Monolithic active pixel sensors (MAPS) have emerged as the new standard in radiation detection, providing a low-cost, high-resolution alternative to the traditional hybrid approach. The advantages of integrating the sensor and readout electronics on a single chip are most prominent when fabricated in a commercial CMOS technology, combining high integration density with small pixel pitches while maintaining low power consumption. The next step in improving the radiation hardness and timing resolution of MAPS is implementing avalanche gain within the sensor itself, thereby increasing the sensor signal and relaxing the constraints for signal-processing electronics. The CASSIA (CMOS Active SenSor with Internal Amplification) sensors aim to achieve this by including a gain layer underneath the typical collection electrode in the standard Tower 180 nm CMOS image sensor process. The talk will give an overview of the design and measurement results on the first two CASSIA prototypes, comparing sensor performance using various types and geometries of gain layers, and exploring prospects for integrating front-end amplifiers and quenching circuits with the sensor, which can be operated either in low-gain or high-gain mode. Further sensor development will also be discussed, with the aim of improving gain uniformity over the pixel area and increasing the fill factor.