

**SOI and Low-k in High-Volume Manufacturing - D.
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At AMD, SOI and Low-k technologies have been in high-volume production since the 130nm technology generation. This work is a summary of several challenges found when moving them from development to high-volume manufacturing in both the 130nm and 90nm technology generations. In overcoming these challenges in wafer processing and transistor development, we have achieved yield learning and performance enhancement rates equivalent to or better than conventional technologies.