Personal Systems Reference
IBM ThinkPad i Series Notebooks
1998 to 2002 - withdrawn

April 2002 - Version 237
IBM ThinkPad i Series 1721 - withdrawn

Processor: Intel Mobile Pentium II 300MHz / 66MHz system bus
Processor features: No upgrade / processor, L2 cache, and MTXC (North Bridge) on Intel Mobile Module
L2 cache: 512KB / sync pipeline burst / ECC half speed
Diskette drive: Internal 3.5" 1.44MB / removable from UltraBay FX / on right side / integrated with DVD
External FDD port: None since diskette internal
DVI: 2X: DVD-ROM / ATAPI / bootable / removable from UltraBay FX / on right side / integrated with diskette drive
CD-ROM: None supported (the DVD-ROM can use CD discs)

Type - model: 2627-721
UPC code: 8-08794-47527-9
Disk: 5.4GB / 13ms read / 14ms write / S.M.A.R.T. / supports two internal disks
Disk controller: IDE / PCI 2.1 / disk can be removed to upgrade by customer
Avail / withdrawn date: January 1999 / April 2002
Display - size and type: 14.1" TFT color / Active Matrix
Display - technology: XGA / 640x480 or 800x600 or 1024x768 / 30ms / 120 nits
16.7 million simultaneous colors / 100 to 1 contrast ratio

Memory - features: Memory - std / max
Memory - std / max: 64MB / 256MB
Graphics - external: None
Graphics - features: Simultaneous LCD and CRT / 150 degree tilt / multiple-monitor support
Memory - std / max: 64MB / 256MB
2.5MB / SDRAM (embedded) / motion compensation / color space conversion / interpolation in X and Y axis

Audio: 16-bit SoundBlaster Pro
MPEG decoder: None (software MPEG-2 support because 300MHz with motion compensation

USB / serial / parallel: One USB / one 9 pin; 16550A / one (IEEE P1284-A, EPP, ECP, bidirectional)
PC Card Std slots: 64 sockets accessed from bottom via removing cover held by phillips-head screw
Audio in/out jacks: Audio in and out (3.5 mm)

DVI: 2X: DVD-ROM / ATAPI / bootable / removable from UltraBay FX / on right side / integrated with diskette drive
CD-ROM: None supported (the DVD-ROM can use CD discs)

Options: 32MB SO DIMM 3.3v NP SDRAM 76H0294
64MB SO DIMM 3.3v NP SDRAM 20L0241
128MB SO DIMM 3.3v NP SDRAM 01K1150
ThinkPad 560 Port Replicator 46H4209
Port Replicator w/ Advanced EtherJet™ 05K4872
6.4GB disk with UltraBay FX adapter 05K9268
Thinkpad 390/i Series Li-Ion Battery 05K4887
IBM Mini-Mouse (black) 07G0033

IBM ThinkPad EasyServ™: customer calls 1-800-772-2227, courier service picks up Thinkpad in most North American locations, IBM repairs and mails back (no shipping charges, most shipping is overnight, 5 business day average turnaround). The customer may be asked certain diagnostic questions before a courier is sent.

For a copy of IBM's Statement of Limited Warranty, call 1-800-772-2227

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## IBM® ThinkPad® i Series 1210, 1230, 1250, 1260 - withdrawn

<table>
<thead>
<tr>
<th>Name</th>
<th>Type/Processor</th>
<th>MHz</th>
<th>Mem</th>
<th>Screen</th>
<th>Disk</th>
<th>CD-ROM</th>
<th>Modem</th>
<th>Ethernet</th>
<th>Design</th>
<th>Preload</th>
<th>Avail</th>
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</thead>
<tbody>
<tr>
<td>1210</td>
<td>Celeron 500/100</td>
<td>32MB</td>
<td>12.1&quot;</td>
<td>HPA SVGA</td>
<td>6GB*</td>
<td>24X-10X² modem optional</td>
<td>Two-spindle</td>
<td>Win98SE</td>
<td>June 2000</td>
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<tr>
<td>1230</td>
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<td>13.0&quot;</td>
<td>HPA SVGA</td>
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<tr>
<td>1250</td>
<td>Celeron 500/100</td>
<td>64MB</td>
<td>12.1&quot;</td>
<td>TFT SVGA</td>
<td>6GB</td>
<td>24X-10X mod</td>
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<td>Win98SE</td>
<td>June 2000</td>
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<tr>
<td>1260</td>
<td>Celeron 500/100</td>
<td>64MB</td>
<td>13.3&quot;</td>
<td>TFT XGA</td>
<td>6GB</td>
<td>24X-10X mod</td>
<td>Two-spindle</td>
<td>Win98SE</td>
<td>June 2000</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Processor
- L2 cache: 128KB / onboard (at processor speed) / ECC
- Memory: 32 or 64MB standard / 160 or 192MB max / SDRAM / non-parity / 100MHz / PC 100 / std memory integrated / one 144-pin SO-DIMM available socket
- Diskette drive: None standard / optional USB Portable Diskette Drive
- CD-ROM: CD-ROM / 24X-10X speed / bootable / not removable
- Ultrabay 2000: None
- Disk (removable): 6.0GB / S.M.A.R.T.

### Display
- 12.1" (308mm) SVGA (800x600) HPA color / High Performance Addressing
- 12.1" (308mm) SVGA (800x600) TFT color / Active Matrix
- 13.0" (330mm) SVGA (800x600) HPA color / High Performance Addressing
- 13.3" (338mm) XGA (1024x768) TFT color / Active Matrix

### Graphics controller
- 1210: Silicon Motion Inc (SMI) LynxEM+ SM712 / PCI / 2MB memory
- 1230/50/60: Silicon Motion Inc (SMI) LynxEM+4 SM712 / PCI / 4MB memory

### Graphics - external
- 1210: External SVGA to 1024x768x65,536 colors at 85Hz
- 1230/50/60: External SVGA to 1024x768x16,7million colors at 85Hz

### Keyboard
- Full-size 87-key (multiple Fn key functions) / palm rest / four customizable color-coded Easy Launch buttons / two Windows keys

### Pointing
- TrackPoint / Press-to-Select / Internet Scroll Bar

### ThinkLight
- None

### UltraPort
- None

### Dimensions²
- 1210/30/50: approximately 12.3 x 9.9 x 1.44" / 313 x 252 x 36.6mm
- 1260: approximately 12.3 x 9.9 x 1.39" / 313 x 252 x 35.4mm

### Approximate weight²
- with CD drive and battery: 1210/50/60: 6.0 lb (2.7 kg), 1230: 6.2 lb (2.8 kg)

### Battery - type
- NiMH 8-cell

### Battery - life¹
- 1210/30: 2.8 hr, 1250/60: 2.6 hr

### Charge time∥
- on / off 5 hrs / 2.5 hrs

### Architecture
- Intel 440MX chip set (memory, IDE, USB, PCI controllers) / PCI 2.1, 32-bit 33MHz (graphics, CardBus) / O2 Micro 6812 for CardBus / ALI MS135 Super I/O (diskette, serial, parallel) / audio and modem functions in software

### Port replicator
- None

### Docking Station
- None

### PC Card Std slots
- 1 Type I, 1 Type II, or 1 Type III / CardBus 32-bit / PCMCIA 2.1 / Zoomed Video

### Video in and out
- Modern: 56K V.90 / Lucent chip set / AC97 modem code
- Ethernet: None / optional via PC Card
- Audio support: SoundBlaster Pro™ support / CS4229 AC97 codec / display mounted stereo speakers / keyboard-based audio controls / no internal microphone / output jack (3.5 mm) / mic in jack
- Security: Power-on password / hard disk password / setup password / security keyhole

### Warranty upgrade¹
- 1 year - carry-in or ThinkPad EasyServ™ / depot repair service via courier
- On-site, Monday-Friday excluding holidays, 9 hours per day, next bus day response

### Video Modes - 1210 with 2MB memory

<table>
<thead>
<tr>
<th>Resolution</th>
<th>LCD</th>
<th>External Monitor</th>
</tr>
</thead>
<tbody>
<tr>
<td>640x480</td>
<td>60Hz</td>
<td>75Hz / 85Hz</td>
</tr>
<tr>
<td>800x600</td>
<td>60Hz</td>
<td>75Hz / 85Hz</td>
</tr>
<tr>
<td>1024x768</td>
<td>60Hz</td>
<td>75Hz / 85Hz</td>
</tr>
</tbody>
</table>

### Video Modes - 1230/50/60 with 4MB

<table>
<thead>
<tr>
<th>Resolution</th>
<th>LCD</th>
<th>External Monitor</th>
</tr>
</thead>
<tbody>
<tr>
<td>640x480</td>
<td>60Hz</td>
<td>75Hz / 85Hz</td>
</tr>
<tr>
<td>800x600</td>
<td>60Hz</td>
<td>75Hz / 85Hz</td>
</tr>
</tbody>
</table>

### Video Modes - 1210 with 2MB memory

- 32MB SO DIMM 100MHz NP SDRAM 20L0253
- 64MB SO DIMM 100MHz NP SDRAM 20L0254
- 128MB SO DIMM 100MHz NP SDRAM 20L0255
- IBM MultiPort USB Hub 00N8215
- 1200/1300 I Series NiMH Battery 02K6680
- Dual Chemistry Battery Charger 02K6696
- Ultralite 56 watt ac Adapter 02K6545
- 56W Car DC Adapter 02K3381
- IBM USB Portable Diskette Drive 05K9276
- IBM EtherJet PC Card 08L3147
- IBM 340MB microdrive 00N8073
- IBM MultiPort USB Hub 00N8073

### Video Modes - 1230/50/60 with 4MB

- IBM Owner Privileges
- ENERGY STAR compliant
- International Warranty Service
- 24 hour x 7 day toll-free hardware support during the warranty

### OPTIONS
- Devices for IBM Portable Drive Bay 2000
- Portable Drive Bay 2000
- SuperDisk (LS-120) UltraBay 2000 05K9236
- SuperDisk (LS-120) UltraBay 2000 05K9237
- 24X-10X CD-ROM UltraBay 2000 05K9233
- 4X/4X/20X CD-Read/Write UltraBay 00N8252
- 4X/4X/20X CD-Read/Write UltraBay 05K9233
- 6GB UltraBay 2000 Disk Drive* 05K9237
- 12GB UltraBay 2000 Disk Drive* 05K9238
- 18GB UltraBay 2000 Disk Drive* 05K9239
- Requires Second Hard Disk Drive Adapter 08K6068
- IBM MultiPort USB Hub 00N8073

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- No warranties are expressed or implied in this summary
- Models withdrawn effective February 2001

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<table>
<thead>
<tr>
<th>Name</th>
<th>Type-model</th>
<th>Processor</th>
<th>MHz</th>
<th>Mem</th>
<th>Screen</th>
<th>Disk</th>
<th>CD or DVD-ROM</th>
<th>Modem</th>
<th>Ethernet</th>
<th>Design</th>
<th>Preload</th>
<th>Avail</th>
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<tbody>
<tr>
<td>1200-11U</td>
<td>1161-11U</td>
<td>Celeron™</td>
<td>550</td>
<td>32MB</td>
<td>12.1&quot; HPVGA 5GB</td>
<td>24X-10X 10CD</td>
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<td>Two-spindle Millennium</td>
<td>Sept 2000</td>
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<td>1200-41U</td>
<td>1161-41U</td>
<td>Celeron™</td>
<td>550</td>
<td>64MB</td>
<td>12.1&quot; TFT VGA 5GB</td>
<td>24X-10X 10CD</td>
<td>modem optional</td>
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<td>Sept 2000</td>
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<td>1161-51U</td>
<td>Celeron™</td>
<td>600</td>
<td>64MB</td>
<td>13.3&quot; TFT XGA 10GB</td>
<td>8X-2X  DVD</td>
<td>modem optional</td>
<td>Two-spindle Millennium</td>
<td>Sept 2000</td>
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<td>1200-71U</td>
<td>1161-71U</td>
<td>Celeron™</td>
<td>600</td>
<td>64MB</td>
<td>13.3&quot; TFT XGA 10GB</td>
<td>8X-2X  DVD</td>
<td>modem optional</td>
<td>Two-spindle Millennium</td>
<td>Sept 2000</td>
<td></td>
<td></td>
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</tbody>
</table>

**Processors**
- Intel® Mobile Celerontm 550 or 600MHz with 100MHz bus
- L2 cache: 128KB onboard (at processor speed) / ECC
- Memory: 32 or 64MB standard / 160 or 192MB max / SDRAM / non-parity / 100MHz / PC 100 / std memory integrated / one 144-pin SO-DIMM available socket

**Diskette drive**
- CD-ROM: Non-standard / optional USB Port / optional USB Port
- DVD: None
- UltraBay 2000: None

**Display**
- 12.1" (308mm) SVGA (800x600) HP color

**Graphics controller**
- 11U: Silicon Motion Inc (SMI) LynxEM+ SM712 / PCI / 2MB memory
- 41U/51U/71U: External SVGA to 1024x768x65,536 colors at 85Hz

**Keyboard**
- Full-size 87-key (multiple Fn key functions) / palm rest / ThinkPad Button and three customizable color-coded Easy Launch buttons / two Windows keys
- Port replicator: TrackPoint / Press-to-Select / Internet Scroll Bar

**Architecture**
- Intel 440MX chip set (memory, IDE, USB, PCI controllers) / PCI 2.1, 32-bit 33MHz (graphics, CardBus, Mini PCI) / O2 Micro 6812 for CardBus / ALI M5135 Super I/O (parallel) / audio and modem functions in software

**Limited warranty**
- 1 year EasyServ

**Warranty upgrade**
- On-site, Monday-Friday excluding holidays, 9 hours per day, next bus day response

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**Video Modes - 11U with 2MB memory**

