

# ThinkPad 770 Notebooks

### **Highlights**



# Extreme performance and technology

Once again, IBM leads the way by engineering the industry's most advanced technology into one sleek notebook—new ThinkPad® 770 models include Intel® Mobile Pentium® II processors at 266MHz,¹ up to an incredible 81GB² internal storage (upgradable to 16.2GB with a second 8.1GB hard drive), up to 64MB standard high-speed SDRAM memory and more.

## Giant 14.1 " active matrix displays

The ThinkPad 770 boasts incredible displays up to 14.1", which are ideal for high-impact presentations or as the perfect desktop alternative.

# Advanced multimedia capabilities including DVD

Advanced audio and video features include DVD movie playback,<sup>3</sup> CD-ROM, full MPEG-2,<sup>4</sup> SRS 3D Sound, Dolby<sup>®</sup> Digital audio output,<sup>5</sup> 3D graphics and high-output speakers.

# Premier mobile Windows NT<sup>®</sup> Workstation support

The ThinkPad 770 is designed to maximize mobile extensions to take full advantage of Windows NT Workstation reliability, security and performance.











With the new ThinkPad 770, IBM has taken mobile computing to the *extreme*. Take a look and you'll see why some of the most respected industry publications believe the ThinkPad 770 is the most outstanding mobile computer in the world.

### **Extreme performance**

A quick glance at the performance features we've packed into the ThinkPad 770 says it all.

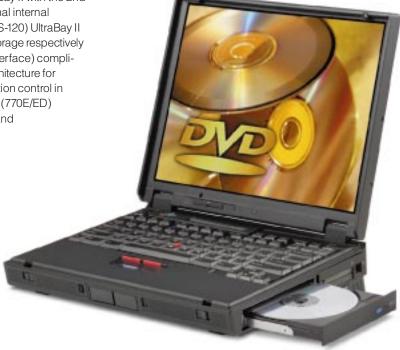
- 266MHz Mobile Pentium II processors, or up to 233MHz Pentium processors with MMX™ technology; 512KB Level 2 cache
- 64MB or 32MB of high-speed SDRAM memory standard.
   Supports a total addressable capacity of 256MB (770) or 288MB (770E/ED) of memory (current options support up to 160MB).<sup>6</sup>
- Up to 8.1GB of hard drive storage standard (up to 16.2GB if you
  put an optional second hard drive in the UltraBay II with the 2nd
  HDD adapter). And if that's not enough, optional internal
  ThinkPad Proven VST Zip 100 or SuperDisk (LS-120) UltraBay II
  options offer 100MB or 120MB of removable storage respectively
- ACPI (Advanced Configuration and Power Interface) compliance that incorporates the new hardware architecture for improved power management and configuration control in support of the coming release of Windows 98 (770E/ED)
- Windows® 95, Windows NT 4.0, Windows 3.11 and OS/2 Warp support

## **Industry recognition about the ThinkPad 770**

**"MVP, State-of-the-Art Notebook,"** *PC Computing*, January 1998 "Let's not mince words: IBM's newest is the finest portable in the world."<sup>7</sup>

**"Best of 1997, High-End Notebook,"** *PC Magazine*, January 6, 1998 "... the ThinkPad 770 is truly the portable with no shortcomings."<sup>8</sup>

"Winner, Technical Excellence," PC Magazine, December 16, 1997



### Tremendous 14.1" displays

The incredibly vast viewing area and bright display enable you to easily view or present huge amounts of data without the need for an external monitor.

- Choice of either a giant 14.1" or 13.3" active matrix display
- 1024 x 768 internal resolution, up to 4MB of SGRAM VRAM and up to 16 million colors for exhilarating mobile images and video

### **DVD** support in every ThinkPad 770

ThinkPad 770 delivers what high-performance users have been waiting for—DVD support in a notebook PC. With its superior video and audio quality, DVD is perfect for viewing video presentations and commercial DVD content. DVD is also perfect for storage (read only), as well as using your current library of CD-ROMs. You can view up to 17GB of DVD content on a single disc! You can also view hardware-supported DVD movies (on the notebook display or externally to a TV) with the optional 'DVD and Enhanced Video Adapter' (standard on 9549-1AU/-5AU).

