

# aaeonEAPI User Guide

## Document History

<i>Version</i>	<i>Date</i>	<i>Author</i>	<i>Description</i>
1.00		Tim Lin	First Release
1.06	2017.10.26	Tim Lin	Modify some typo
1.07	2017.11.10	Jerry Liao	Adjust some format incorrect
1.08	2018.04.11	Albert Wu	Add parameter for EApiWDogStart()
1.09	2018.05.14	Jerry Liao	Change to EApiSfanGetCaps
1.10	2018.01.25	Albert Wu	Add eDP backlight control function

## Function Documentation

# Initialize/UnInitialize API

**EApiStatus\_t EAPI\_CALLTYPE EApiLibInitialize (void )**

Should be called before calling any other API function is called.

**EApiStatus\_t EAPI\_CALLTYPE EApiLibUnInitialize (void )**

Should be called before program exit.

**EApiStatus\_t EAPI\_CALLTYPE EApiVGA LibInitialize (void )**

Should be called before calling any other video backlight API function is called.

**EApiStatus\_t EAPI\_CALLTYPE EApiVGA LibUnInitialize (void )**

Should be called before video backlight program exit.

# Board Information API

EApiStatus\_t EAPI\_CALLTYPE EApiBoardGetStringA (\_\_IN EApiId\_t *Id*, \_\_OUT char \*  
*pBuffer*, \_\_INOUT uint32\_t \* *pBufLen*)

## Parameters:

<i>Id</i>	Name Id: EAPI_ID_BOARD_NAME_STR
<i>Id</i>	Name Id: EAPI_ID_BOARD_SERIAL_STR
<i>Id</i>	Name Id: EAPI_ID_BOARD_MANUFACTURER_STR
<i>Id</i>	Name Id: EAPI_ID_BOARD_BIOS_REVISION_STR
<i>Id</i>	Name Id: EAPI_ID_EC_REVISION_STR

## Return values:

* <i>pBuffer</i>	Destination pBuffer
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## Parameters:

* <i>pBufLen</i>	pBuffer Length
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## Returns:

EAPI\_STATUS\_NOT\_INITIALIZED: Library Uninitialized  
EAPI\_STATUS\_INVALID\_PARAMETER:  
pBufLen==NULL/pBufLen!=NULL&&\*pBufLen&&pBuffer==NULL  
EAPI\_STATUS\_UNSUPPORTED: unknown Id  
EAPI\_STATUS\_MORE\_DATA: strlen(Id)+1>\*pBufLen  
EAPI\_STATUS\_SUCCESS: Else

# Hardware Monitor API

Hardware Monitor SDK is API for customer to use Hardware Monitor feature on AAEON products. Features include Temperature, Voltage, and Fan speed information.

The API dll file is [aaeonEAPI.dll](#)

The API lib file is [aaeonEAPI.lib](#)

The API header file is [aaeonEAPI.h](#)

```
EApiStatus_t EAPI_CALLTYPE EApiHWMONGetCaps (__IN EApiId_t Id, __OUT uint32_t
* pFanEnable, __OUT uint32_t * pTempEnable, __OUT uint32_t * pVoltEnable)
```

