🔴🟢 System Health Monitor

The System Health Monitor is a program that runs in background to periodically check CPU temperature, voltage inputs, and fan speed.   A LM78 chip and its associated drivers are required to run this program and monitor the system's health condition.

The System Health Monitor window contains several cells to display the status of CPU temperature, voltage inputs and fan speed according to the configuration file.   Each cell has a red-green light, a pie chart, a hand, a title and a current reading.   The red-green light indicates if the current reading reaches limit.   The red zone represents the area either over the high limit or under the low limit, while the green zone opposite. The blue hand indicates the current reading.   The light will turn to red when the hand is in the red zones, otherwise, always green.

There are two menus: system menu and pop up menu.   Click the icon in the left-top corner to bring up the system menu.   Press and release right button of the mouse to bring up the pop up menu.   In addition, double-click on any cell will bring up the configuration dialog box for that input.
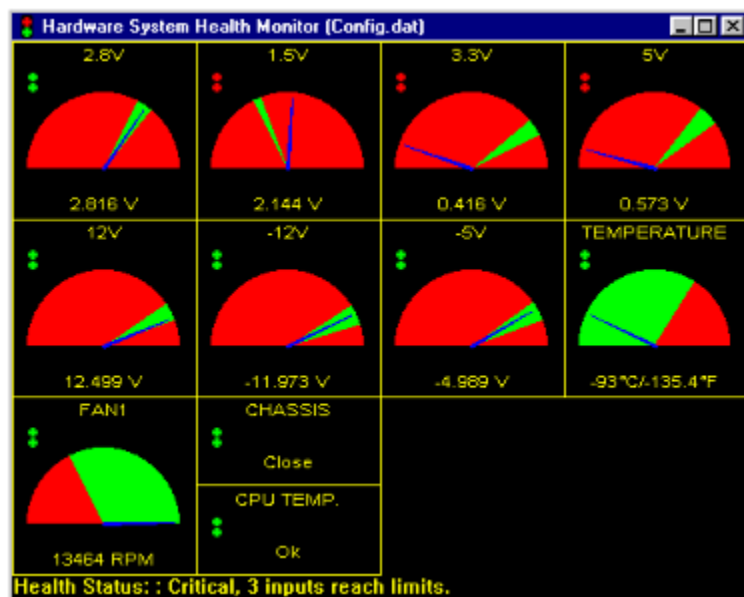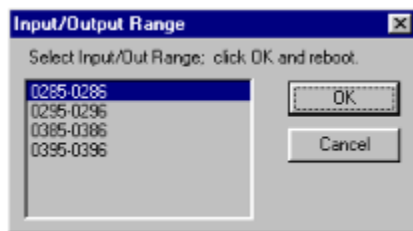
System Health Monitor Menu

System Menu:
1. **Configuration**:
      1. **Edit:**   bring up a configuration dialog box to change settings.
      2. **Open:**   open a specific configuration file.
      3. **Save As:**   save current settings in another configuration file.
2. **Colors**:
      1. **Text:**   change the color of the text.
      2. **Hand:**   change the color of the indicator.
      3. **Red Area:** change the color of the red zones.
      4. **Green Area:**change the color of the green zones.
      5. **Default:**   use the default colors.
3. **Help Topic**:   bring up the help context.
4. **About**:   product information.
5. **IO Range**: bring up a dialog box to set I/O range.(only appear in Windows NT)

Pop Up Menu:
1. **More Info**:show help context about the input where you right click the mouse button
              to bring up this pop up menu.
2. **Configuration**:
      1. **Edit:**   bring up a configuration dialog box to change settings.
      2. **Open:**   open a specific configuration file.
      3. **Save As:**   save current settings in another configuration file.
3. **Colors**:
      1. **Text:**   change the color of the text.
      2. **Hand:**   change the color of the indicator.
      3. **Red Area:** change the color of the red zones.
      4. **Green Area:**change the color of the green zones.
      5. **Default:**   use the default colors.

System Health Monitor Configuration Dialog Box

To configure the settings, select the desired input from the drop-down list in the right-top corner.
Enabled
Enabled monitoring this input.
Warning Message Box
Pop up a "restart Windows 95" dialog box, when the reading of this input reaches limit and the display window is minimized.
Label
Title for the input shown in the display window.

