**IBM**

# IBM ThinkPad

# Product Information Guide

*IBM PC Company*

*15th April 1997*

Final Version -25/3/97

**IBM**

(This page is intentionally left blank)

# Table Of Contents

# ThinkPad: New Models

**NEW ThinkPad 760 models with MMX technology**

Intel recently made available its highest-performance Pentium processor to date for mobile computers. With an award winning pedigree for innovation you can be sure IBM strives to bring you products that incorporate the latest technology in the industry. The new IBM ThinkPad 760XD/XL contain 166MHz Pentium processors with MMX technology for the ultimate in mobile power.

With the addition of the ThinkPad 760XD/XL notebook computers to the internationally acclaimed ThinkPad 760 series, IBM continues its leadership in processor power and overall system performance. Now with the power to run today's and tomorrow's next generation of advanced multimedia and communications applications, the ThinkPad 760XD/XL deliver the ultimate blend of mobile power, performance, connectivity, and configuration flexibility.

## *a Better place to think*

The entire ThinkPad 760 series of enhanced notebook computers in the IBM ThinkPad family incorporate extremely high performance processors, superb displays, large disks and long battery life. Not forgetting the IBM ThinkPads unique hardware and software support, TrackPoint III, Advanced Power Management, a choice of preloaded operating system (inc. Windows NT) and productiviity applications**.** Combine all this with anyone of the IBM docking solutions and they can easily become your primary PC, providing a viable alternative to a desktop system unit.

Whether you're making choices for a few - hundreds - even thousands of users, you've come to the right place. Three distinct ThinkPad families bring the right combination of features for every need...at just the right price. From their sleek black cases to their industry-leading mobile technology, ThinkPad notebooks are the touchstone for quality, performance, value and reliability.

**When you Think about notebooks, Think about a ThinkPad.**

## New Products & availability:

| Description | Type/Model | Specification | P/N | Availability |
|---|---|---|---|---|
| ThinkPad 760XD | 9546-X9E | Pentium 166MHz w/MMX 32MB 3.0GB 12.1" TFT (1024x768) 8X CD-ROM WIN 95 | 7609E-- | April 1997 |
| ThinkPad 760XL | 9547-X9C | Pentium 166MHz w/MMX 16MB 2.1GB 12.1" TFT (800x600) WIN 95 | 7609C-- | April 1997 |
| ThinkPad 760XL | 9547-X9K | Pentium 166MHz w/MMX 32MB 2.1GB 12.1" TFT (800x600) WIN NT | 7609K-- | April 1997 |

Note on screen sizes: '12.1' refer to the diagonally measures distance in inches of the screen display

# IBM ThinkPad Family Overview

The desire to be mobile, to be free to do what we want, when we want, is within us all. IBM has harnessed the technology to allow you this freedom. The IBM ThinkPad range continues to gather praise from around the world and across the industry for customer satisfaction and excellence in technology. This has helped to make ThinkPad the most award winning notebook in the world. With such citations IBM ThinkPads have become synonymous with mobility.
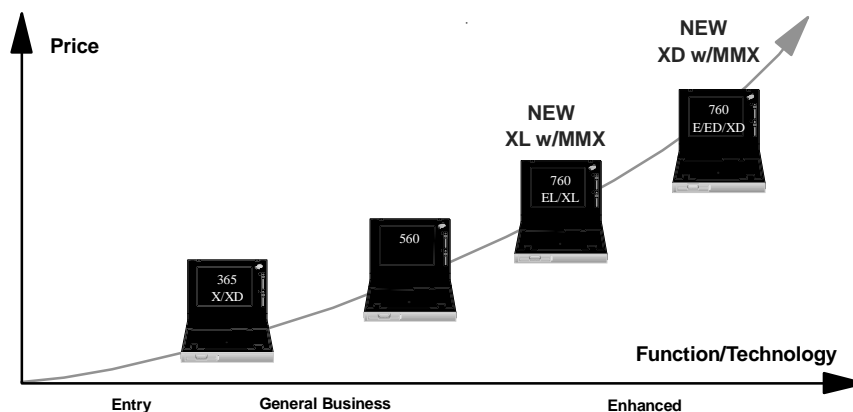
Everyone has their own set of expectations when it comes to choosing a mobile computer-- some strictly business, some entirely personal. By offering such a broad choice of competitively priced ThinkPads suited to a range of professional and personal needs, IBM is able to make this freedom attainable by all.

**Powerful, affordable and upgradeable, the IBM ThinkPad 365 series** is a collection of lightweight, full-size systems delivering exceptional price/performance. With a choice of processors, displays and even multimedia, IBM offers you solid, core performance and ThinkPad innovation at aggressively competitive prices.

**Thin, lightweight, without compromise** were the key requirements made by some of our customers. The IBM engineers delivered again - an ultraportable beyond compromise. The **ThinkPad 560** is a slender, lightweight, high performance machine with large display (12.1" or 11.3") and fullsize keyboard ideal for the nomad or wide area traveller. Weighing in at just over 1.8kg, at a height of 31mm the ThinkPad 560 is the lightweight notebook that performs like a heavyweight.

**Advanced technology, innovative designs and flexibility** are just what you would expect from the **ThinkPad 760 Enhanced** systems. The latest premier mobile platform for enhancing personal productivity makes the most of Pentium performance and outstanding expandability ensuring investment protection. Whether you want the pure peformance of the flagship ThinkPad 760XD, our mobile multimedia & communications centre, or the ThinkPad 760XL's combination of performance and affordability, there's a ThinkPad 760 thats just right for your needs and your budget.

## The ThinkPad Family

# IBM ThinkPad 700 Range At A Glance

| System | 760XL | 760XL | 760E | 760ED | 760XD |
|---|---|---|---|---|---|
| Model-Type | 9547-X9C | 9547-X9K | 9546-X9B | 9546-X9A | 9546-X9E |
| Pentium Processor | 166MHz w/MMX | 166MHz w/MMX | 150MHz | 133MHz | 166MHz w/MMX |
| L2 Cache | Yes | Yes | Yes | Yes | Yes |
| Local Bus | PCI | PCI | PCI | PCI | PCI |
| Memory  std        max | 16MB 104MB | 32MB 104MB | 16MB 104MB | 16MB 104MB | 32MB 104MB |
| Hard disk - Standard | 2.1GB max-3.0GB | 2.1GB max-3.0GB | 2.1GB max-3.0GB | 2.1GB max-3.0GB | 3.0GB |
| Removable HDD | Yes | Yes | Yes | Yes | Yes |
| Display Type

Colours at resolution | 12.1" TFT Black Matrix SVGA 64K 800 x 600 | 12.1" TFT Black Matrix SVGA 64K 800 x 600 | 12.1" TFT Black Matrix XGA 64K 1024x768 | 12.1" TFT Black Matrix XGA 64K 1024x768 | 12.1" TFT Black Matrix XGA 64K 1024x768 |
| Graphics | 32-bit | 32-bit | 64-bit | 64-bit | 64-bit |
| Video RAM | 1MB | 1MB | 2MB | 2MB | 2MB |
| Battery - life avg | Li-Ion 2.3 hrs | Li-Ion 2.3 hrs | Li-Ion 2.6 hrs | Li-Ion 2.2 hrs | Li-Ion 2.0 hrs |
| Quickcharge | 1.5 hrs | 1.5 hrs | 1.5 hrs | 1.5 hrs | 1.5 hrs |
| Size mm (DxWxH) Weight | 210x297x54

