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AMD Takes to Sea

AMD announced it is acquiring SeaMicro, a company concentrating on very low power multi-CPU servers optimized for web services and similar large I/O centric cloud services. While the low power server space is growing dramatically as more web-oriented and cloud-based companies come on line, we believe the results of this acquisition is a mixed bag for AMD. It gains AMD some much needed new technology to exploit, but ultimately it may hurt its bottom line more than it helps.

AMD has struggled to keep up with its primary chip competitor, Intel. Although it does offer better graphics capability in its desktop chips (with its ATI acquired graphics capabilities), overall it continues to lose market share to Intel's better performance CPU and good-enough (and improving) integrated graphics. Further, AMD has been unable to stay competitive with Intel's continued drive to lower power chip families (e.g., Atom) and its relentless drive to reduce the power requirements in its mainline chip families (e.g., Core, Xeon). The one bright spot for AMD has been its Opteron family of server-oriented chips, where it has enjoyed a competitive edge over Intel, but even this is shrinking rapidly. Further, market dynamics indicate a very large opportunity for server-based systems that don't require high processing power, and instead concentrate on massive I/O capabilities (e.g., web-based page serving, cloud-based storage, on-line stores) and highly parallel processing oriented services (e.g., search engines). It is this fast expanding market opportunity that AMD wants to take advantage of with this acquisition.

Acquiring SeaMicro brings several benefits to AMD. SeaMicro has developed a leading ASIC capability that brings the connectivity "fabric" down into silicon, allowing many parallel processing elements to be connected and managed on reduced size and low power boards. This technology could be repurposed into on-chip capability that can extend AMD's own technology to include better parallelism and power management. Further, SeaMicro has the ability to apply their technology to any chip architecture, including ARM, which could move AMD into the low power chip space as it licenses ARM technology in the future to compete with Intel, but also with Qualcomm, NVidia, TI, etc. AMD also has acquired known talent with this acquisition, as many of SeaMicro's execs were high level ex-AMD employees, thus AMD brings back into the fold some very important technologists it can leverage going forward. Finally, this acquisition allows AMD to poke a finger in the eye of Intel, as SeaMicro was ramping up its system manufacturing around Intel chips (Atom and Xeon). No doubt, in the longer term (6-12 months) SeaMicro will be replacing many of its Intel chips with AMD devices.

But, not all is rosy with this acquisition. While AMD gains some interesting technology, it also puts AMD into the server hardware business where it competes with HP, Dell, Oracle/Sun. etc. Hardware sales are a traditionally high volume but low margin business, and it's not clear that this space will ultimately be profitable for AMD. It does allow AMD to plug its Opteron and lower power chips into the product set, increasing its chip volumes, but it may not offer the same margins that AMD is used to selling to its traditional base of OEMs. Further, despite claiming that it won't compete with customers of its chips (e.g., HP, Dell), that is exactly what it is doing. Finally, we believe SeaMicro's business will be negatively impacted longer term as the transition to AMD chips takes place. Even though AMD claims it will allow SeaMicro to plug any chips into their systems, it is likely over time that AMD will lead with its own chips, perhaps exclusively at some point, and deemphasize Intel and ARM devices. We don't believe that AMD can ultimately compete in the low power area with Intel (Atom) or ARM-based systems (e.g., Calxeda). This could severely limit the market for SeaMicro servers.

Bottom Line: This is both an interesting acquisition and a big bet for AMD as it provides it a path to a new and rapidly growing market segment, although at a high purchase price ($334M). However, it isn't clear that AMD can profitably leverage the server hardware manufacturing of SeaMicro as new low-cost and/or bigger competitors come to market. It does gain some compelling technology around fabric connectivity which it can ultimately integrate into its chips. But long term, it's likely that the SeaMicro server business will either be spun out or de-emphasized, and it's not clear that AMD will get back its substantial investment unless it can truly leverage the SeaMicro technology in its traditional chip business. How well (and how rapidly) it does this remains to be seen.

For more in-depth comments or analysis on this or other subjects, feel free to contact us.