<table>
<thead>
<tr>
<th>Resolution</th>
<th>LCD</th>
<th>External Monitor</th>
<th>60Hz</th>
<th>75Hz</th>
<th>85Hz</th>
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</thead>
<tbody>
<tr>
<td>640x480</td>
<td>97K</td>
<td>16M 16M 16M 16M</td>
<td>64K</td>
<td>64K</td>
<td>64K</td>
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<tr>
<td>800x600</td>
<td>97K</td>
<td>16M 16M 16M 16M</td>
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<tr>
<td>1024x768</td>
<td>64K</td>
<td>64K 64K 64K 64K</td>
<td>256</td>
<td>256</td>
<td>256</td>
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</table>

* Supports 1024x768 in virtual screen mode

**Video Modes - 41U/51U/71U with 4MB memory**

<table>
<thead>
<tr>
<th>Resolution</th>
<th>LCD</th>
<th>External Monitor</th>
<th>60Hz</th>
<th>75Hz</th>
<th>85Hz</th>
</tr>
</thead>
<tbody>
<tr>
<td>640x480</td>
<td>16M</td>
<td>16M 16M 16M 16M</td>
<td>64K</td>
<td>64K</td>
<td>64K</td>
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<tr>
<td>800x600</td>
<td>16M</td>
<td>16M 16M 16M 16M</td>
<td>64K</td>
<td>64K</td>
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<tr>
<td>1024x768</td>
<td>16M</td>
<td>16M 16M 16M 16M</td>
<td>64K</td>
<td>64K</td>
<td>64K</td>
</tr>
<tr>
<td>1280x1024</td>
<td>16M</td>
<td>16M 16M 16M 16M</td>
<td>64K</td>
<td>64K</td>
<td>64K</td>
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</table>

* Supports 1024x768 in virtual screen mode for SVGA models

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**Options**
- 32MB SO DIMM 100MHz NP SDRAM 20L0253
- 64MB SO DIMM 100MHz NP SDRAM 20L0254
- 128MB SO DIMM 100MHz NP SDRAM 20L0255
- IBM MultiPort USB Hub 00N8215
- 1200/1300 Series NV Memory Battery 02K6680
- 1200/1300 Series NV Memory Battery Charger 02K6696
- UltraSlat 56 watt AC Adapter 02K6545
- 72W AC Adapter 02K6699
- 56W Car DC Adapter 02K3381
- IBM Ethernet PC Card 08L3147
- IBM 340MB microdrive 00N8073
- Devices for IBM Portable Drive Bay 2000
- Portable Drive Bay 2000 19K4480
- SuperDisk (LS-120) UltraBay 2000 05K9236
- 4X4/20X CD-Read/Write Ultrabay 00N8252
- 6GB Ultrabay 2000 Disk Drive 05K9237
- 12GB UltraBay 2000 Disk Drive 05K9238
- 18GB UltraBay 2000 Disk Drive 05K9239

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<table>
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<th>Type-model</th>
<th>Processor</th>
<th>MHz</th>
<th>Mem</th>
<th>Screen</th>
<th>Disk</th>
<th>CD or DVD-ROM</th>
<th>Modem</th>
<th>Ethernet</th>
<th>Design</th>
<th>Preload</th>
<th>Avail</th>
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<tr>
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<td>1161-42U</td>
<td>Celeron™ 1258B</td>
<td>600</td>
<td>64MB</td>
<td>12.1&quot; TFT SVGA</td>
<td>10GB</td>
<td>24X-10X CD</td>
<td>modem optional</td>
<td>Two-spindle</td>
<td>Millennium Feb 2001</td>
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<tr>
<td>1200-62U</td>
<td>1161-62U</td>
<td>Pentium III 1256B</td>
<td>700</td>
<td>64MB</td>
<td>12.1&quot; TFT XGA</td>
<td>10GB</td>
<td>8X-2X DVD</td>
<td>modem optional</td>
<td>Two-spindle</td>
<td>Millennium Feb 2001</td>
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<tr>
<td>1200-92U</td>
<td>1161-92U</td>
<td>Pentium III 133B</td>
<td>700</td>
<td>64MB</td>
<td>13.3&quot; TFT XGA</td>
<td>20GB</td>
<td>8X-2X DVD</td>
<td>modem optional</td>
<td>Two-spindle</td>
<td>Millennium Feb 2001</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Processor**
- IBM Mobile Celeron™ 600MHz with 100MHz Frontside Bus or IBM Mobile Pentium III 700MHz with 100MHz Frontside Bus

**L2 cache**
- Celeron: 128KB onboard (at processor speed) / ECC
- Pentium III: 256KB onboard (at processor speed) / ECC

**Memory**
- 64MB standard / 92U max:7” SDRAM / non-partly / 100MHz
- PC 100 / std memory integrated / one 144-pin SO-DIMM available socket

**Diskette drive**
- None standard / optional USB Portable Diskette Drive

**CD-ROM**
- Some models: CD-ROM / 24X-10X speed / bootable / not removable

**Video in and out**
- Some models: DVD-ROM / 8X-2X speed / bootable / not removable

**Other features**
- PC Card Std slots
- Docking Station
- Port replicator

**Architecture**
- Intel 440MX chip set (memory, IDE, USB, PCI controllers) / PCI 2.1, 32-bit 33MHz (graphics, CardBus, Mini PCI) / O2: Micro 6812 for CardBus / ALI M5135 Super I/O (parallel) / audio and modem functions in software

**Port replicator**
- Optional IBM MultiPort USB Hub

**Docking Station**
- None

**PC Card Std slots**
- 1 Type I, 1 Type II, or 1 Type III / CardBus 32-bit / PCMCIA 2.1 / Zoomed Video

**Ports**
- Two USB (Version 1.1) / parallel / keyboard/mouse / external DB-15 monitor / RJ-11 (modem) / no serial port

**Video in and out**
- None

**Modem**
- 56K V.90 / Lucent™ chip set on planar / AC97 modem codec / no Mini PCI

**Audio support**
- SoundBlaster Pro™ audio support / CS4299 AC97 codec / display-mounted stereo speakers / keyboard-based audio controls / no internal microphone / output jack (3.5 mm) / mic in jack

**Security**
- Power-on password / hard disk password / setup password / security keyhole

**Limited warranty**
- 1 year - carry-in or ThinkPad EasyServ™ depot repair service via courier

**Energy Star**
- 24 hour x 7 day TCO compliant hardware and software development

**Warranty upgrade**
- 1 year (U.S.)

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**Video Modes - 42U with 2MB memory**

<table>
<thead>
<tr>
<th>Resolution</th>
<th>LCD 60Hz</th>
<th>75Hz</th>
<th>85Hz</th>
</tr>
</thead>
<tbody>
<tr>
<td>640x480</td>
<td>48K*</td>
<td>8K</td>
<td>8K</td>
</tr>
<tr>
<td>800x600</td>
<td>64K*</td>
<td>12K</td>
<td>12K</td>
</tr>
<tr>
<td>1024x768</td>
<td>128K*</td>
<td>48K</td>
<td>48K</td>
</tr>
<tr>
<td>1280x1024</td>
<td>256K*</td>
<td>64K</td>
<td>64K</td>
</tr>
</tbody>
</table>

* Supports 1024x768 in virtual screen mode

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**Video Modes - 62U/92U with 4MB memory**

<table>
<thead>
<tr>
<th>Resolution</th>
<th>LCD 60Hz</th>
<th>75Hz</th>
<th>85Hz</th>
</tr>
</thead>
<tbody>
<tr>
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<td>128K*</td>
<td>48K</td>
<td>48K</td>
</tr>
<tr>
<td>1280x1024</td>
<td>256K*</td>
<td>64K</td>
<td>64K</td>
</tr>
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</table>

* Requires Second Hard Disk Drive Adapter

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**Options**

<table>
<thead>
<tr>
<th>Options</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>64MB SO DIMM 100MHz NP SDRAM</td>
<td>20L0254</td>
</tr>
<tr>
<td>12BM SO DIMM 100MHz NP SDRAM</td>
<td>20L0255</td>
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<tr>
<td>IBM Portable USB Hub</td>
<td>00N8215</td>
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<tr>
<td>i Series NMH Battery 8-cell</td>
<td>02K6680</td>
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<td>i Series Li-Ion Battery 8-cell</td>
<td>02K6728</td>
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<td>i Series Battery Charger</td>
<td>02K6725</td>
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<td>Ultrasmall 56 watt AC Adapter</td>
<td>02K6545</td>
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<td>72W AC Adapter</td>
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<td>56W Car DC Adapter</td>
<td>02K3381</td>
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<td>IBM USB Portable Diskette Drive</td>
<td>05K9276</td>
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<tr>
<td>IBM USB Mobile Mouse</td>
<td>33L3243</td>
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<tr>
<td>IBM 10/100 EtherJet CardBus Adapter</td>
<td>08L3147</td>
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<tr>
<td>10/100 CardBus PC (cabled)</td>
<td>09N3701</td>
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<td>10/100 CardBus Adapter JUANCOM</td>
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<td>IBM 8MB USB Memory Key</td>
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</tr>
<tr>
<td>1GB Microdrive</td>
<td>07N5574</td>
</tr>
<tr>
<td>USB to Parallel Printer Cable</td>
<td>19K6146</td>
</tr>
<tr>
<td>IBM High Rate Wireless PC Card 128MB</td>
<td>09N9906</td>
</tr>
<tr>
<td>High Rate Wireless Access PC 500</td>
<td>09N9906</td>
</tr>
<tr>
<td>Bluetooth PC Card from IBM</td>
<td>09N9812</td>
</tr>
</tbody>
</table>

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**NOTE**
- All trademarks are the property of their respective owners.
- No warranties are expressed or implied in this summary.
- Models withdrawn effective July 2001

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**IBM**
- IBM ThinkPad i Series 1200-x2U - withdrawn
- IBM ThinkPad Proven™ solutions (visit ibm.com/hardwaare)

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**Windows Millennium Preload**
- Microsoft Windows Millennium
- Notebook Manager II
- Utility Wizard
- Easy Buttons Utility
- Access ThinkPad 2.5
- ThinkPad Assistant
- Owner Privileges 2.0
- PC-Doctor™
- Mediamatics DVD (DVD models)
- Norton Anti-Virus™ (OEM edition)
- IBM Update Connector™
- Quicken 2001
- Adobe Acrobat Reader
- Earthlink®
- Real Player G2
- JUNO
- MusicMatch Jukebox
- America Online®
- Lotus SmartSuite™ Millennium
- CD-ROM
- Software Selections CD-ROM
- Recovery CD-ROM (Windows Millennium)

---

**Energy Star**
- 24 hour x 7 day TCO compliant hardware and software development

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**World Wide Web**
- ibm.com/thinkpad
- ibm.com/thinkpad/buydirect

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**Buy Direct**
- 1-888-716-1776 ext 7874

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**Warranty Options**
- 1 year - carry-in or ThinkPad EasyServ™ depot repair service via courier

---

**Onsite response**
- On-site, Monday-Friday excluding holidays, 9 hours per day, next busday response
### IBM ThinkPad i Series 1200 (Spring 2001) - withdrawn

**Type-model**
- 1161-43U
- 1161-53U

**Processor**
- Intel Celeron
- Mobile Celeron

**Memory**
- 128KB / 192MB maximum
- SDRAM / non-parity
- PC100 / 8MB utilized

**Diskette drive**
- None

**Display**
- 13.3" (338mm) XGA
- TFT color / Active Matrix
- UltraView

**Graphics controller**
- Trident
- Cyberglide Aladdin (in M1632M Northbridge / 2X AGP 3D graphics)

**Graphics - external**
- Unified Memory Architecture (UMA uses main 8MB of system memory) / MPEG2

**Keyboard**
- 85-key (multiple Fn key functions) / palm rest / ThinkPad Button and three customizable color-coded

**Pointing**
- TrackPoint / Press-to-Select / Internet Scroll Bar

**Style**
- UltraPort

**Batteries**
- 64MB / 128KB
- NiMH 8-cell / 9.6V x 4.5Ah / supports Li-Ion

**AC adapter**
- 56 watt universal AC adapter

**Dimensions (WxDxH)**
- Approximately 12.3 x 9.9 x 1.4" / 313 x 252 x 36mm

**Approximate weight**
- 5hrs / 2hrs

**Charge time**
- 5hrs / 2hrs

**Architecture**
- ALi chipset / M1632M Northbridge (memory, graphics, PCI)

**Port replicator**
- Optional IBM MultiPort USB Hub

**Docking Station**
- 1 Type I, Type II, or Type III / CardBus 32-bit / PCMCIA 2.1 / Zoomed Video

**Ports**
- 2 USB port (Version 1.1) / parallel / keyboard / mouse / DB-15 monitor / RJ-11 (modem) / RJ-45 (ethernet models) / no serial port

**Modem**
- None

**LAN**
- None

**Audio support**
- SoundBlaster Pro / audio support

**Security**
- Power-on password / hard disk password / setup password / security keyhole

**Limited warranty**
- 1 year - customer carry in or EasyServ

**Service options**
- On-site, Mon-Fri excluding holidays, 8 hours per day, next bus day response

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### IBM Operational System Preload

- **Windows Millennium models**
  - Microsoft Windows Millennium Edition
  - IBM Update Connector (OEM edition)

- **ADDITIONAL PRELOADED SOFTWARE**
  - Microsoft Office XP Small Business Edition
  - Adobe Acrobat Reader
  - Norton AntiVirus (OEM edition)
  - Some: IBM ThinkPad Assistant

### OPTIONS

- **64MB SO DIMM 100MHz NP SDRAM**
- **128MB SO DIMM 100MHz NP SDRAM**
- **i Series NiMH Battery 8-cell**
- **i Series Li-Ion Battery 8-cell**
- **i Series Battery Charger**
- **UltraSISm 56 watt AC Adapter**
- **72W AC Adapter**
- **56W Car Adapter**
- **IBM MultiPort USB Hub**
- **USB to Parallel Printer Cable**
- **USB Portable Diskette Drive**
- **USB Mobile Mouse**
- **USB to Parallel Printer Cable**

**Devices for IBM Portable Drive Bay 2000**
- SuperDisk (LS-240) Drive UltraBay
- 8X/4X/2X CD-Read/Write Ultrabay
- 15GB Ultrabay 2000 Disk Drive
- 30GB Ultrabay 2000 Disk Drive
- 32GB Ultrabay 2000 Disk Drive
- Hard Disk Drive Adapter
- 32GB Ultrabay 2000 Disk Drive
- IBM High Rate Wireless PC Card 128 09N9904
- High Rate Wireless Access Pt 500
- Bluetooth PC Card from IBM
- 1GB Microdrive
- Portable Drive Bay 2000

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*For a copy of IBM's Statement of Limited Warranty, call 1-800-772-2227.

