



ZIN Technologies

ZIN Manufacturing and Fabrication Capabilities



Mechanical, Electrical & Additive Manufacturing Capabilities

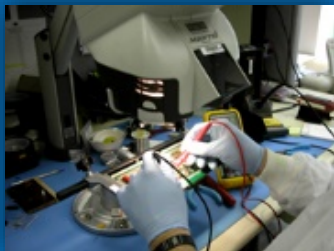
All manufacturing at ZIN is managed through our ZIN AS9100C Quality Management System (QMS). The Manufacturing Work Flow Process (P09014) is managed through the QMS. This process has been applied to Class A/B Mission critical hardware.

The ZIN QMS includes an Approved Vendors List (AVL) for the procurement of non-catalog items and services such as mechanical parts manufacture, EEE parts, and PWB manufacture. Suppliers must be audited by ZIN QA to be added to the AVL.

ZIN Certifications:

ZIN has certified trainers to the NASA and IPC standards

- NASA-STD-8739.1
- NASA-STD-8739.2
- NASA-STD-8739.3
- NASA-STD-8739.4
- 5GSFC-WM-001
- J-STD-001 Space Addendum
- IPC-A-600



Our manufacturing and fabrication capability includes a machine shop and pick and place line managed through material and process control plans, SOPs, EEE parts control, contamination control, risk management, and engineering conformance management and review.

Mechanical - ZIN's in-house mechanical manufacturing facility produces concept, breadboard, prototype, and flight hardware. ZIN also provides production of prototype and flight hardware, and the capability to rapidly modify parts to meet changing requirements and schedule. Our labs are equipped with all standard test equipment, laminar flow and optics benches, and two thermal test chambers. A Class 100K Clean Room with 10K laminar flow benches provide workspace for assembly and testing of contamination-sensitive components.

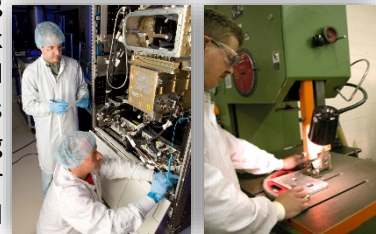
Electrical - ZIN's in-house electrical assembly facility includes stenciler, multi device pick-and-place machine, 8 zone oven, selective soldering machine, lead forming, solder stations, rework stations, reflow for electrical assemblies and batch board washing machine. Our facility allows assembly of surface-mount technology, including BGA, CGA, and leadless chip carriers. For elements that cannot be hand-soldered and visually inspected, ZIN has rework and reflow capabilities. These elements are inspected with ZIN's in-house X-ray machine. ZIN has certified trainers and technicians to the NASA, J, and IPC standards, certified to NASA-STD-8739 for cabling, staking components, and conformal coating. ZIN has also assembled and tested CGAs to GSFC-STD-6001.

Our manufacturing and fabrication capabilities include electrical assembly, machine shop, and additive manufacturing facility (metal alloys and polymer).

ZIN maintains 18,000 square feet of secured manufacturing floor space.

Bonded storage, fabrication, assembly, and testing activities occur in temperature and humidity controlled areas.

ZIN is committed to Lean manufacturing and has implemented 5S practices (sort, set in order, shine, standardize & sustain) within our manufacturing facility.



ZIN Technologies Inc.

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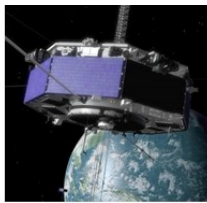
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Founded in 1957, ZIN provides multidisciplinary engineering services to NASA and the aerospace industry and has managed the development of space flight and ground system hardware (aerospace/space systems) from formulation, design, and development through to fabrication, integration, testing, verification, and mission operations.

Our experience includes the development and validation of new technologies (sensors, inertial navigational measurement units (IMUs), composites, advanced acoustic resonant attenuation, optics, power, additive manufacturing and wireless/RF), ISS research investigations, space launch systems (Orion, commercial crew/resupply), satellite (IMU) accelerometer systems, and space based human research projects enabling future space and science missions.



Focus on Quality - Certified and Compliant with Industry and Government Quality Standards



ZIN Technologies, Inc. is an experienced developer of ground and flight systems for manned and unmanned aerospace applications. Marking history for almost five decades, we have provided integrated hardware and software development products and services to NASA, DoD and Fortune 500 companies.


OUR PRODUCTS & SERVICES

	SPACE SYSTEMS INTEGRATION & OPERATIONS		MANUFACTURED PRODUCTS		ADDITIVE MANUFACTURING
	ENGINEERING & TECHNICAL SERVICES		HARDWARE & SOFTWARE DEVELOPMENT		HUMAN HEALTH & MEDICAL DEVICES

Research & Technology



Systems Concepts




Systems Design & Analysis



Engineering & Manufacturing



Systems Assembly



Systems Integration & Test



Management & Mission Operations



Logistics & Sustainment



- Minority Owned-SDB**
- DCAA Approved Forward Pricing**
- AS9100 certified**
- Headquartered Cleveland Ohio**
- Experienced Team of scientists, engineers, designers, and technicians**
- Award Winning Capabilities**

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