

**It's great to be able to say that we are now in our fifth decade of business, we have seen many changes to the global electronics landscape in that time. Influences and events will continue to present us all with both exciting opportunities and business challenges. As the electronics industry continues to innovate, Winslow will strengthen its role to provide advanced interconnect solutions that save time and money.**

### Winslow Adaptics provide critical components to the Solar Orbiter SPICE Instrument

We were pleased to see Solar Orbiter launch from Cape Canaveral on the 10th February to begin its almost two-year journey towards the sun. After more than 10 years in development, Solar Orbiter will provide scientists with a long-awaited insight into some of the mysteries surrounding our nearest star.

One of 10 science instruments on board, SPICE is an imaging spectrograph optimized for use in the far ultraviolet range between 70-105nm. The SPICE optics unit contains the following optical elements: the telescope, entrance slit, diffraction grating and rad-hard two detectors. The detectors are individually secured using customized **Plastic Leaded Chip Carriers** provided by Winslow Adaptics, with heavy gold plated contacts. The stability of Winslow's polyphenylene sulfide housing tolerated machining of a large cutout in the bottom for cold finger access, and still maintain acceptable axis and surface parallelism. The gold plating measured well above the 1.27µm minimum, and Winslow accommodated NASA's requirement for a copper barrier underplating, rather than nickel, to further minimize magnetic fields near the detector.



The spacecraft, which is protected by a heatshield, has been tested to withstand temperatures up to 500°C. The instruments on board will need to operate perfectly in these challenging conditions. SPICE will allow all of the light from the Sun in and will filter out excess light, using only two bands in extreme ultraviolet wavelengths.

### Expert Perspective



John Winslow, head of the Mechanical Engineering at Winslow talks Test Sockets

The central factor when approaching a test socket design is that the information you gain is entirely from the device under test and not from an anomaly in the socket design or manufacture. The socket must be metaphorically invisible and the results consistent.

With the Industry gravitating towards denser arrays and smaller IC packages, Winslow ensure to integrate new materials in the support of pitch requirements to 0.5mm and less. The engineering plastics used in the manufacture of Winslow Test Sockets are universally appropriate for high stress environments regardless of the application. Low coefficient of expansion, high wear resistance and spring probe integrity are vital for reliability at pitches down to 0.3mm to ensure compliance between the device and contacts.



Easily **customised** to suit any device however obscure Winslow Adaptics offer reliable test contactor modules proven in a variety of applications including RF, MEMS gyroscope non-magnetic, WLCSP & ASIC

Here to help, contact: [johnw@winslowadaptics.com](mailto:johnw@winslowadaptics.com)

### BREXIT

Although the United Kingdom has now left the European Union, we remain under the laws of the EU until December 31st, 2020. During this transition phase our government will be required to negotiate our own trade deals and we are seeing lots of speculation around that in our media.

We understand that individual concerns and priorities may differ depending on the nature of the business we conduct together, albeit that most interest clearly lies in the impact of product availability, lead-time and cost implications. Please be assured that we will continue to stay informed and provide updates as and when things change.

See you again in the Spring

Teri-Ann Winslow

Teri-Ann

CEO

