# MEMS Making Their Mark in Consumer Electronics

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MEMS (MicroElectroMechanical Systems) are growing up fast when it comes to their integration into all kinds of Consumer Electronics (CE), reports In-Stat/MDR (www.instat.com). And while most applications, at this point, remain fairly niche, the high-tech market research believes that all signs point to more MEMS devices moving into an increasing number of product families, and thus, moving towards higher volumes. Continued reductions in price (at lower minimum quantities) and smaller form factors have been key to the increased use of MEMS. As a result, revenues for MEMS in consumer electronics are forecast to grow at a Compound Annual Growth Rate (CAGR) of 13.2%, 2003 to 2008.

“If you’ve bought a state-of-the-art home theater projector and/or surround sound system in the past year or two, chances are pretty good that optical MEMS and accelerometers are helping to provide you with cinema-quality images and the most distortion-free sound available,” says Marlene Bourne, a Senior Analyst with In-Stat/MDR. “MEMS pressure sensors and thermopiles are hard at work in newer models of dishwashers and hair dryers, too. And, if you’re an early adopter, and lucky enough to live in Asia-Pacific or Europe, a few cell phone models have just become available that will allow you to actually interact with MEMS accelerometers – although most end-users will have no idea that that’s what they’re doing.”

A recent report from In-Stat/MDR also finds that:

The devices that are leading the way are optical MEMS, RF MEMS, and

accelerometers, with pressure sensors, infrared sensors, gyros and microphones gaining ground.

Key markets include video (led by home theater systems), wireless (namely cell phones), and home appliances of all kinds, ranging from housewares, such as robotic vacuum cleaners, to white goods, such as washing machines. But don't count out sporting goods and electronic gaming, two rapidly growing segments.

At this time, the most significant contributor of revenues is TI's DLP in home theater and digital TVs, followed by Agilent Technologies' FBAR duplexer in cell phones. In terms of unit shipments, the major contributor is Agilent's duplexer, followed closely by sensors as a whole. Both are seeing an increasingly aggressive rate of integration into CE products, so their contribution to unit shipments are expected to remain fairly balanced over the next few years, although microphone shipments could change that.

For more information please contact In-Stat/MDR.