## Parameters:

<i>Id</i>	Value Id: EAPI_ID_HWMON_FAN_CPU
<i>Id</i>	Value Id: EAPI_ID_HWMON_FAN_CHIPSET
<i>Id</i>	Value Id: EAPI_ID_HWMON_FAN_SYSTEM
<i>Id</i>	Value Id: EAPI_ID_HWMON_CPU_TEMP
<i>Id</i>	Value Id: EAPI_ID_HWMON_CHIPSET_TEMP
<i>Id</i>	Value Id: EAPI_ID_HWMON_SYSTEM_TEMP
<i>Id</i>	Value Id: EAPI_ID_HWMON_VOLTAGE_VCORE
<i>Id</i>	Value Id: EAPI_ID_HWMON_VOLTAGE_2V5
<i>Id</i>	Value Id: EAPI_ID_HWMON_VOLTAGE_3V3
<i>Id</i>	Value Id: EAPI_ID_HWMON_VOLTAGE_VBAT
<i>Id</i>	Value Id: EAPI_ID_HWMON_VOLTAGE_5V
<i>Id</i>	Value Id: EAPI_ID_HWMON_VOLTAGE_5VSB
<i>Id</i>	Value Id: EAPI_ID_HWMON_VOLTAGE_12V
<i>Id</i>	Value Id: EAPI_ID_HWMON_VOLTAGE_DIMM
<i>Id</i>	Value Id: EAPI_ID_HWMON_VOLTAGE_3VSB
<i>Id</i>	Value Id: EAPI_ID_BOARD_DRIVER_VERSION_VAL
<i>Id</i>	Value Id: EAPI_ID_AONCUS_HISAFE_FUCTION

## Return values:

<i>*pFanEnable</i>	FanEnable 1:Enable; 0:Disable
<i>*pTempEnable</i>	TempEnable 1:Enable; 0:Disable
<i>*pVoltEnable</i>	VoltEnable 1:Enable; 0:Disable

## Returns:

EAPI\_STATUS\_NOT\_INITIALIZED: Library Uninitialized

EAPI\_STATUS\_UNSUPPORTED: unknown Id

EAPI\_STATUS\_SUCCESS: Else

**EApiStatus\_t EAPI\_CALLTYPE EApiBoardGetValue ( \_\_IN EApiId\_t *Id*, \_\_OUT uint32\_t \*  
*pValue*)**

**Parameters:**

<i>Id</i>	Value Id: EAPI_ID_HWMON_FAN_CPU
<i>Id</i>	Value Id: EAPI_ID_HWMON_FAN_CHIPSET
<i>Id</i>	Value Id: EAPI_ID_HWMON_FAN_SYSTEM
<i>Id</i>	Value Id: EAPI_ID_HWMON_CPU_TEMP
<i>Id</i>	Value Id: EAPI_ID_HWMON_CHIPSET_TEMP
<i>Id</i>	Value Id: EAPI_ID_HWMON_SYSTEM_TEMP
<i>Id</i>	Value Id: EAPI_ID_HWMON_VOLTAGE_VCORE
<i>Id</i>	Value Id:EAPI_ID_HWMON_VOLTAGE_2V5
<i>Id</i>	Value Id:EAPI_ID_HWMON_VOLTAGE_3V3
<i>Id</i>	Value Id:EAPI_ID_HWMON_VOLTAGE_VBAT
<i>Id</i>	Value Id:EAPI_ID_HWMON_VOLTAGE_5V
<i>Id</i>	Value Id:EAPI_ID_HWMON_VOLTAGE_5VSB
<i>Id</i>	Value Id:EAPI_ID_HWMON_VOLTAGE_12V
<i>Id</i>	Value Id:EAPI_ID_HWMON_VOLTAGE_DIMM
<i>Id</i>	Value Id:EAPI_ID_HWMON_VOLTAGE_3VSB
<i>Id</i>	Value Id: EAPI_ID_BOARD_DRIVER_VERSION_VAL
<i>Id</i>	Value Id: EAPI_ID_AONCUS_HISAFE_FUCTION

**Return values:**

<i>*pValue</i>	Return Value
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**Returns:**

EAPI\_STATUS\_NOT\_INITIALIZED: Library Uninitialized  
EAPI\_STATUS\_INVALID\_PARAMETER: *pValue*==NULL  
EAPI\_STATUS\_UNSUPPORTED: unknown *Id*  
EAPI\_STATUS\_SUCCESS: Else

# Digital IO API

DIO SDK is API for customer to use DIO feature on AAEON products. This SDK will get DIO port on the current AAEON product.

