

Power Efficiency Diagnostics Report

Computer Name	SURFACELAPTOP6
Scan Time	2026-08-13T12:25:42Z
Scan Duration	60 seconds
System Manufacturer	Microsoft Corporation
System Product Name	Surface Laptop 6 for Business
BIOS Date	06/25/2026
BIOS Version	23.105.143
OS Build	26200
Platform Role	PlatformRoleMobile
Plugged In	true
Process Count	316
Thread Count	6824
Report GUID	{4c7e958b-1e68-446a-956c-dfaf7c1fa2d8}

Analysis Results

Errors

Power Policy:Sleep timeout is disabled (On Battery)

The computer is not configured to automatically sleep after a period of inactivity.

USB Suspend:USB Device not Entering Selective Suspend

This device did not enter the USB Selective Suspend state. Processor power management may be prevented when this USB device is not in the Selective Suspend state. Note that this issue will not prevent the system from sleeping.

Device Name	Realtek USB GbE Family Controller
Host Controller ID	PCI\VEN_8086&DEV_7EC0
Host Controller Location	PCI bus 0, device 13, function 0
Device ID	USB\VID_0BDA&PID_8153
Port Path	5,1,3

USB Suspend:USB Device not Entering Selective Suspend

This device did not enter the USB Selective Suspend state. Processor power management may be prevented when this USB device is not in the Selective Suspend state. Note that this issue will not prevent the system from sleeping.

Device Name	Generic USB Hub
Host Controller ID	PCI\VEN_8086&DEV_7E7D
Host Controller Location	PCI bus 0, device 20, function 0
Device ID	USB\VID_0BDA&PID_5483
Port Path	5

USB Suspend:USB Device not Entering Selective Suspend

This device did not enter the USB Selective Suspend state. Processor power management may be prevented when this USB device is not in the Selective Suspend state. Note that this issue will not prevent the system from sleeping.

Device Name	USB Composite Device
Host Controller ID	PCI\VEN_8086&DEV_7E7D
Host Controller Location	PCI bus 0, device 20, function 0
Device ID	USB\VID_046D&PID_C52B
Port Path	5,4

USB Suspend:USB Device not Entering Selective Suspend

This device did not enter the USB Selective Suspend state. Processor power management may be prevented when this USB device is not in the Selective Suspend state. Note that this issue will not prevent the system from sleeping.

Device Name	Generic SuperSpeed USB Hub
Host Controller ID	PCI\VEN_8086&DEV_7EC0

Host Controller Location **PCI bus 0, device 13, function 0**
Device ID **USB\VID_0BDA&PID_0483**
Port Path **5,1**

USB Suspend:USB Device not Entering Selective Suspend

This device did not enter the USB Selective Suspend state. Processor power management may be prevented when this USB device is not in the Selective Suspend state. Note that this issue will not prevent the system from sleeping.

Device Name **Generic USB Hub**
Host Controller ID **PCI\VEN_8086&DEV_7E7D**
Host Controller Location **PCI bus 0, device 20, function 0**
Device ID **USB\VID_0BDA&PID_5483**
Port Path **5,1**

USB Suspend:USB Device not Entering Selective Suspend

This device did not enter the USB Selective Suspend state. Processor power management may be prevented when this USB device is not in the Selective Suspend state. Note that this issue will not prevent the system from sleeping.

Device Name **Generic SuperSpeed USB Hub**
Host Controller ID **PCI\VEN_8086&DEV_7EC0**
Host Controller Location **PCI bus 0, device 13, function 0**
Device ID **USB\VID_0BDA&PID_0483**
Port Path **5**

USB Suspend:USB Device not Entering Selective Suspend

This device did not enter the USB Selective Suspend state. Processor power management may be prevented when this USB device is not in the Selective Suspend state. Note that this issue will not prevent the system from sleeping.

Device Name **USB Composite Device**
Host Controller ID **PCI\VEN_8086&DEV_7E7D**
Host Controller Location **PCI bus 0, device 20, function 0**
Device ID **USB\VID_046D&PID_0A29**
Port Path **5,1,2**

USB Suspend:USB Device not Entering Selective Suspend

This device did not enter the USB Selective Suspend state. Processor power management may be prevented when this USB device is not in the Selective Suspend state. Note that this issue will not prevent the system from sleeping.

