



**JABIL**

## ADVANCED ASSEMBLY FACT SHEET

### WHAT IS ADVANCED ASSEMBLY?

Jabil's Advanced Assembly focuses on developing new integration capabilities for macro & micro scale electro mechanical products as well as interconnect and wafer level technologies. We focus on providing customers the with next-generation assembly capabilities needed for growth within many diverse markets.

Advanced Assembly expertly utilizes the latest materials and processes used to interconnect parts and differentiate products at a micro and macro scale. Jabil also offers process solutions and product development support for wafer level electronics with wafer assembly for sensors, photonics, and integrated wearable applications. The Advanced Assembly team develops capabilities that translate directly to industrial manufacturing process innovations, in Macro Assembly, Micro Assembly, Interconnect and Wafer level

### WHY IS ADVANCED ASSEMBLY IMPORTANT?

Enabling miniturization, wearbles and performance

- Components, devices and products must be smaller, lighter, thinner and more flexible.
- The wearables trend is fast paced and is moving traditional products to be hands-free, environmentally aware, and connected. Advanced assembly capabilities solve user comfort challenges, accessibility/portability barriers and temperature/energy consumption concerns by fitting full functionality in a smaller footprint.
- Using Advanced Assembly techniques to design, develop and manufacture your product opens up new possibilities of integrated circuit functions.
- Consumer demand and the Internet of Things trend are dictating that all your products, even non-traditional ones, have user interfaces. Advanced Assembly capabilities are critical to redesigning your product with HMI in mind.

### HOW DO CUSTOMERS BENEFIT FROM ADVANCED ASSEMBLY?

- We reduce component size and weight, while cutting power consumption and boosting performance. We give you a smaller, flatter, and more flexible profile with cutting edge materials and processes.
- We can take your product from static to portable thereby changing where your product can go and how it can function. This opens up new markets and new revenue models.
- Our smaller components and interconnect devices give more industrial design freedom. Product designers no longer have to compromise on look-and-feel to accommodate bulky PCB's
- Our wafer level packaging shortens the length of the interconnections between chips and minimizes switching latency and minimizes electrical noise.
- We can integrate temperature measurement/control directly onto a chip. Without the thermal resistance of a packaged die, integrated temperature sensing gives more accurate temperature measurement.

### HOW IS JABIL INVESTING IN ADVANCED ASSEMBLY?

Blue Sky research lab space and expert talent

- Blue Sky San Jose Research Center
  - Class 100 & 10,000
  - Die bond, wire bond,, surface treatment, test and analysis
  - Wafer Level equipment
- Glass Research and Advanced Integration – Surface prep, micro integration and macro integration
- Assembly programs
- HMI strategy
- Ecosystem and process development.
- 3D pick and placement
- 3D inspection and production transfer
- Advanced package handling
- Continually hiring new talent and building a team of experts