The API dll file is [aaeonEAPI.dll](#)

The API lib file is [aaeonEAPI.lib](#)

The API header file is [aaeonEAPI.h](#)

**EApiStatus\_t EAPI\_CALLTYPE EApiGPIOGetCaps (\_\_IN EApiId\_t Id, \_\_OUTOPT uint32\_t \* PinCount, \_\_OUTOPT uint32\_t \* pDioDisable)**

## Parameters:

<i>Id</i>	GPIO Id: <b>EAPI_GPIO_GPIO_ID(GPIO_NUM)</b>
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## Return values:

<i>*PinCount</i>	Pin Count
<i>*pDioDisable</i>	Pin Enable or Disable 1:Disable; 0:Enable

## Returns:

EAPI\_STATUS\_NOT\_INITIALIZED: Library Uninitialized

EAPI\_STATUS\_INVALID\_PARAMETER: Bitmask==0

EAPI\_STATUS\_UNSUPPORTED: Unsupported Id

EAPI\_STATUS\_INVALID\_BITMASK: (Bitmask&~(pInputs|pOutputs))

EAPI\_STATUS\_SUCCESS: Else

**EApiStatus\_t EAPI\_CALLTYPE EApiGPIOGetDirection (\_\_IN EApiId\_t Id, \_\_IN uint32\_t Bitmask, \_\_OUT uint32\_t \* pDirection)**

## Parameters:

<i>Id</i>	GPIO Id: <b>EAPI_GPIO_GPIO_ID(GPIO_NUM)</b>
<i>Bitmask</i>	Bit mask of Affected Bits: 0xFFFFFFFF

## Return values:

<i>*pDirection</i>	Current Direction
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## Returns:

EAPI\_STATUS\_NOT\_INITIALIZED: Library Uninitialized

EAPI\_STATUS\_INVALID\_PARAMETER: Bitmask==0

EAPI\_STATUS\_UNSUPPORTED: Unsupported Id

EAPI\_STATUS\_INVALID\_BITMASK: (Bitmask&~(pInputs|pOutputs))

EAPI\_STATUS\_SUCCESS: Else

**EApiStatus\_t EAPI\_CALLTYPE EApiGPIOGetLevel (\_\_IN EApiId\_t *Id*, \_\_IN uint32\_t *Bitmask*, \_\_OUT uint32\_t \* *pLevel*)**

**Parameters:**

<i>Id</i>	GPIO Id: <b>EAPI_GPIO_GPIO_ID(GPIO_NUM)</b>
<i>Bitmask</i>	Bit mask of Affected Bits: 0xFFFFFFFF

**Return values:**

* <i>pLevel</i>	Current Level
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**Returns:**

EAPI\_STATUS\_NOT\_INITIALIZED: Library Uninitialized  
EAPI\_STATUS\_INVALID\_PARAMETER: Bitmask==0  
EAPI\_STATUS\_UNSUPPORTED: Unsupported Id  
EAPI\_STATUS\_INVALID\_BITMASK: (Bitmask&~(pInputs|pOutputs))  
EAPI\_STATUS\_SUCCESS: Else

**EApiStatus\_t EAPI\_CALLTYPE EApiGPIOSetDirection (\_\_IN EApiId\_t *Id*, \_\_IN uint32\_t *Bitmask*, \_\_IN uint32\_t *Direction*)**

**Parameters:**

<i>Id</i>	GPIO Id: <b>EAPI_GPIO_GPIO_ID(GPIO_NUM)</b>
<i>Bitmask</i>	Bit mask of Affected Bits: 0xFFFFFFFF
<i>Direction</i>	Direction

**Returns:**

EAPI\_STATUS\_NOT\_INITIALIZED: Library Uninitialized  
EAPI\_STATUS\_INVALID\_PARAMETER: Bitmask==0  
EAPI\_STATUS\_UNSUPPORTED: Unsupported Id  
EAPI\_STATUS\_INVALID\_BITMASK: (Bitmask&~(pInputs|pOutputs))  
EAPI\_STATUS\_INVALID\_DIRECTION:  
(Bitmask&pDirection)&~pInputs/(Bitmask&~pDirection)&~pOutputs  
EAPI\_STATUS\_SUCCESS: Else

