

OPERATING VOLTAGE: 10 - 15V DC

POWER CONSUMPTION:
    KNE-TRN/T   1.5 W (max.)
    KNE-TRN/2   1.5 W (max.)

DIMENSIONS (H X W X D):   0.74" x 1.73" x 2.28" (19 mm x 44 mm x 58 mm)

WEIGHT:
    KNE-TRN/T   0.14lbs. (65 grams)
    KNE-TRN/2   0.17lbs. (76 grams)

EMI: FCC Class A

WARRANTY: Lifetime

TokenRx Token Ring Network Interface Adapters for ISA and Micro Channel Systems

Kingston TokenRx Token Ring adapters exemplify compatibility in three important ways. Based upon the IBM-developed TROPIC chipset TokenRx is 100% compatible with existing IBM Networks.   They feature both RJ-45 and DB-9 interfaces for UTP and STP media support. Additionally, they feature both R5-44 and DB-9 interfaces for complete network versatility With IBM field service and a lifetime warranty, TokenRx means value and peace of mind for Token Ring adapter requirements.

Highlights

- IBM-developed TROPIC chipset based for unquestioned Token Ring compatibility

- Supports both Unshielded and Shielded Twisted-Pair media with RJ-45 and DB-9 Interfaces.

- Covered by IBM Service for expert Token Ring support

- Available in Industry Standard Architecture (ISA) and Micro Channel (MCA) versions

- Supports 4Mbps and 16Mbps data transfer rates for integration into any Token Ring Network

- Supports all popular Network Operating Systems with built in drivers

- Lifetime warranty

- Free technical support

Specifications

NETWORK INTERFACE STANDARDS	Fully compliant with IBM Token-Ring and IEEE 802.5
NETWORK CONNECTORS:	
KTR-MC16/4	DB-9 Shielded Twisted-Pair, RJ-45 Unshielded Twisted-Pair
KTR-ISA16/4	DB-9 Shielded Twisted-Pair, RJ-45 Unshielded Twisted-Pair
CABLE TYPE:	
KTR-MC16/4	Shielded Twisted-Pair (STP), Unshielded Twisted-Pair (UTP)
KTR-ISA16/4	Shielded Twisted-Pair (STP), Unshielded Twisted-Pair (UTP)
DATA TRANSFER RATE:	4Mbps/16Mbps, (Software Configurable)
BUFFER MEMORY:	64KB
BUS WIDTH & TYPE:	
KTR-MC16/4	16-bit Micro Channel

KTR-ISA16/4   16-bit ISA

PC INTERFACE   Fully compliant with Micro Channel standards.
                                     64K shared SRAM buffers, Programmed I/O
                                     and
                                     Memory Map I/O architecture, 16-bit host data
                                     path, 24-bit host memory addressing

SOFTWARE COMPATIBILITY: 100% compatible with IBM Adapter A Drivers
                                     as well as IBM OS/2 EE, LAN Server, PC LAN
                                     Program (All versions), Novell Netware v.2.x,
                                     v3.x and later, SCO UNIX TCP/IP Runtime
                                     System Release 1, 2.0 and later, Banyan
                                     Vines v4.0 and later

CHIP SET: IBM/National Semiconductor TROPIC

EMI: FCC Class A

WARRANTY: Lifetime

TokenRx PCMCIA Token Ring Network Interface Adapter

With support for both Shielded and Unshielded Twisted-Pair cable on one unique media adapter as well as SystemSoftTM Card and Socket Services software, Kingston's TokenRx PCMCIA adapters lead the industry in compatibility.   The PCMCIA Type II compliant adapter has been tested compatible in over 100 leading systems and supports all popular Network Operating Systems.

Highlights

- Unique media adapter provides direct attachment capability to Token Ring networks utilizing both Shielded and Unshielded media

- SystemSoftTM   Card and Socket Services software provided for easy installation

- IBM Service available for expert Token Ring field support

- Comes complete with ODI and NDIS drivers for DOS and OS/2 support of all popular Network Operating Systems

- Supports Remote Program Load (RPL)

- Lifetime warranty

- Free technical support

Specifications

KTR-PCM 16/4:	TokenRx PCMCIA Token Ring Adapter
NETWORK INTERFACE STANDARD:	IEEE 802.5
NETWORK CONNECTIONS:	MIC Shielded Twisted-Pair RJ-45 Unshielded Twisted-Pair
CABLE TYPES:	Shielded Twisted-Pair (STP) Unshielded Twisted-Pair (UTP)
DATA TRANSFER RATE:	4Mbps, 16Mbps (Software Configurable)
INTERFACE:	PCMCIA Type II Release 2.x compliant
BUS DATA WIDTH:	16-bit
PCMCIA DRIVERS PROVIDED:	Industry recognized Release 2.01 Card and Socket Services that support Hot Swapping for both DOS Windows and OS/2
SOFTWARE COMPATIBILITY:	Novell Netware 3.11, 4.x, Netware Lite and Personal Netware, DOS LAN Requester with LAN Server version 2 & 3, IBM PC LAN

Program PCLP Version 1.34 (Server and Client), IBM LAN Support Program version 1.33 or higher, IBM Personal Communications/3270 Version 3.0, IBM LAN Network Manager Version 1, PC Support/400 Version 2.2, TCP/IP for DOS Version 2. 1, Banyan Vines Version 5.5 (Client), Microsoft LAN Manager Version 2.2 (Server and Client), Windows and Windows for Workgroups Version 3.1, 3.1 1, DECNet Pathworks, Artisoft LANtastic Version 5.0, 6.0

FORM FACTOR: Type II, 3.370" x 2.126" x 0. 196" (85mm x 54mm x 5mm)

EMI: FCC Class A

WARRANTY: Lifetime

TokenRx Connectivity: Token Ring Multistation Access Units

Kingston meets the Token Ring connectivity needs of network administrators with two Multistation Access Units (MAUS) that support either Unshielded Twisted-Pair or Shielded Twisted-Pair cabling.   Both units feature a compact form factor and Ring-in/Ring-out ports for uncomplicated network expansion.   TokenRx MAUs are supported by free technical support, an IBM Field Service and lifetime warranty.

Highlights

- Shielded Twisted-Pair (S'I'P) version allows up to 254 stations per ring

- Unshielded Twisted-Pair (UTP) version allows up to 72 stations per ring

- Compact form factor: 17.4" x 6" 2" (44.2cm x 15cm x 5cm)

- Covered by IBM Service for expert Token Ring support

- Lifetime warranty

- Free technical support

Specifications

NETWORK INTERFACE STANDARD: IEEE 802.5

NETWORK CONNECTIONS:
    KTR8UTP   8 RJ-45 Unshielded Twisted-Pair
    KTR8STP   8 MIC Shielded Twisted-Pair

CABLE TYPE:
    KTR8UTP   Unshielded Twisted-Pair (UTP)
    KTR8STP   Shielded Twisted-Pair (STP)

DIMENSIONS (W X L X H).   17.4" x 6" x 2"
                                      44.2cm x 15cm x 5cm

WEIGHT: 6.61lbs. (3kg)

OPERATING TEMPERATURES: -32°F to 122°F (O°C to 50°C)

RING-IN / RING-OUT: Yes

STATIONS PER RING:
    KTR8UTP   72 Stations Maximum
    KTR8STP   254 Stations Maximum

STATION TO MAU DISTANCE:
    KTR8UTP   100m max at 4Mbps, 75m max at 16Mbps
    KTR8STP   300m max at 4Mbps, 150m max at 16Mbps

