# Documentation for the strings module

This module contains a collection of string routines. The routines are similar to some of the those in the Standard C strings library.

This module conforms to the conventions described in

The subroutines in this module cannot be called from a high-level language (like C); they can only be invoked from assembler.

To use any of these routines, link **strings.o**.

*These routines have **not** been tested extensively. Use at your own risk!*

**Version:** 1.0
**Author:** Ken Clowes

## Summary

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|---|---|
| strlen | Determines the length of a null-terminated string. |
| strcpy | Copies a null-terminated string. |
| strrev | Reverses a string in place. |

## Details

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### strlen

Determines the length of a null-terminated string. If the string is less than 256 characters in length, the correct length is returned in Accumulator B and the Carry bit in the Condition Code register is cleared. Otherwise, the C bit is set.

**Since:** 1.0

**Parameters:**

Register X -- the starting address of the string

**Returns:**

AccB -- the length of the string (if less than 256 characters).

CC -- Carry bit Set if length > 255; else Cleared

**Side effects:**

none

**Examples:**

The following shows an elementary use of strlen.

```
msg: .asciz "Hello world";
   ....
   ldx #msg
   jsr strlen ;on return B <-- 11; Carry is clear
   bcs tooBig
```

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# strcpy

Copies a null-terminated string. The string to be copied is passed in IX and the address of the destination is IY.

**Parameters:**

IX starting address of source string

IY starting address of destination string

**Returns:**

nothing

**Side effects:**

none

## strrev

Reverses a string in place. The IX register points to a null-terminated string. The same string is reversed in place (not copied). If the string is more than 255 characters in length, the results are unpredictable.

**Examples:**

The string "abcd" will be reversed to the string "dcba".

**Parameters:**

IX--starting address of the string to be reversed

**Returns:**

nothing

**Side effects:**

Condition Code register (CC) modified.
**Since:** 1.0
**Author:** Ken Clowes