**EApiStatus\_t EAPI\_CALLTYPE EApiGPIOSetLevel (\_\_IN EApiId\_t *Id*, \_\_IN uint32\_t *Bitmask*, \_\_IN uint32\_t *Level*)**

**Parameters:**

<i>Id</i>	GPIO Id: <b>EAPI_GPIO_GPIO_ID(GPIO_NUM)</b>
<i>Bitmask</i>	Bit mask of Affected Bits: 0xFFFFFFFF
<i>Level</i>	Level



**Returns:**

EAPI\_STATUS\_NOT\_INITIALIZED: Library Uninitialized

EAPI\_STATUS\_INVALID\_PARAMETER: Bitmask==0

EAPI\_STATUS\_UNSUPPORTED: Unsupported Id

EAPI\_STATUS\_SUCCESS: Else

# SMBUS/I2C API

Smbus SDK is supported to control the smbus/I2C function, it can read or write data for device connected to smbus/I2C. Through the API interface, the customer can control the smbus function easily.

The API dll file is **aaeonEAPI.dll**

The API lib file is **aaeonEAPI.dll**

The API header file is **aaeonEAPI.dll**

```
EApiStatus_t EAPI_CALLTYPE EApiI2CWriteReadRaw (__IN EApiId_t Id, __IN uint8_t
Addr, __INOPT void* pWBuffer, __IN uint32_t WriteBCnt, __OUTOPT void * pRBuffer, __IN
uint32_t RBufLen, __IN uint32_t ReadBCnt)
```

```
#define EApiI2CWriteRaw(Id, Addr, pBuffer, ByteCnt) \
    EApiI2CWriteReadRaw(Id, Addr, pBuffer, ByteCnt, NULL, 0, 0)
#define EApiI2CReadRaw(Id, Addr, pBuffer, BufLen, ByteCnt) \
    EApiI2CWriteReadRaw(Id, Addr, NULL, 0, pBuffer, BufLen, ByteCnt)
```

Parameters:

<i>Id</i>	EAPI_ID_I2C_EXTERNAL
<i>Id</i>	EAPI_ID_I2C_LVDS_1
<i>Id</i>	EAPI_ID_I2C_LVDS_2
<i>Id</i>	EAPI_ID_AONCUS_I2C_EXTERNAL_2
<i>Id</i>	EAPI_ID_AONCUS_I2C_EXTERNAL_3
<i>Id</i>	EAPI_ID_AONCUS_SMBUS_EXTERNAL_1
<i>Id</i>	EAPI_ID_AONCUS_SMBUS_EXTERNAL_2
<i>Id</i>	EAPI_ID_AONCUS_SMBUS_EXTERNAL_3
<i>Addr</i>	Encoded 7/10Bit I2C Device Address
<i>*pWBuffer</i>	Transfer Write Data Buffer
<i>WriteBCnt</i>	Data Length
<i>*pRBuffer</i>	Transfer Read Data Buffer
<i>BufLen</i>	Data pBuffer Length: Byte=1;
<i>ReadBCnt</i>	Data Length

Returns:

EAPI\_STATUS\_NOT\_INITIALIZED: Library Uninitialized

EAPI\_STATUS\_INVALID\_PARAMETER: pBuffer==NULL/BufLen==0/ByteCnt==0

EAPI\_STATUS\_UNSUPPORTED: unknown Id

EAPI\_STATUS\_INVALID\_BLOCK\_LENGTH: ByteCnt>pMaxBlkLen

EAPI\_STATUS\_BUSY\_COLLISION: Bus Busy SDA/SDC low/Arbitration Error/Collision

Error

EAPI\_STATUS\_TIMEOUT: Time-out due to clock stretching

EAPI\_STATUS\_NOT\_FOUND: start<Addr Byte 1><R>Nak

EAPI\_STATUS\_SUCCESS: Else

The following macro is used to define the “Cmd” whether **byte** or **word**:

```
#define EAPI_I2C_ENC_STD_CMD(x)    EAPI_UINT32_C(((x)&0xFF) | EAPI_I2C_STD_CMD)
```

```
#define EAPI_I2C_ENC_EXT_CMD(x)    EAPI_UINT32_C(((x)&0xFFFF) | EAPI_I2C_EXT_CMD)
```

```
EApiStatus_t EAPI_CALLTYPE EApiI2CReadTransfer (__IN EApiId_t  Id, __IN uint32_t
Addr, __IN uint32_t  Cmd, __OUT void *  pBuffer, __IN uint32_t  BufLen, __IN uint32_t
ByteCnt)
```

**Parameters:**

<i>Id</i>	EAPI_ID_I2C_EXTERNAL
<i>Id</i>	EAPI_ID_I2C_LVDS_1
<i>Id</i>	EAPI_ID_I2C_LVDS_2
<i>Id</i>	EAPI_ID_AONCUS_I2C_EXTERNAL_2
<i>Id</i>	EAPI_ID_AONCUS_I2C_EXTERNAL_3
<i>Id</i>	EAPI_ID_AONCUS_SMBUS_EXTERNAL_1
<i>Id</i>	EAPI_ID_AONCUS_SMBUS_EXTERNAL_2
<i>Id</i>	EAPI_ID_AONCUS_SMBUS_EXTERNAL_3
<i>Addr</i>	Encoded 7/10Bit I2C Device Address
<i>Cmd</i>	I2C Command/Offset

**Return values:**

<i>*pBuffer</i>	Transfer Data pBuffer
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**Parameters:**

<i>BufLen</i>	Data pBuffer Length: Byte=1; Word=2
<i>ByteCnt</i>	Byte Count to read: Byte=1; Word=2

**Returns:**

EAPI\_STATUS\_NOT\_INITIALIZED: Library Uninitialized

EAPI\_STATUS\_INVALID\_PARAMETER: pBuffer==NULL/BufLen==0/ByteCnt==0

EAPI\_STATUS\_UNSUPPORTED: unknown Id

EAPI\_STATUS\_INVALID\_BLOCK\_LENGTH: ByteCnt>pMaxBlkLen

EAPI\_STATUS\_BUSY\_COLLISION: Bus Busy SDA/SDC low/Arbitration Error/Collision

Error

EAPI\_STATUS\_TIMEOUT: Time-out due to clock stretching

EAPI\_STATUS\_NOT\_FOUND: start<Addr Byte 1><R>Nak

EAPI\_STATUS\_SUCCESS: Else

**EApiStatus\_t EAPI\_CALLTYPE EApiI2CWriteTransfer ( \_\_IN EApiId\_t *Id*, \_\_IN uint32\_t *Addr*, \_\_IN uint32\_t *Cmd*, \_\_IN void \* *pBuffer*, \_\_IN uint32\_t *ByteCnt*)**

**Parameters:**

<i>Id</i>	EAPI_ID_I2C_EXTERNAL
<i>Id</i>	EAPI_ID_I2C_LVDS_1
<i>Id</i>	EAPI_ID_I2C_LVDS_2
<i>Id</i>	EAPI_ID_AONCUS_I2C_EXTERNAL_2
<i>Id</i>	EAPI_ID_AONCUS_I2C_EXTERNAL_3
<i>Id</i>	EAPI_ID_AONCUS_SMBUS_EXTERNAL_1
<i>Id</i>	EAPI_ID_AONCUS_SMBUS_EXTERNAL_2
<i>Id</i>	EAPI_ID_AONCUS_SMBUS_EXTERNAL_3
<i>Addr</i>	Encoded 7/10Bit I2C Device Address
<i>Cmd</i>	I2C Command/Offset; Seq&Page Mode-->ByteCnt
<i>*pBuffer</i>	Transfer Data pBuffer
<i>ByteCnt</i>	Byte Count to write: Byte=1; Word=2