# Premier Windows NT Workstation support in a mobile platform

Run Windows NT Workstation on your ThinkPad today! Full power management, UltraBay II warm-swap capability, and hot plug PC Card support deliver the key features you need to take advantage of Windows NT's security, scalability and reliability. With the ThinkPad 770, IBM provides additional Windows NT functional extensions that are normally available only to Windows 95 mobile users. These extensions include DVD for storage, MPEG-2 playback, 3D Graphics (OpenGL only), video capture, infrared and more.

### **Robust system manageability**

The ThinkPad 770 delivers advanced desktop manageability in a notebook PC. Advanced system manageability features include

- DMI (Desktop Management Interface)
   2.0 compliant<sup>9</sup>
- DMI instrumentation such as thermal monitoring via Intel LANDesk® Client Manager
- IBM LANClient Control Manager for remote setup and update without an onsite technician
- IBM Wake on LAN support available via ThinkPad 770, SelectaBase 770, SelectaDock III and network interface card
- Local and remote asset management via Client Services for Netfinity Manager and LANDesk Client Manager
- Asset and data security via multiple passwords and locks for the notebook as well as its components
- IBM AntiVirus and Artisoft's ConfigSafe software for the latest in virus protection and easy operating system recovery

### Unprecedented mobile multimedia

The ThinkPad 770 opens a vibrant new world of mobile computing with up to 14.1" giant, incredibly bright displays where you can exploit amazing 3D graphics. Create dazzling presentations using this powerful array of advanced audio and video capabilities.

- Mobile Pentium II processors or Pentium processors with MMX technology
- Maximum flexibility with choice of DVD or 24X-10X CD-ROM<sup>10</sup>
- High-quality speakers and standard SRS 3D Sound
- Software-supported MPEG-1 playback on all models
- Hardware-supported full MPEG-2
  playback, DVD movie playback, video in
  (video capture) and playback over TV
  (video out) with optional 'DVD and
  Enhanced Video Adapter' (standard on
  9549-1AU/-5AU)

### **Advanced communications**

The Advanced Communications Processor integrated into the ThinkPad 770 (standard on 9549-1AU/-5AU) provides simple one-step international connectivity to extend your reach in an interconnected world. Integrated 56K modem (standard on 9549-5AU; software upgradable to 56K on 9549-1AU), <sup>11</sup> advanced telephony support via RingCentral and Intel Video Phone video conference software keep you connected wherever you go.

## Superior design and portability

- The ThinkPad 770 is IBM designed, developed and manufactured to deliver the highest levels of quality and reliability in the industry
- Designed for easy configurability, select models of ThinkPad 770 family are available through the Authorized Assembler Program (AAP) via select business partners to provide rapid delivery of personally customized solutions (models 9548-32U/-53U). Visit www.ibm.com/pc/customsols for more details on AAP.
- Full-sized IBM keyboard and comfortable palmrest
- The newly enhanced TrackPoint® features a "Press-to-Select" option where you press the TrackPoint itself to speed icon launches and reduce keystrokes. A new programmable center button enables fast scrolling of Web sites and documents, or fast panning across wide spreadsheets; or switch to the innovative magnifying glass feature to enlarge screen views in any application.
- Optimized for mobility with a system weight as low as 6.9 lbs <sup>12</sup> (models 9548-30U/-31U/-40U with battery and optional ThinkPad Proven UltraBay II travel cover. To order the ThinkPad Proven UltraBay II travel cover, contact Compu-Lock (www.Compu-Lock.com) at 1 800 448-4455 (part number 05K5298).



## Advanced system flexibility and investment protection

The ThinkPad 770 notebook's innovative, modular design and array of docking alternatives provide a highly configurable, upgradable mobile computing solution, which allows you to design the system to meet your needs of today and tomorrow.

The UltraBay II's hot-swappable modular design can accommodate many different options including a DVD drive, CD-ROM drive, diskette drive (can be used external or internal), second hard drive (ThinkPad 770 and select 760 hard drives), second battery, travel cover, or even a ThinkPad Proven VST Zip 100 or SuperDisk drive.

# Alternates for the ThinkPad 770 notebook's UltraBay II

Travel cover

Second battery

ThinkPad Proven VST SuperDisk drive<sup>13</sup>

DVD drive

Diskette drive

CD-ROM drive

ThinkPad Proven VST Zip 100 drive<sup>13</sup>

Second hard drive<sup>13</sup>

ThinkPad 770 docking solutions deliver yet another level of convenience and power with a modular, building block solution that allows you to follow a natural progression of upgrades and improvements.