Device Name **USB Input Device**
Host Controller ID **PCI\VEN_8086&DEV_7E7D**
Host Controller Location **PCI bus 0, device 20, function 0**
Device ID **USB\VID_0BDA&PID_1100**
Port Path **5,5**

Warnings**Power Policy:Display timeout is long (On Battery)**

The display is configured to turn off after longer than 5 minutes.

Timeout (seconds) **1800**

Power Policy:Display timeout is long (Plugged In)

The display is configured to turn off after longer than 10 minutes.

Timeout (seconds) **3600**

Power Policy:Sleep timeout is long (Plugged In)

The computer is configured to automatically sleep after longer than 30 minutes.

Timeout (seconds) **7200**

CPU Utilization:Processor utilization is moderate

The average processor utilization during the trace was moderate. The system will consume less power when the average processor utilization is very low. Review processor utilization for individual processes to determine which applications and services contribute the most to total processor utilization.

Average Utilization (%) **2.68**

CPU Utilization:Individual process with significant processor utilization.

This process is responsible for a significant portion of the total processor utilization recorded during the trace.

Process Name	System
PID	4
Average Utilization (%)	0.22
Module	Average Module Utilization (%)
\SystemRoot\system32\ntoskrnl.exe	0.18
\SystemRoot\System32\drivers\atc.sys	0.00
\SystemRoot\System32\drivers\stornvme.sys	0.00

CPU Utilization:Individual process with significant processor utilization.

This process is responsible for a significant portion of the total processor utilization recorded during the trace.

Process Name	RuntimeBroker.exe
PID	42708
Average Utilization (%)	0.21
Module	Average Module Utilization (%)
\Device\HarddiskVolume3\Windows\System32\bcryptprimitives.dll	0.07
\SystemRoot\system32\ntoskrnl.exe	0.07
\Device\HarddiskVolume3\Windows\System32\ntdll.dll	0.01

CPU Utilization:Individual process with significant processor utilization.

This process is responsible for a significant portion of the total processor utilization recorded during the trace.

Process Name	dwm.exe
PID	2496
Average Utilization (%)	0.21
Module	Average Module Utilization (%)
\Device\HarddiskVolume3\Windows\System32\dwmcore.dll	0.11
\SystemRoot\system32\ntoskrnl.exe	0.02
\SystemRoot\System32\win32kbase.sys	0.01

Information

Platform Timer Resolution:Platform Timer Resolution

The default platform timer resolution is 15.6ms (15625000ns) and should be used whenever the system is idle. If the timer resolution is increased, processor power management technologies may not be effective. The timer resolution may be increased due to multimedia playback or graphical animations.

Current Timer Resolution (100ns units) **156250**

Power Policy:Active Power Plan

The current power plan in use

Plan Name **OEM Balanced**

Plan GUID **{381b4222-f694-41f0-9685-ff5bb260df2e}**

Power Policy:Power Plan Personality (On Battery)

The personality of the current power plan when the system is on battery power.

Personality **Balanced**

Power Policy:Video Quality (On Battery)

Enables Windows Media Player to optimize for quality or power savings when playing video.

Quality Mode **Balance Video Quality and Power Savings**

Power Policy:Power Plan Personality (Plugged In)

The personality of the current power plan when the system is plugged in.

Personality **Balanced**

Power Policy:802.11 Radio Power Policy is Maximum Performance (Plugged In)

The current power policy for 802.11-compatible wireless network adapters is not configured to use low-power modes.

Power Policy:Video quality (Plugged In)

Enables Windows Media Player to optimize for quality or power savings when playing video.

Quality Mode **Optimize for Video Quality**

System Availability Requests:Analysis Success

Analysis was successful. No energy efficiency problems were found. No information was returned.

Battery:Battery Information

Battery ID	SurfaceBattery1
Manufacturer	DYN
Serial Number	0016581402
Chemistry	LION
Long Term	1
Sealed	0
Cycle Count	134
Design Capacity	47700
Last Full Charge	40140

Platform Power Management Capabilities:Supported Sleep States

Sleep states allow the computer to enter low-power modes after a period of inactivity. The S3 sleep state is the default sleep state for Windows platforms. The S3 sleep state consumes only enough power to preserve memory contents and allow the computer to resume working quickly. Very few platforms support the S1 or S2 Sleep states.