3.05Kg | 210x297x54

3.05Kg | 210x297x51

2.91Kg | 210x297x51

3.02Kg | 210x297x51

3.18Kg |
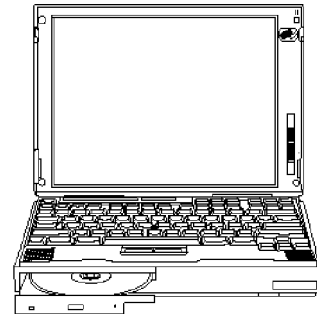| Audio | Yes | Yes | Yes (DSP - Mwave) | Yes (DSP - Mwave) | Yes (DSP - Mwave) |
| CD-ROM | Optional | Optional | Optional | Yes - 6X | Yes - 8X |
| Communications | No | No | Yes (DSP - Mwave) | Yes (DSP - Mwave) | Yes (DSP - Mwave) |
| MPEG | Yes (MPEG-1) | Yes (MPEG-1) | No | Yes (MPEG-2) | Yes (MPEG-2) |
| Infrared | 1.15Mbps | 1.15Mbps | 1.15Mbps | 1.15Mbps | 1.15Mbps |
| TrackPoint | TP III | TP III | TP III | TP III | TP III |
| PCMCIA | 2T2/1T3 | 2T2/1T3 | 2T2/1T3 | 2T2/1T3 | 2T2/1T3 |
| Docking options | SelectaDock | SelectaDock | SelectaDock | SelectaDock | SelectaDock |
| Operating Systems | Windows 95 | WinNT | Windows 95 | Windows 95 | Windows 95 |
| Warranty | 3yr International | 3yr International | 3yr International | 3yr International | 3yr International |

# IBM ThinkPad 760XD/ED/E

**For the ultimate in mobile power, connectivity and flexibility.**

The 760 Enhanced series are the flagship models of the ThinkPad range offering the latest power, connectivity and configuration flexibility to optimize effectiveness and maximise investment return. With inbuilt Mwave DSP technology and MPEG video processors(XD/ED) the 760XD/ED/E take mobile capability into a class of it's own.

## Marketing Highlights:

- Powerful Pentium processors, including the latest 166MHz with MMX technology (XD)

- With a choice of three displays including the latest 12.1" diagonal XGA TFT display for exceptionally sharp images.

- Unique UltraBay supporting second hard disk drive, battery pack & other options.

- Integrated IBM Media Processor (Mwave DSP)
    - Stereo audio support for .WAV & MIDI files
    - Up to 28.8k data/fax modem
    - Telephony/speakerphone/answering machine
    [subject to country PTT/Homologation approval]

- Wide range of docking solutions including the new IBM SelectaDock offerings.

All ThinkPad 760 XD/ED/E Models have the following features:
- High memory capacity with the ability to expand up to 104MB.

- Up to 3.0Gigabytes of removable hard disk drive

- PCI bus architecture with PC Card CardBus support.

- Sleek-design featuring automatic-tilt keyboard and palm rest area

- Integrated Infrared ports (IrDA compliant) for data/file transfers and printing

- Li-Ion battery standard with efficient power management for extended battery life.

- Customer support package with 3-year International Warranty Service

- ThinkPad 760XD/ED special features
    - Integrated CD-ROM, and Total Image Video with MPEG-1 and MPEG-2
    - Video-in port and Video-out to TV port (PAL/NTSC)
    - MIDI/Joystick port

# IBM ThinkPad 760XL

**For the ultimate in mobile power, connectivity and flexibility.**

The 760 Enhanced series are the flagship models of the ThinkPad range offering the latest power, connectivity and configuration flexibility to optimize effectiveness and maximise investment return. The ThinkPad 760XL gives you the perfect combination of features and flexible foundations that can easily be built on, at very affordable prices.

## Marketing Highlights:

- Powerful Pentium processors, including the latest 166MHz with MMX technology

- Large 12.1" diagonal SVGA TFT

- Unique UltraBay supporting
  - second hard disk drive
  - additional battery pack extending portability time
  - optional CD-ROM drives upto 8X speed
  - PCMCIA cartridge
  - removable 1.44 floppy disk drive

- Systems include support for Sound Blaster Pro applications and are equipped with jacks for an external mic, stereo speakers or headphones

- Wide range of docking solutions including the new IBM SelectaDock offerings

All ThinkPad 760XL models have the following features:

- High memory capacity with the ability to expand your ThinkPad 760XL from the standard 16 or 32MB RAM to 104MB.

- 2.1Gigabytes of removable hard disk drive

- PCI bus architecture with PC Card CardBus support

- Sleek-design featuring automatic-tilt keyboard and palm rest area

- Integrated infrared ports (IrDA compliant) for data/file transfers and printing

- Li-Ion battery standard with efficient power management for extended battery life.

- Customer support package with 3-year International Warranty Service

# IBM ThinkPad 760 Series Features and Benefits:

| Feature | Benefit |
|---|---|
| Choice of powerful Pentium processors with 256KB L2 internal cache | Provides the maximum possible performance, with full power management functions to ensure superior battery life |
| 12.1" high-resolution 1024x768 or 800x600 Black Matrix TFT displays | The ultimate in presentation power, with the capability of displaying up to 65,536 colours, reduced reflectivity and the 12.1" providing 35% more viewing area than the 10.4" |
| ThinkPad UltraBay utilises 'spare' bay to enable installation of a variety of options. | Intelligent bay recognises an FDD, PCMCIA cartridge, second Li-Ion battery, HDD or CD-ROM for amazing flexibility. |
| IBM ThinkPad Docking  Solutions | With the ability to use the latest SelectaDock or existing Dock I & II  models, IBM offers both amazing expandibility and the bonus of investment protection. |
| 16 or 32MB  standard EDO memory, expandable to 104MB, and a choice of hard disk drives with capacity up to  3GB | More than enough memory and storage capacity to run Windows 95, Windows NT or OS/2 Warp as well as utilise the suite of pre-installed software packages or multimedia. |
| New look with automatic-tilt keyboard and palm rest area | For improved typing comfort and system use (the tilt mechanism can also be simply re-set to 0% angle) |
| Improved Media Processor (Mwave DSP) - 760XD/ED/E only (Subject to country PTT approvals & with the IBM DAA/telephony Kit & Headset) | Provides advanced audio and communications functions including up to 28.8Kbps data/fax modem: 16-bit CD-quality audio with SoundBlaster and MIDI support; digital answering machine; full-duplex speakerphone |
| Integrated infrared ports and pre-installed IR software (Puma TranXit and Mind Path) | Complies with IrDA (Infrared Data Association) standards and allows data/file transfer between IR-enabled systems |
| Advanced Power Management capabilities, inc. quick charge and on-screen fuel gauge | To ensure that you are always aware and in control of the battery status, enabling you to concentrate on work in-hand |
| MPEG-1 and MPEG-2 HHR (Half Horizontal Resolution) support. | Total Image Video on the 760XD/ED ensures exceptional video performance and improved multimedia capability |
| PCMCIA and PC Card Director. All current 760 models include CardBus PC Card support. | The easiest way to add communication cards, plus audio and more. PC Card Director software will recognise most PCMCIA cards as they are inserted into the ThinkPad. It will then load the application of your choice, ready to run. |
| Preinstalled productivity software | Instant productivity, thanks to an extensive selection of programmes selected for the mobile professional including Lotus SmartSuite. |

# Key ThinkPad 760 Technologies:

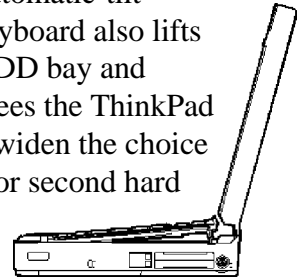## Pentium Processors now including MMX Technology

The IBM ThinkPad range now includes the most powerful Pentium Processor to date. Pentium Processors with MMX technology can offer a huge performance gain and even richer multimedia, over current Pentium products when running MMX-enabled applications. Even on software you run today, Intel advises that you will likely experience a significant boost in performance over a Pentium processor based system of the same clock speed .