ACTIVE CONNECTION LEDS:	8
EMI:	FCC Class A
WARRANTY:	Lifetime

EtheRx PC CARD Type II Ethernet Adapters

Compatibility with all popular Type II PC Card compliant systems is guaranteed with Kingston's EtheRx Ethernet PC Card adapters.   Our innovative dual-interface adapter is the only both Twisted-Pair and Thin-Coaxial media.   Compatible with all popular PC Card Type II compliant systems

Highlights

- Available in two versions: single-interface 10Base-T and a dual interface version that supports both 10Base-T and 10Base-2 media

- Includes SystemSoftTM   Card and Socket Services software for trouble-free installation and system compatibility

- Supports all popular Network Operating Systems with Novell ODI and NDIS drivers for LAN Manager, Windows for Workgroups, Artisoft LANtastic, Banyan Vines, FTP PC/TCP and DEC Pathworks

- Lifetime warranty

- Free technical support

Specifications

NETWORK INTERFACE STANDARDS	IEEE 802.3, I0MBps
NETWORK CONNECTIONS & PART NUMBER:	
KNE-PCM/T	RJ-45 Female / Twisted-Pair, 10Base-T
KNE-PCM/M	RJ-45 Female / 10Base-T & BNC / Thin-Coaxial
CABLE TYPE SUPPORTED:	
KNE-PCM/T	Unshielded Twisted-Pair AWG 22, 24, 26
KNE-PCM/M	Unshielded Twisted-Pair AWG 22, 24, 26 & RG-58/Thin-Coaxial
PC CARD STANDARD:	PC CARD Release 2.x Compliant
PC CARD DRIVERS PROVIDED:	Industry recognized Release 2.01 Socket and Card Services that support Hot Card insertion and removal.
DIAGNOSTIC LEDS:	
KNE-PCM/T	Data Traffic, Link Status
KNE-PCM/M	Transmit, Receive, Collision, Link
DATA BUS WIDTH:	16-bit
BUFFER MEMORY:	16K-B
DATA TRANSFER:	Shared Memory (default) or programmed I/O
SOFTWARE COMPATIBILITY:	Novell Netware, Microsoft LAN Manager and

Windows for Workgroups, IBM LAN Server, Banyan Vines, PC/TCP, DEC Pathworks, as well as other Network Driver Interface. Specifications (NDIS) compliant network operating systems.

FORM FACTOR: Type II, 3.370" x 2.126" x 0. 196" (85mm x 54nun x 5mm)

WEIGHT:
    KNE-PCM/T   Card: 1. loz., Media Access Module: 1.38oz.
    KNE-PCM/M   Card: 1. loz.,Media Access Module: 1.83oz.

POWER CONSUMPTION:
    KNE-PCM/T   0.8 watts (typical), 1.2watts (maximum)
    KNE-PCM/M   0.8watts (typical), 1.71watts (maximum) Twisted-Pair 0.76watts (typical), 1.84 watts (maximum) Thin Coaxial

ENVIRONMENTAL LIMITS:
Operating Temperature: 32F to 122F (O°C to 50°C)
Humidity: 1 0% to 80% non-condensing
Altitude: 3050m (10,000 feet) maximum

GOVERNMENT APPROVALS: Part 15 FCC Rules for Class A certification, CISPR-22 Europe

WARRANTY: Lifetime

TokenRx PC CARD Type II Token Ring Adapters

With support for both Shielded and Unshielded Twisted-Pair media in one unique media adapter, as well as SystemSoftTM Card and Socket Services software for easy installation, Kingston's TokenRx PC Card Token Ring adapter leads the industry in compatibility.   It's compliant with Type II PC Card specifications, supports all popular Network Operating Systems, and has been tested for compatibility in over 100 leading systems.   Unique media adapter provides direct attachment to both Shielded and Unshielded Twisted-Pair media.   SystemSoftTM   Card and Socket Services software provided for easy installation

Highlights

- Supports all popular Network Operating Systems with ODI and NDIS drivers for DOS, Windows and OS/2

- Supports Remote Program Load (RPL)

- Lifetime warranty

- Free technical support

Specifications

PART NUMBER
    KTR-PCM16/4   TokenRx PC Card Adapter

NETWORK INTERFACE STANDARDS: IEEE 802.5

NETWORK CONNECTIONS: MIC Shielded Twisted-Pair
                                  RJ-45 Unshielded Twisted-Pair

CABLE TYPES: Shielded Twisted-Pair (STP)
                                  Unshielded Twisted-Pair (UTP)

DATA TRANSFER RATE: 16Mbps, 4Mbps Selectable

INTERFACE: PC Card Type II Release 2.x compliant

BUS DATA WIDTH: 16-bit

PC CARD DRIVERS PROVIDED: Industry recognized Release 2.01 Card and
                                  Socket Services that support Hot Swapping for
                                  both DOS and OS/2

SOFTWARE COMPATIBILITY: Novell Netware 3.11, 4.x, Netware Lite and
                                  Personal Netware, DOS LAN Requester with
                                  LAN Server version 2 & 3, IBM PC LAN Program
                                  PCLP Version 1.34 (Server and Client), IBM LAN
                                  Support Program version 1.33 or higher, IBM
                                  Personal Communications/3270 Version 3.0,
                                  IBM LAN Network Manager Version 1, PC
                                  Support/400 Version 2.2, TCP/IP for DOS
                                  Version 2. 1, Banyan Vines Version 5.5 (Client),

Microsoft LAN Manager Version 2.2 (Server and Client), Windows and Windows for Workgroups Version 3.1, 3.1 1, DECNet Pathworks, Artisoft LANtastic Version 5.0, 6.0

FORM FACTOR: Type II, 3.3 70" x 2.126" x 0. 196"
                            (85mm x 54mm x 5mm)

EMI: FCC Class A

WARRANTY: Lifetime

DataRex PC CARD Type II Data and Fax Modem

With a data transfer rate of 14.4Kbps, and compatibility with all PC Card Type II compliant systems, the Kingston DataRex Data/Fax Modem represents the ultimate in speed and ease of installation.   DataRex comes complete with SystemSoftTM   Card and Socket Services software for trouble-free installation and compatibility, plus industry-leading Delrina WinFax© communications software.   14.4Kbps data transfer rate for quick and efficient data and fax communication

Highlights

- Compatible with all popular Type II PC Card compliant systems

- Includes SystemSoftTM   Card & Socket Services software for trouble free installation and system compatibility

- Award-winning Delrina WinFax LiteTM fax communications software included for DOS and Windows

- Cellular-Ready with MNP 10 Error Correction,. the highest level available

- Rugged, laser-welded stainless steel case

- 16550 UART for trouble free transmission under Windows and OS/2

- Internal flash memory for in-field product upgrades

- Lifetime warranty

- Free technical support

Specifications

PART NUMBER KFM-PC144	PC Card Type II Data/Fax Modem
FORM FACTOR:	Type II, 3.370" x 2.126" x 0.196" (85mm x 54mm x 5mm)
WEIGHT OF CARD:	1.2 ounces (34 grams)
ACTIVE POWER CONSUMPTION:	0.6 watts
DATA RATE WITHOUT COMPRESSION:	CCITT v.32bis (14400bps), CCITT v.32 (9600 bps), CCITT v.22bis (2400bps), CCITT v.21 (3000bps), CCITT v.23(1200/600bps), BELL212A(1200bps), BELL103A(300bps)
UART TECHNOLOGY:	Enhanced, High-Speed UART 16550
FAX RATES:	CCITT v. 1 7 (14400bps),CCITT v.29 (9600bps), CCITT v.27ter (4800bps), CCITT v.21 (300bps)

