



**ASiKS-Engineering**

**Application Note AN\_121**

# **Programmers Guide for SLCONFIG DLL**

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**This document provides details of the function calls required when using the Slconfig DLL.**

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## 1 Introduction

The products of the SmartLin V2.1 series provide the possibility to adjust almost all values for the Lin Synchronisation Break and the Delimiter field within a range specified by the Lin Specification. This can be achieved by adding some trailing bytes to a Lin header what from the synchronization break and the delimiter are generated by the SmartLin device's control engine.

The API for calculating the correct trailing bytes depending on the values for synchronization break and delimiter will be contained in the **SLCONFIG.DLL**.

This document lists all of the functions available in SLCONFIG.DLL.

## 2 Application Programming Interface (API)

### 2.1 CalcSmartLinTrailingBytes

BYTE CalcSmartLinTrailingBytes(BYTE bSyncBreakTbit, BYTE bSyncDelimiterTbit,  
PBYTE pbTrailingBytes, PBYTE pbNumTrailingBytes,  
PBOOL bRtsValue)

This function must be used to calculate the trailing bytes.

#### Parameters

bSyncBreakTbit	Specifies the desired length of the synch break
bSyncDelimiterTbit	Specifies the desired length of the delimiter
pbTrailingBytes	Pointer to a byte array of type BYTE which receives the actual trailing bytes
pbNumTrailingBytes	Pointer to a variable of type BYTE which receives the actual number of trailing bytes
bRtsValue	Pointer to a variable of type BOOL which receives the actual state the RTS wire has to be set (true → RTS = ON, false → RTS = OFF)

#### Return Value

Returns CALC\_SUCCESS if successful, otherwise the return value will be one of the following error codes:

CONFIGURATION\_NOT\_SUPPORTED  
SYNCH\_BREAK\_VALUE\_NOT\_SUPPORTED  
DELIMITER\_VALUE\_NOT\_SUPPORTED  
VALUE\_OUT\_OF\_SPEC\_RANGE

#### Example:

```
BYTE bRetVal = 0;  
BYTE TrailingBytes[5];  
BYTE bNumTrailingBytes;  
BOOL bRtsValue = false;
```

```
bRetVal = CalcSmartLinTrailingBytes(13,1,TrailingBytes,&bNumTrailingBytes,&bRtsValue);
```

### 2.2 GetDIIVersion

BYTE GetDIIVersion(LPSTR lpDIIVersionBuffer, DWORD dwBufferSize)

This function returns the version of this DLL.

## Parameters

lpDllVersionBuffer	Pointer to the buffer that receives the version of this DLL. The string will be NULL terminated.
dwBufferSize	Length of the buffer created for the device name string. Set buffer length to a minimum of 10 characters.

## Return Value

Returns FTC\_SUCCESS if successful, otherwise the return value will be one of the following error codes:

NULL\_DLL\_VERSION\_BUFFER\_POINTER  
DLL\_VERSION\_BUFFER\_TOO\_SMALL

## Example:

```
BYTE bRetVal = 0;  
BYTE DllVersionBuffer[15];  
DWORD dwBufferSize = 15;
```

```
bRetVal = GetDllVersion((LPSTR) &DllVersionBuffer, dwBufferSize);
```

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## Appendix A – Revision History

Revision History  
Draft Initial Draft January, 2010  
1.0 Initial Release 25<sup>th</sup> February, 2010  
1.1 Updated Contact info 21<sup>st</sup> November, 2018