

Date: October 7, 2019

To: Distribution

From: Don Larson, Product Manager  
Phone: +1 978-206-6598

Subject: ES Components Acquisition of Siliconix Hermetic Products, Update

ES Components "ESC" has been a Franchised Distributor for Vishay for more than 25 years and has a long history of supplying Vishay Siliconix products into all Markets, particularly Military, Aerospace, Medical Implant, and Industrial. Recently ES Components has received MIL-PRF-38535 certification. Qualification builds are currently in process to support part requests that can no longer be supported by depleted Siliconix finished goods inventory of Analog Switches and Multiplexers. New builds will use die acquired from Siliconix. The following information will provide background regarding the acquisition of material from Siliconix and status of current product qualifications.

Siliconix made the decision to exit the **Military and Commercial hermetic** device market for all MOSFET, JFET and Analog Switch products coincident with their decision to close their facility in Santa Clara, CA.

ES Components, who had made several proposals to procure the remaining inventory of these products over the past 15 years, negotiated an acquisition of all available inventory, including finished goods, work-in-process, and die/wafer inventory. Also included was the product documentation/traceability and equipment used on the Siliconix line in Santa Clara, CA. ES Components estimates the current die/wafer inventories can support the market requirements more than 10 years and in many cases many life times.

ES Components coordinated with the DLA and Siliconix during the acquisition phase to ensure the JAN pedigree would be sustained after the acquisition, including new builds with die from the Siliconix die/wafer bank.

To accomplish this, ES Components has partnered with VPT Components "VPT", a division of SST Components, Inc. ("SST") in Billerica, MA and Microchip Technology (Thailand) Co., Ltd. ("MMT"). Both VPT and MMT are DLA approved facilities and can be found on the DLA QML report. Parts that fall under MIL-PRF-19500 will be produced by VPT. Parts that fall under MIL-PRF-38535 will be will assembled at either MMT or VPT with VPT supporting Test and Quality Conformance testing. Parts built by VPT that fall under MIL-PRF-19500 will be branded with the VPT logo. Devices that fall under MIL-PRF-38535 will be branded with the ES Components logo. In both cases, ES Components will provide VPT and MMT with materials required for assembly including die acquired from Siliconix.

As mentioned in the previous paragraph, VPT is MIL-PRF-19500 certified by DLA. VPT has completed the qualification of parts to MIL-PRF-19500/476 (2N5114 – 2N5116), 19500/430 (2N5545 – 2N5547) and MIL-PRF-19500/385 (2N4856 – 2N4861). Additional quals to 19500/547 (2N6660 – 2N6661) in a surface mount UB package is in process. The data has been submitted to DLA and approval is expected soon. In addition, a radiation tolerant option of parts that fall under MIL-PRF-19500/385 has been released. All "Siliconix Inside" products produced by VPT will be sold exclusively through ES Components.

There are 5 qualification lots in process that fall under MIL-PRF-38535. The DG528 (5962-8768901VA) and DG304A (M38510/11605) are expected to be released Q4, 2019. Other quals in process include DG180 (5962-8767301), DG187 (M38510/11105) and DG191 (M38510/11107). Parts will be branded with the ES Components logo and contain die acquired from Siliconix. More information can be found by visiting the military page on the ES Components website at <https://www.escomponents.com/siliconix-military3>.

ES Components will continue to support customer requirements per source control drawings (SCD) from the extensive Vishay Siliconix finished goods inventory, also acquired.

There are strategic plans to expand the existing portfolio to include JAN qualified Surface Mount devices (examples UA, UB, LCC packages), and JANHC / KC die products where there is a market demand. We are also reviewing our ability to establish a JANS pedigree, which may also include devices rated for Radiation Tolerance. ES Components will also support all Customer application specific requirements and Source Control Drawings not currently supported by the JAN portfolio.

Regarding commercial hermetic parts, ESC is using Cirtek Electronics Corporation, Laguna, Philippines for parts built for commercial metal can applications. Please note that Cirtek is the same manufacturer that was used by Siliconix to assemble metal cans. The use of Cirtek ensures that the metal can assembly process will be identical. Microchip Technology (Thailand) Co., Ltd. (MMT) and VPT are used for assembly of other packages including side braze, flatpacks and LCC packages. After assembly, parts are returned to ESC and sent to VPT to complete the mark and test process. Parts are marked with the ESC brand.

ESC is ISO9001, AS9120, AS6081, and **Woman Owned Small Business** certified. In addition, ESC is DLA QSLD approved, ITAR registered, and a member of GIDEP. Certificates can be found on the ESC website at <https://www.escomponents.com/quality-3>

For Product Engineering or Applications support, please contact either of the below:

Don Larson      978-206-6598      [dlarson@escomponents.com](mailto:dlarson@escomponents.com)  
Curt Olsen      480-266-9737      [colsen@escomponents.com](mailto:colsen@escomponents.com)

Thank you, and ES Components looks forward to serving your High Reliability component needs in the future.