S1 Sleep Supported **false**

S2 Sleep Supported **false**

S3 Sleep Supported **false**

S4 Sleep Supported **true**

Platform Power Management Capabilities:Connected Standby Support

Connected standby allows the computer to enter a low-power mode in which it is always on and connected. If supported, connected standby is used instead of system sleep states.

Connected Standby Supported **true**

Platform Power Management Capabilities:Adaptive Display Brightness is supported.

This computer enables Windows to automatically control the brightness of the integrated display.

Platform Power Management Capabilities:Processor Power Management Capabilities

Effective processor power management enables the computer to automatically balance performance and energy consumption.

Group	0
Index	0
Idle State Count	11
Idle State Type	Micro Power Engine Plugin
Nominal Frequency (MHz)	1700
Maximum Performance Percentage	276
Lowest Performance Percentage	100
Lowest Throttle Percentage	4
Performance Controls Type	ACPI Collaborative Processor Performance Control

Platform Power Management Capabilities:Processor Power Management Capabilities

Effective processor power management enables the computer to automatically balance performance and energy consumption.

Group	0
Index	1
Idle State Count	11
Idle State Type	Micro Power Engine Plugin
Nominal Frequency (MHz)	1700
Maximum Performance Percentage	276
Lowest Performance Percentage	100
Lowest Throttle Percentage	4
Performance Controls Type	ACPI Collaborative Processor Performance Control

Platform Power Management Capabilities:Processor Power Management Capabilities

Effective processor power management enables the computer to automatically balance performance and energy consumption.

Group	0
Index	2
Idle State Count	11
Idle State Type	Micro Power Engine Plugin
Nominal Frequency (MHz)	3600
Maximum Performance Percentage	100
Lowest Performance Percentage	27
Lowest Throttle Percentage	2
Performance Controls Type	ACPI Collaborative Processor Performance Control

Platform Power Management Capabilities:Processor Power Management Capabilities

Effective processor power management enables the computer to automatically balance performance and energy consumption.

Group	0
Index	3
Idle State Count	11
Idle State Type	Micro Power Engine Plugin
Nominal Frequency (MHz)	3600
Maximum Performance Percentage	100
Lowest Performance Percentage	27
Lowest Throttle Percentage	2
Performance Controls Type	ACPI Collaborative Processor Performance Control

Platform Power Management Capabilities:Processor Power Management Capabilities

Effective processor power management enables the computer to automatically balance performance and energy consumption.

Group	0
Index	4
Idle State Count	11
Idle State Type	Micro Power Engine Plugin
Nominal Frequency (MHz)	3600
Maximum Performance Percentage	100
Lowest Performance Percentage	27
Lowest Throttle Percentage	2
Performance Controls Type	ACPI Collaborative Processor Performance Control

Platform Power Management Capabilities:Processor Power Management Capabilities

Effective processor power management enables the computer to automatically balance performance and energy consumption.

Group	0
Index	5
Idle State Count	11
Idle State Type	Micro Power Engine Plugin
Nominal Frequency (MHz)	3600
Maximum Performance Percentage	100
Lowest Performance Percentage	27
Lowest Throttle Percentage	2
Performance Controls Type	ACPI Collaborative Processor Performance Control

Platform Power Management Capabilities:Processor Power Management Capabilities

Effective processor power management enables the computer to automatically balance performance and energy consumption.

Group	0
Index	6
Idle State Count	11
Idle State Type	Micro Power Engine Plugin
Nominal Frequency (MHz)	3600
Maximum Performance Percentage	100
Lowest Performance Percentage	27
Lowest Throttle Percentage	2
Performance Controls Type	ACPI Collaborative Processor Performance Control

Platform Power Management Capabilities:Processor Power Management Capabilities

Effective processor power management enables the computer to automatically balance performance and energy consumption.

Group	0
Index	7
Idle State Count	11
Idle State Type	Micro Power Engine Plugin
Nominal Frequency (MHz)	3600
Maximum Performance Percentage	100
Lowest Performance Percentage	27
Lowest Throttle Percentage	2
Performance Controls Type	ACPI Collaborative Processor Performance Control

Platform Power Management Capabilities:Processor Power Management Capabilities

Effective processor power management enables the computer to automatically balance performance and energy consumption.

