

# Silicon Designs Introduces High-Precision MEMS DC Calibration Reference Accelerometers

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**FOR IMMEDIATE RELEASE - June 14, 2022, Kirkland, Washington, USA** – Silicon Designs, Inc., today announced the global market launch of its [Model 2290 Series](#), a family of high-precision, single axis MEMS DC calibration reference accelerometers.



Offered in four unique full-scale acceleration ranges of  $\pm 5$  g,  $\pm 10$  g,  $\pm 25$  g, and  $\pm 50$  g, the Series offers a precise, reliable, and accurate means of determining the sensitivity and frequency response characteristics of unknown MEMS DC accelerometers during end-to-end calibrations and related performance verifications. Within these [applications](#), the Model 2290 serves as the "Reference Standard," either for performance specification comparisons, or as an actual substitute for the working accelerometer. Beyond such verifications, the Series also supports a variety of zero-to-medium frequency instrumentation applications ranging from 2000 Hz to DC, including both center of gravity acceleration measurements and equipment calibrations.

The rugged design of the Model 2290 Series incorporates a high-precision, non-ITAR controlled, tactical-grade MEMS inertial sense element (U.S. Export Classification ECCN 7A994) of similarly rugged design to that which may be also found within Silicon Designs' own industry best-selling [Model 1527 Series](#). The MEMS DC accelerometer chip and other internal components of the Model 2290 are housed together within a 1" square, epoxy sealed, anodized aluminum case with 10-foot integral cable. The cable further terminates into 4-wire pigtails for seamless compatibility with most industry data acquisition systems. An initial calibration certificate is supplied with each Model 2290 accelerometer. Units are both REACH and RoHS compliant.

The Model 2290 Series is relatively insensitive to temperature changes and gradients. Onboard voltage regulation and an internal voltage reference eliminate the need for precision power supplies. The anodized aluminum case is easily mounted via screws, adhesive, or a mounting magnet. As the reference accelerometer is non-ferrous, its performance remains otherwise unaffected by magnetic mounting techniques. Recommended optional accessories for the Model 2290 Series, also available from Silicon Designs, include the [Model 2230 triaxial mounting block](#); [Model 2232 magnetic mount](#); and [Model 2235-BLK stud adaptor block](#).

All Model 2290 high-precision, single axis, MEMS DC calibration reference accelerometers are designed, manufactured, performance-verified, and calibrated in-house at the company's own global corporate headquarters and [ISO9001:2015 certified](#) R&D center, located just outside of Seattle, Washington, USA. Silicon Designs is also a 100% US-based and veteran-owned small business, and with its quality management systems certified to ISO9001:2015. For detailed specifications, pricing, or additional information about the Model 2290 Series, or other MEMS DC accelerometer modules and chips offered by Silicon Designs, please [click here](#).

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### **About Silicon Designs, Inc.**

Since 1983, Silicon Designs has served as renowned global industry experts in the design, development, and manufacture of commercial- and inertial-grade MEMS DC accelerometer modules and chips with integral amplification for zero-to-medium frequency instrumentation requirements. By serving as the OEM of its own accelerometer chips and modules, Silicon Designs is able to ensure that each model in a particular series is made to be virtually identical, and thereby allowing for seamless customer performance upgrades. It further allows the company to ensure that its products can remain of consistently high quality, may be easily modified to customer exacting standards, and yet are still offered with highly competitive lead times and pricing.

From the company's earliest days, of developing classified components under a U.S. Small Business Administration Small Business Innovation and Research (SBIR) grant, to its later Tibbetts Award and induction into the Space Technology Hall of Fame, the team at Silicon Designs applies nearly four decades of acquired know-now, valued-added R&D innovation, and applications engineering expertise into all of its finished product designs. For more information, visit [www.silicondesigns.com](http://www.silicondesigns.com).