**Returns:**

EAPI\_STATUS\_NOT\_INITIALIZED: Library Uninitialized  
EAPI\_STATUS\_INVALID\_PARAMETER: pBuffer==NULL/BufLen==0/ByteCnt==0  
EAPI\_STATUS\_UNSUPPORTED: unknown Id  
EAPI\_STATUS\_INVALID\_BLOCK\_LENGTH: ByteCnt+(overhead)>pMaxBlkLen  
EAPI\_STATUS\_BUSY\_COLLISION: Bus Busy SDA/SDC low/Arbitration Error/Collision

**Error**

EAPI\_STATUS\_TIMEOUT: Time-out due to clock stretching  
EAPI\_STATUS\_NOT\_FOUND: start<Addr Byte 1><W>Nak  
EAPI\_STATUS\_WRITE\_ERROR: start<Addr Byte 1><W>Ack<Addr Byte 2>Nak/<CMD Byte 1>Nak/<Data Byte 1>Nak  
EAPI\_STATUS\_SUCCESS: Else

# Smart Fan API

Smart fan SDK is supported to control the fan function; it can control fan speed manually.

The API dll file is [aaeonEAPI.dll](#)

The API lib file is [aaeonEAPI.dll](#)

The API header file is [aaeonEAPI.dll](#)

**EApiStatus\_t EAPI\_CALLTYPE EApiSfanGetCaps (\_\_IN EApiId\_t Id, \_\_OUT uint32\_t \* pAutoModeCap)**

## Parameters:

<i>Id</i>	Sfan Id: EAPI_ID_SFAN00
<i>Id</i>	Sfan Id: EAPI_ID_SFAN01
<i>Id</i>	Sfan Id: EAPI_ID_SFAN02

## Return values:

<i>*pAutoModeCap</i>	Auto mode enable 1:Enable; 0:Disable
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## Returns:

EAPI\_STATUS\_NOT\_INITIALIZED: Library Uninitialized

EAPI\_STATUS\_SUCCESS: Else

**EApiStatus\_t EAPI\_CALLTYPE EApiSfanGetStatus (\_\_IN EApiId\_t Id, \_\_OUT uint32\_t \* pFanAutoMode, \_\_OUT uint32\_t \* pFullSpeedTemp, \_\_OUT uint32\_t \* pLowSpeedTemp, \_\_OUT uint32\_t \* pManualSpeed)**

## Parameters:

<i>Id</i>	Sfan Id: EAPI_ID_SFAN00
<i>Id</i>	Sfan Id: EAPI_ID_SFAN01
<i>Id</i>	Sfan Id: EAPI_ID_SFAN02

## Return values:

<i>*pFanAutoMode</i>	Mode for Fan 1:AutoMode; 0: ManualMode
<i>*pFullSpeedTemp</i>	Fan speed is full speed when exceeds the setting temperature 0-100
<i>*pLowSpeedTemp</i>	Fan speed is low speed when less than the setting temperature 0-100
<i>*pManualSpeed</i>	ManualSpeed 0-255

## Returns:

EAPI\_STATUS\_NOT\_INITIALIZED: Library Uninitialized

EAPI\_STATUS\_UNSUPPORTED: Unsupported Id

EAPI\_STATUS\_SUCCESS: Else

**EApiStatus\_t EAPI\_CALLTYPE EApiSfanSetStatus** (\_\_IN EApiId\_t *Id*, \_\_IN uint32\_t *FanAutoMode*, \_\_IN uint32\_t *FullSpeedTemp*, \_\_IN uint32\_t *LowSpeedTemp*, \_\_IN uint32\_t *ManualSpeed*)

