

To our customers,

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

April 1st, 2010
Renesas Electronics Corporation

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

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

M16C/80 Series

Selecting maximum

1.0 Abstract

This program selects maximum from 2 values by using a max. select instruction(MAX).

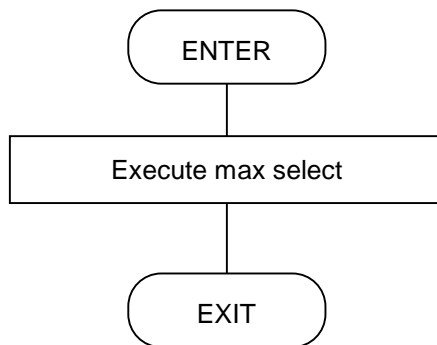
2.0 Introduction

This program selects maximum from 2 values by using a max. select instruction(MAX).

Subroutine name :	-	ROM capacity :	7byte
Interrupt during execution:	Accepted	Number of stacks used :	None

Register/memory	Input	Output	Usage condition
R0	-	-	Unused
R1	-	-	Unused
R2	-	-	Unused
R3	-	-	Unused
A0	-	-	Unused
A1	-	-	Unused
W_DATA1	Word data 1	Indeterminate	←
W_DATA2	Word data 2	Result of max select	←
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
           .SECTION    RAM,DATA
           .ORG      VramTOP           ; RAM area
W_DATA1:   .BLKW   1                   ; Source area of max select
W_DATA2:   .BLKW   1                   ; Destination area of max select
;;
;=====
;   Title: Selecting maximum
;   Outline: Example for using max select instruction
;   Input:  ----->                   Output:
;   R0()                                R0(Unused)
;   R1()                                R1(Unused)
;   R2()                                R2(Unused)
;   R3()                                R3(Unused)
;   A0()                                A0(Unused)
;   A1()                                A1(Unused)
;   Stack amount used: None
;   Notes:
;=====
           .SECTION    PROGRAM,CODE
           .ORG      VromTOP           ; ROM area
MAX.W      W_DATA1,W_DATA2           ; Executes max select
;
           .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

(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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