## Display

IBM continues to deliver leading LCD technology with the ultrafine 1024x768 resolution 12.1-inch (maximum viewable area when measured diagonally) Black Matrix TFT display. The crisp, sharp images and a larger viewing area enable far more information to be displayed on the actual screen (up to 56% more than a 10.4-inch display). These bright Active Matrix displays have a special treatment to reduce reflectivity, providing superior viewing capability outdoors and reduced glare indoors.

## New Ergonomic Design

The award-winning design of the ThinkPad family includes an innovative automatic-tilt keyboard and a palm rest area for more comfortable typing position. The keyboard also lifts up in the conventional ThinkPad manner for easy access to the FDD bay, HDD bay and battery for quick upgrades or battery changes. An additional enhancement sees the ThinkPad UltraBay (the space where the FDD or CD-ROM resides in the 760 series) widen the choice of UltraBay options to include a PCMCIA cartridge, second Li-Ion battery or second hard disk drive (requires IBM ThinkPad Second HDD Adapter option).

IBM works hard to ensure we look after your investment in Enhanced ThinkPad products by offering a docking solutions strategy which means the latest 760 enhanced systems are not only compatible with the latest SelectaDock systems but existing Dock I & II systems

## Exceptional Multimedia

The ThinkPad 760XL/E have PCI bus support with video acceleration, providing exceptional video performance, and the ThinkPad 760XD/ED builds on this in the following ways: The 760XD/ED's Enhanced Video supports Video-in and Video-out (NTSC/PAL), Video capture, Hardware video acceleration and scaling. Additionally, the 760XD/ED Total Image Video system has support for MPEG-1 and MPEG-2 HHR video decoding for significantly improved video performance, and the TheatreSound 16-bit stereo wavetable audio with support for SoundBlaster Pro applications, MIDI and .WAV files ensure that every presentation will be memorable.

The MMX technology in the 760XD/XL models includes 57 new instructions that speed up certain compute-intensive loops in multimedia and communications applications. Just think how that shall enhance MPEG video, music synthesis and 2 & 3 dimensional images.

**IBM**

# IBM ThinkPad 760XD/ED Key Competitors:

| Product Specifications | IBM ThinkPad 760 Series | Toshiba Tecra 7x0CDT Series | Compaq LTE 5xxx Series |
|---|---|---|---|
| Processor | Pentium | Pentium | Pentium |
| Speed MHz | 133,150 or 166MHz w/MMX | 133 or 150 | 100, 120 or 133 |
| Memory - std/max | 16 or 32MB/104MB | 16/144MB | 8/72MB or 16/80MB |
| L2 cache | 256KB | 256KB | 256KB |
| Display | 12.1" XGA TFT 12.1" SVGA TFT | 12.1" XGA TFT | 12.1" SVGA TFT 11.3" TFT or DSTN 10.4" SVGA TFT |
| Video Memory | 1MB or 2MB | 2MB | 1MB |
| PCI Architecture | Yes | Yes | Yes |
| Pointing Device | TrackPoint III | MousePoint | EasyPoint II |
| PC Card Slot | 1-t3/2-t2 CardBus | 1-t3/2-t2 | 1-t3/2-t2 |
| Hard Drive - std/max | 2.1 or 3.0GB / 6.0GB | 1.13GB or 2.5GB / 2.5GB | 810MB, 1.35GB or 2.16GB / 4.32GB |
| Removable HDD | Yes | Yes | Yes |
| Max # Hdd | 2 | 1 | 2 |
| Port Replicator | Yes | Yes | No |
| Docking Station | Yes | Yes | Yes |
| Battery Type (standard) | Li-Ion | Li-Ion | NiMH/Li-Ion option |
| Battery Life(hrs) | 2.0-2.6 | 2:75 to 5 | 2.5 to 4 |
| Max # Batteries | 2 | 1 | 2 |
| Battery Charge Time | 1.5-2.5 hrs (power off) | 4hrs | 1.5 hrs (power off) |
| Intergrated Audio | yes | yes | yes |
| Integrated Fax/Modem | Up to 28.8 via DSP | Up to 28.8 | optional via PCCard |
| Integrated Infrared Port | yes (x2) 1.15Mbps | yes 1.15Mbps | yes 1.15Mbps |
| Integrated CD-ROM | Optional/Standard on most (8X) | 6X | Optional or Standard (4X) |
| Weight with Battery | 2.91 - 3.19kg | 3.4 - 3.7kg | 3.3 - 3.4kg |
| Dimensions (mm) | 51 x 297 x 210 | 58 x 300 x 231 | 51 x 310 x 229 |
| Warranty | 3yr | 3yr | 3yr |

## Competitive Advantage:

**UltraBay Modularity:** Provides the most extensive list of options, including PCMCIA adapter, 2nd hard drive or battery.
**Docking Solutions:** SelectaDocks design with building-block approach makes your ThinkPad a true desktop replacement.
**MPEG Support:** Provides professional quality video and advanced multimedia support(ED).
**Media Processor:** Provides advanced audio and telephony*(E/ED/XD). It's like taking your office on the road.
**Full PCI:** Full implementation so you can take advantage of higher performing peripherals.
**CD-ROM Upgradeability:** All new models can be upgraded giving you future flexibility and investment protection.
**High-Speed Infrared:** Lets you print, transfer files and synchronize data....all without attaching cables or wires.
**Lotus SmartSuite:** Productivity software included at no additional cost.!

 *[subject to country PTT/Homologation approval]

# IBM ThinkPad 560 Range At A Glance

| Model 560 | 100 | 200 |
|---|---|---|
| Model-Type | 2640-100 | 2640-200 |
| Processor | Pentium 133MHz | Pentium 133MHz |
| Local Bus Type | PCI | PCI |
| Memory - std<br>- max | 8MB<br>40MB | 8MB<br>40MB |
| Hard disk - std<br>- opt | 2.1GB | 2.1GB |
| Floppy disk drive | Detachable | Detachable |
| Display<br><br>Type<br>Colours/resolution | 11.3" DSTN<br><br>SVGA<br>256 at 800 x 600 | 12.1" TFT<br><br>SVGA<br>64K at 800 x 600 |
| Video RAM | 1MB | 1MB |
| Battery - type std<br>- life avg | Li Ion<br>3.0 hrs | Li Ion<br>3.0 hrs |
| Quick Charge | 1.5 hrs | 1.5 hrs |
| Size (DxWxH)<br>Weight | 222x297x31mm<br>1.87kg with battery | 222x297x31mm<br>1.86kg with battery |
| Audio* | 16-bit Stereo | 16-bit Stereo |
| Mic & Speakers | Built-in | Built-in |
| Infrared | Yes | Yes |
| TrackPoint | TP III | TP III |
| PCMCIA | 2T2/1T3 | 2T2/1T3 |
| Docking options | Port Replicator | Port Replicator |
| Operating Systems | Windows 95 | Windows 95 |
| Warranty | 1yr International | 1yr International |

**\***supports Sound Blaster Pro applications

# IBM ThinkPad 560

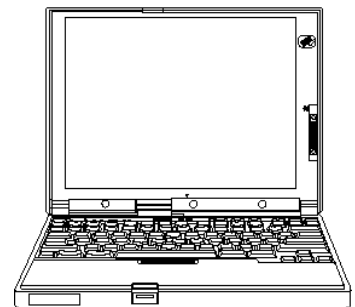**Ultraportability without compromise.**

ThinkPad 560 is the award winning ultraportable that doesn't sacrifice function for size. With the fast 133MHz Intel Pentium processor, a choice of large displays, roomy hard disk drives combined with a full-size keyboard and integrated palm rest for increased working comfort. All of this weighs in at just over 1.8kg and fits in a case just 31mm thin, making it both easy to use and comfortable to carry anywhere, without leaving performance behind.

