x86 and MIPS Applications Processors to Challenge ARM’s Smartphone Market Share

LONDON -- (BUSINESS WIRE) -- ARM-based applications processors currently have a virtual lock on the smartphone market. Traditionally ARM processors have provided the best power efficiency while having comparatively less processing grunt than Intel equivalents, a formula that has worked well for smartphones so far.

But according to ABI Research principal analyst Peter Cooney, “Both Intel and ARM have been working hard to address their weaker areas and there will be a point in the next few years when the performance/power efficiency of these technologies will be equal. At that point the competition in the market should be immense. x86 and MIPS cores have entered the market in 2011, and are forecast to grow to around 18% of the market by 2016.”

The top four suppliers - Texas Instruments, Qualcomm, Samsung, and Marvell—were estimated to account for over 70% of total market revenues in 2010, and those revenues are forecast to double between 2010 and 2016.

“The critical ‘if’ in these forecasts is the performance of the smartphone market,” adds chief research officer Stuart Carlaw. “If it continues to grow at its recent rate, these market forecasts should be accurate, and we have no reason to believe that it won’t.”

While this battle royal of chip architectures takes place, average selling prices of chipsets are forecast to fall, but more slowly than might be expected. Prices will be supported by the introduction of new applications that require new processor designs: applications such as 3D video and augmented reality.

The final contest in the market is between integrated and standalone application processors. Standalone designs are more likely to be used in higher-end devices, while low to mid-range smartphones will tend to use integrated solutions to give faster time to market and make life easier for the OEMs.

A new ABI Research study, “Multi-Core Processors in Smartphones” (http://cts.businesswire.com/ct/CT?id=smartlink&url=http%3A%2F%2Fwww.abiresearch.com%2Fresearch%2F1003858&esheet=6572365&lan=en-US&anchor=http%3A%2F%2Fwww.abiresearch.com%2Fresearch%2F1003858&index=2&md5=9bee096db86eeb1b22a5b1129b572b65) provides forecasts for ARM vs. x86 vs. MIPS cores and standalone vs. integrated solutions. It also profiles and provides SWOT analyses for all major suppliers. It forms part of the firm’s Smartphones & Mobile Devices Research Service.

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