DATA COMPRESSION:	CCITT v.42bis (4: 1), NINP level 5 (2: 1)
ERROR CORRECTION:	CCITT v.42, @P 2-4
FAX COMMAND SET:	CCITT Group 3, Classes1& 2
CELLULAR CONNECTIVITY:	MNP IO Error Correction/Data Compression Compliant
SETUP UTILITY:	PC CARD Card & Socket Services Release 2.0 or above, Intel 82365 SL PC CARD controller enabler
CONSTRUCTION:	Laser-welded stainless steel
AGENCY CERTIFICATION:	UL, FCC Class B, CSA, DOC-CS-03
WARRANTY:	Lifetime

DataPak PC CARD Type III 260 and 340 MB Plug-In Hard Drives

DataPak is a family of 1.8" Type III PC Card compatible hard drives that make storage upgrades fast and easy.   With its miniature design (.41" thick, 2.1" wide and 3.4" long) it's small enough to fit in a shirt pocket, but large enough to store a whole suite of software applications and files.   DataPak features dynamic ramp-loading technology that parks the heads automatically during power-down state, increasing reliability and data protection. Plus, DataPak's low power consumption and rugged 750 G non-operating shock resistance rating makes it ideal for today's demanding mobile computing needs.

Popular Uses

PORTABILITY
At .41" high x 2.1" width x 3.3" length it's easily shared and transported among systems equipped with a PC Card Type III slot.

INCREASING CAPACITY
DataPak provides 260MB or 340MB of formatted uncompressed disk storage to Type III compatible PC Card systems.

ARCHIVING FILES
Since DataPak adheres to the PC CARD specifications allowing for peripheral "Hot Swapping," users can switch to other DataPak hard drives without powering down the system or rebooting.

MULTI-USER SYSTEM
DataPak allows one system to be shared by several users by simply enabling users to remove DataPak (and their individual data), when finished using the PC Card Type III equipped system.

DATA BACK-UP
A transfer rate up to 3.5MB per second and a 11ms access time, provides the fastest data backup and recovery currently available for portable systems.

SECURITY
Remove DataPak to protect data from unauthorized usage

Highlights

- Choice of 260MB or 340MB capacities

- Fully PC Card Type III compatible

- Industry-leading 10.8 ms average seek time

- Up to 6MB per second media transfer rate

- Innovative ramp-loading technology secures heads during power down state for utmost protection during transportation

- Includes SystemSoftTM   Card Socket Service software for trouble-free installation and system

compatibility

- Protective pouch included for further protection during transportation

- Optimum power management enables DataPak to draw only .005 watts of power in sleep mode and 2.0 watts when accessed

- Packaged with pull tabs for systems not equipped with peripheral eject feature

- Mean Time Between Failure (MTBF) = 250,000 hours

- One-year warranty

- Free technical support

Ordering Information

DP-PCM/260   260MB PC CARD Type III Plug-in DataPak hard disk drive
DP-PCM/340   340MB PC CARD Type III Plug-in DataPak hard disk drive

Data Traveler "Hot-Swappable" Portable Hard Drive System

Data Traveler is a portable hard drive that easily installs into the parallel printer port of any IBM PC-compatible desktop, laptop, or notebook system and provides increased storage capacity, portability, and security.   The Data Traveler is extremely compact, with dimensions of 2.5" x 7.5" x 3", and weighs less than three pounds.   The Data Traveler is available in a 500MB capacity and comes equipped with a parallel port "pass-through" for uninterrupted printer use.

Popular Uses

INCREASING DISK CAPACITY
Data Traveler provides notebook and laptop users with the most efficient way to increase disk storage capacity.

TRANSPORTING DATA BETWEEN SYSTEMS
With a portable hard drive capacity of 500MB, data can be easily transported from one system to another.   This is ideal for large files such as databases, graphics, and presentations.

DATA BACKUP AND RECOVERY
Data back up and recovery with Data Traveler drives is up to five times faster than tape backup.

HOT SWAPPING
Data Traveler's hard disk drive is removable, allowing users to "Quick SwapTMII information by inserting/removing additional drives (called Data Carriers) without powering down the system and running setup.

SECURITY
For users requiring security, the Data Traveler can be easily detached from the parallel printer port to avoid unauthorized information access.

Highlights

- Available in 500MB capacity

- Installs into any IBM PC-compatible parallel printer port in less than five minutes

- Equipped with "pass-through" printer connection to keep system connected to printer

- Uses highly reliable, high-perfonnance 2.5"

- Winchester hard drive technology

- Equipped with innovative QuickSwapTM feature for disk drive "hot swapping"

- Weighs less than 3 pounds

- Provides data transfer rates up to 1.2MB

- Supports EPP, BPP, and SPP parallel port modes for use on virtually any system

- Battery for at least three hours of continuous operation (optional)

- Battery is rechargeable while the Data Traveler is in use

- Coexists with existing storage devices

- Supports MS-DOS 5.0 (and greater), Microsoft Windows, and IBM OS/2 2.0 (and greater)

- Free technical support

- Two year warranty

Lightning 486:   DX2/66   Power for IBM PS/2 Models 70 and 80 and for Clones

Kingston's Lightning 486, designed and manufactured by IBM, upgrades 386DX-based IBM PS/2 Models 70 and 80, as well as for Clones, to 486 clock-doubled performance using IBM's 486-compatible Blue Lightning processor.   Once inserted into the original 386DX socket, Lightning 486 increases performance by up to ten times, providing the power needed to run today's most popular software.   This dramatic performance increase is due to clock-doubling Blue Lightning technology, an integrated 16kb internal cache, and an innovative write-back cache scheme to optimize processor performance.   Lightning 486 was designed specifically for the IBM PS/2 Models 70 and 80, making it 100% compatible with all existing peripherals and system diagnostics.   Put Kingston's Lightning 486 into your PS/2 Model 70 and 80 and watch it run like lightning!

Highlights

- Increases performance by up to ten times over the original system

- Uses the IBM 486-compatible Blue Lightning clock-doubled 33/66MHz processor

- Designed and manufactured by IBM

- Asynchronous design allows CPU to run at 66MHz regardless of native bus speed

- Integrated with 16kb internal cache

- Designed with innovative write-back cache scheme to eliminate write speed limitation when operating with internal clock-doubling

- Supports 387DX math coprocessor on motherboard

- Specifically designed for IBM PS/2 Models 70 and 80

- Compatible with IBM OS/2 2.1 (and greater), Microsoft Windows 3.1 (and greater), MS-DOS 6.0 (and greater), and Novell Netware

- 100% compatible with IBM PS/2 hardware, software and diagnostics

- Installation in minutes with no software drivers needed

- Lifetime warranty

- Free technical support

Systems Supported

IBM PS/2 Models 70 and 80

Ordering Information

DESCRIPTION	PART NUMBER
Lightning 486	486/BL66

MCMaster: 486DX2/66 Upgrade for IBM PS/2 Models 55, 56, 57 and 65

MCMaster converts 386SX-based IBM PS/2 Micro Channel systems into 486 powerhouses.   A bus master card that simply plugs into any available expansion slot, MCMaster assumes control of the system via the system's bus, providing up to seven times the performance over the original system.   MCMaster comes with up to 16MB of zero wait state memory on board, providing an easy memory upgrade to optimize the new 486 power.   An internal cache of 8kb plus 128kb external cache further enhances performance.   MCMaster easily provides Micro Channel users the power needed for today's business applications, graphical user interface applications, and operating environments

Highlights

- Provides up to seven times increase in performance

- Available in 486DX2 5OMHz 8kb internal cache, 128kb external cache

- Compatible with IBM OS/2 2.1 (and greater), Microsoft Windows 3.1 (and greater), MS-DOS 6.0 (and greater), and Novell Netware

