Ultra-Low Voltage Power Management Portfolio

ON Semiconductor, a provider of power management and broadband integrated circuits, announced an addition to the industry's premier sub-1 volt integrated circuit (IC) family.
The NCS2001 is a low power, rail-to-rail input and output CMOS operational amplifier(op amp) that provides sub-1 volt operation significant for designers using 0.9 volt operating cores in their microprocessors, DSPs or microcontrollers.
The NCS2001 is a standard building block in analog circuits. It is the latest in ON Semiconductor's line of power management ICs designed to operate at lower voltages. As board space becomes more of a design constraint, devices like the NCS2001, the MC33501 and MC33503, SMARTMOS' single rail-to-rail op amps, and the NCP 100, the first sub-1 volt voltage reference, exclusively offered by ON Semiconductor, will become invaluable in systems that require low voltage operation. ON Semiconductor guarantees op amp performance at an operating voltage below 1 volt.
With widely applicable specifications that can be used in a variety of end applications, the NCS2001 helps designers make the best use of important circuit characteristics. The device maximizes the functionality within a circuit for low supply voltage operation because it has a wider supply voltage. It can be used in portable communications devices, sensor interfaces, active filters, PCMCIA cards, ASIC input drivers and DSP interfaces. The NCS2001 is also an option for designers of battery powered applications because it will operate rail-to-rail on the input and output when the battery voltage is as low as 0.9 volts.
The NCS2001 is a solution for powering applications from a single alkaline, nickel cadmium (NiCd) or nickel metal hydride (NiMH) battery. The device's ability to operate at low voltages also supports the trend towards lower operating voltages in microprocessor, microcontrollers and DSPs by providing the option to use peripheral ICs compatible with the core voltage.
Additional features of the NCS2001 include no output phase reversal with overdriven inputs, trimmed input offset voltage of 0.5 millivolts, extremely low input bias current of 40 pico Amperes and a unity gain bandwidth of 1.4 MHz at 5.0 volts.

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