



**BLOCK DIAGRAM AND OPERATIONNAL
DESCRIPTION**

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6.2 OPERATIONAL DESCRIPTION

6.2.1 MAIN FUNCTIONS

A unique USB key that protects the family and the PC against offensive contents and the dangers of the Internet. A full range of services including:

- Firewall
- Parental Control (websites filtering)
- Internet applications control
- Personal information protection
- Email virus protection
- Events reporting

The product is running on Microsoft® Windows® XP and Windows® 2000 operating systems.

6.2.2 COMPONENTS FUNCTIONALITY

Software :

A software layer, added to the Microsoft Windows operating system, re-steer the network stream towards the USB protection key in order to ensure the main functions described here above.

Components:

To provide these features, the USB key is mainly composed (as shown by the block diagram and schematic) of two Asic's called ASIX and xNSP

The first one (ASIX) ensure the USB to MII protocol conversion in order to allow the communication between xNSP and the operating system. An EPROM called E2P contains the microcode to perform this conversion.

The xNSP, monitored by the information keyed in the Flash Memory executes the protection, the check of the information (Parental control, firewall, anti virus and application control) according to the defined procedure and permit or prohibit the connection of the user to the network or somebody to the User PC.

The clock of this hardware is done by two groups of 12 MHz oscillators called Y1 and Y2+Y3 (see schematic)