

Honeybee Robotics provides advanced products and development services that enable high-performance space systems. Our contributions are designed to provide reliable solutions in cost-effective packages whether our customers need enabling technologies, flight-proven components, or electromechanical systems tailored to the constraints of a specific mission.

Honeybee Robotics has extensive experience creating electromechanical systems to perform reliably in the harsh environment of space. We pride ourselves on developing efficient, tightly integrated products, often on accelerated schedules to meet mission-critical milestones. In over 25 years supporting space platforms, Honeybee has developed expertise in applications including:

- Motors and actuators
- Power and signal transfer
- Explosive and non-explosive release mechanisms
- Solar array drive assemblies and control electronics
- Solar array deployment systems
- Attitude determination and control
- Dexterous manipulators
- End-effectors for manipulation
- Docking and coupling systems
- Robotic perception and control systems
- Human-robot interface systems

Our flight services include new product development, build-to-print manufacturing, and design consulting. We have the responsiveness to complete projects quickly, and the expertise to build complex components. Through decades of experience as a flight hardware supplier, we know how to build unique and reliable solutions around the constraints associated with space systems to optimize mass, power, volume, reliability, and autonomy.

SYSTEMS ENGINEERING	MECHANICAL DESIGN	ELECTRONICS DESIGN	SOFTWARE DEVELOPMENT	PRODUCTION	DESIGN VALIDATION
Specification development & configuration management Engineering cost, schedule & risk analysis	Solid modeling & 3D design Static, dynamic & thermal FEA	Motor control electronics Twist capsule & slip ring design Analog & digital PCB design & layout	Embedded software and driver development Data acquisition, processing & visualization tools	ISO9001 & AS9100C certified process qualification & control Assembly in Class-100 & Class-10,000 clean environments	Full V&V planning & procedure development Environmental testing (thermal-vac, vibe, and EMC/EMI)

Honeybee Robotics is a wholly-owned subsidiary of Ensign-Bickford Industries.

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