

Beyond CMOS

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For CMOS, is this “The Beginning of the End, or the End of the Beginning?” Naysayers have been claiming for some time now that the dramatic progress of microelectronics in accordance with Moore's law over the last several decades is about to come to a crashing halt in a decade or so due to fundamental CMOS device scaling limits. We will give examples from novel semiconductor memory and logic devices that indicate that the future is likely to be even more exciting, with the morphing of microelectronics into nanoelectronics. We will give some examples of work being pursued in spintronics, phasetronics and novel charge based-devices in the US.

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