Philips To Improve The Performance of GSM and 3G Mobile Phones

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Royal Philips Electronics today announced a family of advanced, bulk acoustic wave (BAW) filters and duplexers that significantly enhance the performance of multimedia mobile phones. Philips' new BAW filters feature patented reduced form factor chip-scale packaging technology. This improves the performance and reception of GSM and 3G mobile phones, while reducing space in mobile handset designs. As mobile handset manufacturers add new wireless technologies and features to meet the connected consumer's demands for more entertainment and functionality on the move, the filters become an even more important part of the overall design.

"BAW is one of the most significant developments in filter design in recent years," said Scott Smyser, director and principal analyst, wireless and networking communications for the market research firm, iSuppli Corp. in El Segundo, Calif. "BAW filters outperform SAW and dielectric filters to offer smaller size, reduced in-band insertion loss and increased steepness of the filter skirts in lower and upper transition bands."

As the industry moves toward 3G voice and data services, real estate within the mobile handset is at a premium. Philips' new BAW filters and duplexers simplify the design process and also provide a critical size reduction in the RF module – typically the largest component on a mobile phone board. Philips' patented solder bumped chip-scale packaging reduces manufacturing costs of the RF front-end when compared with currently available wire-bonded BAW filters. By using

Philips' passive integration process technology, manufacturers can more easily integrate baluns, saving space, cost and time.

Philips' BAW filters (BWT190A) and duplexers (BWD190A) for US PCS 1900 MHz will be sampling in Q3 2005 with volume production planned for Q4 2005.