Combined Detection and Modulation Chips

**Biochemical Synthesis and Detection**

Contains 1000’s of pixels in a large die. Each pixel contains 100’s of transistors. Each pixel can detect voltages and currents as well as drive voltages and currents. CMOS, Low noise, Low systematic noise

Biochemical Synthesis and Detection, for millions of pixels. This is a CMOS pixel designed in both 0.25um (shown) and 0.18um process for a very high density array.

**Photonic Detector Modulator**

This chip contains a photo-detector and associated readout electronics and combines a per pixel modulator circuit. The modulation is for a proprietary detection technique. The chip was designed in a low cost 0.6um CMOS technology.

**MEMs High Voltage Driver and Detector**

This chip contains high voltage driver circuits, and sensitive low noise sense circuits. The design is quite a unique combination of technology areas of which we have a lot of experience. It is used in an innovative memory product and includes critical components of the read and write channel including an extremely low noise amplifier. 0.18um CMOS process