e1ectr0n™

BACKGROUNDER

e1ectr0n LAUNCH BACKGROUNDER

The pr0t0n™ robot arm is designed and manufactured in Hillsboro, Oregon by e1ectr0n, Inc. for small manufacturing businesses. This robot is designed especially for businesses dealing with a high-mix/low-volume manufacturing process. Typical uses are repeated tasks such as soldering, driving screw and bolts, parts binning, product packaging, small product assembly; and specialized activities for electronics manufacturing service companies (EMS) such as solder masking and conformal coat masking.

The first use and design for the robot was to meet the requirements of Axiom Electronics, an EMS company based in Hillsboro, Oregon. The robot showed it could be useful and e1ectr0n was formed to continue development and eventual production. The e1ectr0n headquarters and production facility are co-located with Axiom, ensuring that e1ectr0n has access to production-level uses and tests.

Q. How long has the pr0t0n™ robot arm taken to develop?

A. Formed May 2018

Q. Is the pr0ton™ robot arm upgradeable?

A. Yes, vision, end effectors, fixturing, stands

Q. What software comes with the pr0t0n™ robot arm?

A. Onboard software to communicate with the external environment and a programming API. And external user interface that runs on computer Windows or tablet Windows

Q. What is the out-of-box experience?

A. There are three current application models

- Dispense - pr0t0n robot, including fixtures, pumps, end effector, and software for peelable masking of circuit boards prior to reflow.
- Torque Screwdriver – pr0t0n robot, including screwdriver with torque settings, screw presenter, and software.
- Gripping - pr0t0n robots with or without grippers

Q. What additional hardware can be used with the pr0t0n™ robot arm?

A. Game controllers, torque driver, screw presenter, fluid dispense, solder head, grippers, and fixture plate and rails.

Q. What tasks is the pr0t0n™ robot arm currently performing?

A. Dispense and torque driving.

Q. How do cameras assist the robot arm?

A. Applications for position detection associated with electronics manufacturing (locating fiducials in EMS)

Q. When is the first product available for public purchase?

A. Now with delivery in the fall.

Q. How do I buy the pr0t0n™ robot arm?

A. pr0t0n is currently available directly from e1ectr0n.

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