No warranties are expressed or implied in this summary.


<table>
<thead>
<tr>
<th>Name</th>
<th>Type-model</th>
<th>Processor</th>
<th>MHz</th>
<th>Mem</th>
<th>Screen</th>
<th>Disk</th>
<th>CD-ROM</th>
<th>Modem</th>
<th>Ethernet</th>
<th>Design</th>
<th>Preload</th>
<th>Avail</th>
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<tbody>
<tr>
<td>1330</td>
<td>1171-330</td>
<td>Celeron</td>
<td>500</td>
<td>64MB</td>
<td>12.1&quot; TFT SVGA</td>
<td>6GB</td>
<td>24X-10X</td>
<td>modern</td>
<td>10/100</td>
<td>Two-spindle</td>
<td>Win2000</td>
<td>June 2000</td>
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<td>1171-370</td>
<td>Celeron</td>
<td>550</td>
<td>64MB</td>
<td>13.3&quot; TFT XGA</td>
<td>12GB</td>
<td>24X-10X</td>
<td>modern</td>
<td>10/100</td>
<td>Two-spindle</td>
<td>Win2000</td>
<td>June 2000</td>
</tr>
</tbody>
</table>

### Processor
- Intel® Mobile Celeron™ 500 or 550MHz with 100MHz bus
- 128KB / onboard (at processor speed) / ECC

### Memory
- 64MB standard / 192MB maximum / SDRAM / non-parity / 100MHz / PC 100 / std memory integrated / one 144-pin SO-DIMM available socket

### Diskette drive
- None standard / optional USB Portable Diskette Drive

### CD-ROM
- None standard

### Ultrabay 2000
- None

### Disk (removable)
- 6.0 or 12.0GB / S.M.A.R.T.

### Display
- 12.1" (308mm) SVGA (800x600) TFT color / Active Matrix
- 13.3" (338mm) XGA (1024x768) TFT color / Active Matrix

### Graphics controller
- Silicon Motion Inc (SMI) LynxEM4+ SM712 / PCI / 4MB memory

### Graphics - external
- External SVGA to 1024x768x16.7 million colors at 85Hz

### Keyboard
- Full-size 87-key (multiple Fn key functions) / palm rest / four customizable color-coded Easy Launch buttons / two Windows keys

### Pointing
- TrackPoint® / Press-to-Select / Internet Scroll Bar

### ThinkLight
- None

### UltraPort™ connectr
- None

### Dimensions
- 1330: approximately 12.3 x 9.9 x 1.44"; 313 x 252 x 35.4mm
- 1370: approximately 12.3 x 9.9 x 1.39"; 313 x 252 x 35.4mm

### Approximate weight
- With CD drive and battery: 1330: 6.0 lb (2.7 kg), 1370: 6.2 lb (2.8 kg)

### Battery - type
- NiMH 8-cell

### Battery - life
- 2.6 hr

### Charge time
- on / off 5 hrs / 2.5 hrs

### Architecture
- Intel 440MX chip set (memory, IDE, USB, PCI controllers) / PCI 2.1, 32-bit 33MHz (graphics, CardBus, Mini PCI) / O2® Micro 6812 for CardBus / ALI M135 Super I/O (diskette, serial, parallel) / audio and modern functions in software

### Port replicator
- None

### Docking Station
- None

### PC Card Std slots
- 1 Type I, 1 Type II, or 1 Type III / CardBus 32-bit / PCMCIA 2.1 / Zoomed Video

### Ports
- Two USB (Version 1.1) / parallel / keyboard / mouse / external DB-15 monitor / RJ-11 (modem) / RJ-45 (ethernet) / no serial port

### Other features
- 56 watt AC Adapter

### Video in and out
- None

### Modern
- 56K V.90 / Lucent® chip set / AC97 modem codec

### Ethernet
- 10/100 Mini PCI / Ethernet adapter / Intel Chipset

### Audio support
- SoundBlaster Pro™ support / CS4229 AC97 codec / display mounted stereo speakers / keyboard-based audio controls / no internal microphone / output jack (3.5 mm) / mic in jack

### Security
- None

### Limited warranty
- 1 year - carry-in or ThinkPad EasyServ® depot repair service via courier

### Warranty upgrade
- On-site, Monday-Friday excluding holidays, 9 hours per day, next bus day response

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### Video Modes with 4MB

<table>
<thead>
<tr>
<th>Resolution</th>
<th>LCD</th>
<th>External Monitor</th>
</tr>
</thead>
<tbody>
<tr>
<td>640x480</td>
<td>262K</td>
<td>60Hz 75Hz 85Hz</td>
</tr>
<tr>
<td>800x600</td>
<td>262K</td>
<td>16M 16M 16M</td>
</tr>
<tr>
<td>1024x768</td>
<td>262K*</td>
<td>16M 16M 16M</td>
</tr>
<tr>
<td>1280x1024</td>
<td>64K</td>
<td>-- -- --</td>
</tr>
</tbody>
</table>

* 1330 supports 1024x768 in virtual screen mode

### OPTIONS
- 32MB SO DIMM 100MHz NP SDRAM 20L0253
- 64MB SO DIMM 100MHz NP SDRAM 20L0254
- 128MB SO DIMM 100MHz NP SDRAM 20L0255
- IBM MultiPort USB Hub 00N8215
- 1200/1300 I Series NiMH Battery 02K6680
- Dual Chemistry Battery Charger 02K6696
- Ultralite 56 watt AC Adapter 02K6545
- 56W Car DC Adapter 02K3381
- IBM USB Portable Diskette Drive 05K9276
- IBM EtherJet PC Card 08L3147
- IBM 340MB microdrive 00N8073
- Devices for IBM Portable Drive Bay 2000
- Portable Drive Bay 2000 19K4480
- SuperDisk (LS-120) UltraBay 2000 05K9236
- 24X-10X CD-ROM UltraBay 2000 05K9233
- 4X/4X/20X CD-Read/Write UltraBay 00N8252
- 6GB Ultrabay 2000 Disk Drive* 05K9237
- 12GB Ultrabay 2000 Disk Drive* 05K9238
- IBM MultiBay 2000 Expansion Dock* 05K9239
- Requires Second Hard Disk Drive Adapter 08K6068

- ThinkPad Proven® solutions (visit www.ibm.com/pctsw/thinkpad/proven)

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Models withdrawn effective February 2001

(1330) © IBM Corp. January 2001
### IBM ThinkPad i Series 1300-x1U - withdrawn

<table>
<thead>
<tr>
<th>Name</th>
<th>Type-model</th>
<th>Processor</th>
<th>MHz</th>
<th>Mem</th>
<th>Screen</th>
<th>Disk</th>
<th>CD-ROM</th>
<th>Modem</th>
<th>LAN</th>
<th>Design</th>
<th>Preload</th>
<th>Avail</th>
</tr>
</thead>
<tbody>
<tr>
<td>1300-21U</td>
<td>1171-21U</td>
<td>Celeron™ 550</td>
<td>550</td>
<td>64MB</td>
<td>12.1&quot; HPA SVGA</td>
<td>5GB</td>
<td>24X-10X modem</td>
<td>802.11b</td>
<td>Two-spindle</td>
<td>Millennium Oct 00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1300-2AU</td>
<td>1171-2AU</td>
<td>Celeron™ 550</td>
<td>550</td>
<td>64MB</td>
<td>12.1&quot; HPA SVGA</td>
<td>5GB</td>
<td>24X-10X modem</td>
<td>802.11b</td>
<td>Two-spindle</td>
<td>Millennium** Oct 00</td>
<td></td>
<td></td>
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<tr>
<td>1300-61U</td>
<td>1171-61U</td>
<td>Celeron™ 600</td>
<td>600</td>
<td>64MB</td>
<td>12.1&quot; TFT SVGA</td>
<td>10GB</td>
<td>24X-10X modem</td>
<td>10/100</td>
<td>Two-spindle Win2000</td>
<td>Sept 00</td>
<td></td>
<td></td>
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<tr>
<td>1300-91U</td>
<td>1171-91U</td>
<td>Pentium™ III 650</td>
<td>650</td>
<td>64MB</td>
<td>13.3&quot; TFT XGA</td>
<td>5GB</td>
<td>24X-10X modem</td>
<td>10/100</td>
<td>Two-spindle Win2000</td>
<td>Sept 00</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Processor**
- **Note:** Mobile Celeron™ 550 or 600MHz with 100MHz bus or Mobile Pentium III 650MHz with 100MHz bus
- **Note:** Intel® Mobile Celeron™ or Mobile Pentium III

**L2 cache**
- Celeron: 128KB / onboard (at processor speed) / ECC
- Pentium: 256KB / onboard (at processor speed) / ECC

**Memory**
- 64MB standard / 192MB maximum / SDRAM / non-parity / 100MHz / PC 100 / std memory integrated / one 144-pin SO-DIMM available socket

**Display**
- 12.1" (308mm) SVGA (800x600) HPA color / High Performance Addressing
- 12.1" (308mm) SVGA (800x600) TFT color / Active Matrix
- 13.3" (338mm) XGA (1024x768) TFT color / Active Matrix

**Graphics controller**
- Silicon Motion Inc (SMI) LynxEM4+ SM712 / PCI / 4MB memory

**Keyboard**
- Full-size 87-key (multiple Fn key functions) / palm rest / ThinkPad Button and three customizable color-coded **Easy Launch buttons** / two Windows keys
- TrackPoint® / Press-to-Select / Internet Scroll Bar

**Points on/off**
- None

**Dimensions**
- Approximately 12.3 x 9.1 x 1.4"; 313 x 252 x 36mm

**Approximate weight**
- with CD and battery: 6.0 lb (2.7 kg), some models slightly heavier

**Battery**
- Type I
- Battery life: 2x2.5 hr, 61U: 2.3 hr, 71U: 2.6 hr, 91U: 2.9 hr

**Charge time**
- 5 hrs / 2 hrs

**Architecture**
- Intel® 440MX chip set
- Memory, IDE, USB, PCI controllers
- PCI 2.1, 32-bit 33MHz (graphics, CardBus, Mini PCI)
- O2 Micro 6812 for CardBus / ALI M5135 Super I/O (parallel)
- Audio and modem functions in software

**Port replicator**
- Optional IBM MultiPort USB Hub

**Docking Station**
- None

**PC Card Std slots**
- 1 Type I, 1 Type II, or 1 Type III / CardBus 32-bit / PCMCIA 2.1 / Zoomed Video
- Two USB (Version 1.1) / parallel / keyboard / mouse / external DB-15 monitor / RJ-11 (modem) / RJ-45 (ethernet) / no serial port

**Other features**
- 56 watt AC Adapter

**Video in and out**
- None

**Modem**
- 56K V.90 / Lucent chip set / AC97 modem codec

**LAN**
- 21U/237U/21U: 802.11b wireless / Mini PCI adapter / Lucent chip set 61U/91U: 10/100 Mini PCI ethernet adapter / Intel ethernet chipset

**Audio support**
- SoundBlaster Pro™ support / CS4299 AC97 codec / display mounted stereo speakers / keyboard-based audio controls / no internal microphone / output jack (3.5 mm) / mic in jack

**Security**
- Power-on password / hard disk password / setup password / security keyhole

**Limited warranty**
- 1 year - EasyServ™ on-site pickup and delivery courier service

**Warranty upgrade**
- On-site, Monday-Friday excluding holidays, 9 hours per day, next bus day response

## Video Modes with 4MB

<table>
<thead>
<tr>
<th>Resolution</th>
<th>HPA</th>
<th>TFT</th>
<th>60Hz</th>
<th>75Hz</th>
<th>85Hz</th>
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<tbody>
<tr>
<td>640x480</td>
<td>97K</td>
<td>16M</td>
<td>16M</td>
<td>16M</td>
<td>16M</td>
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<tr>
<td>800x600</td>
<td>97K</td>
<td>16M</td>
<td>16M</td>
<td>16M</td>
<td>16M</td>
</tr>
<tr>
<td>1024x768</td>
<td>97K*</td>
<td>16M</td>
<td>16M</td>
<td>16M</td>
<td>16M</td>
</tr>
<tr>
<td>1280x1024</td>
<td>64K</td>
<td>16M</td>
<td>16M</td>
<td>16M</td>
<td>16M</td>
</tr>
</tbody>
</table>

**OPTIONS**

- Devices for IBM Portable Drive Bay 2000
  - Portable Drive Bay 2000 19K4480
  - 2X SuperDisk (LS-120) UltraBay 27L3451
  - 4X/4X/20X CD-Read/Write UltraBay 00N8252
  - 10GB Ultrabay 2000 Disk Drive* 08K9510
  - 20GB UltraBay 2000 Disk Drive* 27L3439

**LIMITED WARRANTY**

- IBM Owner Privileges
- ENERGY STAR compliant
- Setup Guide, User’s Reference
- Windows manual
- Personalized Web-based support
- International Warranty Service 24 hour x 7 day toll-free hardware support during the warranty

**WINDOWS MILLENNIUM PRELOAD**
- Microsoft® Windows® Millennium
- ThinkPad Utilities
- Easy Launch Buttons Utility
- Access ThinkPad II
- Owner Privileges 2.0
- PC-Doctor™
- Netscape Communicator
- Norton Anti-Virus™ (OEM edition)
- IBM Update Connect™
- Quicken 2000
- Adobe Acrobat Reader
- Earthlink®
- Real Player G2
- America Online®
- Lotus® SmartSuite® Millennium
- CD-ROM
- Software Selections CD-ROM
- Recovery CD-ROM