 Add to this special features such as a detachable floppy disk drive, an integrated infrared port for wireless printing and file transfer, and a Li-Ion battery that comes standard.The conclusion is inevitable:
The IBM ThinkPad 560 is the lightweight notebook that performs like a heavyweight.

## Marketing Highlights:

- Pentium 133/66MHz processor

- Large 12.1-inch TFT or 11.3-inch DSTN SVGA displays

- Lightweight       1.86kg (12.1" screen) & 1.87kg (11.3")

- Slim Profile       31mm

- 2.1GB hard-disk drive

- 8MB memory (expandable to 40MB)

- PCI bus architecture capable of 32-bit data transfers for fast performance

- Detachable 1.44MB floppy disk drive

- Integrated Infrared port (IrDA compliant)

- 16-bit Stereo Audio with built in microphone and speakers

- Optional Port Replicator

- Pre-loaded software including Windows 95 and productivity applications

- Customer support package for hardware & software.

- 1 year International Warranty Service

# IBM ThinkPad 560 Key Competitors:

| Product Specifications | IBM ThinkPad 560 Series | DEC HiNote Ultra II 5100 Ser. | Toshiba Portege 650CT |
|---|---|---|---|
| Processor | Pentium | Pentium | Pentium |
| Speed MHz | 133 | 133 or 150 | 133 |
| Memory - std/max | 8/40MB | 8 or 16 / 56MB | 16/80MB |
| L2 cache | N/A | 256KB | 256KB |
| Display | 12.1" SVGA TFT 11.3" SVGA DSTN | 11.3" SVGA TFT 10.4" SVGA TFT | 11.3" SVGA TFT |
| Video Memory | 1MB | 1MB | 2MB EDO |
| PCI Architecture | Yes | Yes | Yes |
| Pointing Device | TrackPoint III | trackball | MousePoint |
| PC Card Slot | 1-t3/2-t2 | 1-t3/2-t2 | 1-t3/2-t2 CardBus, ZV |
| Hard Drive - std/max | 2.1 GB / 2.1GB | 1.08GB 1.35 or 1.44GB / 1.44GB | 1.26GB / 1.26GB |
| Removable HDD | Yes | Yes | No |
| Port Replicator | Optional | Optional | Optional |
| Docking Station | No | Optional | No |
| Battery Type (standard) | Li-Ion | Li-Ion | NiMH/Li-Ion option |
| Battery Life(hrs) | 3 | 3 to 5 | 2.5 to 5 |
| Battery Charge Time | 1.5 hrs (power off) | 2-3hrs (power off) | 6-9 hrs (power on) |
| Integrated Audio | Yes | Yes | Yes |
| Integrated Fax/Modem | Optional via PC Card | Optional via PC Card | Integrated 28.8Kbps data/fax/voice |
| Integrated Infrared Port | yes 115Kbps | yes 115Kbps | yes 4Mbps |
| Integrated CD-ROM | No (optional via PC Card) | No (optional Mobile Media Module) | No (optional via PC Card) |
| Weight with Battery | 1.86kg | 1.81kg | 2.18kg |
| Dimensions (mm) | 31 x 297 x 222 | 28 x 280 x 216 | 46 x 262 x 209 |
| Warranty | 1yr | 3yr | 3yr |

## Competitive Advantage:

**Large Displays:** Largest displays in this form factor makes it easier to see your work.
**Light Weight:** It's easy to carry around when you're on the move.
**PCI Bus:** Supports 32-bit transfers for faster performance.
**Quick Battery Charge:** Your ThinkPad is ready to go when you are.

**Integrated Infrared:** Lets you print, transfer files and synchronize data....all without attaching cables or wires.
**Lotus SmartSuite:** Productivity software included at no additional cost.!
**Netscape Navigator:** Web browser preloaded for easy access to the internet.

# IBM ThinkPad 560 Key Competitors:

| Product Specifications | IBM ThinkPad 560 Series | DEC HiNote Ultra II 5100 Ser. | Toshiba Portege 650CT |
|---|---|---|---|
| Processor | Pentium | Pentium | Pentium |
| Speed MHz | 133 | 133 or 150 | 133 |
| Memory - std/max | 8/40MB | 8 or 16 / 56MB | 16/80MB |
| L2 cache | N/A | 256KB | 256KB |
| Display | 12.1" SVGA TFT 11.3" SVGA DSTN | 11.3" SVGA TFT 10.4" SVGA TFT | 11.3"  SVGA TFT |
| Video Memory | 1MB | 1MB | 2MB EDO |
| PCI Architecture | Yes | Yes | Yes |
| Pointing Device | TrackPoint III | trackball | MousePoint |
| PC Card Slot | 1-t3/2-t2 | 1-t3/2-t2 | 1-t3/2-t2 CardBus, ZV |
| Hard Drive - std/max | 2.1 GB  / 2.1GB | 1.08GB 1.35 or 1.44GB / 1.44GB | 1.26GB / 1.26GB |
| Removable HDD | Yes | Yes | No |
| Port Replicator | Optional | Optional | Optional |
| Docking Station | No | Optional | No |
| Battery Type (standard) | Li-Ion | Li-Ion | NiMH/Li-Ion option |
| Battery Life(hrs) | 3 | 3 to 5 | 2.5 to 5 |
| Battery Charge Time | 1.5 hrs (power off) | 2-3hrs (power off) | 6-9 hrs (power on) |
| Integrated Audio | Yes | Yes | Yes |
| Integrated Fax/Modem | Optional via PC Card | Optional via PC Card | Integrated 28.8Kbps data/fax/voice |
| Integrated Infrared Port | yes 115Kbps | yes 115Kbps | yes 4Mbps |
| Integrated CD-ROM | No (optional via PC Card) | No (optional Mobile Media Module) | No (optional via PC Card) |
| Weight with Battery | 1.86kg | 1.81kg | 2.18kg |
| Dimensions (mm) | 31 x 297 x 222 | 28 x 280 x 216 | 46 x 262 x 209 |
| Warranty | 1yr | 3yr | 3yr |

## Competitive Advantage:

**Large Displays:** Largest displays in this form factor makes it easier to see your work.
**Light Weight:** It's easy to carry around when you're on the move.
**PCI Bus:** Supports 32-bit transfers for faster performance.
**Quick Battery Charge:** Your ThinkPad is ready to go when you are.

**Integrated Infrared:** Lets you print, transfer files and synchronize data....all without attaching cables or wires.
**Lotus SmartSuite:**  Productivity software included at no additional cost.!
**Netscape Navigator:** Web browser preloaded for easy access to the internet.

