



Jazz Semiconductor Launches High Voltage BCD Process for Power Management and High Voltage Analog Markets

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NEWPORT BEACH, Calif.--(BUSINESS WIRE)--Dec. 7, 2005--Foundry Offers Bipolar CMOS DMOS (BCD) Processes to Fabless Power and Analog IC Companies to Capture More Analog Content

Jazz Semiconductor, an independent wafer foundry focused primarily on specialty CMOS process technologies, today announced the availability of 0.5 micron BCD process technology targeted for power management integrated circuits (ICs) and high performance amplifiers and drivers required for consumer applications. This recent announcement underscores Jazz Semiconductor's commitment to expand beyond its core foundation of high speed analog and RF into the emerging power management and high voltage markets.

BCD (bipolar CMOS DMOS) processes incorporate, into a single foundry process flow, what are typically three different process types: bipolar, for analog control; CMOS, for digital control; and DMOS, for handling the high currents required for managing on-chip or system power. The combined process is ideally suited to address the emerging power requirements of both consumer and handheld electronics -- however, to date, these processes have been predominantly the exclusive domain of integrated device manufacturers (IDMs).

The BCD process technology being offered by Jazz has been in fabrication for over ten years, making Jazz one of the leading foundries to bring this technology into the mainstream for fabless power and analog IC companies looking to differentiate their products through the incorporation of analog, digital and complex power functions. BCD processes provide features that enable higher levels of integration, smaller size, and better efficiency than general foundry offerings. A significant number of analog-centric fabless and fab-lite companies have already designed into the BCD processes which are used for wireless and consumer electronics such as cell phones, personal computers, DVD players and recorders, hard disk drives, portable audio players and gaming devices.

"With their core expertise in SiGe BiCMOS and RFCMOS coupled with the launch of 20/40V capability in 0.18um and now full BCD and complementary bipolar processes, Jazz has positioned itself as a leading foundry for the analog system-on-chip market for companies looking to combine complex RF circuitry with the on-chip power management," observed Morry Marshall at Semico Research. "The typical foundry is focused on capturing the digital opportunity, but the emergence of the analog fabless model and the growth in both RF and power management markets endorse Jazz Semiconductor's timely focus on the right market segment for future integration."

The Jazz BCD process is an industry proven 0.5 micron, 40V BCD process that features dual gate oxides (5.5V and 16V), complementary N- and P-channel MOSFETs with 5V, 7V, 16V, and 30V capabilities, vertical NPN (VNPN) and lateral PNP (LPNP) bipolar transistors, a variety of passive elements, and an NMOS device rated for 40V operation. This process provides a versatile platform for applications requiring BiCMOS or BCD-only process technologies and integrates 0.5 micron CMOS with high-voltage drivers, enabling the fabrication of complex smart-power chips. This process is well-suited for applications such as power management and smart power, motor control, gate drivers and microprocessor supervisory circuits.

In addition, Jazz is offering a 1.25 micron complementary bipolar process, which can safely handle 30V supplies. This process offers the advantages of multiple voltages and high density passives as

well as an NPN bipolar transistor designed for power applications and an isolated VPNP (IVPNP) for good amplifier output stages. This process is targeted for applications including high performance amplifiers, linear regulators, switching regulators, buck/boost controllers and power management.

"Our newly available high voltage BCD and complementary bipolar process technologies expand our current analog offerings and are aligned with our business strategy and technology roadmaps," said Paul Kempf, chief technology and strategy officer, Jazz Semiconductor. "This is another step toward providing our customers with all of the technologies required for complex analog sub-systems that may include RF transceivers, power amplifiers, power management, audio and other specialized functions. The mainstream fabless community will now have access to technology that can be leveraged to create innovative, more integrated power and analog products."

Jazz plans to continue expanding its roadmap for BCD smart-power, high voltage CMOS and complementary bipolar processes into its core 0.35um and 0.18um platforms which already enable highly integrated transceiver and power amplifier devices. Target end-markets include integrated power management and power control functions in cellular handsets, digital multiphase power control, power over ethernet, on-chip voltage regulation, and Class D audio amplifiers.

Jazz Semiconductor offers full design kits, models and documentation for both processes, and additional information or access to the technologies can be requested through Jazz Semiconductor at info@jazzsemi.com.

About Jazz Semiconductor

Jazz Semiconductor is an independent wafer foundry focused primarily on specialty CMOS process technologies, including High Voltage CMOS, SiGe BiCMOS and RFCMOS for the manufacture of highly integrated analog and mixed-signal semiconductor devices. Jazz's executive offices and its U.S. wafer fabrication facilities are located in Newport Beach, California and its Asian engineering, manufacturing, and sales support is located in Shanghai, China. Jazz has expanded its wafer capacity in China through manufacturing partnerships with Advanced Semiconductor Manufacturing Corporation and Hua Hong NEC Electronics Co., Ltd. Contact Jazz Semiconductor at www.jazzsemi.com.

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