

For Immediate Release

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## **Industry's First Multi-Layer Microfluidics Wafer Mastered**

**Cushing, OK (May 12, 2015)** - Doug Carson & Associates, Inc. (DCA) and Synchronicity Microfluidics are pleased to announce the industry's first multi-layer microfluidics wafer has been mastered using a DVD-class laser beam recorder. Synchronicity made the wafer using DCA's G2 Imaging formatter. Each layer of the dual-layer CAD image was mastered independently. Between layers, the wafer was removed from the turntable, developed, etched and recoated with photo-resist. Patent-pending technology in DCA's G2 Imaging formatter maintains image alignment between runs.

The microfluidics design includes very small features such as 160-micron channels and 750-micron wells. Extremely high resolution images are used by DCA's G2 during the mastering process. For this design, each layer had 150 billion pixels and was mastered at 76,200 DPI. One layer was etched to 50-micron depth while the second layer was 200-microns.

"Now that multi-layer wafers can be manufactured using DCA's G2 Imaging formatter with DVD-class laser beam recorders, medical science companies have access to a faster, less expensive alternative to other microfluidics manufacturing approaches such as micro-machining and mask/maskless lithography", said Doug Carson, DCA's founder.

## **About DCA, Inc.**

DCA, Inc., Doug Carson & Associates, (http://www.dcainc.com) is the industry's leading provider of signal processing and format creation technology for the optical disc manufacturing industry. Since 1988, Optical Disc manufacturers have relied on DCA's pre-mastering, mastering and verification products. Format creators have come to rely on DCA for anti-piracy ideas and format design tools. Content producers now begin to rely on DCA for digital video analysis tools, including file-based verifiers.

## **About Synchronicity Microfluidics**

Synchronicity Mastering Services was organized as a Limited Liability Company in July 1999, meeting a significant need in the optical disc industry for an independent mastering facility. Synchronicity has become the premier independent CD/DVD/BD along w/DVD+R mastering facility for the North American optical disc industry. The company has four laser beam recorders, 23 plating cells, and plenty of redundancy in all critical manufacturing processes.

Synchronicity Microfluidics offers Microfluidic / LOAC and many other products mastering with the same production efficiencies, quality control, and turn times that made it a leader in the optical disc industry for 15 years.