

Flight of longevity

Rochester explains how aerospace and defence buyers can be confident that critical components will remain available for long-life products and systems

Aerospace and defence markets have product lives that far exceed those of the components which go to make them. Long-term product availability is vital in these sectors, and companies need to ensure that a reliable long-term source of components is available.

Companies not only need to establish a sourcing partner that can offer guarantees of availability over the long term but can also demonstrate a controlled transition process through end-of-life and into long-term fully authorised supply – or even long-term production.

As an AS6496-compliant distributor and licensed manufacturer, Rochester Electronics continues to offer Military Grade semiconductors and packages long after the original component manufacturers (OCMs) discontinue them. In addition to the millions of components available in-stock, Rochester's in-house high-reliability hermetic assembly line offers a full complement of package styles including Ceramic DIP, Side Brazed DIP, Flat Pack, CQFP, PGA, Ceramic Leadless Chip Carrier, and Metal Can.

Rochester also offers a wide range of commercial and industrial components and can supply a custom flow built to meet the needs of source-controlled drawings.

Rochester's extensive in-house qualification and test facilities ensure complete risk-free sourcing of components in compliance with industry standards. Rochester is a QML

manufacturer certified by DLA Land and Maritime to MIL-PRF-38535 offering Class Q and Class V microcircuits for Military and Aerospace applications.

Rochester Electronics certifications include:

- QML per MIL-PRF-38535
- DLA-certified Hermetic Assembly, Electrical Test, Burn-In and Reliability Lab to Mil-STD-883
- Class Q (Class B) & Class V (Space) products
- ISO9001: 2015 Certification
- AS9120B:2016
- QSLD DLA Certified, verifying that Rochester, as a critical supplier to DLA and meets the DLA standards for distribution processes.
- TAPA FSR-A: 2017

Rochester manufactured products for military applications:

Intel

- The only authorized source for all Military Grade CPUs and supporting Memory products including 186/188/196/286/486 Microprocessors

Analog Devices

- TigerSharc, BlackFin, and other SHARC DSPs

Texas Instruments/National Semiconductor

- TMS320C30/40/50 and F206/240 DSPs
- Op Amps, Regulators, and Logic devices still available in historic packages such as DIP, Ceramic, Metal Can

NXP Semiconductors

- Extended Temp MC68000 Microprocessors
- PowerPC Processors

IBM

- PowerPC Processors including PPC750 series

Cypress

- FIFO and Dual Port SRAMs

Ampleon

- LDMOS, VDMOS, GaN1 PowerFETs for RF applications

Intersil/Harris

- Historic Military-grade Voltage Regulators, Drivers, Timers, and Controllers.

Rochester built products are manufactured using known-good-die stored in one of its two nitrogen wafer storage facilities; and are tested to AS6496 standards using the original test processes employed by the OCM. Products retain their original part number because they are guaranteed to meet the original datasheet specification. As a 100 per cent authorised source of supply, anti-counterfeiting standards that apply to independent suppliers such as AS6171 and AS6081 are NOT required.

For ongoing critical obsolete component needs, where Rochester does not hold available inventory or wafer to build, Rochester can leverage its vast Test and Design Engineering experience to keep our customers' systems going.

Rochester can help with suitable alternatives (grades, speeds, finishes, packages) and the creation of additional testing parameters to provide the customer evidence needed to qualify the alternative.

Rochester can also support fundamental design changes such as the replacement of obsolete key components with ASIC solutions. The possibility exists in these cases to transition to an ASIC which is not only identical in terms of fit-form-function, but with no software changes required and no errata. This means that Aerospace DO-254 re-qualifications, even for safety-critical (DAL-A) applications, can be greatly simplified as a minor change.

Rochester Electronics offers the most comprehensive Stock – Build – Redesign service available for Military and Aerospace customers.

rocelec.com





© 2021 Rochester Electronics, LLC. All Rights Reserved.

WE KEEP THINGS MOVING.

As an authorised distributor, Rochester Electronics provides the world's most extensive range of end-of-life (EOL) and broadest range of active semiconductors to keep the medical, defense and infrastructure industries moving worldwide.



 **Rochester
Electronics®**
www.rocelec.com

Authorised Distribution | Licensed Manufacturing | Manufacturing Services

Unit 2 Fenice Court, Eaton Socon, St Neots • Cambridgeshire PE19 8EW • United Kingdom
[+44.1480.408400](tel:+441480408400) / emeasales@rocelec.com / www.rocelec.com

