



CSR Synergy Framework 3.1.0

Formatted IO

API Description

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1 Introduction

This document describes the functionality and interface provided by the CSR Synergy Framework Formatted IO API.

The Formatted IO API consists of a single function that does formatted text string output.

2 Formatted IO

The Formatted IO API depends on the `csr_util.h` interface that is ported as part of a BSP.

2.1 Interface declaration

To use the API, the `csr_formatted_io.h` header must be included.

Synopsis

```
#include "csr_formatted_io.h"
```

2.2 CsrSprintf

Prototype

```
#include "csr_formatted_io.h"

CsrInt32 CsrSprintf(CsrCharString *dest,
                  CsrSize n,
                  const CsrCharString *fmt,
                  ...);
```

Description

This function provides formatted string output into a character buffer, guaranteeing zero-termination of the target buffer.

Parameters

| Type | Argument | Description |
|-----------------------|----------|--|
| CsrCharString * | dest | The destination buffer. |
| CsrSize | n | The size in bytes of the destination buffer. |
| const CsrCharString * | fmt | The output format string. |
| | ... | Output arguments. |

Returns

If an output formatting error is encountered, -1 is returned. Otherwise, the return value is the number of characters that would have been output, assuming there was infinite buffer space. This can be used for detecting truncation by checking if the return value is larger than the buffer size given.

3 Document References

| Ref | Title |
|-----|-------|
|-----|-------|

Terms and Definitions

| Abbreviation | Explanation |
|--------------|-------------------------|
| CSR | Cambridge Silicon Radio |

Document History

| Revision | Date | History |
|----------|-------------|--------------------------|
| 1 | 1 July 2010 | Initial released version |
| 2 | OCT 2010 | Ready for release 2.2.0 |
| 3 | DEC 2010 | Ready for release 3.0.0 |
| 4 | Aug 2011 | Ready for release 3.1.0 |

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