Geneva — STMicroelectronics is trumpeting the first vertical-deflection booster for slim CRTs, which provides high output-current levels and flyback voltages, coupled with low heat dissipation.

Slim cathode ray tubes (CRT) are said to combine the form-factor benefits of flat panels with all the inherent advantages of CRT technology, such as superb sharpness, bright colors, and outstanding contrast, at an attractive price. Slim tubes approximate the depth of LCD and plasma TVs for about a third of the cost, according to the company.

The vertical booster drives the vertical coil of the deflection yoke to scan the electron beam over the screen. This, in conjunction with horizontal deflection and beam modulation, creates viewable images. In slim CRT displays, very high output currents are needed to drive the coil, as the beam swings over wider deflection angles, compared to conventional CRTs. The device provides a peak-t-peak current up to 3.6 A in operating mode.

The advanced design of the vertical booster also sustains high output flyback voltages, up to 100 V, to allow short retrace times required in horizontal frequency 2(H) and high-definition TVs. The device's proprietary "external flyback," architecture decreases supply voltage and reduces the dissipation rate in the IC.
The STV8179F's heptawatt package is pin compatible with STMicroelectronics' linear vertical boosters. Samples will be available next month with volume production slated for July 2005.

Pricing ranges from 90 to 99 cents per unit in 1,000-piece quantities. Click here for the STV8179F data sheet.