**Parameters:**

<i>Id</i>	Sfan Id: EAPI_ID_SFAN00
<i>Id</i>	Sfan Id: EAPI_ID_SFAN01
<i>Id</i>	Sfan Id: EAPI_ID_SFAN02
<i>FanAutoMode</i>	Mode for Fan 1:AutoMode; 0: ManualMode
<i>FullSpeedTemp</i>	Fan speed is full speed when exceeds the setting temperature 0-100
<i>LowSpeedTemp</i>	Fan speed is low speed when less than the setting temperature 0-100
<i>ManualSpeed</i>	ManualSpeed 0-255

**Returns:**

EAPI\_STATUS\_NOT\_INITIALIZED: Library Uninitialized

EAPI\_STATUS\_UNSUPPORTED: Unsupported Id

EAPI\_STATUS\_SUCCESS: Else

# BACKLIGHT API

BACKLIGHT Controller SDK is API to control the brightness of LVDS in **Voltage** and **PWM** mode. Through the API interface, the customer can determine the brightness of LVDS LCD panel easily.

The API dll file is **aaeonEAPI.dll**

The API lib file is **aaeonEAPI.dll**

The API header file is **aaeonEAPI.dll**

**EApiStatus\_t EAPI\_CALLTYPE EApiBKLIGHTGetCaps (\_\_OUT uint32\_t \* pBLCDDevCount)**

## Return values:

<i>*pBLCDDevCount</i>	Get the count of backlight control
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## Returns:

EAPI\_STATUS\_NOT\_INITIALIZED: Library Uninitialized

EAPI\_STATUS\_SUCCESS: Else

**EApiStatus\_t EAPI\_CALLTYPE EApiVgaGetBacklightBrightness (\_\_IN EApiId\_t Id, \_\_OUT uint32\_t \* pBright)**

## Parameters:

<i>Id</i>	Backlight Id: EAPI_ID_BACKLIGHT_1
<i>Id</i>	Backlight Id: EAPI_ID_BACKLIGHT_2
<i>Id</i>	Backlight Id: EAPI_ID_BACKLIGHT_3
<i>Id</i>	Backlight Id: EAPI_ID_BACKLIGHT_4

## Return values:

<i>*pBright</i>	Get the value of brightness, the value is from 0 to 255
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## Returns:

EAPI\_STATUS\_NOT\_INITIALIZED: Library Uninitialized

EAPI\_STATUS\_INVALID\_PARAMETER: pBright==NULL

EAPI\_STATUS\_UNSUPPORTED: unknown Id

EAPI\_STATUS\_SUCCESS: Else

**EApiStatus\_t EAPI\_CALLTYPE EApiVgaSetBacklightBrightness (\_\_IN EApiId\_t *Id*, \_\_IN uint32\_t *Bright*)**

**Parameters:**

<i>Id</i>	Backlight Id: EAPI_ID_BACKLIGHT_1
<i>Id</i>	Backlight Id: EAPI_ID_BACKLIGHT_2
<i>Id</i>	Backlight Id: EAPI_ID_BACKLIGHT_3
<i>Id</i>	Backlight Id: EAPI_ID_BACKLIGHT_4
<i>Bright</i>	Set the value of brightness, the value is from 0 to 255

**Returns:**

EAPI\_STATUS\_NOT\_INITIALIZED: Library Uninitialized

EAPI\_STATUS\_INVALID\_PARAMETER: Bright>EAPI\_BACKLIGHT\_SET\_BRIGHTTEST

EAPI\_STATUS\_UNSUPPORTED: unknown Id

EAPI\_STATUS\_SUCCESS: Else



# Watchdog Timer API

Watchdog Timer SDK is API for customer to use Watchdog feature on AAEON products. This Watchdog SDK is used when system requires auto-rebooting after system hangs up without updating the enabled Watchdog timer embedded in AAEON's board.