Group	0
Index	8
Idle State Count	11
Idle State Type	Micro Power Engine Plugin
Nominal Frequency (MHz)	3600
Maximum Performance Percentage	100
Lowest Performance Percentage	27
Lowest Throttle Percentage	2
Performance Controls Type	ACPI Collaborative Processor Performance Control

Platform Power Management Capabilities:Processor Power Management Capabilities

Effective processor power management enables the computer to automatically balance performance and energy consumption.

Group	0
Index	9
Idle State Count	11
Idle State Type	Micro Power Engine Plugin
Nominal Frequency (MHz)	3600
Maximum Performance Percentage	100
Lowest Performance Percentage	27
Lowest Throttle Percentage	2
Performance Controls Type	ACPI Collaborative Processor Performance Control

Platform Power Management Capabilities:Processor Power Management Capabilities

Effective processor power management enables the computer to automatically balance performance and energy consumption.

Group	0
Index	10
Idle State Count	11
Idle State Type	Micro Power Engine Plugin
Nominal Frequency (MHz)	1700
Maximum Performance Percentage	276
Lowest Performance Percentage	100
Lowest Throttle Percentage	4
Performance Controls Type	ACPI Collaborative Processor Performance Control

Platform Power Management Capabilities:Processor Power Management Capabilities

Effective processor power management enables the computer to automatically balance performance and energy consumption.

Group	0
Index	11
Idle State Count	11
Idle State Type	Micro Power Engine Plugin
Nominal Frequency (MHz)	1700
Maximum Performance Percentage	276
Lowest Performance Percentage	100
Lowest Throttle Percentage	4

Performance Controls Type **ACPI Collaborative Processor Performance Control**

Platform Power Management Capabilities:Processor Power Management Capabilities

Effective processor power management enables the computer to automatically balance performance and energy consumption.

Group	0
Index	12
Idle State Count	11
Idle State Type	Micro Power Engine Plugin
Nominal Frequency (MHz)	1700
Maximum Performance Percentage	276
Lowest Performance Percentage	100
Lowest Throttle Percentage	4
Performance Controls Type	ACPI Collaborative Processor Performance Control

Platform Power Management Capabilities:Processor Power Management Capabilities

Effective processor power management enables the computer to automatically balance performance and energy consumption.

Group	0
Index	13
Idle State Count	11
Idle State Type	Micro Power Engine Plugin
Nominal Frequency (MHz)	1700
Maximum Performance Percentage	276
Lowest Performance Percentage	100
Lowest Throttle Percentage	4
Performance Controls Type	ACPI Collaborative Processor Performance Control

Platform Power Management Capabilities:Processor Power Management Capabilities

Effective processor power management enables the computer to automatically balance performance and energy consumption.

Group	0
Index	14
Idle State Count	11
Idle State Type	Micro Power Engine Plugin
Nominal Frequency (MHz)	1700
Maximum Performance Percentage	276
Lowest Performance Percentage	100
Lowest Throttle Percentage	4
Performance Controls Type	ACPI Collaborative Processor Performance Control

Platform Power Management Capabilities:Processor Power Management Capabilities

Effective processor power management enables the computer to automatically balance performance and energy consumption.

Group	0
Index	15
Idle State Count	11
Idle State Type	Micro Power Engine Plugin
Nominal Frequency (MHz)	1700
Maximum Performance Percentage	276
Lowest Performance Percentage	100

Lowest Throttle Percentage	4
Performance Controls Type	ACPI Collaborative Processor Performance Control

Platform Power Management Capabilities:Processor Power Management Capabilities

Effective processor power management enables the computer to automatically balance performance and energy consumption.

Group	0
Index	16
Idle State Count	11
Idle State Type	Micro Power Engine Plugin
Nominal Frequency (MHz)	2500
Maximum Performance Percentage	100
Lowest Performance Percentage	44
Lowest Throttle Percentage	4
Performance Controls Type	ACPI Collaborative Processor Performance Control

Platform Power Management Capabilities:Processor Power Management Capabilities

Effective processor power management enables the computer to automatically balance performance and energy consumption.

Group	0
Index	17
Idle State Count	11
Idle State Type	Micro Power Engine Plugin
Nominal Frequency (MHz)	2500
Maximum Performance Percentage	100
Lowest Performance Percentage	44
Lowest Throttle Percentage	4
Performance Controls Type	ACPI Collaborative Processor Performance Control

Device Drivers:Analysis Success

Analysis was successful. No energy efficiency problems were found. No information was returned.