- Two SIMM sockets on board for up to 16MB of memory

- Internal math coprocessor on DX version

- Easy installation into any available expansion slot

- Lifetime warranty

- Free technical support

Systems Supported

IBM PS/2 Models 55, 56, 57, 65

Ordering Information

Description	On-Board Memory	Part Number
MCMaster 50MUz DX2	OMB	MC50PD/O
MCMaster 50MHz DX2	4MB	MC50PD/4
MCMaster 5OM14z DX2	8MB	MC50PD/8
MCMaster 5OMHz DX2	16MB	MC50PD/16

SLC Now!: 486SLC2/50, and 386SLC/20,25 Upgrades for IBM PS/2 Models 25/286, 30/286, 50, 50Z and 60

Kingston's SLC/Now!, designed and manufactured by IBM, provides 286-based IBM Micro Channel systems with 486 performance using the 486 compatible IBM SLC processor.   Once installed into the existing processor socket, SLC/Now! increases system performance by up to ten times, providing users the power needed for the latest operating systems and business applications.   Available in three different versions, SLC/Now! provides flexibility according to budget and performance requirements.

Highlights

• SLC/Now! 2OMHz and 25MHz integrated with 386SLC processor with 8kb internal cache

• SLC/Now! 5OMHz integrated with the clock-doubling 486SLC2 processor with 16kb internal cache

• Increase performance by up to ten times

• Fully compatible with IBM OS/2 2.1 (and greater), Microsoft Windows 3.1 (and greater), MS-DOS 6.0 (and greater), and Novell Netware

• Socket for 387SX math coprocessor on all versions

• Easy to install

• Designed and manufactured by IBM for utmost compatibility

• Affordable system upgrade solution

• Lifetime warranty

• Free technical support

Systems Supported

IBM PS/2 Models 25/286, 30/286, 50, 50Z, and 60

Ordering Information

Description	Processor Speed	Part Number
SLCNow! for PS/2 Model 25/286 & 30/286	486SLC2 25/50MHz	SLC/50LEM
SLC/Now! for PS/2 Model 5OZ	386SLC 2OMHz	SLC/20LCM
SLC/Now! for PS/2 Model 5OZ	386SLC 25MHz	SLC/25LCM
SLC/Now! for PS/2 Model 5OZ	486SLC2 25/50MHz	SLC/50LCM

SLCNow! for PS/2 Model 50 & 60	386SLC 2OMHz	SLC/20GAM
SLC/Now! for PS/2 Model 50 & 60	386SLC 25MHz	SLC/25GAM
SLC/Now! for PS/2 Model 50 & 60	486SLC2 25/50MHz	SLC/50GAM

Data Express Family of Removable Storage Subsystems

Kingston's Storage product line is specifically designed to reliably increase storage capacity and system flexibility. The Data Silo family of durable, stand-alone expansion chassis, and the
Data Express family of removable drive carriers and receiving frames, provide numerous options
for housing hard disk, optical disk, tape and CD-ROM drives, in addition to RAID controllers.

Kingston continues to provide a 7 year warranty and free Technical Support for every Data Silo or
Data Express product.

Some of the newer storage products released by Kingston are:

    Data Express
        Data Express DE100 - Internal/External Removable Storage
        Data Express DE300 - Internal/External Removable Storage

    Data Silo
        Data Silo DS500 - 9 bay Rack Mount or Tower enclosure

For more information about Kingstons broad line of Storage upgrades, please call (800) 435-0642 or look us up on the World Wide Web at: http://www.kingston.com

Information about other Kingston Storage Products....

Data Express is a family of reliable, removable storage drive products.   These well-received, modular subsystems are steel-constructed receiving frames and removable carriers that house 3.5" (DE100) or 2.5" (DE5 0) hard disks or 3.5" (DE150i) front loading devices, (e.g. DAT, floptical, etc.). Data Express IDE or SCSI versions are available internally mounting into your computer system expansion bay or externally, SCSI units can be mounted in SCSI expansion cabinets.

Popular Uses

DATA SECURITY
Remove Data Express from your system after use to prevent unauthorized data usage.

TRANSFERRING DATA
Remove the Data Express carrier for transporting data to another system or for maintenance and repair.

ARCHIVING LARGE FILES
Swap Data Express drives without powering down your system to access information on other drives or DATS.

NETWORK ENVIRONMENT
Ideal for SCSI based disk arrays needing reliable removability (e.g. RAID) Mounts into a standard 19" rack or tower peripheral bay

IDEAL PRIMARY DRIVE
With Data Express as the primary drive, you can easily swap in a replacement drive in case

of failure to prevent lengthy system down time.

Data Express Junior DE50i

The Data Express Junior DE50i is available for mounting into a 3.5" drive bay on your PC, workstation, or minicomputer.   The SCSI or IDE Data Express DE501is composed of a compact disk carrier and a receiving frame.   The DE50i carrier holds a 2.5" SCSI or IDE hard drive, and is compact enough to fit into your shirt pocket.   The drive carrier and receiving frame are available as a combined unit or separately to allow you to configure the optimum removable environment for your needs.

Highlights

- Provides ability to easily remove and transport data

- Houses 2.5" SCSI or AT/IDE hard drives

- Easily mounts into any 3.5" or 5.25" drive bay

- Carrier and receiving frame both composed of   rugged steel and polycarbonate plastic

- Highly reliable mating connectors (rated at minimum 5,000 insertions)

- Compatible with 8-bit single ended SCSI or AT/IDE disk drives

- A unit select number is clearly displayed on the front panel of the receiving frame

- A disk activity indicator light shows when the drive is being accessed by the system

- Features key lock to prevent unauthorized or untimely removal of the drive carrier

- Free technical support

- Seven year warranty

Data Express DE100i

The DE100i removable disk/tape drive subsystem is composed of a removable drive carrier and mating frame, and is able to mount into a 5.25" half-receiving, and is able to mount into a 5.25" half-height expansion bay on your PC, workstation or SCSI expansion cabinet.   The DE100i carrier holds either a 3.5" SCSI or IDE device.   The SCSI version of the DEI00i is available with a "Hot Swap" option for high reliability use, allowing you to install, remove, or exchange Data Express carriers without powering down your system.   The unit's steel construction provides durability and efficient heat dissipation for today's high performance drives.

Highlights

- Provides ability to easily remove and transport data.

- Houses 3.5" SCSI or AT/IDE devices.

- Easily mounts into any 5.25" half-height peripheral bay (1.7" high)

- Carrier and receiving frame both composed of rugged steel, providing efficient heat dissipation plus durability

- Highly reliable mating connectors (rated at minimum 25,000 insertions)

- Available with "Hot Swap" option to quickly insert and remove carriers without powering down system

- Available for use with single-ended (8-bit or 16-bit) and differential (8-bit or 16-bit) SCSI or AT/IDE disk drives

- A unit ID select number is clearly displayed on the   front panel of the receiving frame

- A disk activity indicator light shows when the drive is being accessed by the system

- Features key lock to prevent unauthorized or   untimely removal of the drive carrier

- A rugged and water tight carrying case is available separately for transporting the carrier to other locations

- Free technical support

- Five year warranty

Data Express DE300i

Introducing the most compact removable storage subsystem available on the market today. The Data Express DE300i is a new and unique removable hard disk subsystem that allows you to add three Winchester disk or tape devices based on 1" high 3.5" drives to your PC, workstation, or minicomputer, within a single full-height 5.25" form factor peripheral slot. The DE300i is composed of three drive carriers and a single receiving frame.   The carriers are suitable for use with a variety of 8-bit single-ended standard SCSI disk drives at this time.   The receiving frame is designed to mount into a single 5.25" full-height peripheral bay.

