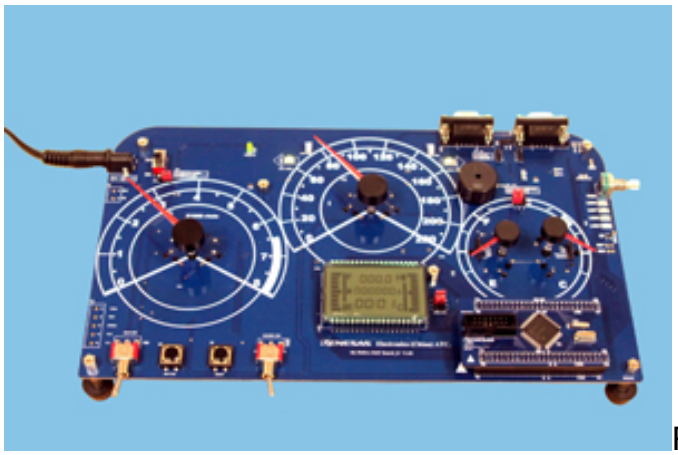
MCUs Target Instrument Cluster Systems for Two- and Four-Wheeled Vehicles



Renesas Electronics Corporation announced 21 new 16-bit microcontroller (MCU) products in the RL78/D1A Group, including 48-pin versions, which are said to be the industry's smallest single-chip MCUs for two-wheeled vehicle meter applications. The new devices with packages ranging from 48 to 100 pins are designed for cost-sensitive meter control applications in two- and four-wheeled vehicles in various markets. The newly added 48-pin package product versions of the RL78/D1A MCUs provide roughly the same functionality atabout half the size (7 mm × 7 mm) of the earlier 78K0/Dx2 with 64-pin package (10 mm × 10 mm). This enables switching from mechanical to electronic meters more practical. The newly added 100-pin package products provide enhanced functionality, with 256KB on-chip flash memory capacity and expanded LCD panel display capability of 53 LCD segments × 4 backplane lines compared with previous-generation devices featuring 60 KB flash memory capacity and LCD panel display capability of 40 columns × 4 lines. This allows vehicles to display a wide variety of vehicle information on the dashboard, including odometer and other information. This group of MCUs adds on-chip data flash for storing odometer data so that external EEPROM can be eliminated. Combining integrated flash memory, 1 to 4 channels of stepping motor controller/driver, an LCD controller/driver and a sound generator, the new MCUs make it possible to implement a meter display control system on a single chip, resulting in smaller form factors, reduced system costs and shortened system development cycles.

Renesas Electronics www.renesas.com [1]

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