# IBM ThinkPad 300 Range At A Glance

| System | 365X | 365XD | 365XD |
|---|---|---|---|
| Model-Type | 2625-2X9 | 2625-GX9 | 2625-1X9 |
| Processor | Pentium 133MHz | Pentium 120MHz | Pentium 133MHz |
| Local Bus | PCI | PCI | PCI |
| Memory - std<br>- max | 8MB<br>40MB | 8MB<br>40MB | 8MB<br>40MB |
| Hard disk - std<br>- opt | 1.08GB<br>1.4 or 2.1GB | 1.08GB<br>1.4 or 2.1GB | 1.35GB<br>1.4 or 2.1GB |
| Removable Hard disk drive | User Upgradeable | User Upgradeable | User Upgradeable |
| Display<br>Type<br>Colours at resolution | 11.3" DSTN<br>SVGA<br>256<br>800 x 600 | 10.4" TFT<br>SVGA<br>64K<br>800 x 600 | 11.3" TFT<br>SVGA<br>64K<br>800 x 600 |
| Video RAM | 1MB | 1MB | 1MB |
| Battery - type<br>- life avg | NiMH<br>2.0 hrs | NiMH<br>2.0 hrs | NiMH<br>2.0 hrs |
| Quick charge | 1.2 hrs | 1.2 hrs | 1.2 hrs |
| Size mm (DxWxH)<br>Weight | 211x297x49.5<br><br>2.67kg | 211x297x49.5<br><br>2.77kg | 211x297x49.5<br><br>2.92kg |
| Audio | Yes | Yes | Yes |
| CD-ROM | Upgradeable | Yes - 6X | Yes - 6X |
| Infrared | Yes | Yes | Yes |
| TrackPoint | TP III | TP III | TP III |
| PCMCIA | 2T2/1T3 | 2T2/1T3 | 2T2/1T3 |
| Docking options | Port Replicator | Port Replicator | Port Replicator |
| Operating Systems | Windows 95 | Windows 95 | Windows 95 |
| Warranty | 1yr<br>International | 1yr<br>International | 1yr<br>International |

# IBM ThinkPad 365X/XD

**Exceptional combinations of price and performance.**
The ThinkPad 365 is a distinctly designed, yet affordable mobile PC with the ideal combination of power, usability and potential to do more in a connected environment. These performance business notebooks are packaged with a choice of Pentium 133 or 120MHz processors, bright displays up to 11.3 inches in size, built-in infrared, upgradeable hard drives and memory.
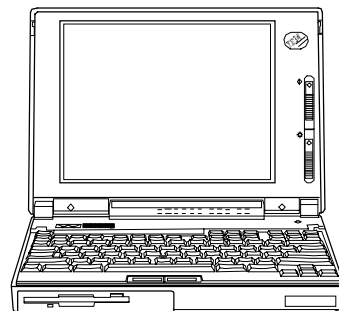
With 16-bit audio Sound Blaster Pro support, MIDI compatibility, internal microphone and speaker included across the ThinkPad 365 family, the potential for advanced and integrated multimedia capability is never far away. Whether you choose the ThinkPad 365XD system with integrated CD-ROM or choose to upgrade your ThinkPad 365X with maybe an 8X CD-ROM drive later you have a notebook to compete with much heavier and less integrated multimedia systems.

## Marketing Highlights:

- Powerful Pentium 133MHz or 120MHz processors

- With a choice of three displays 10.4-inch SVGA TFT and,
  TFT or DSTN 11.3-inch displays

- Excellent Video and Audio capabilities
  - PCI local bus support with video acceleration and 1MB video RAM
  - Support for Sound Blaster Pro applications
  - Jacks for external mic, stereo speakers or headphones

- Choice of 6X CD-ROM on XD models with X models capable of being upgraded by an IBM Service Centre with an optional CD-ROM drive.

- Lightweight      - 365X    11.3" screen 2.67Kg
                   - 365XD 11.3" screen 2.92Kg

All ThinkPad 365X/XD models have the following features:
- 1.08GB or 1.35GB hard-disk drive,
  user-upgradeable to 2.1GB

- 8MB memory (expandable to 40MB)

- Integrated Infrared port (IrDA compliant)



- Optional Port Replicator with integrated battery charger and built-in palm rest

- Pre-loaded software including Windows 95 and productivity applications

- Customer support package with 1-year International Warranty Service

# IBM ThinkPad 365XD Key Competitors:

| Product Specifications | IBM ThinkPad 365X/XD Series | Toshiba Satellite Pro 420CD Series | Compaq Armada 41xx |
|---|---|---|---|
| Processor | Pentium | Pentium | Pentium |
| Speed MHz | 120 or 133 | 100 | 100, 120 or 133 |
| Memory - std/max | 8/40MB | 8/40MB | 8/40MB or 16/48MB |
| L2 cache | N/A | N/A | 256KB |
| Display | 10.4" SVGA TFT 11.3" SVGA DSTN 11.3" SVGA TFT | 11.3" SVGA TFT 11.3" SVGA DSTN | 11.8" SVGA TFT 11.3" SVGA DSTN |
| Video Memory | 1MB | 2MB | 1MB |
| PCI Architecture | Yes | No | Yes |
| Pointing Device | TrackPoint III | MousePoint | Touchpad |
| PC Card Slot | 1-t3/2-t2 | 1-t3/2-t2 CardBus, ZV | 1-t3/2-t2 ZV |
| Hard Drive - std/max | 1.08GB or 1.35GB / 2.1GB | 810MB or 1.3GB / 1.3GB | 810MB or 1.08GB / 1.08GB |
| Removable HDD | Yes | Yes | Yes |
| Max # Hdd | 1 | 1 | 1 |
| Port Replicator | Yes | Yes | Yes |
| Docking Station | No | No | No |
| Battery Type (standard) | NiMH | Li-Ion | Li-Ion |
| Battery Life(hrs) | 2 | Up to 4 | 2.5 to 3.3 |
| Max # Batteries | 1 | 1 | 3 |
| Battery Charge Time | 1.5 hrs | 2-3 hrs | 1.5 hrs |
| Intergrated Audio | yes | yes | yes |
| Integrated Fax/Modem | optional via PCCard | optional via PCCard | optional via PCCard |
| Integrated Infrared Port | yes 115Kbps | yes 115Kbps | yes 115Kbps |
| Integrated CD-ROM | 6X std models (optional 8X upgrade) | 6X | Optional 4X via Mobile CD Unit |
| Weight with Battery | 2.67 - 2.9kg | 3.22 - 3.36kg | 3.67kg (w/ MCDU) or 2.72kg (w/o) |
| Dimensions (mm) | 49 x 297 x 211 | 56 x 299 x 235 | 58 x 295 x 262 - w/MCDU 38 x 295 x 262 - w/o MCDU |
| Warranty | 1yr | 3yr | 3yr |

## Competitive Advantage:

**Upgradeable Hard Drives:** With up to 1.35GB of  storage, there's plenty of room for today, and room to grow for tomorrow
**Integrated Infrared:** Lets you print, transfer files and synchronize data....all without attaching cables or wires.
**Multimedia:** 16-bit audio is a standard feature, with all 365X models also able to be dealer/service upgraded to CD-ROM.
**Quick Battery Charge:** Your ThinkPad is ready to go when you are.
**Light Weight:** It's easy to carry around when you're on the move.
**Lotus SmartSuite:** Productivity software included at no additional cost.!

