

RENESAS TOOL NEWS on May 16, 2008: 080516/tn3

## The Sound Playback System M3S-S2-Tiny Revised to V.2.00 Release 00

The sound playback system M3S-S2-Tiny, which is used for all the Tiny MCUs\*, has been revised from V.1.01 Release 00 to V.2.00 Release 00. The M3S-S2-Tiny system is available without charge.

\*The R8C/Tiny, M16C/Tiny, and H8/300H Tiny series of MCUs

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### 1. Outline of M3S-S2-Tiny

The M3S-S2-Tiny system allows you to utilize sound outputs in all of your application systems with Renesas's Tiny MCUs.\* The sound-reproducing algorithm specific to M3S-S2-Tiny efficiently compresses and expands sound at high speed using the ADPCM technique.

So M3S-S2-Tiny can be used to introduce sound output functionality to your systems where announcement or warning has ever been made by visual indications or beeps.

\*The R8C/Tiny, M16C/Tiny, and H8/300H Tiny series of MCUs

### 2. Features of Revised Product

- (1) The Renesas-specific algorithm of sound compression and expansion converts expanded 16-bit data to 8- or 10-bit data according to your system's requirements.
- (2) The compressed data of two or more sound channels can be expanded in parallel.
- (3) The processing of expansion being optimized MCU by MCU, the revised product can expand decompressed data 30% faster than the previous one. For example, MCUs of the R8C/Tiny series running at 4 MHz are capable of expanding (reproducing) sound data that has been sampled at a frequency of 8 kHz.

(4) The revised product consumes ROM and RAM about 30% less than the previous one for sound reproduction, which allows you to introduce sound output functionality using less memory. For example, about 0.4 Kbytes of ROM and 20 bytes of RAM (including the stack) are consumed in MCUs of the R8C/Tiny series.

(5) Sample programs in the type of workspace of High-performance Embedded Workshop are included. The development tools for creating workspaces for the sample programs are as follows:

- C compiler package for the M16C series (M3T-NC30WA)  
V.5.40 Release 00A
- C/C++ compiler package for the H8SX, H8S, and H8 families  
V.6.02 Release 00

For details of the product, see its datasheets on the Web site at <http://www.renesas.com/mw/s2> available on and after 5 June.

### **3. How to Apply for Revised Product**

Sample code will be placed soon.

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