**WINDOWS 2000 PRELOAD**
- Microsoft® Windows® 2000
- Professional
- Microsoft Office 2000 Small Business
- ThinkPad Utilities
- Easy Buttons Utility
- Access ThinkPad II
- ThinkPad Assistant
- IBM Owner Privileges
- Online User’s Guide
- PC-Doctor™
- Netscape Communicator
- ConfigSafe®
- Norton Anti-Virus™ (OEM edition)
- IBM Update Connect™
- Quicken 2000
- Adobe Acrobat Reader
- Real Player G2
- Software Selections CD-ROM
- Recovery CD-ROM

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### Specifications

<table>
<thead>
<tr>
<th>Name</th>
<th>Type-model Processor</th>
<th>MHz</th>
<th>Mem</th>
<th>Screen</th>
<th>Disk</th>
<th>CD-ROM</th>
<th>Modem</th>
<th>LAN</th>
<th>Preload</th>
<th>Avail</th>
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<tbody>
<tr>
<td>1300-5WU</td>
<td>1171-5WU Celeron™</td>
<td>650</td>
<td>64MB</td>
<td>12.1“</td>
<td>TFT SVGA</td>
<td>10GB</td>
<td>24X-10X</td>
<td>modem</td>
<td>802.11b</td>
<td>Two-spindle Millennium Feb 01</td>
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<td>1171-5BU Celeron™</td>
<td>650</td>
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<td>12.1“</td>
<td>TFT SVGA</td>
<td>10GB</td>
<td>24X-10X</td>
<td>modem</td>
<td>802.11b</td>
<td>Two-spindle Millennium Feb 01</td>
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<td>700</td>
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<td>TFT XGA</td>
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<td>TFT XGA</td>
<td>10GB</td>
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<td>modem</td>
<td>802.11b</td>
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<td>64MB</td>
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<td>modem</td>
<td>802.11b</td>
<td>Two-spindle 2000, Small Bus Mar 01</td>
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<td>1300-5KL</td>
<td>1171-5KL Pentium III</td>
<td>700</td>
<td>64MB</td>
<td>13.3“</td>
<td>TFT XGA</td>
<td>10GB</td>
<td>24X-10X</td>
<td>modem</td>
<td>802.11b</td>
<td>Two-spindle 2000, Small Bus Mar 01</td>
</tr>
</tbody>
</table>

**Processor**
- Intel® Mobile Celeron™ 650 or 700MHz with 100MHz bus or Intel Mobile Pentium III 700MHz with 100MHz bus

**L2 cache**
- Celeron: 128KB / onboard (at processor speed) / ECC
- Pentium: 256KB, 512KB / onboard (at processor speed) / ECC

**Memory**
- 64MB standard / 192MB maximum / 256MB DRAM
- PC 100 / std memory integrated / one 144-pin SO-DIMM available socket

**Display**
- 12.1” (308mm) SVGA (800x600) TFT color / Active Matrix
- 13.3” (338mm) XGA (1024x768) TFT color / Active Matrix

**Graphics controller**
- Silicon Motion Inc (SMI) LynxEM4+ SM712 / PCI / 4MB memory

**Keyboard**
- Full-size 87-key (multiple Fn key functions) / palm rest

**Battery**
- 10 or 20GB / S.M.A.R.T. / average seek 12 ms (read) / ATA-5 65MB/sec

**Dimensions**
- Approximately 12.3 x 9.9 x 1.4” / 313 x 252 x 36mm

**Approximate weight**
- with CD and battery: 5.9 lb (2.67 kg)

**Charge time**
- 5xx: 3.4 hr, 7xx: 3.2 hr, 6xx/9xx: 3.7 hr

**Architecture**
- Intel 440MX chip set (memory, IDE, USB, PCI controllers)
- PCI 2.1, 32-bit 33MHz (graphics, CardBus, Mini PCI)
- O2 Micro 6812 for CardBus / ALI M1535 Super I/O (parallel) / audio and modem functions in software

**Video in and out**
- None

**Limited warranty**
- 1 year

**Warranty upgrade**
- On-site, Monday-Fri excluding holidays, 9 hours per day, next bus day response

### Windows Millennium Preload
- Norton AntiVirus™ (OEM edition)
- IBM Update Connector™
- Quicken 2001
- IBM Acrobat Reader
- Earthlink™
- Lotus® SmartSuite™ Millennium CD-ROM
- Software Selections CD-ROM
- Recovery CD-ROM

### Windows 2000 Preload
- Norton AntiVirus™ (OEM edition)
- IBM Update Connector™
- Quicken 2001
- ConfgiSafe
- IBM Acrobat Reader
- Real Player G2
- Lotus® SmartSuite™ Millennium CD-ROM
- Software Selections CD-ROM
- Disk-to-Disk Recovery (in hidden Service Partition)

### Video Modes with 4MB

<table>
<thead>
<tr>
<th>Resolution</th>
<th>LCD</th>
<th>External Monitor</th>
</tr>
</thead>
<tbody>
<tr>
<td>640x480</td>
<td>640x480</td>
<td>640x480</td>
</tr>
<tr>
<td>800x600</td>
<td>16M</td>
<td>16M 16M 16M</td>
</tr>
<tr>
<td>1024x768</td>
<td>16M</td>
<td>16M 16M 16M</td>
</tr>
<tr>
<td>1280x1024</td>
<td>64K</td>
<td>64K 64K 64K</td>
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</tbody>
</table>

**Note:** All trademarks are the property of their respective owners. Models withdrawn effective July 2001.
### IBM ThinkPad i Series 1300 (Spring 2001) - withdrawn

#### Type-model Processor | Mem | Screen | Disk | Optical | Modem | LAN | Design | Preload | Office Software | Available
--- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | ---
1171-4MU Celeron™ | 700 | 64M | 13.3" TFT XGA | 10G | CD-ROM™ | Modern | 10/100 | Two-spindle | Millennium | SmartSuite | May 2001
1171-6MU Pentium™ III | 750 | 64M | 13.3" TFT XGA | 10G | CD-ROM | Modern | 10/100 | Two-spindle | Windows® 2000 | SmartSuite | May 2001
1171-8MU Pentium™ III | 750 | 64M | 13.3" TFT XGA | 20G | CD-ROM® | Modern | 10/100 | Two-spindle | Windows® 2000 | SmartSuite | May 2001
1171-5XU Celeron | 700 | 64M | 13.3" TFT XGA | 20G | CD-ROM | Modern | 10/100 | Two-spindle | Millennium | SmartSuite | May 2001
1171-6XU Pentium™ III | 750 | 64M | 13.3" TFT XGA | 20G | CD-ROM® | Modern | 10/100 | Two-spindle | Windows® 2000 | SmartSuite | May 2001
1171-8XU Pentium™ III | 750 | 64M | 13.3" TFT XGA | 20G | CD-ROM® | Modern | 10/100 | Two-spindle | Windows® 2000 | SmartSuite | May 2001
1171-9XU Pentium™ III | 750 | 64M | 13.3" TFT XGA | 20G | CD-ROM® | Modern | 10/100 | Two-spindle | Windows® 2000 | SmartSuite | May 2001
1171-5CU* Celeron | 700 | 64M | 13.3" TFT XGA | 10G | CD-ROM | Modern | 10/100 | Two-spindle | Office Standard | Std | May 2001
1171-6NU Pentium™ III | 750 | 64M | 13.3" TFT XGA | 20G | CD-ROM® | Modern | 10/100 | Two-spindle | Windows® 2000 | SmartSuite, XP | Aug 2001
1171-82U Pentium™ III | 750 | 64M | 13.3" TFT XGA | 20G | CD-ROM® | Modern | 10/100 | Two-spindle | Windows® 2000 | SmartSuite, XP | Aug 2001

#### Processor
- Intel® Mobile Celeron™
- Pentium III

#### Video Modes with 8MB
- **Video Modes**
  - 640x480: 16M 16M 16M
  - 800x600: 16M 16M 16M
  - 1024x768: 16M 16M 16M
  - 1280x1024 -- 64K --

#### Options
- 640x480 SBU DIMM 100MHz NP SDRAM 20L0254
- 1280x1024 20L0255
- 1280x1024 SBU DIMM 100MHz NP SDRAM 20L0254
- 1 Series NiMh Battery 8-cell 02K6680
- 1 Series Li-ion Battery 8-cell 02K6278
- 1 Series Battery Charger 02K6275
- 1 Series Battery Charger 02K6267
- UltraSaver 56K Modem Adapter 02K6545
- 72W AC Adapter 02K6699
- 56W Car DC Adapter 02K3381
- IBM MultiPort USB Hub 00N8215
- IBM USB Portable Diskette Drive 05K9276
- IBM USB Mobile Mouse 33L3243
- USB to Parallel Printer Cable 19K4164
- IBM 8MB USB Key 08L3168
- IBM 10/100 Ethernet CardBus Adapter 08L3147
- 10/100 CardBus PC Card (cabled) 09N3701
- 10/100 CardBus Adptr XJACK 3Com 09N9801
- IBM Hi-Speed USB 02K8980
- IBM Hi-Speed USB 02K8980
- IBM High Rate Wireless Access Pt 09N9906
- Bluetooth PC Card from IBM 09N9812
- 1GB Microdrive 07N5574
- Portable Drive Bay 2000 09K4480

#### OPERATING SYSTEM PRELOAD
- Windows 2000 models
  - Microsoft® Windows® 2000 Professional
  - Disk-to-Desk Recovery (in hidden Service Partition)
- Windows Millennium models
  - Microsoft® Windows® Millennium Edition
  - Disk-to-Desk Recovery (in hidden Service Partition)

#### ADDITIONAL PRELOADED SOFTWARE
- **SmartSuite™** models
  - Lotus® SmartSuite Millennium
  - IBM Update Connector
  - PC-Doctor™
  - Norton AntiVirus® (OEM edition)
  - IBM Update Connector
  - Quickpen 2001
  - Acrobat Reader
  - Microsoft Office Small Business (Word, Excel, Outlook, Publisher, Small Business Tools)
  - Microsoft Office XP Small Business CD

#### Common to most models
- Utility Wizard
- Easy Buttons Utility
- Access ThinkPad 2.5
- ThinkPad Assistant
- IBM Owner Privileges
- PC-Doctor™
- Norton AntiVirus® (OEM edition)
- IBM Update Connector

#### ENERGY STAR compliant
- Devices for IBM Portable Drive Bay 2000
- SuperDisk (LS-240) Drive UltraBay 08K9616
- 8X/4X24X CD-Reader UltraBay 08K9568
- 15GB UltraBay 2000 Disk Drive 08K9588
- 30GB UltraBay 2000 Disk Drive 08K9593
- 30GB UltraBay 2000 Disk Drive 08K9511

####限定的保修 15 年 - 客户采购及 EasySrvX20 磁盘备份及运费
- On-site, Mon-Fri excluding holidays, 8 hours per day, next bus day response

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*For a copy of IBM's Statement of Limited Warranty, call 1-800-772-2227
No warranties are expressed or implied in this summary
US models announced May 15, 2001 or August 7, 2001
US models withdrawn effective November 2001

