

# Power Service Reference

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Table of Contents

Constant Definition ..... 3

    SCE\_KERNEL\_POWER\_TICK\_xxx ..... 4

Battery Information Functions ..... 5

    scePowerIsPowerOnline ..... 6

    scePowerIsLowBattery ..... 7

    scePowerIsBatteryCharging ..... 8

Power Save Suppression Function ..... 9

    sceKernelPowerTick ..... 10

Clock Frequency Control Functions ..... 11

    scePowerSetConfigurationMode ..... 12

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## Constant Definition

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# **SCE\_KERNEL\_POWER\_TICK\_xxx**

Idle timer cancellation type

## **Definition**

```
#include <kernel.h>
#define SCE_KERNEL_POWER_TICK_DEFAULT 0x00
#define SCE_KERNEL_POWER_TICK_DISABLE_AUTO_SUSPEND 0x01
#define SCE_KERNEL_POWER_TICK_DISABLE_OLED_DIMMING 0x06
#define SCE_KERNEL_POWER_TICK_DISABLE_OLED_OFF 0x04
```

Macro	Description
SCE_KERNEL_POWER_TICK_DEFAULT	Cancels all timers
SCE_KERNEL_POWER_TICK_DISABLE_AUTO_SUSPEND	Cancels the timer related to automatic suspension
SCE_KERNEL_POWER_TICK_DISABLE_OLED_DIMMING	Cancels the timer for the screen (touchscreen) dimming
SCE_KERNEL_POWER_TICK_DISABLE_OLED_OFF	Cancels the timer for switching the screen (touchscreen) off

## **Description**

This constant represents the type of method to be used for canceling a timer that measures the time until power save mode begins.

## **See Also**

sceKernelPowerTick()

# Battery Information Functions

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# scePowerIsPowerOnline

---

Get external power supply connection status

## Definition

---

```
#include <power.h>
SceInt32 scePowerIsPowerOnline (
    void
);
```

## Calling Conditions

---

Multithread safe.

## Arguments

---

None

## Return Values

---

If an error occurs, a negative value is returned.

Value	Description
1	Power is supplied from an external power supply (AC adapter)
0	Power is not supplied from an external power supply (AC adapter)
<0	Error

## Description

---

This function checks whether or not power is supplied from an external power supply (AC adapter).

## See Also

---

scePowerIsBatteryCharging()

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# scePowerIsLowBattery

---

Get low battery status

## Definition

---

```
#include <power.h>
SceInt32 scePowerIsLowBattery (
    void
);
```

## Calling Conditions

---

Multithread safe.

## Arguments

---

None

## Return Values

---

If an error occurs, a negative value is returned.

Value	Description
1	The status is low battery status
0	The status is not low battery status
<0	Error

## Description

---

This function obtains information indicating whether or not the status is low battery status.

Low battery status means that the remaining battery life is short.

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# scePowerIsBatteryCharging

Get battery charging status

## Definition

```
#include <power.h>
SceInt32 scePowerIsBatteryCharging (
    void
);
```

## Calling Conditions

Multithread safe

## Arguments

None

## Return Values

If an error occurs, a negative value is returned.

Value	Description
1	Battery is charging
0	Battery is not charging
SCE_POWER_ERROR_DETECTING	Obtaining battery information
<0	Error

## Description

This function obtains information indicating whether or not the battery is charging.

The correct value may not be returned until the power service recognizes the battery by polling.  
Battery charging may be suppressed (the battery is not charging) while the WLAN is in use.

## See Also

scePowerIsPowerOnline()



# Power Save Suppression Function

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# sceKernelPowerTick

## Cancel idle timer

### Definition

```
#include <kernel.h>
SceInt32 sceKernelPowerTick (
    SceInt32 ticktype
);
```

### Calling Conditions

Multithread safe.

### Arguments

*ticktype* Specify the method of canceling the timer for measuring the time until power save mode begins.

The following values can be specified for the *ticktype* argument.

Macro	Description
SCE_KERNEL_POWER_TICK_DEFAULT	Cancels all timers.
SCE_KERNEL_POWER_TICK_DISABLE_AUTO_SUSPEND	Cancels only the timer related to automatic suspension.
SCE_KERNEL_POWER_TICK_DISABLE_OLED_DIMMING	Cancels the timer for the screen (touchscreen) dimming
SCE_KERNEL_POWER_TICK_DISABLE_OLED_OFF	Cancels the timer for switching the screen (touchscreen) off

### Return Values

Always returns 0.

### Description

This function cancels the count value of the idle timer so that the PlayStation®Vita does not enter a power save state when the idle timer expires.

In the idle state, the system automatically performs power save processing such as turning off the screen (touchscreen). Using the `sceKernelPowerTick()` function to cancel the count value for the idle state prevents the specified power save processing from being performed.

Normally, use `SCE_KERNEL_POWER_TICK_DEFAULT`.

Specify `SCE_KERNEL_POWER_TICK_DISABLE_AUTO_SUSPEND` to cancel only the timer for beginning automatic sleep mode. Use this when you wish to only suppress automatic sleep while allowing the screen (touchscreen) display to disappear.

# Clock Frequency Control Functions

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# scePowerSetConfigurationMode

Control clock frequencies

## Definition

```
#include <power.h>
SceInt32 scePowerSetConfigurationMode (
    SceUInt32 conf
);
```

## Calling Conditions

Not multithread safe

## Arguments

*conf*      Power configuration setting

SCE\_POWER\_CONFIGURATION\_MODE\_A = Mode A  
 SCE\_POWER\_CONFIGURATION\_MODE\_B = Mode B  
 SCE\_POWER\_CONFIGURATION\_MODE\_C = Mode C

## Return Values

If an error occurs, a negative value is returned.

Value	Description
0	Success
<0	Error

## Description

Set the power configuration for setting the GPU clock frequency, etc.

For details on Mode A/Mode B/Mode C operation, refer to the "Power Configuration Control" chapter in the "Power Service Overview" document.

### Note

Note that the time required to execute the `scePowerSetConfigurationMode()` function may vary depending on the device type and each device.