- Simple port replication and cable management with the SelectaBase 770
- PC Card Enabler attached to SelectaBase 770 provides enhanced replication capability with two additional PC CardBus slots
- Desktop functionality and manageability via the SelectaBase 770 and SelectaDock III's two full-size and one half-size PCI/ISA slots, two PC CardBus slots, SCSI-3, UltraBay II, one half-high industry-standard bay, two USB ports, plug and play convenience and IBM Wake on LAN support

**PC Card Enabler** 

SelectaBase 770



NEW	770ED NEW	770E	770	770	770
Model	9549-5AU	9548-51U/-52U	9549-1AU	9548-30U/-31U	9548-40U
Intel Pentium processor	266MHz Mobile Pentium II	266MHz Mobile Pentium II	233MHz Pentium with MMX	233MHz Pentium with MMX	200MHz Pentium with MMX
Level 2 cache	512KB	512KB	512KB	512KB	512KB
TFT Display	14.1"	14.1"	14.1"	13.3"	13.3"
Max resolution	Up to 1024x768 with 16M colors	Up to 1024x768 with 16M colors	Up to 1024x768 with 64K colors	Up to 1024x768 with 64K colors	Up to 1024x768 with 64K colors
SDRAM memory (std/max) <sup>6</sup>	64/160-288MB	32/160-288MB	32/160-256MB	32/160-256MB	32/160-256MB
Hard disk drive	8.1GB swappable	5.1GB swappable	5.1GB swappable	4.0GB swappable	3.2GB swappable
Diskette drive	internal swappable	internal swappable	internal swappable	internal swappable	internal swappable
CD-ROM drive <sup>10</sup>	24X-10X optional	24X-10X optional	24X-10X optional	24X-10X optional	24X-10X optional
DVD drive	standard	optional	optional	optional	optional
DVD and Enhanced Video Adapter	standard	optional	standard	optional	optional
MPEG playback	MPEG-1 full MPEG-2	MPEG-1 optional MPEG-2	MPEG-1 full MPEG-2	MPEG-1 optional MPEG-2	MPEG-1 optional MPEG-2
Video RAM	4MB SGRAM	4MB SGRAM	2MB SGRAM	2MB SGRAM	2MB SGRAM
Audio	SRS 3D Sound, Sound Blaster Pro, Dolby <sup>®</sup> Digital output <sup>5</sup>	SRS 3D Sound, Sound Blaster Pro, optional Dolby Digital output	SRS 3D Sound, Sound Blaster Pro, Dolby Digital output	SRS 3D Sound, Sound Blaster Pro, optional Dolby Digital output	SRS 3D Sound, Sound Blaster Pro, optional Dolby Digital output
Fax/modem	56K <sup>11</sup>	optional (PC Card)	33.6Kbps <sup>14</sup> integrated (56K upgradable) <sup>11</sup>	optional (PC Card)	optional (PC Card)
PC Cards	2 Type II, 1 Type III CardBus, ZV Port	2 Type II, 1 Type III CardBus, ZV Port	2 Type II, 1 Type III CardBus, ZV Port	2 Type II, 1 Type III CardBus, ZV Port	2 Type II, 1 Type III CardBus, ZV Port
Preloaded Operating system	Windows 95	Windows 95/ Windows NT	Windows 95	Windows 95/ Windows NT	Windows 95
Infrared	up to 4Mbps	up to 4Mbps	up to 4Mbps	up to 4Mbps	up to 4Mbps
Li-lon battery life <sup>15</sup> (one battery)	3.5 hrs	3.5 hrs	3.5 hrs	4.0 hrs	4.0 hrs
Standard I/O interfaces	serial, parallel, USB, diskette, keyboard/ mouse, docking interface, audio I/O, external monitor, video I/O, Dolby <sup>®</sup> Digital out, RJ-11	serial, parallel, USB, diskette, keyboard/ mouse, docking interface, audio I/O, external monitor	serial, parallel, USB, diskette, keyboard/ mouse, docking interface, audio I/O, external monitor, video I/O, Dolby <sup>®</sup> Digital out, RJ-11	serial, parallel, USB, diskette, keyboard/ mouse, docking interface, audio I/O, external monitor	serial, parallel, USB diskette, keyboard/ mouse, docking interface, audio I/O external monitor
Dimensions	2.2" x 12.3" x 10.0"	2.2" x 12.3" x 10.0"	2.2" x 12.3" x 10.0"	2.2" × 12.3" × 9.4"	2.2" × 12.3" × 9.4"
Approx. weight <sup>12</sup> with travel cover* FDD DVD drive	th battery and 7.3 lbs 7.8 lbs 8.1 lbs	7.1 lbs 7.6 lbs 8.0 lbs**	7.3 lbs 7.8 lbs 8.2 lbs**	6.9 lbs 7.4 lbs 7.8 lbs**	6.9 lbs 7.4 lbs 7.8 lbs**