(1171) © IBM Corp. November 2001
<table>
<thead>
<tr>
<th>IBM® ThinkPad®</th>
<th>i Series 1410</th>
<th>i Series 1450</th>
</tr>
</thead>
<tbody>
<tr>
<td>Processor type</td>
<td>Intel® Pentium® 266MHz with MMX™ technology</td>
<td>All-in-one design means the disk, diskette drive, and CD-ROM are all within the covers of the notebook</td>
</tr>
<tr>
<td>Processor features</td>
<td>No upgrade</td>
<td>- C: drive is FAT16 of 2GB</td>
</tr>
<tr>
<td>L2 cache</td>
<td>512KB</td>
<td>- D: drive is FAT32 of remaining space</td>
</tr>
<tr>
<td>Diskette drive</td>
<td>Internal 3.5&quot; 1.44MB use simultaneously with CD-ROM / on right side</td>
<td></td>
</tr>
<tr>
<td>External FDD port</td>
<td>None since diskette internal</td>
<td></td>
</tr>
<tr>
<td>CD-ROM</td>
<td>CD-ROM / 20X-10X speed / CAV /ATAPI / bootable / not removable / on right side</td>
<td></td>
</tr>
<tr>
<td>Audio Control Panel</td>
<td>Instant Audio (external CD player controls in front of palm rest to play music CDs for up to six hrs when system off/closed)</td>
<td></td>
</tr>
<tr>
<td>Type - model</td>
<td>2611-410</td>
<td>All models:</td>
</tr>
<tr>
<td>UPCI code</td>
<td>0-57944-47551-4</td>
<td>- C: drive is FAT16 of 2GB</td>
</tr>
<tr>
<td>Disk - size / ms</td>
<td>3.2GB / 13ms read / 14ms write</td>
<td>- D: drive is FAT32 of remaining space</td>
</tr>
<tr>
<td>Disk controller</td>
<td>EIDE / PCI 2.1 / supports one internal disk / can not be removed or upgraded</td>
<td></td>
</tr>
<tr>
<td>Avail / Withdrawal date</td>
<td>November 1998 / May 2001</td>
<td></td>
</tr>
<tr>
<td>Display - size and type</td>
<td>12.1 Inch TFT color / Active Matrix</td>
<td></td>
</tr>
<tr>
<td>Display - technology</td>
<td>16.7 million simultaneous colors / 80 to 1 contrast</td>
<td></td>
</tr>
<tr>
<td>Graphics - controller</td>
<td>NeoMagic™ MagicGraph128XD™ (NM2097B) / 128-bit SVGA accelerator / Zoomed Video support / DDC1 and DDC2B</td>
<td></td>
</tr>
<tr>
<td>Graphics - features</td>
<td>2MB / iDRAM / (embedded) / color space conversion and interpolation in X and Y axis / support for DCI, DirectDraw</td>
<td></td>
</tr>
<tr>
<td>Graphics - arch/data path</td>
<td>PCI 2.1 / 32-bit / external SVGA to 1024x768 with 65,536 colors at 75Hz</td>
<td></td>
</tr>
<tr>
<td>Graphics - controller</td>
<td>Simultaneous LCD and CRT/® 150 degree tilt</td>
<td></td>
</tr>
<tr>
<td>Memory - std / max</td>
<td>32MB / 256MB®</td>
<td></td>
</tr>
<tr>
<td>Memory - features</td>
<td>SDRAM / non-parity / 66MHz / 3.3 volt / 64-bit</td>
<td></td>
</tr>
<tr>
<td>Memory - features</td>
<td>2 sockets for JEDEC 144-pin SO DIMMs / one socket used by std memory / sockets accessed from bottom via removing cover held by Phillips-head screws</td>
<td></td>
</tr>
<tr>
<td>Keyboard</td>
<td>Full-size 85-key (10 Fn key functions) / keyboard slope with tilt feet / Customizable color-coded ShortCut Keys / two Windows keys / palm rest</td>
<td></td>
</tr>
<tr>
<td>Pointing</td>
<td>TrackPoint® / Press-to-Select / Release-to-Select / dragging / click page / center button for scrolling (Internet Scroll Bar) or magnifying glass / spare caps</td>
<td></td>
</tr>
<tr>
<td>Dimensions / weight</td>
<td>13.1 x 10.1 x 1.85&quot; (245 cubic inches) / 7.5 lbs</td>
<td></td>
</tr>
<tr>
<td>Battery - type / life</td>
<td>NIMH / non-intelligent / 3.0 hours / service life</td>
<td></td>
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<tr>
<td>Charge time - on / off</td>
<td>5.3 hrs on / 2.0 hrs off</td>
<td></td>
</tr>
<tr>
<td>Architecture</td>
<td>ALI® Aladdin IV M1531 North Bridge / M1533 (EIDE, USB, PCI to ISA bridge)</td>
<td></td>
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<tr>
<td>Architecture</td>
<td>02® Micro 68333 PCMCIA controller / NS PC97338 (FDC, IR, I/O)</td>
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<tr>
<td>Architecture</td>
<td>PCI 2.1 / 32-bit / 33MHz (EIDE, graphics, PCMCIA, USB, audio, DMI)</td>
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<tr>
<td>Architecture</td>
<td>ISA (audio, diskette, serial, parallel, infrared, modem)</td>
<td></td>
</tr>
<tr>
<td>Docking station</td>
<td>None</td>
<td></td>
</tr>
<tr>
<td>Port replicator</td>
<td>Port Replicator (for easy, one-step connection to desktop peripherals)</td>
<td></td>
</tr>
<tr>
<td>PCMCIA™ slots</td>
<td>2 Type I or 2 Type II or 1 Type III / CardBus 32-bit- / Zoomed Video (lower slot) / PCMCIA 2.1 compatible / PC Card Standard 95</td>
<td></td>
</tr>
<tr>
<td>USB / serial / parallel</td>
<td>One USB / one 9 pin: 16550A / one (IEEE 1284-A, EPP, ECP, bidirectional)</td>
<td></td>
</tr>
<tr>
<td>Other features</td>
<td>APIM-aware BIOS / Universal AC adapter, 3 prong, barrel, slim, 45 watts</td>
<td></td>
</tr>
<tr>
<td>Video in/out</td>
<td>MPEG decoder</td>
<td></td>
</tr>
<tr>
<td>Video in/out</td>
<td>None (software support for MPEG-1 in Windows 98)</td>
<td></td>
</tr>
<tr>
<td>Audio</td>
<td>56K / V.90 / integrated in system / Lucent 1641B / not voice-capable</td>
<td></td>
</tr>
<tr>
<td>Audio</td>
<td>16-bit SoundBlaster Pro™ audio support / Yamaha YM715E / full duplex</td>
<td></td>
</tr>
<tr>
<td>Audio</td>
<td>Altel Lansing™ SoundGuide stereo speakers with Dynamic Equalization Circuit®</td>
<td></td>
</tr>
<tr>
<td>Audio features</td>
<td>Dial volume control (left side) / internal microphone</td>
<td></td>
</tr>
<tr>
<td>Audio in/out jacks</td>
<td>Microphone jack (stereo) / headphone jack (stereo) / line-in jack</td>
<td></td>
</tr>
<tr>
<td>Infrared ports</td>
<td>None</td>
<td></td>
</tr>
<tr>
<td>Security</td>
<td>Power-on password / supervisor password / security keyhole</td>
<td></td>
</tr>
<tr>
<td>Supported operating system</td>
<td>Windows 98 only</td>
<td></td>
</tr>
<tr>
<td>Service options</td>
<td>1 year - EasyServ®️️ / onsite pickup and delivery courier service</td>
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<tr>
<td>The ThinkPad i Series 1400 Port Replicator provide cable management and I/O ports:</td>
<td>On-site, M-F, 8-5, next bus day (72 cities) / service agreements up to 5 yrs from purchase date</td>
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<tr>
<td>OPTIONS</td>
<td>32MB SO DIMM 3.3v NP SDRAM</td>
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<td>OPTIONS</td>
<td>64MB SO DIMM 3.3v NP SDRAM</td>
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<tr>
<td>OPTIONS</td>
<td>128MB SO DIMM 3.3v NP SDRAM</td>
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<td>OPTIONS</td>
<td>i Series 1400 Port Replicator</td>
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<tr>
<td>OPTIONS</td>
<td>NIMH Battery</td>
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<tr>
<td>OPTIONS</td>
<td>Li-Ion Battery (non-intelligent)</td>
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<td>OPTIONS</td>
<td>45 watt AC Adapter (barrel; 3 prong) 11J8702</td>
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<td>FEATURES</td>
<td>IBM Update Connector</td>
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<tr>
<td>FEATURES</td>
<td>PC Doctor</td>
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<td>FEATURES</td>
<td>IBM Global Network (IGN Dialer)</td>
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<td>FEATURES</td>
<td>Norton AntiVirus (OEM version)</td>
<td></td>
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<td>FEATURES</td>
<td>Access ThinkPad®️️</td>
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<td>FEATURES</td>
<td>Ring Central Fax</td>
<td></td>
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<td>FEATURES</td>
<td>America Online®️️</td>
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<tr>
<td>FEATURES</td>
<td>ConfiSafe</td>
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<td>FEATURES</td>
<td>IBM Update Connector</td>
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<td>FEATURES</td>
<td>IBM Global Network (IGN Dialer)</td>
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<td>Norton AntiVirus (OEM version)</td>
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<td>FEATURES</td>
<td>Access ThinkPad®️️</td>
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<tr>
<td>FEATURES</td>
<td>Ring Central Fax</td>
<td></td>
</tr>
<tr>
<td>FEATURES</td>
<td>America Online®️️</td>
<td></td>
</tr>
</tbody>
</table>

**WINDSORS®️️ 8 PRELOAD®️️**

- Microsoft®️️ Windows®️️ 98
- Online User’s Guide
- ThinkPad®️️ Configuration Program
- ThinkPad®️️ Customization Center
- Diskette Factory
- BIOS Utility
- Notebook Manager program
- Sleep Manager program
- ShortCut Keys Utility
- SafeOFF Utility
- IntelliQuest Registration 3.0
- Lotus®️️ SmartSuite Millennium
- Quickon 98
- Tom Lehman Golf Pro 98
- World Book Encyclopedia
- Rand McNally Trip Maker®️️
- Norton AntiVirus (OEM version)
- Access ThinkPad®️️
- Ring Central Fax
- America Online®️️
- ConfiSafe
- IBM Update Connector
- PC Doctor
- IBM Global Network (IGN Dialer)
- Norton AntiVirus (OEM version)
- Access ThinkPad®️️
- Ring Central Fax
- America Online®️️

**INTERNATIONAL WARRANTY SERVICE**

1 year - EasyServ®️️ / onsite pickup and delivery courier service | |
| Service options | On-site, M-F, 8-5, next bus day (72 cities) / service agreements up to 5 yrs from purchase date | |
| OPTIONS | 32MB = DMA Mode 2 or PIO Mode 4 | |
| OPTIONS | 4.3GB = DMA Mode 2 or PIO Mode 4 | |

All trademarks are the property of their respective owners.

No warranties are expressed or implied in this summary.

(1410) © IBM Corp. April 2001
## IBM® ThinkPad® i Series 1411, 1451 - withdrawn

<table>
<thead>
<tr>
<th>Feature</th>
<th>i Series 1411</th>
<th>i Series 1451</th>
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</thead>
<tbody>
<tr>
<td>Processor type</td>
<td>Intel® Pentium® 300MHz with MMX™ technology / 66MHz system bus</td>
<td>All-in-one design means the disk, diskette drive, and CD-ROM are all within the covers of the notebook</td>
</tr>
<tr>
<td>Processor features</td>
<td>No upgrade</td>
<td></td>
</tr>
<tr>
<td>L2 cache</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diskette drive</td>
<td>512KB / synchronous pipelined burst / 66MHz</td>
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</tr>
<tr>
<td>Diskette drive</td>
<td></td>
<td></td>
</tr>
<tr>
<td>External FDD port</td>
<td>Internal 3.5 / 1.44MB / use simultaneously with CD-ROM / on right side</td>
<td></td>
</tr>
<tr>
<td>CD-ROM</td>
<td>CD-ROM / 2X-10X speed / CAV / ATAPI / bootable / not removable / on right side</td>
<td></td>
</tr>
<tr>
<td>DVD</td>
<td>None supported</td>
<td></td>
</tr>
<tr>
<td>Audio Control Panel</td>
<td>Instant Audio (external CD player controls in front of palm rest to play music CDs for up to six hrs when system off/closed)</td>
<td></td>
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<tr>
<td>Type - model</td>
<td>2611-411</td>
<td>2611-451</td>
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<tr>
<td>UPC code</td>
<td>0-87944-47553-8</td>
<td>0-87944-47554-5</td>
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<tr>
<td>Disk - size / ms</td>
<td>4.3GB / 13ms read / 14ms write</td>
<td>All-models:</td>
</tr>
<tr>
<td>Disk controller</td>
<td>IDE / PCI 2.1 / supports one internal disk / disk can not be removed or upgraded</td>
<td>- C: drive is FAT16 of 2GB</td>
</tr>
<tr>
<td>Avail / withdrawn date</td>
<td>January 1999 / April 2000</td>
<td>- D: drive is FAT32 of remaining space</td>
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<tr>
<td>Display - size and type</td>
<td>12.1 inch TFT color / Active Matrix</td>
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<tr>
<td>Display - technology</td>
<td>SVGA / 640x480 or 800x600 / 35ms / 120 nits</td>
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<tr>
<td>Graphics - controller</td>
<td>NeoMagic™ MagicGraph128XD™ (NM2097B) / 128-bit SVGA accelerator / Zoomed Video support / DDC1 and DDC2B</td>
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</tr>
<tr>
<td>Graphics - features</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Memory - std / max</td>
<td>32MB / 256MB</td>
<td>64MB / 256MB</td>
</tr>
<tr>
<td>Memory - features</td>
<td>SDRAM / non-parity / 66MHz / 3.3 volt / 64 bit</td>
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<tr>
<td>Docking station</td>
<td>None</td>
<td></td>
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<tr>
<td>Port replicator</td>
<td>Port Replicator (for easy, one-step connection to desktop peripherals)</td>
<td></td>
</tr>
<tr>
<td>PCMCIA™ slots</td>
<td>2 Type I or 2 Type II or 1 Type III / CardBus 32-bit / Zoomed Video (lower slot)</td>
<td></td>
</tr>
<tr>
<td>USB / serial / parallel</td>
<td>One USB / one 9 pin: 16550A / one (IEEE P1284-A, EPP, ECP, bidirectional)</td>
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</tr>
<tr>
<td>Other features</td>
<td></td>
<td></td>
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<tr>
<td>Architecture</td>
<td>ALL® Aladdin IV M1531 North Bridge / M1533 (EIDE, USB, PCI to ISA bridge)</td>
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</tr>
<tr>
<td>Video in/out</td>
<td>None</td>
<td></td>
</tr>
<tr>
<td>MPEG decoder</td>
<td>None (software support for MPEG-1 in Windows 98)</td>
<td></td>
</tr>
<tr>
<td>Data/fax modem</td>
<td>56k / V.90 / integrated in system / Lucent 1641B / not voice-capable</td>
<td></td>
</tr>
<tr>
<td>Audio</td>
<td>16-bit SoundBlaster Pro™ audio support / Yamaha YM715E full duplex</td>
<td></td>
</tr>
<tr>
<td>Speakers</td>
<td>Altec Lansing® SoundGuide stereo speakers with Dynamic Equalization Circuit™</td>
<td></td>
</tr>
<tr>
<td>Audio in/out jacks</td>
<td>Dumb voice control (left side) / internal microphone</td>
<td></td>
</tr>
<tr>
<td>Infrared ports</td>
<td>None</td>
<td></td>
</tr>
<tr>
<td>Security</td>
<td>Power-on password / supervisor password / security keyhole</td>
<td></td>
</tr>
<tr>
<td>Supported oper system</td>
<td>Windows 98 only</td>
<td></td>
</tr>
<tr>
<td>Limited warranty</td>
<td>1 year - EasyServ™ onsite pickup and delivery courier service</td>
<td></td>
</tr>
<tr>
<td>Service options</td>
<td>On-site, M-F, 8-5, next bus day (72 cities) / service agreements up to 5 yrs from purchase date</td>
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</tr>
</tbody>
</table>

### WINDOWS 98 PRELOAD

- Microsoft® Windows® 98
- Online User's Guide
- ThinkPad Configuration Program
- ThinkPad Customization Center
- Diskette Factory
- BIOS Utility
- Notebook Manager program
- Sleep Manager program
- Shortcut Keys Utility
- SafeGPS Utility
- IntelliQuest Registration 3.0
- Lotus® SmartSuite® Millennium
- Quickken 98
- Tom Lehman Golf Pro 98
- World Book Encyclopedia
- Norton AntiVirus™ (OEM version)
- Access ThinkPad
- Ring Central Fax
- America Online™

### OPTIONS

- 32MB SO DIMM 3.3v NP SDRAM 76H0294
- 64MB SO DIMM 3.3v NP SDRAM 20L0241
- 128MB SO DIMM 3.3v NP SDRAM 01K1150
- i Series 1400 Port Replicator 05K5591
- Li-Ion Battery 02K6525
- 45 watt AC Adapter (barrel; 3-prong) 11J6702
- IBM Mini-Mouse (black) 07G0033
- Pressing F1 during startup brings up BIOS Utility