Highlights

- Provides ability to easily remove and transport data

- Ideal for disk array environments

- Houses three 1" SCSI disk or tape drives (simultaneously)

- Easily mounts into any 5.25" full-height drive bay

- Carrier and receiving frame both composed of rugged steel, providing efficient heat dissipation plus durability

- Highly reliable mating connectors (rated at minimum 25,000 insertions)

- Features key locks to prevent unauthorized or untimely removal of the drive carriers

- On/off keys can be attached permanently to the locking mechanisms for added convenience

- Compatible with 8-bit single ended SCSI disk drives at this time

- Unit ID select numbers are clearly displayed on the front panel of the unitary receiving frame

- Disk activity indicator lights show when each drive is being accessed by the system

- Free technical support

- Five year warranty

Data Express DE100i-ex

For those users who require external removable storage, Kingston offers DE100i-ex versions of the Data Express.The DElOOi-ex houses Data Express units in an extemal SCSI expansion chassis equipped with a superior fan(s) and power supply(ies).   The entire external subsystem unit is constructed of rugged steel with a carefully designed and tested ventilation system for cooling today's high capacity, high performance drives.   DElOOi-ex external versions are available in single, cfaal, and quad bay units.   External interconnecting SCSI cables and terminators are available separately.

Highlights

- Ideal for transporting and removing data

- Ideal for disk array environments

- Entire subsystem composed of rugged steel providing superior heat dissipation for today's high capacity, high performance drives

- Removable unit mating connectors rated at 25,000 insertions (minimum)

- Equipped with highly-rated fan and power supply

- Available for use with (8-bit or 16-bit) single-ended and (8-bit or 16-bit) differential SCSI disk drives

- A unit ID select number is clearly displayed on the front panel of each receiving frame

- A disk activity indicator light is located on the front panel of each receiving frame showing when the drive is being accessed by the system

- Features individual key lock to prevent unauthorized or untimely removal of the drive carrier

- On/off keys can be attached permanently to the locking mechanisms for added convenience and to prevent accidental loss

- A rugged water-tight carrying case is available separately for transporting the carrier(s) to other locations

- Free technical support

- Five year warranty

Data Express DE300i-ex

Packing more removable hard drives per cubic inch than any other commercial storage product, the external DE300i-ex Data Express system is available with three or six one inch drive carriers and receiving frame(s) in rugged and compact expansion chassis.   The (DE300i-ex) three bay version is mounted in a Kingston single bay full-height Data Silo, and the six bay unit is mounted in our dual bay full-height Data Silo peripheral expansion cabinet.   The all-steel units provide the ruggedness and reliability you need for use in networking, RAID, or other high capacity, high performance applications.   External interconnecting SCSI cabies and terminators are available separately

Highlights

- Provides ability to easily remove and transport data

- Ideal for disk array environments

- Houses three or six1inch SCSI disk or tape drives (simultaneously)

- Equipped with highly rated internal power supply(ies) and fan(s)

- Carriers and receiving frames are composed of rugged steel, providing superior heat dissipation for today's high perfon-nance drives

- Highly reliable mating connectors (rated at minimum 25,000 insertions)

- Features key locks to prevent unauthorized or untimely removal of the drive carriers

- On/off keys can be attached permanently to the locking mechanisms for added convenience and to prevent accidental loss

- Compatible with 8-bit single ended, SCSI disk drives

- Unit ID select numbers are clearly displayed on the front panel of the receiving frame

- Disk activity indicator lights are located on the front panel showing when each drive is being accessed by the system

- Free technical support

- Five year warranty

Data Silo

Kingston's Data Silo expansion chassis are a family of stand alone external storage enclosures for 3.5" or 5.25" SCSI peripherals.   Each Data Silo unit is built to accommodate single-ended or differential SCSI devices, plus Kingston's Data Express family of removable devices a pictured above.   Constructed of rugged steel, each Data Silo is equipped with its own highly rated power supply(ies) and fan(s).   External cables and SCSI terminators are available separately for all Data Silo products, as part of our plug and play Periheral Expansion Kits.

Popular Uses

ADDING FUNCTIONALITY
Data Silo can house SCSI devices such as a CD-ROM

INCREASING CAPACITY
By adding a hard drive, DAT drive, or optical device, users can easily increase storage capacity when intemal expansion

DISK ARRAYS
Data Silo dual and quad bay units provide ideal drive stacking features for the most reliable expansion in disk array environments

REMOVABILITY

Data Silo can house Kingston's Data Express products, providing all the benefits of storage removability including data security and portability

Data Silo Junior DS50

The Data Silo Junior (DS50) series can house one 3 SCSI peripheral (Single Bay Unit) or two 3.5" scs   peripherals (Dual Bay Unit), The DS50 is construc rugged aluminun, P,Oiding light weight, durability superior heat dissipation for today's high perform drives.   With compact dimensions and an ergonomic the ideal enclosure for your external SCSI devices.

Highlights

- Houses any 3.5" SCSI device

- Available in single or dual bay units

- Constructed of rugged aluminum for superior heat dissipation for today's high-capacity drvies

- Equipped with superior fan and power supply

- Features quiet operation and excellent ventilation for peripheral cooling

- Compact design

- Accommodates 8- and 16-bit single-ended or differentiation SCSI devices

- Disk activity indicator light is available on front filler panel(s)

- Compatible with DE50i SCSI Data Data Express removable drive product

- Free technical support

- Five year warranty

Data Silo Midi DS75

The Data Silo Midi (DS75) is a dual bay expansion cabi net that houses one 3.5" and one 5.25" inch half-height SCSI peripheral.   Constructed of rugged steel, the DS75 is ideal for operating today's high capacity, high performance SCSI devices such as CD-ROMS, disks, or tape drives simultaneously in one subsystem.   With compact dimensions and an ergonomic design, the DS75 is an ideal enclosure for housing your external SCSI devices.

• Houses one 3.5" device and one 5.25" device

• Ideal for combining different sized SCSI peripherals including: CD-ROMs, Optical disk drives, and tape drives

• Industry-standard audio jacks included as an integral part of the DS75

• Constructed of rugged steel for superior heal dissipation for today's high capacity devices

• Equipped with a highly rated fan and power supply

• Features quiet operation and superior ventilation for peripheral cooling

• Dimensions: 4.45" high X 7.25" wide X 10.88" deep

• Weighs 6.5 lbs.

• Free technical support

• Five year warranty

Data Silo Maxi DS100

The Data Silo Maxi (DS100) is a series of steel SCSI expansion cabinets that can house one, two, or four SCSI peripherals.   Kingston's popular DS100 series provides the utmost flexibility and reliability by enabling users to integrate any SCSI peripheral combinations. Compact in design with high reliability power supply(ies) and fan(s), the DS100 is a low maintenance storage chassis ideally suited for use with workstations, network servers and personal computers.   When combined with the DE100 or DE3 00 removable drive products, the DS100 excels in RAID or other high capacity drive applications.

