

ABN 73 613 509 041 Level 3, 62 Lygon Street Carlton VIC 3053 Australia

www.sensera.com | +613 9824 5254

25 October 2018 **Australian Securities Exchange (ASX) Announcement** 

## Sensera Expands Microfabrication Capabilities to Meet Growing **Customer Demand**

Sensera Limited (ASX: SE1, "Sensera" or "the Company"), an Internet of Things (IoT) solution provider that delivers sensor-based products transforming real-time data into meaningful information, action and value, is pleased to announce that the Company has acquired and qualified additional thin-film processing equipment including a dicing saw, a wafer bonder and an electroplating cell to meet the growing customer demand in the MicroDevices segment.

The new dicing capability operates under full wafer and custom situations, featuring a positional accuracy down to 1 µm and a cutting speed of 300 mm/sec. It supports custom shaping of silicon, sapphire, Pyrex, quartz, ceramics and metals.

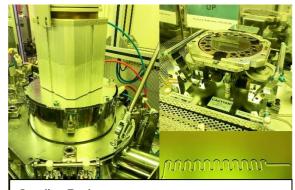
Tim Stucchi, GM/COO of the Sensera MicroDevices division, said:

"We are very pleased to expand our production capabilities, closely aligning ourselves with growing customer demand. This new production equipment substantially broadens our tool set and enables greater vertical integration and process control."

Ralph Schmitt, CEO of Sensera, said:

"To drive down cycle times, improve quality control and reduce costs, our fab requires ongoing capability upgrades. Our objective here is to bring previously outsourced processes back in-house and to expand our internal capability to develop and produce complex MicroElectroMechanical System products and solutions.

"The new dicer, bonder and electroplating cell are essential components that Sensera needs to enable innovative development programs and commercial volume customer shipments."



**Bonding Tool** 

– fluidic channel, 1mm wide with glass bonded lid



Automated Dicing Saw

MEMS pressure sensors shown (0.235mm diam.)

Operating under high vacuum, precisely controlled temperature and high-pressure conditions, the new wafer bonder facilitates extremely demanding applications. Eutectic, thermal compressive, adhesive and anodic bonding processes with a wafer alignment accuracy of 2 µm have been smoothly integrated into Sensera's qualified processes, thus enabling the Company to offer many wafer level packaging (WLP) solutions to its current and future customers in multiple applications and market spaces:

- ✓ Microfluidic devices for bio-analysis, medical research and drug development
- ✓ Pressure sensors for human implantable surgical devices
- ✓ Precision accelerometer and gyroscope devices for geo-positioning
- ✓ Micro-mirror devices for laser based Automotive self-driving applications

The wafer bond chamber is configurable to process small coupons (from ~10 mm<sup>2</sup>) and wafer diameters from 25 mm (1") up to 200 mm (8").



**Automated Plating Tool** - now creating features as small as 0.00225 mm The electroplating cell is able to plate and electroform wafers or discreet parts up to a size of 200 mm (8"). Typical applications of this capability include MEMS, integrated circuits on silicon, gallium arsenide and similar glass-type substrates. Sensera's qualified processes on this cell achieve exceptionally low residual stress and enable tight thickness uniformity control.

## For more information, please contact:

## **Ralph Schmitt** Chief Executive Officer +1 781 404 6500

info@sensera.com

Tim Dohrmann **Investor Relations** +61 468 420 846 tim@nwrcommunications.com.au

## **About Sensera Limited (ASX: SE1):**

Sensera is an Internet of Things (IoT) solution provider that delivers sensor-based products transforming real-time data into meaningful information, action and value. The company designs and manufactures hardware and software across the vertical technology spectrum from unique structures as MicroElectroMechanical Systems (MEMS) and sensors, as well as wireless networked systems and software that when combined, drive an entire IoT platform solution.

Shares in Sensera Limited (ASX: SE1) are traded on the Australian Securities Exchange (ASX). For more information, please visit our website: www.sensera.com.

Any forward-looking statements in this announcement are not guarantees of future performance and involve known and unknown risks, uncertainties, assumptions and other important factors, many of which are beyond the control of the Company, its directors and management.