



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 bRetValue = 0;  
BYTE TrailingBytes[5];  
BYTE bNumTrailingBytes;  
BOOL bRtsValue = false;  
  
bRetValue = CalcSmartLinTrailingBytes(13,1,TrailingBytes,&bNumTrailingBytes,&bRtsValue);
```

2.2 GetDllVersion

BYTE GetDllVersion(LPSTR lpDllVersionBuffer, 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 bRetValue = 0;  
BYTE DllVersionBuffer[15];  
DWORD dwBufferSize = 15;
```

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

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Appendix A – Revision History

Revision History
Draft Initial Draft January, 2010
1.0 Initial Release 25th February, 2010