As one of the largest test outsourcing providers, STATS ChipPAC offers a full suite of test platforms and engineering services to support a broad range of mixed signal, RF, analog and high-performance digital semiconductor devices for the communications, digital consumer and computing markets. STATS ChipPAC combines operational efficiencies with proven test capabilities to achieve the lowest cost of test with the highest possible throughput and faster time-to-market.
STATS ChipPAC’s experienced R&D and test teams have helped customers reduce their engineering burdens and prepare products for high volume manufacturing in the shortest time possible. Our world class test development and test program migration services include:

- Test program development, debug, optimization and validation
- Device characterization
- First silicon characterization (Wafer Probe)
- Probe card design, fabrication and qualification (Wafer Probe)
- Load board design, fabrication and qualification (Final Test)
- Prototype evaluation
- Multi-site migration to higher parallel testing
- Test program conversion to new tester platform
Wafer Probe

Wafer Probe is a critical step in semiconductor manufacturing due to the need to minimize device throughput, yield and quality in order to reduce the overall cost of test. STATS ChipPAC operates some of the highest precision probers available in the industry. Our probe services include, but are not limited to:

- Probe card design, development and maintenance
- Copper pillar bump wafer probe
- Known Good Die (KGD) testing for System-in-Package
- Prober network customization to support real-time data
- Fine-pitch, RF, bump, thin wafer probing
- Multiple site (x32) probing
- 3 row staggered / sample
- 28nm and 40nm fabrication wafer probe
- Direct Docking Technology
- 300mm (12”), 200mm (8”) or 150mm (6”) wafer probing

Final Test and Post Test

Every stage of the manufacturing process is critical and test automation is an important differentiator. STATS ChipPAC has established a Next Generation Final Test Cell and highly automated Post Test systems to achieve extremely high throughput while maintaining a zero defects standard of quality.

Whether you require production with minimum or full engineering support, STATS ChipPAC can provide:

- Prototype verification and 1st silicon debug
- Multi-site implementation: x16 (Digital), x320 (Memory), x8 (Mixed Signal), x8 (RF)
- Film Frame Strip Test
- Testing advanced wafer level packages
- Testing silicon-based Integrated Passive Devices
- Yield enhancement with monitoring and feedback
- Test time optimization
- Wafer sort to final test correlation feedback
- Quick-turn failure analysis
- Reliability services (i.e., ESD testing, latch-up testing and operating life testing)
- Handlers with Active Thermal Control (ATC)

STATS ChipPAC’s Post Test services include Lead Scan, Final Marking, Tape and Reel, Burn-in, Bake and Dry Pack, System Level Test and drop shipment as well as other custom post test solutions.

STATS ChipPAC’s fully-automated Post Test processes maximize throughput while minimizing manual handling to ensure that your devices are shipped on time. We offer a single, integrated approach to managing supply chain logistics so our customers’ product is efficiently manufactured in multiple geographies while meeting cost targets and aggressive cycle times.
Integrated Test Management System (ITMS)

STATS ChipPAC’s test capabilities include an innovative Integrated Test Management System (ITMS) that efficiently and effectively integrates the test systems and business processes with all of STATS ChipPAC’s factories to achieve the highest levels of quality and throughput with a lower cost of test.

ITMS automates test systems and manufacturing processes in order to eliminate manual steps, reduce cycle time and provide an automatic closed-loop control process with real-time data analysis and monitoring. ITMS helps STATS ChipPAC’s customers gain significant yield improvements as well as the design-in flexibility of having their devices tested in any of our factories while receiving the same successful results.

Flexible Test Services to Meet Your Needs

STATS ChipPAC specializes in full turnkey test solutions that are supported in multiple geographies. Since 1999, we have provided world class test development and proven test experience in RF, mixed signal, digital, memory and integrated system-on-chip (SOC) devices. We also offer Wafer Sort only or Final Test only options to meet your unique test requirements. If you are looking for a test provider who can deliver a lower cost of test, proven test quality, design flexibility, higher yields, reduced cycle time and a broad geographic footprint, STATS ChipPAC has a solution for you.

**STATS ChipPAC Ltd.**

**Corporate Headquarters:** 10 Ang Mo Kio Street 65, #05-17/20 Techpoint, Singapore 569059. Tel: (+65) 6824 7777

**US Headquarters:** 46429 Landing Parkway, Fremont, CA USA 94538 Tel: (+1) 510 979 8000

www.statschippac.com