# IBM ThinkPad Docking Solutions

IBM's docking solutions compliment the power, convenience and flexibility long associated with ThinkPads. By ensuring new ThinkPads work with existing and future docking products IBM is helping to protect your investment. It's a building block approach your budget will appreciate.
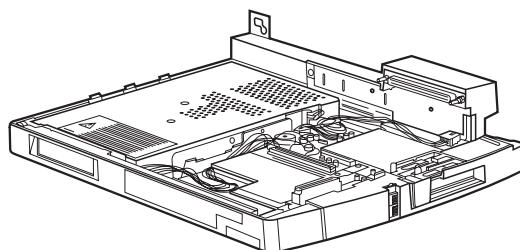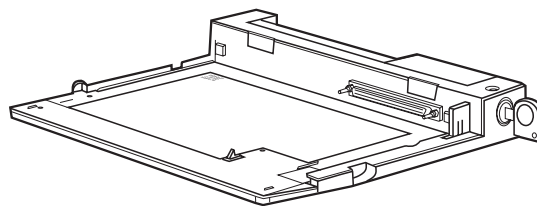
For starters, SelectaDock Base Model I provides port replicator convenience and cable management for easy attachment of multiple peripherals. Modular in design it slips easily into the SelectaDock I or II, which gives you an expandable desktop system with PCI capability.

Existing ThinkPads that dock to the current Port Replicator I will also dock to the SelectaDock Base Model I, whilst ThinkPad 365 and 560 have their own product specific port replicators providing the easy attachment of multiple peripherals.

*ThinkPad Docking Solutions at a Glance*

| Model | Part Number | Dimensions | Weight | PC Card Slots | Slots | Bays | Systems Supported |
|-------|-------------|------------|--------|---------------|-------|------|-------------------|
| SelectaDock II | TOSD2-- | 86x395x420mm | 8.3kg | 2T2/1T3 | 3 | 2 UltraBay 1 half-hight | 760XD/XL 760E/ED/EL |
| SelectaDock I | TOSD1-- | 35x390x380mm | 4.4kg | 2T2/1T3 | 1 | 1 UltraBay | 760XD/XL 760E/ED/EL |
| SelectaDock Base Model I | TOSDB-- | 6x320x268mm | 1.4kg | - | - | - | 760,755,750, 370 and 360 |
| Dock II | TODO2-- | 67x124x380mm | 7.7kg | - | 2 | 2 | 760,755,750, 370 and 360 |
| Dock I | 53G97-- | 69x102x410mm | 2.8kg | - | 1 | 1 | 760,755,750, 370 and 360 |
| Port Replicator I | 66G3515 | 33x297x79mm | - | 2T2/1T3 | - | - | 760,755,750, 370 and 360 |
| 365 Port Replicator | 75H7529 | 37x298x429mm | 1.2kg | - | - | - | All 365 |
| 560 Port Replicator | 46H4218 | 33x61x298mm | 331g | - | - | - | All 560 |

NB: The above table is for quick reference only. For exact details and specifications refer to announcement letters and brochure G611-0015.

# IBM ThinkPad Options - Selected

| IBM ThinkPad Options | Part Number | 365X | 560 | 760XD/XL/ED/EL/E |
|---|---|---|---|---|
| **Memory** | | | | |
| 8MB EDO SO DIMM | 92G7340 | ● | ● | ● |
| 16MB EDO SO DIMM | 92G7341 | ● | ● | ● |
| 32MB EDO SO DIMM | 92G7342 | ● | ● | ● |
| **Storage** | | | | |
| 1.4GB Removable HDD(365) | 82H8161 | ● | | |
| 2.1GB Removable HDD(365) | 82H8175 | ● | | |
| 8X CD-ROM Drive  365 Upgrade | 83H6726 | ● | | |
| 1.08GB Hard Disk Drive II (560) | 46H4208 | | ● | |
| 2.1GB Hard Disk Drive (560) | 45H8783 | | ● | |
| 1.08GB Hard Disk Drive II | TOFB08M | | | ● |
| 1.2GB Hard Disk Drive II | TOFB12M | | | ● |
| 1.4GB Hard Disk Drive II | 69H8412 | | | ● |
| 2.1GB Hard Disk Drive II | 69H8414 | | | ● |
| 3.0GB Hard Disk Drive II | 45H8789 | | | ● |
| Second Hard Disk Drive Adapter | TOFB2HM | | | ● |
| 6X CD-ROM Drive  (UltraBay) | 85G1957 | | | ● |
| 8X CD-ROM Drive  (UltraBay) | 45H8786 | | | ● |
| **Communications** | | | | |
| 28.8kbps PCMCIA Data/Fax Modem | 75H8808 | ● | ● | ● |
| Wireless LAN PCMCIA Adapter | WLAAPEN | ● | ● | ● |
| Token-Ring Auto 16/4 PCMCIA card | OTRMCSY | ● | ● | ● |
| Etherjet PC Card - 10BaseT | 72H4552 | ● | ● | ● |
| **Expansion** | | | | |
| UltraBay PCMCIA Cartridge | TOCARTR | | | ● |
| Port Replicator  & Charger (365) | 75H7529 | ● | | |
| Port Replicator (560) | 46H4218 | | ● | |
| SelectaDock Base Model I | TOSDB** | | | ● |
| SelectaDock Model I | TOSD1** | | | ● |
| SelectaDock Model II | TOSD2** | | | ● |
| **Batteries** | | | | |
| ThinkPad 365 NiMH Battery Pack | 38H6304 | ● | | |
| ThinkPad 560 Lithium Ion Battery Pack | 46H4206 | | ● | |
| ThinkPad Lithium Ion Battery Pack II | TOFBLIM | | | ● |
| **AC Adapters** | | | | |
| AC Adapter (35W) | 85G67** | ● | ● | ● |
| ThinkPad Travel Quick Charger | TOTQC** | | | ● |
| Car Battery Adapter | 54G0355 | | | ● |
| **Carrying Cases** | - | ● | ● | ● |

Note: Many of the options listed are country specific, and the part number may need to be changed to the relevant country code.
This chart is for guidance only and the information within it may not be wholly accurate.

# IBM ThinkPad Proven Solutions

The award winning IBM ThinkPad portable computers continue to receive outstanding reviews from customers and industry experts alike. And with each new model, customers offer us helpful suggestions for making ownership of these highly functional computers even more rewarding.

In response to these requests for a greater selection of solutions, IBM is working with other industry-leading manufacturers whose products and services meet our rigorous standards for ThinkPad compatibility and complement our own existing range of ThinkPad options.

The result is ThinkPad Proven, an innovative programme that not only broadens your choice of products, but gives you peace of mind as well. Before a third party can display the ThinkPad Proven logo on a product it must confirm that the product has been tested, and will be warranted and supported to demanding ThinkPad Proven Standards, ensuring total customer satisfaction.

*Expand your ThinkPad Solutions with third-party products* - We designed ThinkPads for flexibility so they can easily be customised to your needs. And complementing IBM's range of ThinkPad options, ThinkPad Proven(*) opens the door to an even greater choice of products, services and technologies.

*ThinkPad Proven products include-* Memory and storage products, modems, multimedia accessories, infrared, portable printers, navigation products, SCSI adapters, power accessories, remote control software, security products and travel accessories.

ThinkPad Proven products are distributed, marketed, warranted and serviced by the manufacturers and their dealers or local representitives. Products are available now at dealers, computer shops, retail stores and other outlets selected by the product manufacturers. Products may not be available in all countries.

