First Dual Supply Voltage Cortex-M0 MCUs released

ECN Europe

NXP [1] has released its LPC1100LV series, which it says is the world's first ARM Cortex-M0 microcontroller with dual supply voltage of 1.65V to 1.95V VDD and 1.65V to 3.6V VIO.Â The LPC1100LV series offers 50 MIPS performance in a tiny 2-mm x 2-mm footprint with over three times power reduction compared to similar 3.3V VDD devices.Â The LPC1100LV platform is specifically designed for battery-powered end applications ranging from mobile phones, tablets, Ultrabooks and mobile accessories to active cable, cameras, and portable medical electronics.

â€œHigh-performance dual supply voltages generally aren't available in a single tiny package,â€ said Jan Jaap Bezemer, director of marketing, microcontroller business line, NXP Semiconductors. â€œThe LPC1100LV series uniquely combines these critical requirements for battery-powered applications in the same device and enables our customers to create low-power solutions not previously available.â€

Thanks to NXP's latest proprietary embedded Flash with 256-Byte erase sector and low leakage current, the LPC1100LV can handle linear current consumption at low clock frequency while reducing system power. The LPC1100LV also features a 5-us wake-up time.

NXP's LPC1100LV devices deliver 50 MIPS of performance compared to the 1 to 5 MIPS performance typical of 8/16-bit MCUs. This high performance allows LPC1100LV to complete demanding tasks faster and to remain in active mode for a shorter period of time, further reducing the average current consumed by the device. Given the same task, LPC1100LV's unique 1.65V-1.95V VDD low-voltage input offers more than three times power reduction compared to competitor Cortex-M0 devices using 3.3V VDD input, and more than ten times compared to typical 8/16-bit MCUs.

SOURCE [2]

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http://www.ecnmag.com/blogs/2012/02/first-dual-supply-voltage-cortex-m0-mcus-released

Links:
[1] http://www.nxp.com
[2] http://ecneurope.wordpress.com/2012/02/22/first-dual-supply-voltage-cortex-m0-mcus-released/