New chip could energize cathode television

December 9 2005

A new family of semiconductors could breathe new live into the venerable cathode-ray tube technology.

STMicroelectronics said Friday it had developed a line of chips called the HD1 family that it says will allow the use of the lower-cost CRT technology in popular flat-screen television sets.

New "super-slim" CRT displays made possible by chip advances are 30-percent thinner and comparable to the dimensions of popular liquid crystal display screens.

STM said the HD1 chips were designed to handle high breakdown voltages of up to 1,700 volts, which is required in super-slim CRT.

"Because these new displays employ pictures tubes of significantly reduced depth, the angle through which the electron beam must be deflected during each horizontal scan is increased from 110 degrees to typically 124 degrees," the company said in a news release. "That places stringent new demands on the bipolar power transistors that control the flow of current through the horizontal deflection coils."

STM said its new devices were available at a cost of between $1 and $2.