The API dll file is [aaeonEAPI.dll](#)

The API lib file is [aaeonEAPI.dll](#)

The API header file is [aaeonEAPI.dll](#)

**EApiStatus\_t EAPI\_CALLTYPE EApiWDogGetCap (\_\_OUTOPT uint32\_t \* pMaxDelay, \_\_OUTOPT uint32\_t \* pMaxEventTimeout, \_\_OUTOPT uint32\_t \* pMaxResetTimeout)**

## Return values:

<i>*pMaxDelay</i>	Maximum Supported Delay in milliseconds
<i>*pMaxEventTimeo ut</i>	Maximum Supported Event Timeout in milliseconds 0 == Unsupported
<i>*pMaxResetTimeo ut</i>	Maximum Supported Reset Timeout in milliseconds

## Returns:

EAPI\_STATUS\_NOT\_INITIALIZED: Library Uninitialized  
EAPI\_STATUS\_UNSUPPORTED: Unsupported  
EAPI\_STATUS\_INVALID\_PARAMETER: pMaxDelay==NULL &&  
pMaxResetTimeout==NULL && pMaxEventTimeout==NULL  
EAPI\_STATUS\_SUCCESS: Else

**EApiStatus\_t EAPI\_CALLTYPE EApiWDogGetStatus (\_\_OUTOPT uint32\_t \* pwdtMinute, \_\_OUTOPT uint32\_t \* pwdtCountTime, \_\_OUTOPT uint32\_t \* pwdtReloadTime)**

## Return values:

<i>*pwdtMinute</i>	Get the mode of minute or second
<i>*pwdtCountTime</i>	Get WDT time count
<i>*pwdtReloadTime</i>	Get WDT ReloadTime

## Returns:

EAPI\_STATUS\_NOT\_INITIALIZED: Library Uninitialized  
EAPI\_STATUS\_SUCCESS: Else

**EApiStatus\_t EAPI\_CALLTYPE EApiWDogSetStatus ( \_\_IN uint32\_t *wdtMinute*, \_\_IN uint32\_t *wdtCountTime*, \_\_IN uint32\_t *wdtReloadTime* )**

**Parameters:**

<i>wdtMinute</i>	Set the mode of minute or second
<i>wdtCountTime</i>	Set WDT time count
<i>wdtReloadTime</i>	Set WDT ReloadTime

**Returns:**

EAPI\_STATUS\_NOT\_INITIALIZED: Library Uninitialized  
EAPI\_STATUS\_SUCCESS: Else

**EApiStatus\_t EAPI\_CALLTYPE EApiWDogReloadTimer (void )**

Reload the Timeout count.

**Returns:**

EAPI\_STATUS\_NOT\_INITIALIZED: Library Uninitialized  
EAPI\_STATUS\_UNSUPPORTED: Unsupported  
EAPI\_STATUS\_SUCCESS: Else

**EApiStatus\_t EAPI\_CALLTYPE EApiWDogStart ( \_\_IN uint32\_t *Delay*, \_\_IN uint32\_t *Minute*, \_\_IN uint32\_t *EventTimeout*, \_\_IN uint32\_t *ResetTimeout* )**

**Parameters:**

<i>Delay</i>	Delay in milliseconds
<i>Minute</i>	Control Minute or Second
<i>EventTimeout</i>	Event Timeout in milliseconds
<i>ResetTimeout</i>	Reset Timeout in milliseconds

**Returns:**

EAPI\_STATUS\_NOT\_INITIALIZED: Library Uninitialized  
EAPI\_STATUS\_UNSUPPORTED: Unsupported  
EAPI\_STATUS\_INVALID\_PARAMETER:  
Delay>pMaxDelay/EventTimeout>pMaxEventTimeout/ResetTimeout>pMaxResetTimeout  
EAPI\_STATUS\_RUNNING: Already Running  
EAPI\_STATUS\_SUCCESS: Else

**EApiStatus\_t EAPI\_CALLTYPE EApiWDogStop (void )**

Close Watchdog Instance.

**Returns:**

EAPI\_STATUS\_NOT\_INITIALIZED: Library Uninitialized

EAPI\_STATUS\_UNSUPPORTED: Unsupported

EAPI\_STATUS\_SUCCESS: Else