RENESAS Tool News

A Note on Using the Real-Time OS HI2000/3

Please take note of the following problem in using the real-time OS --HI2000/3--for the H8S family of MCUs:

- On calculating stack area size

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1. **Versions Concerned**
   HI2000/3 V1.00r1, V1.00r2, V1.1.02, V.1.02 Release 00 and V.1.03 Release 00

2. **Description**
   Formulas for calculating stack area size, which are tabulated in Appendix A (Memory size) in the user's manual, have been corrected as follows.
   The user's manual can be seen "HI2000/3 Hitachi Industrial Realtime Operating System for H8S Series"(pdf).

Title of Table	Correction
Table A.2 OS Stack Area Size Calculation	See (1) and (3) below.
Table A.3 Timer Interrupt Stack Area Size Calculation	See (1) and (3) below.
Table A.4 Task Stack Area Size Calculation	See (1) and (3) below.
Table A.5 Interrupt Handler Stack Area Size Calculation	See (1) and (3) below.
Table A.8 Trace Function Stack Area Size Calculation	See (2), (3) and (4) below.

(1)

Item	Calculation	
	For	**Read**
Stack area for interrupts	10 * LOWINTNST + 6 * UPPINTNST	10 * LOWINTNST + 10 * UPPINTNST
	8 * LOWINTNST + 4 * UPPINTNST	8 * LOWINTNST + 8 * UPPINTNST

(2)

Item	Calculation	
	For	**Read**
Stack area for interrupts	6 * UPPINTNST	10 * UPPINTNST
	4 * UPPINTNS	8 * UPPINTNST

(3)

Item	Calculation	
	For	**Read**
Stack area for undefined Interrupts	8	14
	6	12

(4)

Item	Calculation and Size(Bytes)	
	For	**Read**
Stack area used by OS	26	30