- Ideal for disk array environments or compact and reliable extemal expansion

- The user can mix and match 3.5" or 5.25" devices

- Single Bay Unit can house one half height 5.25" or 3.5" SCSI device

- Dual Bay Unit can house two half-height 5.25" or 3.5" SCSI devices

- Single Full Height Unit can house one full-height 5.25" device

- Dual Full-Height Unit can house two full-height 5.25" devices

- Quad Bay Unit can house four 5.25" or 3.5" SCSI devices

- Every unit constructed of rugged steel

- Equipped with a highly rated fan(s) and power supply(ies) (Quad Bay and Dual Full-Height Bay Units each equipped with two fans)

- Features quiet operation and superior ventilation for peripheral cooling

- Free technical support

- Five year warranty

Data Keeper

The DK100 Data Keeper, 4mm Digital Audio Tape (DAT) drives and subsystems, are high-capacity (2 or 8GB), medium transfer rate SCSI devices for off-line data storage on tape in a fon-nat called Digital Data Storage (DDS).   The DK200 8mm versions are high performance type storage units available with up to 14 gigabyte of tape capacity at this time.   To meet your specific requirements, Data Keeper is offered in three configurations: internal, removable/transportable (DK100only), or external.   All versions come equipped with the necessary cabling and hardware to ensure effortless "plug and lot play" installation.

Popular Uses

BACKUP AND RECOVERY
With such large capacities and versatility, Data Keeper can easily handle the demands of backing up network file servers and large workstation files for protecting data integrity.

INCREASING CAPACITY
By adding a DAT or 8nun cartridge device, users can easily increase storage capacity to up to 14 gigabytes on a single tape.

REMOVABILITY
Provides all the benefits of storage removability including data storage, security, transporting and portability.

Highlights

DATA KEEPER/INTERNAL

- Both 4mm (DK100) and 8mm (DK200) Data Keeper units are suitable for internal and external mounting

- Provided adapter brackets allow you to easily install Data Keeper DK100 into either 3.5" or 5.25" mounting bay

- Front panel displays important operating mode information

- SCSI ID selection provided via back panel jumper pins

- Option switches allow easy drive configuration for individual requirements

- 90-meter DAT tape and cleaning tape included for DK100 and 112-meter 8mm cartridge tape and cleaning tape included for DK200

- Free technical support

- One year warranty

DATA KEEPER/EXTERNAL

- Both 4mm (DK100) and 8mm (DK200) Data Keeper units are suitable for internal and external mounting

- Self-contained unit with internal power supply, fan, power on LED indicator, system interconnecting

cable, and SCSI terminator

- Ergonomic, strong, light-weight chassis construction

- Unit select switch is conveniently located on the Data Keeper chassis back panel

- Up to seven SCSI subsystems can be attached to one computer

- Front panel display lights provide important operating mode information

- 90-meter DAT tape and cleaning tape included for DK100 and 112-meter 8mm cartridge tape and cleaning tape included for DK200

- Free technical support

- One year warranty

- Data Keeper DK100 Removable/Transportable

- Provided receiving frame and removable drive inserts into 5.25" drive bay

- DK100 tape drive can easily be removed for security, repair, or easy transportation

- Carrier/receiving frame unit is built with high-quality, steel construction and highly reliable mating connectors (rated at 25,000 insertions)

- 90-meter DAT tape and cleaning tape included for DK100

- Up to seven SCSI subsystems can be attached to one   system

- Key lock prevents unauthorized or untimely Data Keeper removal or installation

- Unit ID select number clearly displayed on front panel

- Tape drive activity indicator light located on the unit receiving frame

- Front panel display lights on DK100 DAT drive provide important operating information

- Optional rugged and water-tight carrying case to easily transport and protect the DK100 Data Keeper drive/carrier

- Free technical support

- One year warranty

DataPak PC CARD Type III 260 and 340 MB Plug-In Hard Drives

DataPak is Kingstons 1.8" PCMCIA Type III compatible hard drive that makes storage upgrades fast and easy.   With its miniature design (.41" thick, 2.1" wide and 3.3" long) and large capacity, the DataPak is small enough to fit into a shirt pocket and large enough to store a whole suite of software applications and files.   DataPak features a dynamic ramp loading technology that parks the heads automatically during power down state for increased reliability and data protection.   Plus, DataPak's low-power consumption and rugged 750G non-operating shock resistance rating make it ideal for today's demanding mobile computing needs.

Popular Uses

PORTABILITY
Kingston's DataPak can be easily shared and transported amongst systems equipped with a PCMCIA Type III slot.

INCREASING CAPACITY
DataPak provides 260mb and 340mb of formatted, uncompressed disk storage to Type III compatible PCMCIA ported systems.

ARCHIVING FILES
Users can switch to other DataPak hard drives without powering down the system or rebooting.

MULTI-USER SYSTEM
DataPak allows a single system to be shared by several users by simply enabling users to remove their individual Data Pak drive when finished using the PCMCIA Type III equipped system. DATA BACK-UP
With transfer rates up to 3.5MB per second, and with a 11 ms access time, DataPak provides the fastest data back-up and recovery currently available for portable systems.

SECURITY
Remove DataPak to protect data from unauthorized usage.

Highlights

- 260MB and 340MB formatted native capacity

- Fully PCMCIA Type III compatible

- Rugged design with up to 15OG shock operating (75OG non-operating)

- 11ms average access time

- Innovative ramp loading technology secures   heads during power down state for utmost protection during transportation

- Includes SystemSoftTM   CardSoft Card & Socket Software for trouble free installation and system compatibility

- Drive protective pouch included for further protection during transportation

- Mean Time Between Failure (MTBF) = 250,000 hours

- Operating environment, 5°C to 55°C

- Optimum power management enables DataPak to draw only .025 watts of power in sleep mode and 1.30 watts when operating and being accessed

- Packaged with pull tabs for systems not equipped with peripheral eject feature

- Free technical support

- One year warranty

Data Card: Hard Disk and Memory on a single Micro Channel Expansion Board

The Data Card is an ideal way to add the storage and memory needed for today's demanding software in IBM PS/2 Micro Channel systems.   Data Card is available for 16 and 32-bit Micro Channels with a 500MB 2.5" bootable Winchester hard drive.   In addition, it features four SIMM sockets for up to 64MB of total system memory on one Micro Channel expansion card.   The Data Card coexists with the system's native hard drive, enabling you to build upon your current capacity.   Easily configured as bootable "C" drive, or as an application drive ("D" or greater), DataCard provides 16ms access time to further increase performance capabilities.

Popular Uses

INCREASING DISK CAPACITY
Data Card allows Micro Channel users to easily add up to 500MB of storage internally.

INCREASING MEMORY CAPACITY
Data Card supports up to 64MB of total system memory,   providing the performance needed to handle today's demanding software.

Highlights

- Both hard disk and memory on one Micro Channel board

- Specifically designed for IBM PS/2 models 50, 5OZ, 55, 56, 57, 60, 65, 70, and 80

- Dual functionality saves limited bus slots.   Supports up to 64MB of total system memory on 32-bit Micro Channel systems

- Available with or without memory.

- Coexists with system native hard drive.

- 16ms average drive access time for increased disk performance

- Can be configured as bootable "C" drive or application drive ("D" or greater).   Accepts standard IBM memory for easy shift of modules from motherboard or expansion board to Data Card

- Fully compatible with DOS, OS/2, Windows, and Novell Netware

- Free lifetime technical support

- Five year warranty (two year drive warranty)

- Lifetime warranty on memory

Data Card Specifications

16-BIT MICRO CHANNEL FOR 286 & 386SX BASED VERSIONS:

KINGSTON PART NUMBER	FORMATTED DRIVE CAPACITY	MAXIMUM SYSTEM MEMORY CAPACITY	ON-BOARD MEMORY

KTM-DC16/500-0	500MB	16Mb	0MB
KTM-DC16/500-4	500MB	16Mb	4Mb
KTM-DC16/500-8	500MB	16Mb	8Mb

32-Bit Micro Channel For 386DX & 486 Based Versions:

KTM-DC32/500-0	500MB	64Mb	0MB
KTM-DC32/500-4	500MB	64Mb	4Mb
KTM-DC32/500-8	500MB	64Mb	8Mb

WARRANTY-.   Lifetime (two-year drive warranty)

Kingston Memory Upgrades

What's your favorite memory?   If you answered Kingston, you're in very good company.

