

INNOVATIVE ELECTRONICS BOX BUILD

Strength in Flexibility with High-Velocity Manufacturing

SemiGen



- Define the product's specifications, features, and requirements
- Create detailed assembly and manufacturing instructions

Component Procurement

Source and procure all necessary components, including PCBs, connectors, switches, displays, cables, power supplies, and any other electronic parts required for the product

Pre-Assembly Preparation

- > Prepare the enclosure or box that will house the components
- Prepare any necessary mechanical components, such as fasteners, brackets, and mounting hardware

Component Installation

- Assemble the printed circuit boards and other electronic components into the enclosure following the assembly instructions
- Secure components in place using appropriate methods, such as screws, clips, or adhesives

Cable & Wire Harness Assembly

- Route and connect cables and wire harnesses between components per design
- Secure cables / wires to prevent interference, ensuring proper cable management

Power Supply Integration

- Integrate power supplies, batteries, and charging circuits if required
- Ensure proper connections and safe integration of power sources

Mechanical Assembly

- Assemble any mechanical parts required for the final product, such as housing, covers, and structural components
- Secure mechanical components using appropriate fasteners

Calibration & Testing

- Calibrate sensors and components that require precise measurements
- > Perform functional testing ensuring all components are working
- Conduct electrical testing to verify proper connections and functionality

Quality Control

- Inspect the assembled product for any defects, errors, or discrepancies
- Ensure that the product meets quality standards and specifications

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» IPC-A-600

» IPC-A-610

» IPC-WHMA-A-620

» ANSI/ESD S2020

» MIL-STD-750, 883, 1686C » MIL-PRF-38534, 38535,19500

INDUSTRY STANDARDS

» J-STD-001 (Including Space Addendum)

AS**9100D**(2016) CERTIFIED

SO9001:2015

13485:2016



State-of-the-art Facilities

West Coast | San Jose, CA

55,000
7
AOI, FP, SPI, X-Ray, ICT
Class 10k
Yes
Yes
Yes

East Coast | Londonderry, NH

Sq-Ft:	43,000
MicroE Cells	4
Inspection	XRF, X-Ray
Clean Room	Class 10k (15k sq-ft)
RF Products	Yes
Foundry	Yes
QMS	Yes
ITAR	Yes

Certfications and Standards

CERTIFICATIONS

Aerospace

» AS9100:2016, Rev D

Defense

- » Cybersecurity: CMMC
- » NIST 800-171

International Standards

» ISO9001:2015

Medical Devices

» ISO 13485: 2016

MIL/ AERO REGISTRATIONS

ITAR

» International Traffic in Arms Regulations

SAM

» Systems for Award Management

OASIS

» Online Aerospace Supplier Information System

GIDEP

» Government Industry Data Ex change Program

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