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Cavity QED and Atom Chips THOMAS PURDY, SUBHADEEP GUPTA, KEVIN MOORE, KATER MURCH, DAN STAMPER-KURN, University of California, Berkeley — We report our recent progress toward combining the technologies of microfabricated magnetic atom traps and high finesse optical cavities. We are pursuing a design in which one small lithographically patterned mirror is surrounded by current- carrying wires which allow for the controlled delivery of cold atoms into the cavity. The other half of the cavity is formed by a macroscopic mirror suspended above the chip. Details of the fabrication and component testing are discussed.

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