You see, we've become the most popular memory in the world by maintaining an uncompromised dedication to reliability.   That means bench testing each and every product in the system for which it was designed with diagnostics developed by the system's original manufacterer.   When it comes to compatibility, we leave absolutely nothing to chance.   We suspect that's why,   - in a recent Galup poll -   Kingston was reported as the largest independent memory supplier to the Fortune 1000 companies.   They rely on our upgrades every single day   -   and you can too!

With today's operating systems and application software, acceptable system performance   - and your own productivity   - demands an ever increasing need for additional RAM. Kingston can help you solve your memory upgrading requirements by first, helping you learn just how your   system can be upgraded, and second, by offering you unparalled quality in the vast array of memory products Kingston manufactures for more printers, desktop and portable personal computers and workstations than anyone in the industry.

RAM

Random Access Memory.   Varieties include [DRAM](#), [VRAM](#) and [SRAM](#).

DRAM

Dynamic Random Access Memory.   This is the most common form of memory in today's computers and printers.

VRAM

Video Random Access Memory.

VRAM is a specially designed, "dual-port" form of random access memory, and was originally developed for video display controllers.   Video operations require very rapid transfer of millions of bytes of screen pixel and color information between the controller's processor, the host system's processor, and memory.   At the expense of higher cost, VRAM is significantly faster than normal DRAM.

SRAM

Static Random Access Memory.

Static RAM is a hardware memory implementation in which physical locations of data are "hard-coded" in the chip.   This allows three to five-fold increases in access speed over the more common DRAM.

One common use of SRAM is in hardware "caching", in which data awaiting further processing is maintained in a temporary tempory holding area.   Typically, the processing agent is a CPU or other on-board controller chip which is capable of reading and writing data at a rate faster than it can be acquired from DRAM memory.   The cache medium does not require extensive internal logic, and therefore fast SRAM suits the task.

Standard Memory

The factory-installed RAM in a computer or printer.

This term is used interchangeably with *Base Memory.*

Base Memory

The factory-installed RAM in a computer or printer.

This term is used interchangeably with *Base Memory.*

CPU

Central Processing Unit.

This is a chip which serves at the highest level of processing and control in a computer.

Memory Upgrade Path

The Memory Upgrade Path lists all or most of the memory upgrading alternatives available for the displayed system.   Each value in the first column of the table table represents a possible memory configuration, and the other two columns list the quantity and Kingston Part Number(s) required to achieve that configuration.

Standard ("base" or factory) memory configurations are represented by the abbreviation 'STD' in the second column of the Upgrade Path table.

Note: Many systems are shipped with more than one possible standard memory configuration.   In this case, be sure to establish which standard memory configuration applies to you.

The Bank Schema is intended to supplement the Memory Upgrade Path by providing a visual means (albeit rudimentary) of   understanding what configurations are possible and impossible.

How to Read a Bank Schema

The **Bank Schema**, a diagram or rows and columns that shows the number of memory sockets in your system, is meant to supplement the   Memory Upgrade Path in describing the method of expanding the system's memory.   *Please keep in mind that this visual display is a theoretical bank layout, and not an actual physical system board layout*.

Each   ___   represents a *memory socket*.   For example,   ___   ___   ___   ___   = four memory sockets.

Each column represents a bank.   The number of   ___   symbols in a column represent the number of memory sockets in a bank.   Upgrading is performed one bank at a time.   For example, if there are four columns with two ___ in each column, upgrading is done two modules at a time.   However, if there is just a row of single ___, upgrading may be performed one module at a time.

Examples:

8 sockets =   ___   ___   ___   ___   ___   ___   ___   ___

In this example, up to eight modules may be installed *one at a time in any combination*.

8 sockets (4 banks of 2) =   ___   ___   ___   ___
                                           ___   ___   ___   ___

This system can accept up to eight modules, but *modules must be two at a time*.

4 sockets (1 banks of 4) =   ___
                                    ___
                                    ___
                                    ___

The system can accept up to *four modules, all installed at once*.

The **standard memory** (base amount your system was shipped with) is shown as either **removable** or **non-removable**.

Removable memory comes in the form of modules that fit into memory sockets, and, if desired, can be removed and replaced with modules of higher capacity.   Removable memory is represented by a '___' with a number next to it:

    ___4   ___   means there is a 4MB module in the first socket, and the second socket is empty.

Non-removable memory usually comes in the form of memory chips which are soldered directly onto the system board.   It is represented in the bank schema in brackets:

    [4MB]
    ___   ___   means there are 4MB of fixed memory on the board and two memory sockets available for expansion.

Bank

A group of sockets, all of which must be either vacant (available) or occupied at any given time for the system to operate correctly.

Memory module

A self-contained assembly of electronic components and circuitry, including RAM memory chips.

Memory socket

A receptacle for a single [memory module](#).

PCMCIA

The Personal Computer Memory Card International Association (PCMCIA) is an organization of companies developing the personal computer card (PC Card) standards. A PC Card is a small form-factor adapter that has the size and shape of a credit card.

With the profileration of notebook and hand-held computer systems, the search for smaller, lighter, and more portable tools for information processing is generating innovative developments in many aspects of the portable computer market. These innovations include display, memory, power management, and overall computer design and size. PC Cards are a key technology for adding memory, storage, and I/O capabilities to portable systems.

PCMCIA standards define three types of cards. A Type I PC Card (3.3MM thick) may be used for various types of memory enhancements, including RAM, Flash memory,one time programmable (OTP) memory, and electronically erasable programmable read only memory (EEPROM). A Type II PC Card (5.0mm thick) may be used for memory enhancements and/or for I/O features such as modems, LANs, SCSI interface, sound cards, Global Positioning System (GPS), RS232 interface   and host communications. A Type III PC Card (10.5mm thick) is primarily used for Winchester drives. New applications are added to these cards, making it a very attractive alternative for both portable computer and desktop users.

Socket and Card Services

The Socket and Card Services (SS/CS) are the key elements of the PCMCIA software architecture. Socket Services is a BIOS level software interface that provides a way to access the PCMCIA sockets (slots) of a computer. Socket Services identifies how many sockets are in your computer system and detects the insertion or removal of a PC Card adapter while the system is powered on. Socket Services is part of the PCMCIA 2.1 specification and interfaces with Card Services.

Card Services is a software management interface that allows you to allocate the system resources (such as memory and interrupts) automatically, once Socket Services detects that a PC Card has been added. Card Services also releases these resources when the PC Card has been removed. Furthermore, Card Services provides you with an interface to higher level software to load any needed hardware drivers. The specification for Card Services is currently being finalized.

The combination of PC Card Adapter hardware, and SS/CS provides "Plug-and-Play" and "Hot Swapping" capability in the portable computing environment.

10Base-T

An implementation of the IEEE 802.3 Ethernet standard on 26 to 22-gauge unshielded twisted-pair wiring, a baseband medium, at 10 megabits per second.

10Base-2

An implementation of the IEEE 802.3 Ethernet standard on thinnet/coaxial BNC cabling.

802.3

Defined by the IEEE, a set of standards which govern the use of the network access method used by Ethernet networks. Although and Ethernet are used interchangeably, there are technical differences.

Attachment Unit Interface (AUI)

The connector used with thick Ethernet that often includes a cable (called a drop cable) running off the main, or backbone, coaxial cable.

