



## TECHNOLOGY

# Fiber Optic Breadboard

## OVERVIEW

Laboratory space utilized in optics research is often an expensive commodity. Unfortunately, the majority of platform equipment used in laboratories is planar in nature and not modular. This planar arrangement tends to consume a lot of valuable lab space and often results in confusing layouts that make troubleshooting during experiments very difficult. There is a lack of platform equipment available in the industry that allows for efficient and simple 3-D modular stackability that effectively increases the amount of available lab space.

A researcher at the University of Maryland has developed a novel fiber optic breadboard possessing several advantages over the current state of the art. The new breadboard consists of a modular 3-D assembly of platforms with various patterns machined in them such that placing, holding, and formatting fiber optic experiments is accomplished in compact space. This 3-D nature allows for the conservation of valuable laboratory "real estate". The new breadboard also aids in final component visualization and comprises a quick clamp system for assembling and stacking the platforms while maintaining structural integrity. The modular nature of the breadboard allows the platforms to be marketed and sold individually for use on existing laboratory tables and also as complete packages with accompanying PC stands and standard electronic component mounting racks. Although the use of the breadboard is intended for fiber optic research, the breadboard may also be used for free-space optics, remote sensing, and smart structures research.

A patent is pending on this technology. For additional information, please contact Office of Technology Commercialization, University of Maryland, College Park. Telephone: (301) 405-3947. E-mail: [otc@umd.edu](mailto:otc@umd.edu)

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## Additional Information

### INSTITUTION

University of Maryland, College Park

### CATEGORIES

- Microelectronics

### EXTERNAL RESOURCES

- [US Patent 6,857,628](#)

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