WHAT IS CLAIMED IS:

1. An electronic device for communicating with external devices by audio, comprising a security function module, an audio communication processing module and an audio signal connection component, the audio communication processing module being connected to the security function module and the audio signal connection component respectively, wherein

the audio signal connection component is configured to receive a first audio signal from the external devices and to output the first audio signal to the audio communication processing module;

the audio communication processing module is configured to convert the first audio signal outputted from the audio signal connection component into a first digital signal and to send the first digital signal to the security function module; and/or

the audio communication processing module is configured to convert a second digital signal outputted from the security function module into a second audio signal and to send the second audio signal to the audio signal connection component, and the audio signal connection component is configured to output the second audio signal to the external devices.

2. The electronic device according to claim 1, wherein each of the first audio signal and the second audio signal is a dual tone multi frequency signal.

3. The electronic device according to claim 1, wherein the audio signal connection component comprises any one of:

a combination of a loudspeaker and a microphone; and

an audio connection plug for being connected to the external devices and for transmitting the first audio signal or the second audio signal.

4. The electronic device according to claim 1, wherein the audio signal connection component comprises any one of:

a loudspeaker for broadcasting the first audio signal or the second audio signal;

a microphone for receiving the first audio signal or the second audio signal; and

an audio connection socket for being connected to external devices and for transmitting the first audio signal or the second audio signal.

5. The electronic device according to claim 1, wherein the security function module is a digital certificate module for generating a digital certificate by the first digital signal.

6. The electronic device according to claim 1, wherein the security function module is a dynamic password generating module for generating a dynamic password by the first digital signal.

7. The electronic device according to claim 6, further comprising:

a displaying module, configured to receive the dynamic password from the dynamic password generating module and to display the dynamic password.

8. The electronic device according to any one of claims 1-7, further comprising:

a battery, configured to supply a power; and

a power controlling module, connected to the battery, the security function module, the audio signal connection component, the audio communication processing module and the displaying module respectively, and configured to control the battery to supply the power to the security function module, the audio signal connection component, the audio communication processing module and the displaying module when the security function module is connected to the external devices through the audio signal connection component and the audio communication processing module.

9. The electronic device according to claim 8, further comprising:

a switch, connected to the power controlling module, and configured to control the power controlling module to turn on and/or turn off the power supply provided by the battery.

10. The electronic device according to any one of claims 1-7, further comprising:

a USB interface, connected to the security function module, and configured to communicate with the external devices.

WHAT IS CLAIMED IS:

1. An electronic device for communicating with external devices by audio, comprising a security function module, an audio communication processing module and an audio signal connection component comprising any one of a combination of a loudspeaker and a microphone, and an audio connection plug or an audio connection socket for being connected to the external devices and for transmitting the first audio signal or the second audio signal, the audio communication processing module being connected to the security function module and the audio signal connection component respectively, wherein

the audio signal connection component is configured to receive a first audio signal from the external devices and to output the first audio signal to the audio communication processing module;

the audio communication processing module is configured to convert the first audio signal outputted from the audio signal connection component into a first digital signal and to send the first digital signal to the security function module; and/or

the audio communication processing module is configured to convert a signal corresponding to a second digital signal outputted from the security function module into a second audio signal and to send the second audio signal to the audio signal connection component, and the audio signal connection component is configured to output the second audio signal to the external devices.

2. The electronic device according to claim 1, wherein each of the first audio signal and the second audio signal is a dual tone multi frequency signal.

3. The electronic device according to claim 1, wherein the security function module is a digital certificate module for generating a digital certificate by the first digital signal.

4. The electronic device according to claim 1, wherein the security function module is a dynamic password generating module for generating a dynamic password by the first digital signal.

5. The electronic device according to claim 4, further comprising:

a displaying module, configured to receive the dynamic password from the dynamic password generating module and to display the dynamic password.

6. The electronic device according to any one of claims 1-5, further comprising:

a battery, configured to supply a power; and

a power controlling module, connected to the battery, the security function module, the audio signal connection component, the audio communication processing module and the displaying module respectively, and configured to control the battery to supply the power to the security function module, the audio signal connection component, the audio communication processing

module and the displaying module when the security function module is connected to the external devices through the audio signal connection component and the audio communication processing module.

7. The electronic device according to claim 6, further comprising:

a switch, connected to the power controlling module, and configured to control the power controlling module to turn on and/or turn off the power supply provided by the battery.

8. The electronic device according to any one of claims 1-5, further comprising:

a USB interface, connected to the security function module, and configured to communicate with the external devices.