

Symptom-to-FRU error messages

This chapter describes the Symptom-to-FRU error messages.

How to use error messages

Use the error codes displayed on the screen to diagnose failures.

If two or more error codes are displayed, begin the diagnosis with the first one. Whatever caused the first error code can cause false error codes to be displayed.

If no error code is displayed, see if the error symptom is listed in the "Symptom-to-FRU index."

How to diagnose multiple FRUs

When an adapter or a device has more than one FRU, the error code could be caused by any of them. Before replacing multiple FRUs, try removing or exchanging each FRU, one by one in the specified sequence, to see if the symptoms change.

Symptom-to-FRU index

The symptom-to-FRU index lists the symptoms and errors and their possible causes. The most likely cause is listed first.

Note: Do the FRU replacements or other actions in the sequence shown in the "FRU/Action in Sequence" column. If a FRU replacement does not solve the problem, put the original part back in the computer. Do not replace a nondefective FRU.

This index can also help you determine, during regular servicing, what FRUs are likely to need to be replaced next.

A numeric error code is displayed for each error detected in POST or system operation. In the displays, **X** can be any number.

If no numeric codes is presented, use the narrative descriptions of symptoms.

If a symptom is not listed, go to "Undetermined problems" on page 31.

Note

For an IBM device not supported by diagnostic codes in the ThinkPad notebook computers, see the manual for that device.

Numeric error codes

Symptom or error	FRU or action, in sequence
10X 101: Interrupt failure. 102: Timer failure. 103: Timer interrupt failure. 104: Protected mode failure. 105: Last 8042 command not accepted. 107: NMI test failure. 108: Timer bus test failure. 109: Low meg-chip select test.	1. System board
110 System board parity.	1. Go to “Testing the computer” on page 7. 2. DIMM card. 3. If the expansion unit is attached to the computer, detach it. 4. System board.
111 I/O parity.	1. Go to “Testing the computer” on page 7. 2. Expansion unit or port replicator. 3. System board.
11XX 1101: Serial_A test failure.	1. Go to “Testing the computer” on page 7. 2. Serial device. 3. Communication cable. 4. System board.
12XX 1201: Serial_B test failure.	1. Go to “Testing the computer” on page 7. 2. System board (infrared).
158 No hard disk password has been set even though the supervisor password is set.	Set the password for the hard disk drive.
159 The hard disk password is not set the same as the supervisor password.	Set the correct password for the hard disk drive.

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161 Dead battery.	1. Go to “Checking the backup battery” on page 12. 2. Backup battery. 3. System board.
163 Time and date were not set.	1. Set time and date. 2. System board.
173 Configuration data was lost.	1. Select OK in the error screen; then set the time and date. 2. Backup battery. 3. System board.
174	1. Check device configuration. 2. Hard disk drive assembly. 3. System board.
175, 177, 178 175: EEPROM CRC #1 error. 177: Supervisor password check sum error. 178: EEPROM is not functional.	1. System board.
17XX 1701: Hard disk controller failure. 1780, 1790: Hard disk 0 error. 1781, 1791: Hard disk 1 error.	1. Go to “Testing the computer” on page 7. 2. Hard disk drive. 3. System board.
183 Incorrect password entered at the supervisor password prompt.	Have the user examine the password.
184 Power-on password check sum error.	Reset the power-on password in Easy-Setup.
185 The startup sequence is not valid. Suspect that power was off when the startup sequence was being updated.	Reset the startup sequence in Easy-Setup.
188, 189 BAD EEPROM CRC #1. An incorrect checksum of the EEPROM is received.	1. System board.
190 A depleted battery pack was installed while the power was on.	Go to “Checking the battery pack” on page 11.

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191XX PM initialization error.	1. System board.
192 Fan error.	1. Go to “Testing the computer” on page 7. 2. Measure the voltage of the backup battery. If the voltage is not correct, replace the backup battery. 3. Fan. 4. System board.
193 RF Antenna has been removed.	1. Type the correct supervisor password at the password prompt. 2. Reseat the RF Antenna to the HDD cover.
194 The computer is carried through the portal gate.	1. Type the correct supervisor password at the password prompt.
195 The configuration read from the hibernation area does not match the actual configuration.	Check whether the configuration has been changed. For example, check whether the DIMM card has been added.
196 A read error occurred in the hibernation area of the hard disk drive.	1. Run the hard disk drive test. 2. Hard disk drive.
199XX Resume error.	1. System board.
1XX	1. System board.
2XX 201: Memory data error. 202: Memory line error 00–15. 203: Memory line error 16–23. 205: Memory test failure on on-board memory. 221: ROM to RAM remap error.	1. Go to “Testing the computer” on page 7. 2. DIMM card. 3. System board.
225 Unsupported memory module.	1. Check if the supported DIMM is installed. 2. DIMM card. 3. System board.

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Symptom or error	FRU or action, in sequence
<p>301, 303, 304, 305, 3XX 301: Keyboard error.</p>	<ol style="list-style-type: none"> 1. Go to “Testing the computer” on page 7. 2. Keyboard. 3. External numeric keypad. 4. External keyboard. 5. Keyboard and mouse cable. 6. System board.
<p>601, 6XX 601: Diskette drive or controller error.</p>	<ol style="list-style-type: none"> 1. Go to “Testing the computer” on page 7. 2. Diskette drive assembly. 3. Diskette. 4. System board.
<p>602 Diskette read error.</p>	<ol style="list-style-type: none"> 1. Go to “Testing the computer” on page 7. 2. Diskette. 3. Diskette drive assembly.
<p>604 Unacceptable ID was read from the diskette drive.</p>	<ol style="list-style-type: none"> 1. Go to “Testing the computer” on page 7. 2. Diskette drive assembly. 3. System board.
<p>2402</p>	<ol style="list-style-type: none"> 1. TV out card.
<p>24XX 2401: System board video error.</p>	<ol style="list-style-type: none"> 1. Go to “Testing the computer” on page 7. 2. System board.
<p>808X 8081: PC Card presence test failure. PC Card revision number also checked. 8082: PC Card register test failure.</p>	<ol style="list-style-type: none"> 1. Go to “Testing the computer” on page 7. 2. PC Card slot assembly. 3. PCMCIA device. 4. System board.
<p>860X Pointing device error when TrackPoint is disabled. 8601: System bus error–8042 mouse interface. 8602: External mouse error. 8603: System bus error or mouse error.</p>	<ol style="list-style-type: none"> 1. Go to “Testing the computer” on page 7. 2. External mouse. 3. External keyboard. 4. System board.

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<p>861X Pointing device error when TrackPoint is enabled.</p> <p>8611: System bus error—I/F between 8042 and IPDC. 8612: TrackPoint error. 8613: System board or TrackPoint error.</p>	<ol style="list-style-type: none"> 1. Go to “Testing the computer” on page 7. 2. Reseat the keyboard cable on the sub card. 3. Keyboard. 4. External mouse. 5. Sub card. 6. System board.
<p>I9990301 I9990302 I9990305</p> <p>I9990301: Hard disk error. I9990302: Invalid hard disk boot record. I9990305: No bootable device.</p>	<ol style="list-style-type: none"> 1. Check that the operating system is installed in the hard disk drive. If not, install the operating system. 2. Reseat the boot device. 3. Check the startup sequence for the correct boot device. 4. Check that the operating system has no failure and is installed correctly.
<p>I9990303 (Bank–2 flash ROM check sum error.)</p>	<ol style="list-style-type: none"> 1. System board.
<p>Other codes not listed above.</p>	<p>Go to “Undetermined problems” on page 31.</p>