



### Renesas Electronics Introduces Three New SoCs for USB/SD Audio Decoders with 88 Percent Reduced Package Size

Renesas Electronics, a premier supplier of advanced semiconductor solutions, today announced the availability of three new audio decoder systems-on-chip (SoCs), the  $\mu$ PD63530,  $\mu$ PD63910 and  $\mu$ PD63911, with an integrated USB (Universal Serial Bus) host controller. The new SoCs are ideal for use in automotive and consumer products. The  $\mu$ PD63530 device is available in a 48-pin low-profile quad flat-pack (LQFP) package that is 88 percent smaller than existing package offerings. The  $\mu$ PD63910 and  $\mu$ PD63530 SoCs allow easy software upgrading through the use of external flash memory. In addition to a host controller supporting USB 2.0 (full speed, 12 megabits per second (Mbps)), the new devices integrate all the functions needed in a audio system to decode music in three popular formats: MP3, Windows Media Audio™ (WMA), and AAC.

System features of the new Renesas Electronics SoCs will shorten the amount of time needed to develop audio systems that play audio data stored on USB memory devices or Secure Digital (SD) cards.

Key features of the new products:

*(1) 88 percent smaller package ( $\mu$ PD63530)*

The new SoCs are equipped in a compact 48-pin LQFP package (7 millimeter (mm) x 7 mm), which is an 88 percent smaller package than the company's existing package offerings.

*(2) Easy updating of software by using external flash memory ( $\mu$ PD63910 and  $\mu$ PD63530)*

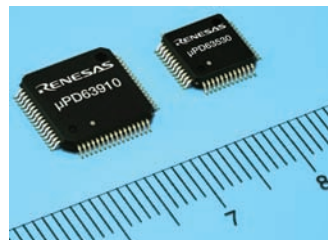
Renesas Electronics' new SoCs simplify software updates by allowing the designer to store modified versions of the system firmware in external memory. These updates are uploaded to the SoCs at boot time, allowing for future enhancement of system functions.

*(3) Wide range of USB solutions in one package*

The new devices incorporate a USB host controller (including on-chip PHY), and functions for decoding compressed audio data. All the functions required to play audio files stored on a USB memory device, SD card, or digital music player are provided in a single chip.

*(4) Built in software for USB decoding*

The standard integrated software includes USB control; MP3, WMA and AAC decoding functions; a WAV file playback function; file system control; and system control functions. Customers can develop application software running on their host processor that simply issues control commands (Play, Stop, etc), substantially reducing the amount of development time required.



More information can be found on the separate sheet for the specifications of the new SoCs, the  $\mu$ PD63530,  $\mu$ PD63910 and  $\mu$ PD63911.

**Ref. N° 1012534**