The LM78 is capable of monitoring the IN0-IN6, FAN1-FAN3, TEMPERATURE, FAN1-FAN3 and BTI signal inputs.   In a typical motherboard design, its usages are listed below:
IN0:   V-CPU, used to monitor the voltage of CPU and core chipset.   Its value depends
             installed CPU type. Consult your system manual for the proper value.
IN1:   V-T, used to monitor the voltage of the signal termination. Its value varies.
IN2:   3.3V, used to monitor 3.3-volt input.
IN3:   5V, used to monitor 5-volt input.
IN4:   12V, used to monitor 12-volt input.
IN5:   -5V, used to monitor -5-volt input.
IN6:   -12V, used to monitor -12-volt input.
TEMP: used to monitor CPU or motherboard temperature.
FAN1: CPU-FAN, used to monitor CPU fan.   A speed signal output is required.
FAN2: other fan input.
FAN3: other fan input.
CHASSIS: used to monitor the "Open" or "Close" status of the system chassis.
BTI: CPU-Temp, used to monitor the status of additional CPU or other temperature sensor.
Voltage Ratio
Only IN0 to IN6 has this attribute. It is a factor in determining the current reading and is determined by the motherboard hardware.   If you believe that your system is in good health and   the default values are not suitable for your system, you can adjust the ratio to get the appropriate values.   To change this value,   the program must be started by issuing command "hsysmon -config" under DOS prompt.
Fan Speed
Only FAN1, FAN2, FAN3 has this attribute.   It is a factor in determining the current reading.   To change this value,   the program must be started by issuing command "hsysmon -config" under DOS prompt.
Low Limit
Low limit of the allowable area.   This value can be changed.
High Limit
High limit of the allowable area.   This value can be changed.
Update Interval
Refresh time interval in seconds.   This setting applies to all inputs.
No Warning Message
Disabled "Warning Message Box" settings for all inputs.
No Warning Beep
No warning beep when any input reaches limit.

Hardware System Health Monitor (Config.dat)

☑ Enabled   IN0 ▼

☑ Warning Message Box

Label : 2.8V   Voltage Ratio : 1.0

Low Limit :   2.672 V

High Limit :   2.928 V

Update Interval : 1   seconds (1-60)

☐ No Warning Message Box

☐ No Warning Beep

[OK]   [Cancel]

The voltage (V-CPU) is within limits.

The voltage (V-CPU) is out of limits. Verify the limit settings, if correct, contact your system supplier for help.

The voltage (V-T) is within limits.

The voltage (V-T) is out of limits. Verify the limit settings, if correct, contact your system supplier for help.

Power supply's voltage (3.3V) is within limits.

Power supply's voltage (3.3V) is out of limits. Verify the limit settings, if correct, contact your system supplier for help.

Power supply's voltage (5V) is within limits.

Power supply's voltage (5V) is out of limits. Verify the limit settings, if correct, contact your system supplier for help.

Power supply's voltage (12V) is within limits.

Power supply's voltage (12V) is out of limits. Verify the limit settings, if correct, contact your system supplier for help.

Power supply's voltage (-12V) is within limits.

Power supply's voltage (-12V) is out of limits. Verify the limit settings, if correct, contact your system supplier for help.

Power supply's voltage (-5V) is within limits.

Power supply's voltage (-5V) is out of limits. Verify the limit settings, if correct, contact your system supplier for help.

Temperature is OK.

Temperature is too high. Verify the limit settings and fan condition, if correct, contact your system supplier for help.

Cooling fan is running OK.

Cooling fan is running too slow or not working. Verify the limit settings and fan condition, if correct, contact your system supplier for help.

Cooling fan is running OK.

Cooling fan is running too slow or not working. Verify the limit settings and fan condition, if correct, contact your system supplier for help.

Cooling fan is running OK.

Cooling fan is running too slow or not working. Verify the limit settings and fan condition, if correct, contact your system supplier for help.

Chassis is closed.

Chassis was opened.

CPU temperature is OK.

CPU temperature is too high. Verify the limit settings and fan condition, if correct, contact your system supplier for help.