### FEATURES

- 4.3GB = DMA Mode 2 or PIO Mode 4
- All disks are S.M.A.R.T.® compliant
- 32-bit SVGA accelerator / Zoomed Video support / DDC1 and DDC2B
- APM-aware BIOS / Universal AC adapter / 3-prong, barrel, slim, 45 watts
- PC 97 compliant
- ACPI ready (APM enabled)
- BIOS 1.0e (OEM version)
- ThinkPad on the Net
- Lotus SmartSuite Millennium CD-ROM
- World Book Encyclopedia CD-ROM
- PCMCIA 2.1 compatible / PC Card Standard 95
- IBM Update Connector
- IBM Global Network (IGN Dialer)
- Scaling / Navigation browser
- ThinkPad solutions (visit www.ibm.com/pc/us/accessories (U.S.) or www.ibm.com/pc/ca/accessories (CA)
- ThinkPad Proven™ solutions (visit www.ibm.com/pc/us/thinkpad/proven)
- IBM Global Network (IGN Dialer)
- ThinkPad Proven™ solutions (visit www.ibm.com/pc/ca/thinkpad/iseries (U.S.) or www.ibm.com/pc/ca/thinkpad/CA)
- ENERGY STAR compliant
- International Warranty Service 24 hour / 7 day / telephone, bulletin board, electronic, and Internet (www.ibm.com/pc/us/support

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* For a copy of IBM's Statement of Limited Warranty, call 1-800-772-2227, courier service picks up ThinkPad in most North American locations, IBM repairs and mails back (no shipping charges, most shipping is overnight, 3 business day average turnaround). The customer may be asked certain diagnostic questions before a courier is sent.
## IBM® ThinkPad® i Series 1412, 1452, 1472 - withdrawn

### Processor
- **Type:** Intel Mobile Celeron™ 366MHz or Mobile Pentium II 366MHz / 66MHz system bus
- **Cache:** L2
  - **Size:** 64KB
  - **Architecture:** 128KB / Pentium II: 256KB
  - **Features:** All onboard (full spd) / sync pipelined burst / ECC / write-back
- **Internal clock:** 1.5GHz / 1.44MB / use simultaneously with CD-ROM / on right side
- **CD-ROM:** 98 manual / ATAPI / bootable / not removable / on right side
- **DVD:** 1452/72: 2x-1x DVD-ROM / bootable / not removable / on right side
- **Audio Control Panel:** Instant Audio (external CD player controls in front of palm rest to play music CDs for up to six hrs when system off/closed)

### Type - model
- **ThinkPad i Series 1400 Port Replicator**
- **ThinkPad i Series 1412, 1452, 1472 - withdrawn**

### Memory
- **STD:** 32MB / 256MB

### Graphics - features
- **Controller:** NeoMagic™ MagicMedia256AV™ (NM2200) / Accelerated Graphics Port / AGP-1x / 128-bit engine, 256-bit memory

### Audio in/out jacks
- **Microphone jack**
- **Line-in jack**
- **Headphone jack**

### Display (diagonal)
- **12.1 inch** (308mm)
  - **TFT color**
  - **Active Matrix**

### Display - technology
- **SVGA** / 640x480 or 800x600 / 30ms / 120 nits
  - **16.7 million simultaneous colors** / 80 to 1 contrast

### Processor type
- **L2 cache**
  - **Size:** 64KB

### Diskette drive
- **Capacity:** 3.5" / 1.44MB

### Display - size and type
- **Dimensions / weight**
  - **13.1 x 10.1 x 1.85** (245 cubic inches)

### Display - techology
- **TFT color** / Active Matrix
- **SVGA** / 640x480 or 800x600 / 30ms / 120 nits

### Battery - type / life
- **32MB / 256MB**

### Key features
- **Audio in/out jacks**
  - **Microphone jack**
  - **Line-in jack**
  - **Headphone jack**

### Dimensions / weight
- **Battery**
  - **Life:** 1.4 hours / 1254/72: 7.7 lbs

### Service options
- **Windows 98 only**
  - **Limited warranty:** 1 year - ThinkPad EasyServ™, (door-to-door depot repair service) or carry-in
  - **On-site:** M-F, 8-5, next bus day (72 cities) / serv up to 5 yrs from purch date

### Specifications
- **All disks are S.M.A.R.T. 8 compliant**
- **4.8GB = DMA Mode 2 or PIO Mode 4**
- **6.4GB = DMA Mode 2 or PIO Mode 4**
- **All disks are S.M.A.R.T.™ compliant**

### Features
- **ACPI ready (APM enabled)**
- **System Status Indicators**
- **Plug and Play 1.0a**
- **Light green mode, standby mode, and hibernation mode**
- **ENERGY STAR compliant**
- **International Warranty Service**

### Processor type
- **Options:**
  - **CPU:** 32MB SO DIMM 3.3v SDRAM
  - **Processor type:** Celeron 366MHz / 256x / Pentium II 366MHz / 256x / Celeron 366MHz / 256x

### Power On/Off
- **Pressing F1 during startup brings up BIOS Utility**
- **Models:**
  - **C:** drive is FAT16 of 2GB
  - **D:** drive is FAT32 of remaining space

### Windows 98 Preload
- **MicroSoft® Windows® 98**

### CD-ROM drive
- **Capacity:** 800x600 16M 16M 16M

### Graphics
- **Graphics - controller:** ALI M1533

### Audio
- **Audio in/out jacks**
  - **Microphone jack**
  - **Line-in jack**

### Display
- **Display:** 1280x1024 -- 256 -- --

---

**IBM (International Warranty Service)** - 1-800-772-2227, courier service picks up ThinkPad in most North American locations, IBM repairs and mails back (no shipping charges, most shipping is overnight, 3 business day average turnaround). The customer may be asked certain diagnostic questions before a courier is sent.

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**IBM Corp. October 1999**
**IBM ThinkPad® i Series 1420, 1460, 1480 - withdrawn**

<table>
<thead>
<tr>
<th>Feature</th>
<th>i Series 1420</th>
<th>i Series 1460</th>
<th>i Series 1480</th>
</tr>
</thead>
<tbody>
<tr>
<td>Processor type</td>
<td>Intel Mobile Celeron™</td>
<td>Celeron 433MHz</td>
<td>Celeron 466MHz</td>
</tr>
<tr>
<td>Memory - std / max</td>
<td>32MB / 256MB17</td>
<td>64MB / 256MB</td>
<td>64MB / 256MB</td>
</tr>
<tr>
<td>Memory - features</td>
<td>SDRAM / non-parity / 6.33 MHz</td>
<td>64-bit data path / 2 sockets for JEDEC 144-pin SO DIMMs</td>
<td>64-bit data path / 2 sockets for JEDEC 144-pin SO DIMMs</td>
</tr>
<tr>
<td>Battery - type</td>
<td>4:20 hrs</td>
<td>4:20 hrs</td>
<td>4:20 hrs</td>
</tr>
<tr>
<td>Battery - life (hr)</td>
<td>4:20 hrs</td>
<td>4:20 hrs</td>
<td>4:20 hrs</td>
</tr>
<tr>
<td>Video (TV) out</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Mpeg decoder</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Data/fax modem</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Audio</td>
<td>16-bit SoundBlaster Pro™</td>
<td>16-bit sound card</td>
<td>16-bit SoundBlaster Pro™</td>
</tr>
<tr>
<td>Audio features</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Security</td>
<td>Power-on password / supervisor password / security keyhole</td>
<td>Power-on password / supervisor password / security keyhole</td>
<td>Power-on password / supervisor password / security keyhole</td>
</tr>
<tr>
<td>Supported operating system</td>
<td>Windows 98 only</td>
<td>Windows 98 only</td>
<td>Windows 98 only</td>
</tr>
<tr>
<td>Limited warranty</td>
<td>1 year</td>
<td>1 year</td>
<td>1 year</td>
</tr>
<tr>
<td>Service options</td>
<td>ThinkPad EasyServ™</td>
<td>ThinkPad EasyServ™</td>
<td>ThinkPad EasyServ™</td>
</tr>
<tr>
<td>OPTIONS</td>
<td>- 32MB SO DIMM 3.3v NP SDRAM 76H0294</td>
<td>- 64MB SO DIMM 3.3v NP SDRAM 20L0241</td>
<td>- 128MB SO DIMM 3.3v NP SDRAM 01K1150</td>
</tr>
<tr>
<td>Color depth / LCD</td>
<td>16M / 16M / 16M / 16M</td>
<td>16M / 16M / 16M / 16M</td>
<td>16M / 16M / 16M / 16M</td>
</tr>
</tbody>
</table>

**ThinkPad EasyServ™:** customer calls 1-800-772-2227, courier service pickup is ThinkPad in most North American locations, IBM repairs and mails back (no shipping charges, most shipping is overnight, 3 business day average turnaround). The customer may be asked certain diagnostic questions before a courier is sent. All trademarks are the property of their respective owners. No warranties are expressed or implied in this summary (1420) © IBM Corp. March 2000
<table>
<thead>
<tr>
<th>IBM® ThinkPad®</th>
<th>i Series 1421</th>
<th>i Series 1441</th>
<th>All-in-one design means the disk, diskette drive, and CD-ROM are all within the covers of the notebook</th>
</tr>
</thead>
<tbody>
<tr>
<td>Processor type</td>
<td>Intel® Mobile Celeron™ 466MHz / 466MHz system bus</td>
<td></td>
<td></td>
</tr>
<tr>
<td>L2 cache</td>
<td>128KB / at processor speed / sync pipelined burst / ECC / write-back</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diskette drive</td>
<td>Internal 3.5 1.44MB / use simultaneously with CD-ROM / on left side</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CD-ROM</td>
<td>1247: CD-ROM / 1427: CD-ROM / 2x10X speed / CAY / ATAPI / bootable / not removable / on right side</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DVD</td>
<td>1441: 4X-1X DVD-ROM / bootable / not removable / on right side</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Audio Control Panel</td>
<td>Media Center with Instant Audio (external CD player controls in front to play music CDs when system off or closed)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Type - model</td>
<td>2621-421</td>
<td>2621-441</td>
<td></td>
</tr>
<tr>
<td>UPC code</td>
<td>0-87944-52625-2</td>
<td>0-87944-53544-7</td>
<td></td>
</tr>
<tr>
<td>Disk - size / ns</td>
<td>6.0GB / 12ms read / 14ms write / ATA-66 / S.M.A.R.T.</td>
<td>6.0GB / 12ms read / 14ms write / ATA-66 / S.M.A.R.T.</td>
<td></td>
</tr>
<tr>
<td>Disk controller</td>
<td>EIDE / PCI 2.1 / supports one internal disk / disk can not be removed or upgraded</td>
<td>4X-1X DVD-ROM</td>
<td></td>
</tr>
<tr>
<td>CD or DVD</td>
<td>24X-10X CD-ROM</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Available date</td>
<td>January 2000</td>
<td>January 2000</td>
<td></td>
</tr>
<tr>
<td>Withdrawn date</td>
<td>July 2000</td>
<td>July 2000</td>
<td></td>
</tr>
<tr>
<td>Dimensions</td>
<td>13.0 inch (330mm) HPA color / Dual Scan</td>
<td>12.0 inch (308mm) TFT color / Active Matrix</td>
<td></td>
</tr>
<tr>
<td>Display - technology</td>
<td>SVGA / 640x480 or 800x600 / 30ms / 120 nits</td>
<td>SVGA / 640x480 or 800x600 / 30ms / 120 nits</td>
<td></td>
</tr>
<tr>
<td>Graphics - controller</td>
<td>ATi™ Rage Mobility-M™ / Accelerated Graphics Port / 2X AGP / 64-bit graphics / 4MB SDRAM / motion compensation / multiple monitor support / DDC2B</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Graphics - features</td>
<td>External SVGA to 1024x768x16.7 million colors at 85Hz and 1280x1024x256 colors</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Memory - std / max</td>
<td>32MB / 256MB</td>
<td>64MB / 256MB</td>
<td></td>
</tr>
<tr>
<td>Memory - features</td>
<td>SDRAM / non-parity / 66MHz / 3.3 volt / 64-bit data path / 2 sockets for JEDEC 144-pin SO DIMMs / one socket used by std memory / sockets accessed from bottom via removing cover held by Phillips-head screws</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Keyboard</td>
<td>Full-size 85-key (multiple Fn key functions) / slope with tilt feet / palm rest / four customizable color-coded Easy Launch buttons / two Windows keys</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Keyboard light</td>
<td>None</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pointing</td>
<td>TrackPoint™ / Press-to-Select / Release-to-Select / dragging / click pace / center button for scrolling (Internet Scroll Bar) or magnifying glass / spare cap</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dimensions² / weight³</td>
<td>1421: 12.9x10.6x1.8&quot; / 7.8 lbs</td>
<td>1441: 12.9x10.6x1.6&quot; / 7.7 lbs</td>
<td></td>
</tr>
<tr>
<td>Battery - type</td>
<td>1421: NIMH / intelligent / right side</td>
<td>1441: Li-Ion / intelligent / right side</td>
<td></td>
</tr>
<tr>
<td>Battery - life⁵</td>
<td>1421: 2.0 hrs</td>
<td>1441: 3.0 hrs</td>
<td></td>
</tr>
<tr>
<td>Charge time⁶ - on / off</td>
<td>1421: 2.5 hrs on / 2.1 hrs off</td>
<td>1441: 4.10 hrs on / 3.1 hrs off</td>
<td></td>
</tr>
<tr>
<td>Architecture</td>
<td>ALL™ Aladdin IV M1621 North Bridge / M1533 (EIDE, USB, PCI to ISA bdy)</td>
<td>AGP for graphics / O2 Micro 6833 PCMCIA controller / PCI 2.1 32-bit 33MHz (EIDE, modem, PCMCIA, USB, audio) / ISA (diskette, serial, parallel, infrared) / NS PC973853</td>
<td></td>
</tr>
<tr>
<td>Docking station</td>
<td>None</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Port replicator</td>
<td>None</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PCMCIA™ slots</td>
<td>1 Type I or 1 Type II or 1 Type III / CardBus 32-bit / Zoomed Video</td>
<td></td>
<td></td>
</tr>
<tr>
<td>USB / serial / parallel</td>
<td>Other features</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Video (TV) out</td>
<td>1421: None</td>
<td>1421: S-Video out connector on side (does not require cable)</td>
<td></td>
</tr>
<tr>
<td>MDEG decoder</td>
<td>None</td>
<td>(software support for MPEG-1 in Windows 98)</td>
<td></td>
</tr>
<tr>
<td>Data/fax modem</td>
<td>56K V.90 / integrated in system / Lucent 1646 / Mini PCI Type IIb / not voice-capable</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Audio</td>
<td>16-bit SoundBlaster Pro® audio support / PCI / ES1946 / no full duplex support</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Speakers</td>
<td>Altec Lansing® SoundGuide stereo speakers w/ Dynamic Equalization Circuit®</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Audio features</td>
<td>Dial volume control (front side) / internal microphone</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Audio in/out jacks</td>
<td>Microphone jack (stereo) / headphone jack (stereo) / line-in jack (all left side)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Infrared ports</td>
<td>Power-on password / supervisor password / security keyhole</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Security</td>
<td>1 year - ThinkPad EasyServ™ (door-to-door depot repair service) or carry-in</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Limited warranty¹</td>
<td>1 year - ThinkPad EasyServ™ (door-to-door depot repair service) or carry-in</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Service options⁰</td>
<td>On-site, M-F, 8-5, next bus day (72 cities)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Choose from seven optional color covers*:</td>
<td>Mars Red Metallic, Terra Green Metallic, Eclipse Blue Metallic, Lunar Grey Metallic, Sirius Red, Andromeda Green, Polaris Blue</td>
<td></td>
<td></td>
</tr>
<tr>
<td>OPTIONS</td>
<td>32MB SO DIMM 3.3v NP SDRAM</td>
<td>76H0294</td>
<td></td>
</tr>
<tr>
<td>OPTIONS</td>
<td>64MB SO DIMM 3.3v NP SDRAM</td>
<td>20L0241</td>
<td></td>
</tr>
<tr>
<td>OPTIONS</td>
<td>128MB SO DIMM 3.3v NP SDRAM</td>
<td>01K1150</td>
<td></td>
</tr>
<tr>
<td>OPTIONS</td>
<td>Li-Ion Battery</td>
<td>02K6603</td>
<td></td>
</tr>
<tr>
<td>OPTIONS</td>
<td>Ultra slim 56 watt AC Adapter (3 prong)</td>
<td>02K6545</td>
<td></td>
</tr>
<tr>
<td>OPTIONS</td>
<td>10/100 Ethernet CardBus Adapter</td>
<td>34L1301</td>
<td></td>
</tr>
<tr>
<td>OPTIONS</td>
<td>MultiPort USB Hub</td>
<td>00N8215</td>
<td></td>
</tr>
<tr>
<td>OPTIONS</td>
<td>ThinkPad Proven® solutions² / visit <a href="http://www.ibm.com/pcc/us/accessories/">www.ibm.com/pcc/us/accessories/</a> (U.S.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>OPTIONS</td>
<td>ThinkPad Proven® solutions² / visit ibm.com/pcc/us/thinkpadproven</td>
<td></td>
<td></td>
</tr>
<tr>
<td>OPTIONS</td>
<td>ThinkPad Proven® solutions² / visit <a href="http://www.ibm.com/pcc/us/thinkpadseries">www.ibm.com/pcc/us/thinkpadseries</a> (U.S.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WINDOWS 98 PRELOAD</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FEATURES</td>
<td>Owner Privileges¹² program</td>
<td>PC 98-compliant</td>
<td></td>
</tr>
<tr>
<td>FEATURES</td>
<td>System Status Indicators</td>
<td>Plug and Play 1.0a</td>
<td></td>
</tr>
<tr>
<td>FEATURES</td>
<td>Standby mode and hibernation mode</td>
<td>ENERGY STAR-compliant</td>
<td></td>
</tr>
<tr>
<td>FEATURES</td>
<td>IBM SystemXtra™</td>
<td>International Warranty Service¹¹</td>
<td></td>
</tr>
<tr>
<td>FEATURES</td>
<td>ACPI power mgmt / Universal AC adapter, 3 prong, barrel, slim, 56 watts</td>
<td>IBM Update Connector¹⁴</td>
<td></td>
</tr>
<tr>
<td>FEATURES</td>
<td>- Pressing F1 during startup brings up BIOS Utility</td>
<td>- PC-Doctor™ (system diagnostics)</td>
<td></td>
</tr>
<tr>
<td>FEATURES</td>
<td>- Notebook Manager available during operation</td>
<td>- Access ThinkPad</td>
<td></td>
</tr>
</tbody>
</table>

