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Pre-production samples of Qimonda's GDDR5 chips  
Overclockers Russia

## [Qimonda Takes GDDR5 to Mass-Production: More Pixels on Your LCD](#)

*Another round in the graphics battle is about to commence*

German memory specialist Qimonda has announced that it was ready to ramp up production of the next generation of memory chips in the GDDR5 family. The advent of the new solution is likely to [spark another battle](#) between AMD's graphics division and its arch-rival Nvidia, given the fact that GDDR5 memory will deliver extra graphics performance at slightly lower costs. According to Qimonda officials, the company can provide graphics card manufacturers with chips running at dazzling clock speeds of about 4.5 GHz.

"Qimonda [was the first](#) to announce samples of GDDR5 back in November 2007. We have proven the technology and we can deliver in volume production to the market today", said Glen Haley, communications director of Qimonda in North America. The memory manufacturer managed to achieve working samples of GDDR5 memory with stock frequencies of 3.60GHz, 4.0GHz and 4.50GHz. However, the next generation of memory products will require more complex PCB designs, as it comes with extra pins over the GDDR3 counterparts. For instance, while GDDR3 was assembled in a PG-TFBGA-136 package, the new products will follow the PG-TFBGA-170 standard. GDDR5 memory offers double the bandwidth delivered by previous generations of chips, which is a great advantage in a cut-throat market competition. However, the first batches of GDDR5 chips will carry a price premium, given the fact that Qimonda is the first company to market such high-end products. "If you look at the best performing GDDR3 parts today, they are running at about 2Gbit/s. With our GDDR5 we are able to at least double this data rate", said Haley. "We believe that Qimonda offers the highest performing graphics memory. There is a price/performance curve, and we are well-positioned to accommodate market demand as adoption increases", he concluded. Other top-tier memory manufacturers such as Hynix Semiconductor and Samsung Electronics are currently making the final adjustments before carrying their GDDR5 designs to mass-production.