

ACT: The AS6171 Experts

The first American test lab fully accredited to all AS6171 methods required to test devices to the moderate risk level.

SAE released AS6171, its standard for laboratory test methods for identifying suspect counterfeit EEE parts, in late 2016. Almost immediately thereafter, the quality and engineering staff at ACT began studying the burgeoning requirements and trained and equipped itself to meet all AS6171 responsible tester qualifications.

AS6171 provides uniform requirements, practices and test methods for test facilities to follow and is more stringent than standards SAE had previously released for resellers (AS6081) and manufacturers (AS5553). AS6171 is now on its way to becoming the leading quality and counterfeit mitigation standard. Not only are major aerospace primes beginning to require compliance; according to SAE, the next iteration of AS6081 will be more closely aligned with AS6171. Currently, Advanced Component Testing is one of a select few ANAB-accredited ISO/IEC testing labs in the world that can perform (on site) all AS6171 test methods required to the moderate risk level.

As compared to AS6081, the default standard since its 2013 release, SAE AS6171:

- Requires additional inspections and tests including aggressive acetone, mechanical scrape, XRF material and SEM surface analysis, decapsulation on passives, and DC electrical testing
- Defines unique test sequences for its five defined risk levels
- Provides more details on how to perform inspections and tests
- For insight, read our white paper: *AS6171 Comparison to AS6081*

AS6171 Test Methods

Documentation Inspection
Packaging Inspection
External Visual Inspection
(including via SEM)
Marking Permanency Solvent
Two-tier Acetone
1 M2P Solvent
Commercial Solvent
Mechanical Scrape
XRF for Lead Finish
XRF for Materials
X-Ray Inspection
Delid/Decap Inspection

As part of ACT's ISO 17025 audit, the facility has been accredited to AS6171 (as well as AS6081, IDEA-STD-1010B and MIL-STD-202G) for various test methods. See certificate for all details.

**For more information about our services or to request a quote,
phone 631-676-6390 or visit www.actestlab.com.**