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¹: All trademarks are the property of their respective owners. No warranties are expressed or implied in this summary.
²: (1421) © IBM Corp. June 2000

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<table>
<thead>
<tr>
<th>Processor type</th>
<th>Intel Mobile Celeron® 500MHz or Mobile Pentium III 500MHz / 100MHz system bus Celeron: 128KB; Pentium III: 256KB; All: at processor speed / sync pipelined burst / ECC</th>
<th>All-in-one design means the disk, diskette drive, and CD-ROM are all within the covers of the notebook</th>
</tr>
</thead>
<tbody>
<tr>
<td>L2 cache</td>
<td>1442: CD-ROM / 24X/10X1 speed / CAV / ATAPI / bootable / not removable / right side 1442/82/92: 6X-1X DVD-ROM / bootable / not removable / right side</td>
<td></td>
</tr>
<tr>
<td>Diskette drive</td>
<td>1442: 1.44MB on left side 1442/82/92: 800MB / 1.44MB on left side</td>
<td></td>
</tr>
<tr>
<td>CD-ROM</td>
<td>1442: CD-ROM / 24X/10X1 speed / CAV / ATAPI / bootable / not removable / right side 1442/82/92: 6X-1X DVD-ROM / bootable / not removable / right side</td>
<td></td>
</tr>
<tr>
<td>DVD</td>
<td>1442/82/92: 6X-1X DVD-ROM / bootable / not removable / right side</td>
<td></td>
</tr>
<tr>
<td>Audio Control Panel</td>
<td>Media Center with Instant Audio (external CD player controls in front to play music CDs when system off or closed)</td>
<td></td>
</tr>
<tr>
<td>Type - model</td>
<td>2621-422 Celeron 500MHz 24X/10X CD-ROM 6.0GB / 12ms read / 14ms write / ATA-66 or PIO 2621-442 Celeron 500MHz 6X-1X DVD-ROM 12.0GB / 12ms read / 14ms write / ATA-66 or PIO 2621-482 Pentium III 500MHz 2X-10X CD-ROM 2621-492 Pentium III 500MHz 2X-10X DVD-ROM</td>
<td></td>
</tr>
<tr>
<td>Processor</td>
<td>14.1 inch (308mm) TFT color / Active Matrix 16.7 million simultaneous colors / 150 to 1 contrast 14.1 inch (355mm) TFT color / Active Matrix 16.7 million simultaneous colors / 120 to 1 contrast 15.0 inch (381mm) TFT color / Active Matrix 16.7 million simultaneous colors / 120 to 1 contrast</td>
<td></td>
</tr>
<tr>
<td>Memory - std / max</td>
<td>32MB / 256MB17 64MB / 256MB 64MB / 256MB 64MB / 256MB 64MB / 256MB</td>
<td></td>
</tr>
<tr>
<td>Memory - features</td>
<td>SDRAM / non-parity / 100MHz / 3.3 volt / 64-bit data path / 2 sockets for JDEC 144-pin SO DIMMs / one socket used by std memory / sockets accessed from bottom via removing cover held by phillips-head screws</td>
<td></td>
</tr>
<tr>
<td>Keyboard</td>
<td>Full-size 85-key (multiple Fn key functions) / slope with tilt feet / palm rest / four customizable color-coded Easy Launch buttons® / two Windows keys 1482/83/92: ThinkLight® / keyboard light (to work in low light)</td>
<td></td>
</tr>
<tr>
<td>Pointing</td>
<td>TrackPoint® / Press-to-Select / Release-to-Select / dragging / click pace / center button for scrolling (Internet Scroll Bar) / Magnifying glass / space cap</td>
<td></td>
</tr>
<tr>
<td>Dimensions</td>
<td>1422: 12.9x10.6x1.61&quot; front and 1.75&quot; rear 1424: 1.59&quot; front and 2.00&quot; rear 82/83: 12.9x10.6x1.59&quot; front and 1.73&quot; rear 1492: 1.73&quot; front and 2.00&quot; rear</td>
<td></td>
</tr>
<tr>
<td>Weight</td>
<td>1422: 7.7 lbs; 1424: 7.4 lbs; 1482/92: 7.9 lbs</td>
<td></td>
</tr>
<tr>
<td>Battery - type</td>
<td>1422/42/82: NiMH / intelligent / right 1483/92: Li-Ion / intelligent / right side</td>
<td></td>
</tr>
<tr>
<td>BSB / life / serial</td>
<td>1422/42/82: 2.0 hrs 1483/92: 3.5 hrs</td>
<td></td>
</tr>
<tr>
<td>Charge time</td>
<td>1422/42/82: 2.5 hrs on / 2.1 hrs off 1483/92: 4.0 hrs on / 3.1 hrs off</td>
<td></td>
</tr>
<tr>
<td>Architecture</td>
<td>Intel 440BX AGPset / PXI4XM (EIDE, USB, PCI to ISA bdg) / AGP for graphics / TI1410 PCMCIA controller / PCI 2.1 32-bit 33Mhz (EIDE, modem, PCMCIA, USB, audio) / ISA (diskette, serial, parallel, infrared) / NS PC97338 Super I/O</td>
<td></td>
</tr>
<tr>
<td>Port replicator</td>
<td>None</td>
<td></td>
</tr>
<tr>
<td>Docking station</td>
<td>None</td>
<td></td>
</tr>
<tr>
<td>PCMCIA® slots</td>
<td>1 Type I or 1 Type II or 1 Type III / CardBus 32-bit / Zoomed Video</td>
<td></td>
</tr>
<tr>
<td>USB / life / serial</td>
<td>One USB / one 9-pin / 1650A / one (IEEE P1294-A, EPP, FCP, bi-directional)</td>
<td></td>
</tr>
<tr>
<td>Other features</td>
<td>ACPI power mgmt / Universal AC adapter, 3 prong, barrel, 56 watts</td>
<td></td>
</tr>
<tr>
<td>Video (TV) out</td>
<td>S-Video out conn on side (does not require cable)</td>
<td></td>
</tr>
<tr>
<td>MPEG decoder</td>
<td>None (software support for MPEG-1 in Windows 98)</td>
<td></td>
</tr>
<tr>
<td>Datafax modem</td>
<td>56K V.90 / integrated in system / Lucent® 1646 / Mini PCI Type IIIb /</td>
<td></td>
</tr>
<tr>
<td>Audio</td>
<td>16-bit SoundBlaster Pro® / audio support / PCI / ES1946 //full dupplex support / Multichannel Analog SoundGuide® / Audio speakers with Dynamic Equalization Circuit®</td>
<td></td>
</tr>
<tr>
<td>Audio features</td>
<td>Dial volume control (front side) / headphone jack (stereo) / line-in jack (all left side)</td>
<td></td>
</tr>
<tr>
<td>Security</td>
<td>Power-on password / hard disk password / supervisor password / security keyhole</td>
<td></td>
</tr>
</tbody>
</table>

**OPTIONS**

- 32MB SO DIMM 100MHz NP SDRAM 20L0253
- 64MB SO DIMM 100MHz NP SDRAM 20L0254
- 128MB SO DIMM 100MHz NP SDRAM 20L0255
- IBM MultiPort USB Hub 02K6603
- Li-Ion Battery
- Ultrasonic 56 watt AC Adapter (3 prong) 02K6654
- 10/100 EtherJet CardBus Adapter 34L1301

- Windows 98 Second Edition
- ACPI enabled
- System Status Indicators
- Plug and Play 1.0a
- Standby mode and hibernation mode
- ENERGY-STAR compliant
- International Warranty Service

24 hour / 7 day / telephone / bulleting board, fax, electronic, and Internet (www.ibm.com) support for more information and to order "12.1" and 14.0" models only

Visit www.ibm.com/us/thinkpad/iseries/cover.html for more information and to order "12.1" and 14.0" models only

Visit www.ibm.com/us/thinkpad/iseries/ (OEM version)

Acer Notebook Manager available during operation

Lotus® SmartSuite Millennium CD-ROM

ThinkPad EasyServ®: customer calls 1-800-772-2227, courier service picks up ThinkPad in most North American locations, IBM repairs and mails back (no shipping charges, most shipping is overnight, 3 business day average turnaround). The customer may be asked certain diagnostic questions before a courier is sent.