<sup>\*</sup> Travel cover available as an option.

 $<sup>^{\</sup>star\star}$  DVD drive available as an option.

### **Options by IBM**

Options by IBM offers a wide range of upgrades designed to make your work easier, increase your productivity and protect your computing investment. For a complete list of options visit

### www.ibm.com/pc/us/options

32MB SDRAM SO DIMM	76H0294
64MB SDRAM SO DIMM	76H0295
NEW 8.1GB Hard Disk Drive	02K0517
NEW! 24X-10X CAV Internal	
CD-ROM Drive (UltraBay II)	02K0516
DVD Drive (UltraBay II)	11J8950
DVD and Enhanced	
Video Adapter	11J8957
Li-Ion Battery	83H6738
56WAC Adapter	83H6739
External Battery Charger	11J8985
SelectaBase 770	83H6735
PC Card Enabler	83H6741
SelectaDock III <sup>16</sup>	3547003
2nd HDD Adapter	11J8836
Turbo 16/4 Token-Ring	
PC Card (RJ-45)	85H3629
EtherJet PC Card Combo	
10BaseT/2	72H4534



Connection

ThinkPad is the official notebook of the NBA

04K0064

900MHz Cordless Computer

#### ThinkPad Proven Solutions<sup>17</sup>

ThinkPad Proven products are tested, warranted and supported by the manufacturer to ThinkPad Compatibility Standards.

- VST SuperDisk 770 UltraBay II option<sup>18</sup>
- VST Zip 100 770 UltraBay II option<sup>19</sup>
- Extended Systems: Infrared JetEye Net Plus Printer and Ethernet Token-Ring Connections
- Port, Inc.: Smart and superbly crafted carrying cases that offer a unique SafePort protection system
- Compu-Lock: UltraBay II travel cover<sup>20</sup>

## **Customer service and support**

- Three-year limited warranty,21 International Warranty Service<sup>22</sup> and EasyServ door-to-door depot service via courier
- Toll-free hardware support at no additional charge during the warranty period
- Service options<sup>23</sup> to provide up to five years of service coverage from date of ThinkPad notebook purchase (including warranty period). Service options must be purchased during the original product warranty period.
  - On-site, next business day service in 1-, 2-, 3-, 4- or 5-year packages
- EasyServ, door-to-door depot service via courier in 2-, 3-, 4- or 5-year packages (including the limited warranty)
- International service included upon request, at no additional charge

### IBM SystemXtra™

SystemXtra is designed to help you make the most of your ThinkPad investment by combining a host of technologies, services, software, training and convenient financing—all for a single monthly invoice. SystemXtra offers

- Industry-leading technologies to help you realize the total benefit of ownership
- Services from your IBM Business Partner and IBM, including Remote Technical Support Services and Recovery Services for End-Users
- Total-solution financing from IBM that includes SystemXtra Technology Exchange—a flexible, affordable way to update your IBM ThinkPad inventory after only two years24

### **Need more information?**

### **World Wide Web**

www.ibm.com/pc/us/thinkpad www.ibm.com/pc/us/options www.ibm.com/pc/us/thinkpad/proven www.ibm.com/pc/us/systemxtra

## **IBM Fax Information Service**

1800 IBM-3395

ThinkPad Information Directory Doc #11078

### Product and Dealer Location Information

1 800 426-7255 ext 4751

- 1 MHz only measures microprocessor internal clock speed, not application performance. Other factors also affect application performance
- <sup>2</sup> GB means billion bytes when referring to hard drive capacity. Accessible capacity varies. 3 For DVD movie playback, the optional DVD drive (standard on 9549-
- 5AU) and the 'DVD and Enhanced Video Adapter' (standard on 9549-5AU/-1AU) are required.
- MPEG-2 standard on 9549-1AU/-5AU: optional on others
- $^{\rm 5}$  Dolby Digital audio output is available standard on 9549-1AU/-5AU and available as an option on all other 770 models. For Dolby Digital output, the DVD and Enhanced Video Adapter (11J8957) must be installed and the ThinkPad connected to appropriate receiver and external speakers.

