



OpenClovis Software Development Kit (SDK) Service Description and API Reference for CheckSum Management Service

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Chapter 1

Functional Overview

The OpenClovis CheckSum library provides a set of APIs for computing the CheckSum on the input byte stream. The computation can be done for a 16-bit or a 32-bit number, depending on the need of the application.

1.1 Interaction with other components

This component is used by all the components of ASP, as well as the application that needs the CheckSum of some data.

Chapter 2

Service Model

TBD

Chapter 3

Service APIs

3.0.1 clCksm16bitCompute

clCksm16bitCompute

Synopsis:

Computes a 16-bit CheckSum.

Header File:

clCksmApi.h

Syntax:

```
CL_RcT clCksm16bitCompute(  
    CL_IN  ClUInt8T *pData,  
    CL_IN  ClUInt32T length,  
    CL_OUT ClUInt16T *pChecksum);
```

Parameters:

pData: (in) Data for which CheckSum is being computed. This must be a valid pointer and cannot be NULL.

length: (in) Length of the data for which the CheckSum is to be computed.

pChecksum: (out) Location where the computed CheckSum is stored. This must be a valid pointer and cannot be NULL.

Return values:

CL_OK: The function executed successfully.

CL_ERR_NULL_POINTER: pData or pChecksum contains a NULL pointer.

Description:

This function is used to compute a 16-bit CheckSum.

Library File:

libCIUtils

Related Function(s):

[clCksm32bitCompute](#)

3.0.2 clCksm32bitCompute

clCksm32bitCompute

Synopsis:

Computes a 32-bit CheckSum.

Header File:

clCksmApi.h

Syntax:

```
CL_RcT clCksm32bitCompute (
    CL_IN  ClUInt8T *pData,
    CL_IN  ClUInt32T length,
    CL_OUT ClUInt32T *pChecksum)
```

Parameters:

pData: (in) Data for which CheckSum is being computed. This must be a valid pointer and cannot be NULL.

length: (in) Length of the data for which the checksum is to be computed.

pChecksum: (out) Location where the computed CheckSum is stored. This must be a valid pointer and cannot be NULL.

Return values:

CL_OK: The function executed successfully.

CL_ERR_NULL_POINTER: *pData* or *pChecksum* contains a NULL pointer.

Description:

This function is used to compute a 32-bit CheckSum.

Library File:

libClUtils

Related Function(s):

[clCksm16bitCompute](#)

Chapter 4

Service Management Information Model

TBD

Chapter 5

Service Notifications

TBD

Chapter 6

Debug CLIs

TBD

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