We claim:

1. A method of controlling a mode of a device, the method comprising:

determining a Vbus voltage on a Vbus pin in a USB connector on the device;

comparing the Vbus voltage with a threshold;

determining if the device is applying a voltage to the Vbus pin; and

configuring the device based on the comparison of the Vbus voltage and the threshold and the determination of whether the device is applying the voltage to the Vbus pin.

2. The method of claim 1, wherein the step of configuring the device comprises:

if the device is not applying the voltage to the Vbus pin, then configuring the device based on the comparison of the Vbus voltage and the threshold; and

if the device is applying the voltage to the Vbus pin, then continue determining if the device is applying a voltage to the Vbus pin until the device is not applying the voltage to the Vbus pin.

3. The method of one of claim 1 or claim 2, wherein the step of configuring the device comprises:

determining if a response is received at the USB connector;

if the response is not being received at the USB connector, then stop applying the voltage to the Vbus pin; and

if the response is being received at the USB connector, then configuring the device as a host.

4. The method of one of any of the foregoing claims 1 through 3, wherein the step of comparing the Vbus voltage on the Vbus pin with the threshold comprises determining:

if the Vbus voltage is greater than the threshold, then indicating that a peripheral configured as a host is attached to the USB connector; and

if the Vbus voltage is less than the threshold, then indicating that a peripheral configured as a slave is attached to the USB connector.

5. The method of one of any of the foregoing claims 1 through 4, wherein the step of configuring the device comprises:

if the comparison indicates that a peripheral configured as a slave is attached to the USB connector, then configuring the device as a host; and

if the comparison indicates that a peripheral configured as a host is attached to the USB connector, then configuring the device as a slave.

6. The method of one of any of the foregoing claims 1 through 5, wherein the step of configuring the device comprises:

applying the voltage to the Vbus pin;

monitoring the USB connector to determine if a response is received;

if the response is not received, then stop applying the voltage to the Vbus pin; and

if the response is received, then configuring the device as the host.

7. The method of one of any of the foregoing claims 1 through 6, wherein configuring the device is comprised of selectively applying a voltage to the Vbus pin and configuring the device with one of a slave stack and a host stack.

8. An apparatus (100) to control a mode of a device (10), the apparatus (100) comprised of:

a processor (110); and

a voltage comparison module (130) coupled to the processor (110);

wherein the processor (110) and the voltage comparison module (130) are adapted to measure a Vbus voltage on a Vbus pin (210) in a USB connector (200) on the device (10) and determine if the device (10) is applying a voltage to the Vbus pin (210);

the voltage comparison module (130) is adapted to compare the Vbus voltage with a threshold; and

the processor (110) is adapted to configure the device (10) based on the comparison of the Vbus voltage and the threshold and the determination of whether the device (10) is applying the voltage to the Vbus pin (210).

9. The apparatus (100) of claim 8, wherein the processor (110) adapted to configure the device (10) comprises the processor (110) adapted to:

if the device (10) is not applying the voltage to the Vbus pin (210), then configure the device (10) as a host based on the comparison of the Vbus voltage and the threshold; and

if the device (10) is applying the voltage to the Vbus pin (210), then continue to determine if the device (10) is applying the voltage to the Vbus pin (210) until the device (10) is not applying the voltage to the Vbus pin (210).

10. The apparatus (100) of one of claim 8 or claim 9, wherein the processor (110) adapted to configure the device (10) comprises the processor (110) adapted to:

determine if a response is received at the USB connector (200);

if the response is not received at the USB connector (200), then stop applying the voltage to the Vbus pin (210); and

if the response is received at the USB connector (200), then configure the device (10) as a host.

11. The apparatus (100) of one of any of the foregoing claims 8 through 10, wherein the voltage comparison module (130) adapted to compare the Vbus voltage on the Vbus pin (210) with the threshold comprises the voltage comparison module (130) adapted to:

measure the Vbus voltage on the Vbus pin (210);

if the Vbus voltage is greater than the threshold, then indicate that a peripheral (250) configured as a host is attached to the USB connector (200); and

if the Vbus voltage is less than the threshold, then indicate that a peripheral (250) configured as a slave is attached to the USB connector (200).

12. The apparatus (100) of one of any of the foregoing claims 8 through 11, wherein the processor (110) adapted to configure the device (10) comprises the processor (110) adapted to:

if the comparison indicates that a peripheral (250) configured as a slave is attached to the USB connector (200), then configure the device (10) as a host; and

if the comparison indicates that a peripheral (250) configured as a host is attached to the USB connector (200), then configure the device (10) as a slave.

13. The apparatus (100) of one of any of the foregoing claims 8 through 12, further comprising:

a power supply module (120) coupled to the processor (110) and the Vbus pin (210), the power supply module (120) adapted to selectively apply the voltage to the Vbus pin (210);

wherein the processor (110) adapted to configure the device (10) comprises the processor (110) adapted to:

send a signal to the power supply module (120) to cause the power supply module (120) to apply the voltage to the Vbus pin (210);

monitor the USB connector (200) to determine if a response is received;

if the response is not received, then stop applying the voltage to the Vbus pin (210); and

if the response is received, then configure the device (10) as a host.

14. The apparatus (100) of claim 13, wherein the processor (110) adapted to apply a voltage to the Vbus pin (210) comprises the processor (110) adapted to send a signal to the power supply module (120) to apply a voltage to the Vbus pin (210).

15. The apparatus (100) of one of any of the foregoing claims 8 through 14, wherein the apparatus (100) adapted to configure the device (10) comprises the apparatus (100) adapted to:

selectively apply a voltage to the Vbus pin (210); and

configure the device with one of a slave stack and a host stack.