  6 Current available memory options allow memory expansion up to 160MB
- using two 64MB SDRAM SO DIMMs in the two available slots for memory expansion. Memory expansion beyond 160MB will depend on the availability of memory options larger than 64MB built to IBM ThinkPad 770 specifications and such availability cannot be assured. To achieve 160MB memory configuration on the ThinkPad 770ED, you need to replace one 32MB SDRAM SO DIMM in the memory slot with 64MB SDRAM SO DIMM. EDO memory is not supported in ThinkPad 770E/ED models
- Reprinted from PC Computing, January 1998. 91998 Ziff Davis
- Reprinted from *PC Magazine*, January 6, 1998. 91998 Ziff Davis. Standard on ThinkPad 770E/ED models; others upgradable via Internet
- Variable read rate. Actual playback speed will vary and is often less than the maximum possible.
  Upgrade on 9549-1AU via Internet software download at no additional
- charge (Internet access fees excepted). Software upgrade via the Internet to the V.90 56K ITU standard beginning in 4Q98. Subject to change without notice. x2 modems are designed to be capable of receiving data at up to 56Kbps from an x2-compatible service provider and transmitting data at up to 33.6Kbps. Public networks currently limit maximum download speeds to about 53Kbps. Actual speeds depend on many factors and are often less than the maximum possible
- lncludes battery; actual weight may vary due to vendor components, manufacturing process and options
- Hot swappable function is currently not available. Such availability
- Actual speeds depend on many factors and are often less than the

- Results obtained using BAPCo (Business Applications Performance Corporation) SYSmark Benchmark Test. Battery life (and recharge times) will vary based on many factors including screen brightness, applications, features, power management, battery conditioning and other customer preferences. SelectaDock III requires SelectaBase 770
- Not warranted by IBM.
- Targeted to be available 3Q98. Such availability cannot be assured.
- Targeted to be available 2Q98. Such availability cannot be assured
- To order, contact Compu-Lock at 1800 448-4455 (part number 05K5298)
- For terms and conditions or a copy of IBMs statement of Limited Warranty, call 1 800 772-2227 or contact your IBM representative or reseller.
- Available in those countries where IBM and IBM resellers sell and service ThinkPad products. Registration required. Service level is based on the standard service for ThinkPad notebooks in that particular country.
- Service options available based on specific ThinkPad notebook purchased; details available via fax by calling 1800 426-3395 and requesting document #11017 or call your IBM authorized reseller for additional information.
- If you qualify and subject to conditions.

IBM reserves the right to change specifications or other product information without notice. This publication could include technical inaccuracies or typographical errors. References herein to IBM products and services do not imply IBM intends to make them available in all countries. IBM provides this publication "AS IS" without warranty of any kind, either expressed or implied, including the implied warranties of merchantability or fitness for a particular purpose. Some jurisdictions do not allow disclaimer of express or implied arranties, therefore this disclaimer may not apply to you

IBM, ThinkPad, ThinkPad Proven, SystemXtra, OS/2, Netfinity, EasySery, UltraBay and TrackPoint are trademarks or registered trademarks of IBM Corporation. Microsoft, Windows, Windows NTWorkstation and the Microsoft logo are trademarks or registered trademarks of Microsoft Corporation, Intel. Pentium and MIMX are trademarks or registered trademarks of Intel Corporation. Dolby is a registered trademark of Dolby Laboratories. Other company product and service names may be trademarks or service marks of others

Made in Scotland, Mexico, Australia, Japan or assembled in the U.S. of U.S. and









© International Business Machines Corporation 1998

Printed in the United States of America

All rights reserved



Printed on recycled paper containing 10% recovered post-consumer fiber



G221\_6090\_01