Automatic Partitioning/Reconnection

If any of the ports on the EtheRx Hub experience excessive collisions, duration collisions, or faulty conditions, that particular port can be partitioned. Once partitioned, the Hub will continue to monitor that port. If the error conditions have been corrected, the Hub will automatically reconnect that port to the network.

Backbone

Cable on which 2 or more stations or networks may be attached.

BNC

A standardized biconic connector used with thinnet and coaxial cable.

Cascading Star

A LAN topology characterized by a centralized multiport repeater serving as the focal point for many other multiport repeaters.

Crossover Cable

A cable connecting or cascading between two or connecting 2 stations without a Hub. The transmit and receive pins on these cables are crossed.

Hub

A multi-connection device in a cascading star-topology network to which the nodes are attached.   Also, a wiring hub or repeater that brings together the connections from multiple network nodes.

Jabber Lock-up Protection

The EtheRx Hub implements a built-in jabber protection scheme to ensure that the network is not disabled due to transmission of excessively long data packets. This protection scheme will automatically interrupt excessively long transmissions to prevent jabber lock-up.

Link Test

The EtheRx Hub implements the link test function as specified in the IEEE 802.3 10Base-T standard. The Hub will transmit link test pulses to any RJ-45 twisted-pair port. These pulses are sent to confirm that a valid connection exists between each twisted-pair port on the Hub and its attached device.

RG-58

A variety of shielded coaxial cable used for "thin" Ethernet transmission (thinnet). Like all Ethernet cable, RG-58 has a 50-ohm characteristic impedance.

RJ-45

A modular eight-wire connector used to terminate twisted-pair telephone cable. It is used for starLAN networks and some telephone systems.

Repeater

If any single port senses the start of a valid packet on its receiving line, the EtheRx Hub will re-transmit the received data to all other ports on the network. The re-transmission of packet complies to the IEEE 802.3 specification in terms of preamble structures, voltage amplitude, and timing characteristics. These timing regeneration prevent cumulative loss of signal, jitters, and distortion caused by the network cabling, enabling the EtheRx Hub to be cascaded to other EtheRx .

How to Learn About New Kingston Products

The best way to get information about Kingston products is via the World Wide Web. Our URL is:

http://www.kingston.com

You can also discover new Kingston product information and read about newsworthy Kingston events using the What's New! button of the learn about page of the Kepler Search window.

Kingston RAMfax automated fax-back service offers fact sheets on all Kingston products, new and old.   Call RAMfax toll-free at (800) 435-0056.

Any of our friendly Kingston Customer Service Representatives will be happy to answer your questions about newly released or anounced products.   Call toll free at (800) 845-2545.

For additional contacts, see Contacting Kingston - A Summary.

Kingston Product ID

This is the Kingston Part Number converted to uppercase and stripped of all hyphens, slashes and spaces.   The Product ID is used in data import operations to uniquely associate a row of data with a Kingston product.

Keeping KEPLER Up To Date

You can download the most current KEPLER database update from Kingstons World Wide Web site (or URL is: http://www.kingston.com) or from from Kingston's BBS or via the Kingston forum on Compuserve.

What to do once you've downloaded the Kepler for Windows Update...

The file you are about to download is a self-extracting 'zip' file. In order to 'unzip' this file, please do the following:

>	Copy the KWUPD.EXE file to the KEPLER for Windows directory and type:

>	>	KWUPD.EXE [ENTER]

>	This will unzip the two files needed for the update. You must then run KEPLER and do the
following:

>	>	Select the ADMINISTRATOR button
>	>	Enter the PASSWORD (or hit the ENTER key if no password)

You will be in the Administrator section... so hit the UPDATE button and follow the instructions.

Before applying the update, make sure that no one else on your network is using KEPLER.

Contents command (Help menu)

Invokes the KEPLER Help and Easy Reference <u>Contents</u> screen.

Using Help command (Help   menu)

Opens help on [How to Use Help](#).

About KEPLER... command (Help   menu)

Invokes the <u>About KEPLER... window</u>, which displays the KEPLER issue volume, number and date, along with the Kingston KEPLER logo and copyright notice.

What's New button

Learn about newsworthy events and new Kingston products!

About Us button

Learn more about Kingston Technology Corporation.

About KEPLER Window

Displays the KEPLER issue volume, number and date, along with the Kingston KEPLER logo and copyright notice.

The KEPLER volume, number and date is also displayed on the Main Panel page of the KEPLER Search wondow.

License Agreements

Kingston's ELECTRONIC PRODUCT LIBRARY and EASY REFERENCE Copyright(c) 1993-1996 Kingston Technology Corporation.

All rights reserved under International and Pan-American Copyright Conventions. You are free to reproduce and distribute diskettes in its original form. You may not, however, **resale**, **access** or **modify** the Kepler Program or Data contained therein via any software application other than **Kepler For Windows** itself.

Import

Please consult your application software documentation for instructions on importing specific file formats.

Each of the following file formats is provided:

FILENAME.DBF   DBaseIII+/Clipper/Foxpro database format.

FILENAME.WK1   Lotus 1-2-3 v.2.x spreadsheet format.

FILENAME.XLS   Microsoft Exel (v.2.0 and above) format.

FILENAME.CSV   Comma-Separated Values (also know as Comma-Delimited ASCII text file) format.

FILENAME.TXT   Tab-Delimited ASCII file format, suitable for word processing applications.

FILE format:

```
ACCT_ID          N(4,0)  ; Account Id :  numeric 4 digits, no decimal
DATA_ID          C(12)   ; Data Id:      always: 'KTC00001-A00'
SUB_TITLE        C(18)   ; Character:    18 characters
KPARTNO          C(15)   ; System name:       15 characters
OEMPARTNO        C(32)   ; OEM P/N:      32 characters
ACCT_SKU         C(15)   ; Account P/N: 15 characters
DESCR            C(42)   ; Part descript:       42 characters
UPC_CODE         C(12)   ; UPC P/N:      12 characters
ENHANCEMEN       C(1)    ; Enhancement:        '*' = yes, empty() = no
K_LIST           N(8,2)  ; Kingston List:      numeric 8 digits, 2 decimals
ACCT_PRICE       N(8,2)  ; Account Price:      numeric 8 digits, 2 decimals
```

Export

Please consult your application software documentation for instructions on exporting specific file formats.

Each of the following file formats is provided:

FILENAME.DBF	DBaseIII+/Clipper/Foxpro database format.
FILENAME.WK1	Lotus 1-2-3 v.2.x spreadsheet format.
FILENAME.XLS	Microsoft Exel (v.2.0 and above) format.
FILENAME.CSV	Comma-Separated Values (also know as Comma-Delimited ASCII text file) format.
FILENAME.TXT	Tab-Delimited ASCII file format, suitable for word processing applications.

FILE format:

ACCT_ID	N(4,0)	; Account Id : numeric 4 digits, no decimal
DATA_ID	C(12)	; Data Id: always: 'KTC00001-A00'
SUB_TITLE	C(18)	; Character: 18 characters
KPARTNO	C(15)	; System name: 15 characters
OEMPARTNO	C(32)	; OEM P/N: 32 characters
ACCT_SKU	C(15)	; Account P/N: 15 characters
DESCR	C(42)	; Part descript: 42 characters
UPC_CODE	C(12)	; UPC P/N: 12 characters
ENHANCEMEN	C(1)	; Enhancement: '*' = yes, empty() = no
K_LIST	N(8,2)	; Kingston List: numeric 8 digits, 2 decimals
ACCT_PRICE	N(8,2)	; Account Price: numeric 8 digits, 2 decimals

User Mode

- Upgrade
- Import
- Export