For more detailed information on products, manufacturers and the ThinkPad Proven programme please refer to the revised **IBM announcement letter ZA94-0327** and the **ThinkPad Proven Solutions brochure (G611-0046-00).**

Product information can also be found on the IBM ThinkPad home page at **http://www.pc.ibm.com/thinkpad/index.html**

# Mobile Operating System Software Support

IBM has a design for the future of mobile systems. This plan demonstrates the IBM commitment to influence and implement the Microsoft technology curve, to deliver the best mobile hardware platforms for OS/2 and Microsoft operating systems, to become the premier provider of service and support for mobile operating systems, and to protect IBM customer investment in technology.

As part of its mobile operating system strategy, IBM has teamed up with Microsoft to provide leading-edge technology for the interconnected customer. IBM works with Microsoft as industry standards are proposed, developed, and implemented. As a result, IBM now offers Windows NT expertise for its products, including Windows NT compatibility testing with hardware, applications, and large networks. IBM stands poised as the premier service and support organization for Microsoft operating systems in the industry today.

While IBM advances as a Windows 95 and Windows NT platform provider and development leader, it also maintains its commitment to OS/2. There remains a large customer demand for OS/2, especially to run mission-critical applications that are central to a customers competitiveness. Substantial investment has also been made in the OS/2 client/server platform and so to ensure customers can leverage this investment, IBM is accelerating the delivery of OS/2-based network computing solutions.

Teaming up with Microsoft, IBM continues its tradition of leading the industry with products that offer compatibility, reliability, and flexibility in today's multiple operating system environment. Its commitment to mobile computing, with different operating systems, makes IBM a leading strategist in mobile operating systems development and support.

Earlier this year, IBM was certified as a Microsoft Hardware Compatibility Laboratory. This certification allows IBM to certify its personal computers under Windows NT. The IBM ThinkPad passed Microsoft's hardware compatibility test for Windows NT Version 3.51, and Version 4.0. The ThinkPad focuses on easy installation, integration and support for mobile functions across the ThinkPad family. IBM believes that ThinkPad is the premier mobile Windows NT client on the market because of its compatibility and advanced functionality. That's the ThinkPad promise of value.

In addition to being Microsoft-certified, the ThinkPad goes a step further. Additional mobile enhancements have been made. These functions include suspend and resume for energy saving, and such hardware-based power management tasks as turning off the hard disk drive and monitor after a pre-determined period. A ThinkPad running Windows NT will allow a "warm swap" between the floppy disk drive and the CD-ROM, making it easy to switch between floppy disk and CD-ROM.

Support for the ThinkPad has expanded into operating systems, including OS/2, Windows 95, Windows NT, and Windows 3.11. This support is now available on the Internet at http://www.pc.ibm.com/support/ips/refs.html. Contents of this web page include the latest device drivers, utilities, and Basic Input/Output System (BIOS) to download. There is also an on-line ThinkPad user's guide, tips and techniques documents, and question-and-answer material.

## Preloaded Software

The following preinstalled, complimentary software applications enable you to become immediately engaged in the mobile computing experience.

- Windows 95, Windows NT
- Online Publications
- Diskette Factory for Utilities -- Allows users to make make backup copies of selected preloaded programmes and utilities
- Lotus cc: Mail(TM) for the IBM Global Network(TM) -- An easy to start, easy to us e-mail solution allowing users to connect across compatible and incompatible networks regardless of the Value Added Network or architecture involved
- Triton CoSession Host -- Remote communications support which which allows a technician to dial into your PC and fix problems online
- Puma TranXit -- Makes it easy to connect your ThinkPad to your desktop computer, provided that it has IR capability. The built-in IR allows the transfer of data and synchronisation of files with or without cables
- Asymetrix Digital Video Producer -- Provides video capture capability and organises and edits video clips (available on TP760XD/ED only)
- SofNet FaxWorks Voice -- Allows users to send, receive, view, print and edit faxes and allows the system to act as a personal answering machine
  NOTE: Shipped with the appropriate country DAA/Telephony Kit II only
- Compuserv for Windows
- Netfinity for Windows 95 - provides complete workgroup systems management.

**Note:** No diskettes are included with the product and not all software products may be included with all IBM ThinkPads. The non-IBM software programs listed in this section are licensed to you under the non-IBM manufacturer's, suppliers or publisher's terms and conditions. The non-IBM manufacturers, suppliers or publishers are responsible for providing any service or support associated with these programs. The descriptions of these programs were obtained from information made available by these companies to the general public. IBM does not warrant these products.

## Year 2000 Support

Just what is the Year 2000 transition? It's a phenomenon caused by years of writing programs and databases with only two digits to represent the year in the date fields. Wherever that's been the case, systems and applications will yield incorrect results when the year is 2000 and only "00" is used in computation.

- All new ThinkPad models announced after January 1, 1996 are Year 2000 compliant. This means that the century byte in CMOS is automatically updated to reflect the correct century when the machine is booted after the century is changed.
- Older machines have to have the byte manually set, with the date command.
- Very old machines didn't have a real time clock at all. You have to set the date manually whenever you boot.

IBM has published a 180-page customer paper for planning and implementation for the year 2000. For the latest information point your browser to:
**http://www.software.ibm.com/year2000/index.html**

# Questions and Answers

1.  *In what way does IBM justify its claim to be the technological leader in the fast-expanding portable notebook market?*

    As a direct result of the innovative designs, advanced technology and excellent quality of the ThinkPad range, IBM dominates the enhanced sector of the notebook market place with well over 50% of the notebooks purchased in this sector being ThinkPads.IBM strives to implement it's technical innovation throughout the ThinkPad range to ensure everyone can benefit whatever their notebook requirements and this has been confirmed by our continued growth and presence as one of the top notebook suppliers in the world.

    ThinkPad firsts include the first portable with a 10.4" TFT screen and its Black Matrix on Array counterpart. The ThinkPad 701 with its innovatively designed TrackWrite keyboard was the first of its kind, and the ThinkPad 755CV/CDV was also a unique product. Today the amazing thin and lightweight ThinkPad 560 is a product of IBM's constant attention to detail in design.

    IBM is leading the portables market by introducing products with the very latest processors, such as the new ThinkPad 760XD Pentium 166MHz models with MMX technology. By combining this power with the newest 12.1" XGA TFT screen, , an 8X CD-ROM, and an upgradeable media processor your ensured excellent multimedia and communications capabilities, **all in the same machine!**

2.  *How has IBM solved the problem of heat dissipation in the ThinkPad Pentium models without impacting the weight or battery life of the machine?*

    In developing features to overcome possible heat issues IBM has created some unique and effective designs, such as the "Heat Pipe" first introduced with the ThinkPad 755CX and now the thermostatically controlled cooling fan within the new XD/XL MMX models. Both designs ensure that any excessive heat produced by the Pentium processor is quickly and safely transported away from the processor card area. In addition, the ThinkPad 760 tilt-keyboard aids this heat-dissipation process by enabling an improved through-flow of cooler surrounding air.

3.  *What is MPEG?*

    MPEG video compression standard was developed by the Moving Picture Experts Group to provide full-frame, full-motion video playback with audio, even at low bitrates. Video quality had to rival that seen on consumer VCR's, while maintaining bitrates that could be stored and played back on consumer CD-ROM's. The MPEG digital audio is excellent -- of stereo CD quality -- and the ThinkPad 760XD/ED supports MPEG-1 and MPEG-2 HHR (which delivers the highest quality video available for a 4X CD-ROM).

