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ON THE COVER: Ion-beam induced charge (IBIC) microscopy images of an 80 μ m × 80 μ m region of a working device memory field, measured using a focused 2-MeV helium ion beam. The images show regions of increasing measured charge pulses (clockwise from top left). The contrast is due partially to the underlying *p*-*n* junctions of the memory and partially to the overlying metallizations. See the technical theme that begins on page 11.

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