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IBM® ThinkPad® i Series 1512, 1552 - withdrawn

Processor type: Intel® Mobile Celeron™ 366MHz / 66MHz system bus
L2 cache: 128KB / onboard (full spd) / sync pipelined burst / ECC / write-back
Diskette drive: Internal 3.5", 1.44MB / use simultaneously with CD-ROM / on right side
CD-ROM: CD-ROM / 24X-10X speed / CAV / ATAPI / bootable / not removable / on right side
DVD: None available
Audio Control Panel: Instant Audio (external CD player controls in front of palm rest to play music CDs for up to 6 hrs when system off/closed)

Type - model: 2611-512
UPC code: 0-87944-450453
Disk - size / ms: 4.8GB / 13ms read / 14ms write
Disk controller: IDE / PCI 2.1 / supports one internal disk / disk can not be removed or upgraded
CD or DVD: 24X-10X CD-ROM
Avail / withdrawn date: July 1999 / September 1999
Display (diagonal): 12.1" TFT / SVGA

Display - size and type: 12.1 inch (308mm) TFT color / Active Matrix
Display - technology: SVGA / 640x480 or 800x600 / 30ms / 120 nits

16.7 million simultaneous colors / 80 to 1 contrast
14.1 inch (358mm) TFT color / Active Matrix

XGA / 640x480 or 800x600 or 1024x768 / 30ms / 130 nits
16.7 million simultaneous colors / 200 to 1 contrast

Graphics - controller: IBM ThinkPad EasyServ

Graphics - features: IBM Security

Audio features: Infrared ports

Audio: Audio

Speakers: Audio

MPEG decoder: Audio / Supports MPEG-1, MPEG-2, and MPEG-4

Video: Audio / Supports MPEG-1, MPEG-2, and MPEG-4

Audio in/out jacks: Microphone jack (stereo) / headphone jack (stereo) / line-in jack

Infrared ports: None available

Security: Security

Supported oper system: Windows 98 only

Limited warranty: 1 year - ThinkPad EasyServ® 9 (door-to-door depot repair service) or carry-in

Service options: On-site, M-F, 8-5, next bus day / 72 cities / serv up to 5 yrs from purch date

The ThinkPad i Series 1400 Port Replicator

provide cable management and I/O ports:

- Power jack
- Parallel-connector
- Serial connector
- External mouse connector
- External keyboard connector
- External monitor connector
- Universal Serial Bus (USB) port
- Headphone jack
- Line-in jack
- Microphone jack

Color depth LCD | External Monitor
---|---
Resolution | TFT

640x480 | 16M
800x600 | 16M
1024x768 | 16M
1280x1024 | 256

OPTIONS

- 2MB SO DIMM 3.3V NP SDRAM 76H0294
- 64MB SO DIMM 3.3V NP SDRAM 20L0241
- 128MB SO DIMM 3.3V NP SDRAM 01K1150
- i Series 1400 Port Replicator 05K5591
- Li-Ion Battery 02K6576
- 45 watt AC Adapter (barrel; 3 prong) 11J8702

- ThinkPad Proven solutions (visit www.ibm.com/pa/us/thinkpad/)

FEATURERS

PC 98 compliant
ACPI ready (APM enabled)
System Status Indicators
Plug and Play 1.0a
Light green mode, standby mode, and hibernation mode
ENERGY STAR compliant
International Warranty Service 24 hour / 7 day telephone support, bulletin board, fax, electronic, and Internet (www.ibm.com/pa/us) support

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4.8GB = DMA Mode 2 or PIO Mode 4
All disks are S.M.A.R.T.™ compliant

Pressing F1 during startup brings up BIOS Utility

All models:
- C: drive is FAT16 of 2GB
- D: drive is FAT32 of remaining space

IBM Update Connector
- IBM Productivity Line
- IBM Global Network (IGP Dialer)
- Norton AntiVirus™ ( OEM version)
- Access ThinkPad
- RingCentral Fax
- America Online™
- IBM Update Connector
- PC-Doctor™ (system diagnostics)
- IBM Global Network (IGP Dialer)
- Norton AntiVirus™ ( OEM version)
- Access ThinkPad
- RingCentral Fax
- America Online™
- IBM Update Connector
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- PC-Doctor™ (system diagnostics)
- IBM Global Network (IGP Dialer)
- Norton AntiVirus™ ( OEM version)
- Access ThinkPad
- RingCentral Fax
- America Online™
**IBM® ThinkPad® i Series 1540, 1541, 1560 - withdrawn**

<table>
<thead>
<tr>
<th>Feature</th>
<th>i Series 1540</th>
<th>i Series 1541</th>
<th>i Series 1560</th>
<th>All-in-one design means, the diskette drive, and CD-ROM are all within the covers of the notebook</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Processor type</strong></td>
<td>Inte® Mobile Celeron™ 433 or 466MHz</td>
<td>Celeron 433MHz</td>
<td>Celeron 466MHz</td>
<td>Celeron 466MHz</td>
</tr>
<tr>
<td><strong>Processor speed</strong></td>
<td>250/266/300MHz</td>
<td>300MHz</td>
<td>333MHz</td>
<td>350MHz</td>
</tr>
<tr>
<td><strong>Cache</strong></td>
<td>4MB</td>
<td>8MB</td>
<td>12MB</td>
<td>12MB</td>
</tr>
<tr>
<td><strong>Memory</strong></td>
<td>128MB</td>
<td>256MB</td>
<td>512MB</td>
<td>512MB</td>
</tr>
<tr>
<td><strong>Hard Drive</strong></td>
<td>6.8GB</td>
<td>12.8GB</td>
<td>6.8GB</td>
<td>6.8GB</td>
</tr>
<tr>
<td><strong>Video Card</strong></td>
<td>Rage Mobility-M™</td>
<td>Radeon Mobility-M™</td>
<td>ThinkLight</td>
<td>ThinkLight</td>
</tr>
<tr>
<td><strong>Audio</strong></td>
<td>Altec Lansing 16-bit SoundBlaster Pro™</td>
<td>16-bit SoundBlaster Pro™</td>
<td>16-bit SoundBlaster Pro™</td>
<td>16-bit SoundBlaster Pro™</td>
</tr>
<tr>
<td><strong>Display</strong></td>
<td>12.1” TFT / SVGA</td>
<td>12.1” TFT / SVGA</td>
<td>12.1” TFT / SVGA</td>
<td>12.1” TFT / SVGA</td>
</tr>
<tr>
<td><strong>Keyboard</strong></td>
<td>Full-size key 85-key</td>
<td>Full-size key 85-key</td>
<td>Full-size key 85-key</td>
<td>Full-size key 85-key</td>
</tr>
<tr>
<td><strong>Battery</strong></td>
<td>2.0 hrs</td>
<td>1.5 hrs</td>
<td>2.0 hrs</td>
<td>2.0 hrs</td>
</tr>
<tr>
<td><strong>Dimensions</strong></td>
<td>1540/41: 12.9x10.6x1.59” front and 1.69” rear / 7.65 lbs</td>
<td>1540/41: 12.9x10.6x1.59” front and 1.69” rear / 7.65 lbs</td>
<td>1540/41: 12.9x10.6x1.59” front and 1.69” rear / 7.65 lbs</td>
<td>1540/41: 12.9x10.6x1.59” front and 1.69” rear / 7.65 lbs</td>
</tr>
<tr>
<td><strong>Hardware</strong></td>
<td>IBM Update Connector 14</td>
<td>IBM Update Connector 14</td>
<td>IBM Update Connector 14</td>
<td>IBM Update Connector 14</td>
</tr>
<tr>
<td><strong>Service Options</strong></td>
<td>Easy Buttons Utility</td>
<td>Easy Buttons Utility</td>
<td>Easy Buttons Utility</td>
<td>Easy Buttons Utility</td>
</tr>
<tr>
<td><strong>Limited Warranty</strong></td>
<td>1 year</td>
<td>1 year</td>
<td>1 year</td>
<td>1 year</td>
</tr>
</tbody>
</table>

**Windows 98 Preload**
- Microsoft® Windows® 98 Second Edition
- Office 2000 Small Business
- Windows 98 manual, and Quick Reference Card
- System Status Indicators Plug and Play 1.0a
- Standby mode and hibernation mode
- ENERGY STAR-compliant
- IBM SystemXtra 3.5
- 24 hour / 7 day telephone, bulletin board, electronic, and Internet support

* For a copy of IBM's Statement of Limited Warranty, call 1-800-772-2227

**ThinkPad EasyServ**: customer calls 1-800-772-2227, courier service picks up ThinkPad in most North American locations, IBM repairs and mails back (no shipping charges, most shipping is overnight, 3 business day average turnaround). The customer may be asked certain diagnostic questions before a courier is sent.

**Owner Privileges**: program PC 98-compliant
- System Status Indicators Plug and Play 1.0a
- Standby mode and hibernation mode
- ENERGY STAR-compliant
- IBM SystemXtra 3.5
- 24 hour / 7 day telephone, bulletin board, electronic, and Internet support

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The ThinkPad Port Replicator with Advanced EtherJet Feature provides cable management, additional I/O ports, CardBus PC Card slots, and 10/100 ethernet with Wake on LAN®. Features:

- 10/100 ethernet (Intel 82558, Wake on LAN)
- Dual IBM lock slots to secure the ThinkPad, PC Cards, and Port Replicator
- Connectors:
  - USB, serial (RS-232, 9 pin), parallel (25 pin), external display, keyboard, mouse
  - Audio in and out (3.5 mm)
  - Joystick/MIDI port (15 pin) - not on system
  - External diskette drive connector (no support)
  - Power connector
- Features of the PC Card slots:
  - Two Type III slots (side by side)
  - CardBus Standard compliant 95 compliant
  - CardBus compliant (PCI 2.1 / 32-bit)
  - PC Card Standard compliant 95 compliant
- Power connector
- Features of the PC Card slots:
  - Two Type III slots (side by side)
  - CardBus Standard compliant 95 compliant
- Power connector

options:

- 32MB SO DIMM 3.3v NP SDRAM 76H0294
- 64MB SO DIMM 3.3v NP SDRAM 20L0241
- 128MB SO DIMM 3.3v NP SDRAM 01K1150
- ThinkPad 560 Port Replicator 46H4209
- ThinkPad Port Replicator w/ Advanced EtherJet05K4872
- 6.4GB disk with UltraBay FX adapter05K9823
- Model number TP923; UPC 0-87944-44543-2
- 10GB disk with UltraBay FX adapter 05K9823
- 12GB disk with UltraBay FX adapter 05K3258
- ThinkPad 390/i Series Li-Ion Battery 02K6513
- Model number TP923; UPC 0-87944-44543-2
- Model number TP15; UPC 0-87944-44544-9
- V.90 PC Card Modem with XIJJACK® 10L7393
- IBM Mini-Mouse (black) 07G0033
- DVD/Disquette (for UltraBay FX) 05K9821
- ThinkPad Proven™ solutions

Pressing F1 during startup brings up IBM BIOS Setup Utility

Windows 98 Preload

- Microsoft® Windows® 98
- Lotus SmartSuite Millennium CD-ROM
- Norton AntiVirus (OEM version)
- IBM Update Connector
- IBM PC Doctor
- IBM Global Network (IGN Dialer)
- ThinkPad on the Net
- ThinkPad Configuration Program
- ThinkPad Customization Center
- IntelliQuest Registration 3.0
- ThinkPad Port Replicator with Advanced EtherJet
- ThinkPad Proven™ solutions

Features

- PC 97 compliant
- ACPI ready (APM enabled)
- System Status Indicators
- Plug and Play 1.0a
- Standby, suspend, and hibernation modes
- ENERGY STAR compliant
- International Warranty Service 11
- 24 hour/7 day telephone, bulletin board, electronic, and Internet

All-in-one design means the disk, diskette drive, and CD-ROM are all within the covers of the notebook.

* For a copy of IBM's Statement of Limited Warranty, call 1-800-772-2227.
* No warranties are expressed or implied in this summary.

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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.

1 MHz only measures microprocessor internal clock speed (or bus speed where indicated), not application performance. Other factors also affect application performance.

2 Includes battery; actual weight may vary due to vendor components, manufacturing process and options.

3 These 56K V.90 modems are designed to be capable of receiving data at up to 56Kbps from V.90 or K56Flex service equipment, and transmitting data up to about 31.2Kbps. Public networks currently limit maximum download speeds to about 53Kbps. Actual speeds depend on many factors and are often less than the maximum possible.

4 GB equals one billion bytes when referring to hard drive capacity. Accessible capacity may be less.

5 Variable read rate. Actual playback speed will vary and is often less than the maximum possible.

6 100-hour Internet trial period through America Online with no per day usage limits. Telephone line charges and surcharges may apply. Online service charges will apply after expiration of initial trial period.

7 Response time varies. May exclude some holidays. On-site service provided after IBM attempts to resolve the problem remotely.

8 S.M.A.R.T. is defined as Self-Monitoring, Analysis and Reporting Technology.

9 ThinkPad EasyServ: customer calls 1-800-772-2227, courier service picks up ThinkPad system at most North American locations, IBM repairs and mails back (no shipping charges, most shipping is overnight, five business day average turnaround). Rapid Depot Repair (12-hour turnaround at depot from the time the machine arrives at the depot; three business day average turnaround) is standard for ThinkPad 600 and 770 systems in warranty and included for all ThinkPad systems as part of any mobile warranty upgrade. The customer may be asked certain diagnostic questions before a courier is sent. Service levels are response objectives and are not guaranteed.

10 For terms and conditions or a copy of IBM's Statement of Limited Warranty, call 1 800 772-2227 in the U.S. and in Canada, call 1 800 465-7999. International warranty service 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.

12 IBM makes no warranties, expressed or implied regarding ThinkPad Proven products and services, including Year 2000 readiness and any implied warranties of merchantability and fitness for a particular purpose.

13 Membership in Owner Privileges is currently included with the purchase of ThinkPad i Series (excluding refurbished machines). Available only in the U.S. and Canada. Registration is required for membership. IBM reserves the right to modify or withdraw this program at any time. Visit www.ibm.com/pf/us/privileges (in Canada www.ibm.com/pf/ca/privileges) for membership details.

14 Update Connector is available to registered ThinkPad customers during the limited warranty period at no charge. Line charges may apply.

15 Service options available based on specific ThinkPad notebook purchased; details available via fax by calling 1 800 426-3395 and requesting document #11017 or call your IBM authorized reseller for additional information.

16 Some software may differ from its shrink-wrapped version (if any) and may not include user manuals or all program functionality. Warranty, service and support for non-IBM products are provided directly to you by third parties, not IBM. IBM makes no representations or warranties regarding non-IBM products. For non-IBM software, applicable third-party software licenses may apply.

17 Maximum memory varies depending on model, and may require replacement of standard memory with optional maximum memory modules in all available slots.

26 When using multi-monitor with Windows 98, available graphics memory may limit resolution and/or color. Individual application support for this feature will vary.

33 External device must support the same maximum resolution and refresh rate as that of the built-in notebook display.

These systems ship with an operating system.

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