Cutting-edge Semiconductor Technology Enables Mobile Devices to Offer Greater Functionality and Lower Power Consumption

SAN DIEGO and HSINCHU, TAIWAN, R.O.C., /PRNewswire-FirstCall/ -- Qualcomm Inc. recently announced that the Company is working closely with foundry partner Taiwan Semiconductor Manufacturing Company on 28 nanometer (nm) process technology. The advanced process node enables more features to be integrated into smaller chips with a high level of cost efficiency, accelerating the expansion of wireless into new market segments.

Small form factor and low power consumption are important features of Qualcomm's next generation of system-on-a-chip (SoC) solutions, including the Snapdragon™ chipset platform. The two companies are capitalizing on their long-term relationship as Qualcomm works on migrating directly from the 45nm to the 28nm node.

"TSMC prides itself on its ability to deliver cutting-edge technology platforms, including the related design ecosystems. Our 28nm platform supports the high-performance, low-power products that deliver next-generation experiences," said Jason Chen, vice president of Worldwide Sales and Marketing. "We are pleased to be working with Qualcomm, a market leader in wireless technology, on bringing these new experiences to reality."

"Qualcomm's close collaboration with TSMC has always been a key part of our ability to deliver significant advantages to our customers through the industry-leading integration, power efficiency and cost efficiency of our products — enabling them to do more with less," said Jim Clifford, senior vice president and general manager of Qualcomm CDMA Technologies.

"Qualcomm's integrated fabless manufacturing model and migration to smaller geometries will allow us to continue enabling the best mobile user experience possible on handsets, smartphones and smartbook devices."

Qualcomm and TSMC worked closely on 65nm and 45nm technologies. They are continuing their relationship into low-power, low-leakage 28nm designs for high-volume manufacturing. Delivering up to twice the density of previous manufacturing nodes, 28nm technology allows semiconductors that power mobile devices to do far more with less power. Qualcomm and TSMC are working on both high-k metal gate (HKMG) 28HP and silicon oxynitride (SiON) 28LP technologies. Qualcomm expects to tape out its first commercial 28nm products in mid-2010.

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