

To our customers,

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## Old Company Name in Catalogs and Other Documents

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Renesas Electronics website: <http://www.renesas.com>

April 1<sup>st</sup>, 2010  
Renesas Electronics Corporation

Issued by: Renesas Electronics Corporation (<http://www.renesas.com>)

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To all our customers

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Note : Mitsubishi Electric will continue the business operations of high frequency & optical devices and power devices.

Renesas Technology Corp.  
Customer Support Dept.  
April 1, 2003

# M16C/80 Series

## Transferring strings

### 1.0 Abstract

This program transfers memory contents(string data) from one location to another by using a string transfer instruction (SMOVU).

### 2.0 Introduction

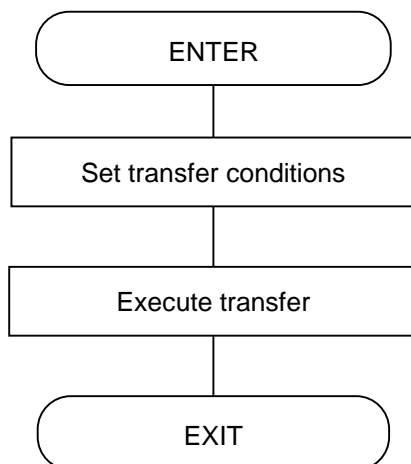
This program transfers memory contents(string data) from one location to another by using a string transfer instruction (SMOVU).

The program sets the source's start address in A0, and the destinations's start address in A1 before executing the SMOVU instruction.

Subroutine name :	-	ROM capacity :	10byte
Interrupt during execution:	Accepted	Number of stacks used :	None

Register/memory	Input	Output	Usage condition
R0	-	-	Unused
R1	-	-	Unused
R2	-	-	Unused
R3	-	-	Unused
A0	-	Indeterminate	Source address
A1	-	Indeterminate	Destination address
STRING1	Content of STRING1	Does not change	←
STRING2	Content of STRING2	Content of STRING1	←
Usage precautions			

### 3.0 Flowchart



**4.0 Programming Code**

```

*****
;
; *
;   M16C Program Collection
;   CPU : M16C/80 series
; *
;
*****
VramTOP    .EQU    0000400H           ; Declares start address of RAM
VromTOP    .EQU    0FE0000H           ; Declares start address of ROM
        .SECTIONRAM,DATA
        .ORGVramTOP                   ; RAM area
LENGTH     .EQU    16                 ; Length of area
STRING1:   .BLKB  LENGTH              ; Source area of string transfer
STRING2:   .BLKB  LENGTH              ; Destination area of string transfer
;;
=====
;   Title: Transferring strings
;   Outline: Example for using string transfer instruction
;   Input:   ----->                Output:
;   R0( )   R0(Unused)
;   R1( )   R1(Unused)
;   R2( )   R2(Unused)
;   R3( )   R3(Unused)
;   A0( )   A0(Indeterminate)
;   A1( )   A1(Indeterminate)
;   Stack amount used: None
;   Notes:
=====
        .SECTION    PROGRAM,CODE
        .ORG        VromTOP           ; ROM area
MOV.L     #STRING1,A0                 ; Sets source address
MOV.L     #STRING2,A1                 ; Sets destination address
SMOVU.B                                     ; Executes transfer of strings
;
        .END ;

```

## **5.0 Reference**

### **MCU Technical Information Homepage**

<http://www.infocom.maec.co.jp/indexe.htm>

(or <http://www.mdece.com/> , <http://www.mitsubishichips.com/products/mcu/index.html> or your local Web Site.)

### **Technical Support**

E-mail: [support@apl.maec.co.jp](mailto:support@apl.maec.co.jp)

(or your local support E-mail address. A private e-mail address should NOT be used.)

### **Data Sheet**

M16C/80 group

(Use the latest version on the Homepage: <http://www.infocom.maec.co.jp/indexe.htm>)

### **User's Manual**

M16C/80 group

(Use the latest version on the Homepage: <http://www.infocom.maec.co.jp/indexe.htm>)

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