4.   *Is there really a difference between standard active matrix TFT screens and Black Matrix?*

Yes there is. Black Matrix will significantly reduce glare from overhead lighting and sunlight, although direct sunlight will still slightly impair viewing at certain angles.

5.   *With battery power being a key element of mobile computing the life of a battery or number of charge cycles a battery is capable of can be an important consideration. What is IBM doing to ensure ThinkPad customers can keep working when mobile?*

IBM considers this to be one of the most important areas of development for ThinkPad customers and continues to develop, produce and test it's batteries to the limit. A single charge cycle is when a battery has been fully charged and discharged and IBM's latest Li-Ion batteries are capable of over 1000 charge cycles.

6.   *How does IBM justify the battery life claims for its ThinkPad products?*

To determine the life expectancy of a notebook battery, IBM adheres to BAPCo, an industry-standard battery test. Of course using the excellent power management tools available with the ThinkPad the user may be able  to extend the battery life beyond the quoted figure dependant on conditions of use.

7.   *The TrackPoint mouse pointer on the ThinkPad has recently been copied by other manufacturers. What is IBM doing to keep this as a unique device?*

Most other manufacturers are using quick copies of TrackPoint. They look similar but are not as accurate. TrackPoint is always red and always positioned between the G, H and B keys. If it is blue or green, be assured it  is not the real thing, and it has not had the years of  testing and optimisation that has lead PC Magazine to call TrackPoint "the best pointing device available".

**ThinkPad 760 Enhanced Series and SelectaDock stations**

1.   *Are the latest Docking Stations backwards compatible with previous ThinkPads?*

Our new SelectaDock Base model can be used with previously purchased ThinkPads as a port replicator. Although non-PCI models will not be able to take advantage of the further SelectaDock models due to achitecture differences with ISA However we believe this unique capability will go some way to helping companies protect previous investments and lower the total cost of computing.

2.   *Are the latest 760 models backwards compatible with the Dock I and Dock II?.*

Yes, they are compatible, however ISA-based cards can only be used in the docking stations and therefore would require an adapter/conversion card.

**ThinkPad 560 ultraportable series**

1.  *The "butterfly" keyboard was an innovative design. Why did IBM decided to eliminate the "butterfly" from its ultraportable notebook line?*

    The ThinkPad 701's keyboard was designed to fit a full sized keyboard in a case of lesser width. That design assumed the use of a 10.4" screen. Now our customers are asking for 11.3" or 12.1" screens which necessitate a wider notebook case than the 701. This eliminates the need for the "TrackWrite" keyboard.

2.  *Please comment on the "death of the butterfly." Do you have plans to implement the keyboard design in any future ThinkPad. models?*

    We do not have immediate plans to implement the TrackWrite keyboard in other ThinkPad models. However, we will not rule out it's use in future products.

3.  *Why hasn't IBM found a way to implement a built-in diskette drive in it's ultraportable notebooks?*

    We've found that customers who tend to purchase ultraportables are experienced notebook users, who do not really need internal diskette drives and prefer not to carry around extra size and weight. Instead, we have built-in infrared for easy file transfer. Of course the detachable FDD can easily be connected when it is needed.

4.  *Do you plan to develop an ultraportable with a built-in diskette drive in the future?*

    A IBM does not comment on unannounced products, or products that may or may not be in development.


**ThinkPad 365 series**

1.  *How are the new ThinkPad 365 notebooks modular in design?*

    The ThinkPad 365 models purchased without CD-ROM drives can be upgraded by an authorized IBM or business partner technician to a CD-ROM model.

2.  *Are the hard drives customer upgradeable in the ThinkPad 365 notebooks?*

    Yes. Upgrading a hard drive on a ThinkPad 365 requires the user to remove some screws with a standard screwdriver. The procedure is clearly explained in the users manual. The ThinkPad 760, with it's UltraBay, allows the hard drive to be removed without the use of a screwdriver.

# Available Marketing Material

Need more information ?

Find out more about the wide range of IBM ThinkPad notebook computers in the following ways:

| *Item* | *IBM Reference* | *Description* |
|---|---|---|
| IBM ThinkPad 760 SpecSheet | TSEE030F | 4pp, colour, marketing and technical info |
| IBM ThinkPad 560 SpecSheet | TSEE020F | 2pp, colour, marketing and technical info |
| IBM ThinkPad 365X/XD SpecSheet | TSEE010F | 2pp, b&w, marketing and technical info |
| IBM ThinkPad Docking Solutions SpecSht | G611-0015 | 4pp, b&w, marketing and technical info |
| IBM ThinkPad Proven Solutions SpecSht | G611-0046-00 | 6pp, b&w, marketing and technical info |

## Internet

| | |
|---|---|
| IBM Home Page | http://www.ibm.com |
| PC Company Technical and Support info | http://www.raleigh.ibm.com/pcco/cat/ind |
| IBM PC Company | http://www.pc.ibm.com |

## White Papers & InfoBriefs

| | | |
|---|---|---|
| Infrared Technology Paper | n/a | Available as Adobe Acrobat and AmiPro formats |
| Pentium Pro & Pentium Technology | n/a | Available as Adobe Acrobat and AmiPro formats |
| Memory | n/a | Available as Adobe Acrobat and AmiPro formats |
| Mwave\DSP  Capability Paper | n/a | Available as Adobe Acrobat and AmiPro formats |
| Digital Video technology | n/a | Available as Adobe Acrobat and AmiPro formats |
| ThinkPad Batteries & Power Management | n/a | Available as Adobe Acrobat and AmiPro formats |
| Modems & Mobile Computing | n/a | Available as Adobe Acrobat and AmiPro formats |
| IBM ThinkPad Quality | n/a | Available as Adobe Acrobat and AmiPro formats |
| IBM ThinkPad Security | n/a | Available as Adobe Acrobat and AmiPro formats |
| Mobile Operating System Strategy | n/a | Available as Adobe Acrobat and AmiPro formats |
| 32-bit Operating Systems | n/a | Available as Adobe Acrobat and AmiPro formats |
| Graphics | n/a | Available as Adobe Acrobat and AmiPro formats |
| IBM ThinkPad DSTN Displays | n/a | Available as Adobe Acrobat and AmiPro formats |
| Hardware & Software Compatibility Matrix | n/a | Available as Adobe Acrobat and AmiPro formats |
| Speech Recognition | n/a | Available as Adobe Acrobat and AmiPro formats |
| IBM ThinkPad Mobile Docking | n/a | Available as Adobe Acrobat and AmiPro formats |
| TME 10 NetFinity | n/a | Available as Adobe Acrobat and AmiPro formats |

Others still in draft format - add to list when available

## Note:

It is possible that this publication may contain
reference to, or information about, IBM products
that are not announced in your country.
Such reference does not mean  that IBM intends
to announce such products in your country.

This publication is for guidance only.
Although checks have been made, it may contain
inaccuracies. Changes will be periodically made
and incorporated into new versions of this
publication.

IBM is the registered trademark of
International Business Machines Corporation

All other trademarks acknowledged.

Example back page text :

IBM United Kingdom Limited

The IBM PC Company Response Centre

Normandy House

Bunnion Place

Basingstoke

Hampshire   RG21 7XG

Telephone 0345 727272

'MB' denotes million bytes and  'GB' means billion bytes when referring to disk drive capacity.
Actual total user capacity may vary depending upon operating environment.

This publication is for general guidance only (03/97).

**TIEE972A**