



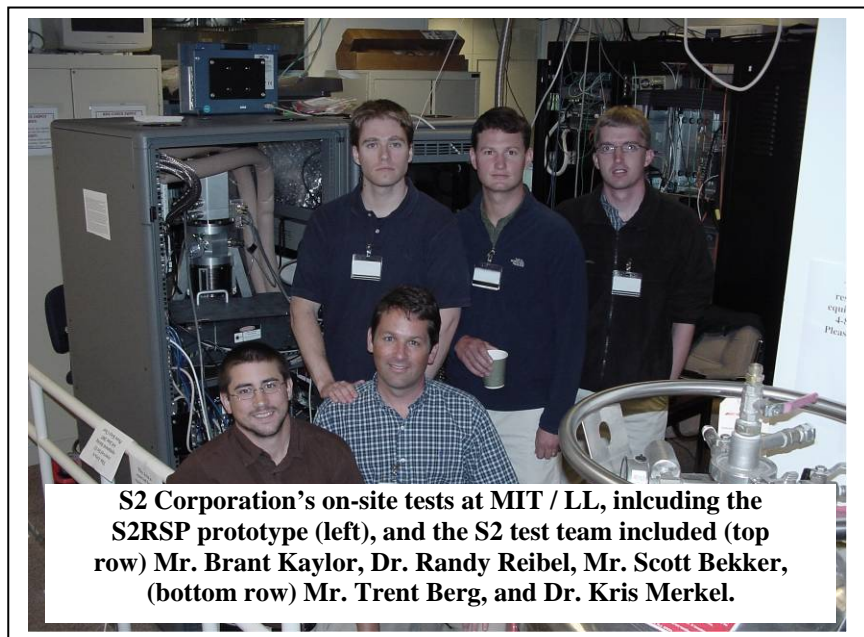
## S2 CORPORATION SUCCESSFULLY TESTS RADAR SIGNAL PROCESSING PROTOTYPE HARDWARE

July 23, 2007

Bozeman, MT – S2 Corporation announces that it has completed a successful laboratory testing effort of its S2 material based Radar Signal Processor (S2RSP) prototype hardware at Lincoln Laboratory in Lexington, MA. Lincoln Laboratories (LL) is a federally funded research and development center operated as a part of the Massachusetts Institute of Technology (MIT) in support of several U. S. Government funded efforts. The external laboratory testing effort was arranged by and conducted for the United States Army Space and Missile Defense Command (SMDC) to assess the viability of the S2RSP. SMDC manages a multi-year Phase III Small Business Innovative Research (SBIR) contract to S2 Corporation for the development of the S2RSP device.

The testing effort was the culmination of nearly four years of a focused research and development (R&D) effort by S2 Corporation personnel. The prototype hardware was designed based on the results of the R&D effort over three years, and was assembled over the past year. The hardware offers wide instantaneous bandwidth processing of waveforms with arbitrary modulation format and large range extents. After the test data has been analyzed, a full report will be issued by LL personnel. One outcome could be the assessment of suitability for follow on testing efforts. The radar test facilities of immediate interest are located at the Reagan Test Site (RTS) on Kwajalein Island, Republic of the Marshall Islands. An external range testing effort of the S2RSP is anticipated in early 2008.

The hardware was successfully shipped from Bozeman, MT to Lexington, MA. Testing occurred over a two week period and allowed the S2RSP to be applied to several radar scenarios in a controlled environment. Several Kwajalein Range Services (KRS) personnel were on hand to support the testing efforts. Any obstacles encountered were quickly resolved by S2 and KRS personnel. S2 Corporation will review all data recorded and make any necessary improvements to the S2RSP prototype in anticipation of shipping the device to RTS.



S2 Corporation's on-site tests at MIT / LL, including the S2RSP prototype (left), and the S2 test team included (top row) Mr. Brant Kaylor, Dr. Randy Reibel, Mr. Scott Bekker, (bottom row) Mr. Trent Berg, and Dr. Kris Merkel.

After the testing effort was complete, Dr. Frank Robey of MIT/LL stated “I would like to thank everybody for making the testing run so smoothly the last two weeks. The results looked very good. The KRS and S2 folks worked very well together.”

The S2RSP hardware is comprised of photonic, electronic and cryogenic components. The cryogenic cooling of crystals allows them to achieve high performance signal processing. A large portion of engineering has been devoted to the use of a closed-cycle cryostat to achieve the cooling of the small sugar cube sized S2 crystal to 4K (or, 269 degrees below 0 degrees Celsius). Closed cycle cryocoolers are desirable as they offer turn-key and low-maintenance systems that do not require liquid helium, and could be deployed for a variety of missions. At LL, S2 Corporation successfully tested closed cycle cryocoolers running at 4K, a significant accomplishment for the test effort, and one which was required to show suitability of the S2RSP to operate at the Reagan Test Site or other test ranges.

The S2RSP program is funded by the Missile Defense Agency (MDA) in line with the agency stated goals. Goal 6 of the MDA is “to maintain a strong research and development program focused on continual improvement of the ballistic missile defense system,” according to the publication The 2006 Strategic Intent of the MDA. The goal statement continues, “This is because threats against us become more complex over time and because technical progress offers new opportunities to create a more effective and efficient system against those threats.” The efforts to build and test the S2RSP fall into the Objective 1 of Goal 6, which is to “Mature key technologies to the point where they can be considered for fielding in the BMDS.” That objective states: “We will seek out and develop new and innovative concepts and technologies that can be applied across the BMDS to stay ahead of the ballistic missile threat, improve system performance and reliability, and lower life-cycle costs. We will stimulate greater innovation through out-of-the-box thinking and seek out the most promising technologies from U.S. and international sources. We will use Centers of Excellence to foster technology transition and develop effective approaches for addressing challenges that cut across elements and components. One of the most critical areas for advanced development is enhancing our ability to discriminate threat objects from decoys and debris.”

#### About S2 Corporation:

S2 Corporation is a high-technology-based small business that aims to provide creative solutions for multiple DoD customers. Our areas of interest include radar, communications, signal processing and other military and commercial applications. We were incorporated in November 2005 and are privately owned and operated. S2 Corporation is experienced in proof-of concept design, rapid prototyping, and testing. S2 Corporation’s research & development efforts are aimed at harnessing and applying so called “S2 technology” based on spectral and spatial (S2) crystalline materials, which offer a unique combination of absorptive and holographic properties with high optical quality. Our strategy is to push technological solutions to a sufficient Technology Readiness Level (TRL) for viability through off-site prototype testing efforts, and then make appropriate teaming agreements for technology system insertion. S2 Corporation is based in Bozeman, Montana, and is located nearby nationally recognized Montana State University, where many of the initial and enabling research efforts were performed.

For further information please visit – [www.s2corporation.com](http://www.s2corporation.com)