

How to navigate the obstacles of Obsolescence E&A 2023

Ensuring Long-Term Product Viability

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26 T/M **28**
SEPTEMBER '23
JAARBEURS UTRECHT

WHAT WE DO

SiliconExpert helps you make better data-driven decisions with a human-driven experience.



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Component Data

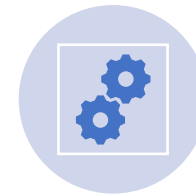
Agenda



The Challenge(s) of
Obsolescence



Impact of
Obsolescence



Obsolescence
Management
Strategies



Design for resilience



Q&A – 5 minutes



The Challenge(s) of Obsolescence

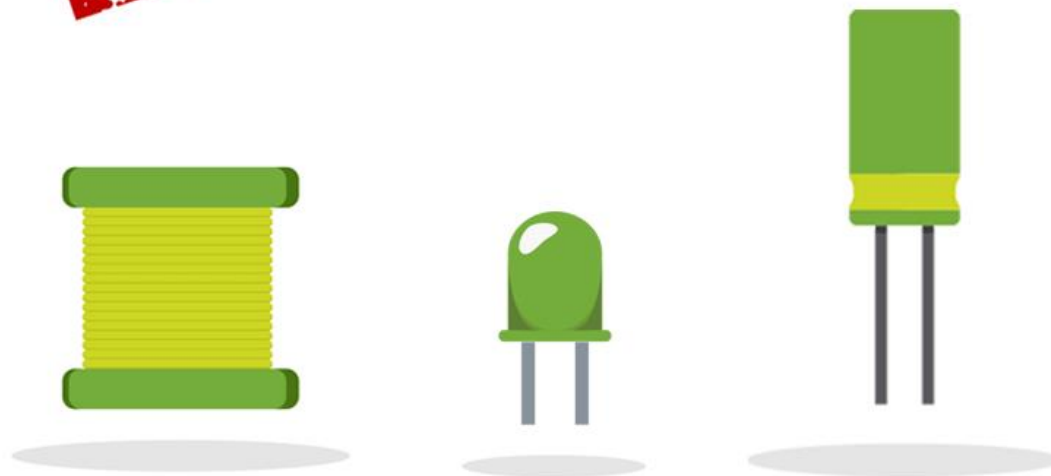
In recent years, the electronics industry has witnessed a substantial rise in the challenge of component obsolescence. This trend has significant implications for product development, manufacturing, and long-term product support.

- In 2020, there were approximately 11,000 electronic components declared obsolete, a 25% increase from the previous year.
- Approximately 20% of all electronic components face obsolescence-related issues during their lifecycle.
- The average lifespan of electronic components has decreased to around 7-10 years, down from 15-20 years a few decades ago.*

*<https://a2globalelectronics.com/obsolescence-management/4-reasons-component-obsolescence-is-a-growing-part-of-supply-chain-management-and-how-to-manage-it/>

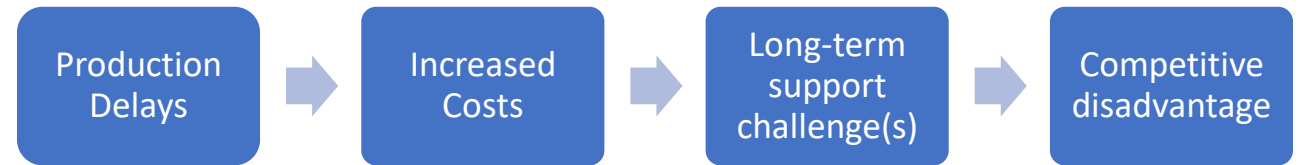
<https://www.rila.org/blog/2018/04/obsolete-electronics-waste-or-opportunity>

OBSOLETE



Impact of Obsolescence

The use of obsolete electronic components can have far-reaching consequences, affecting various aspects of product development and sustainability.



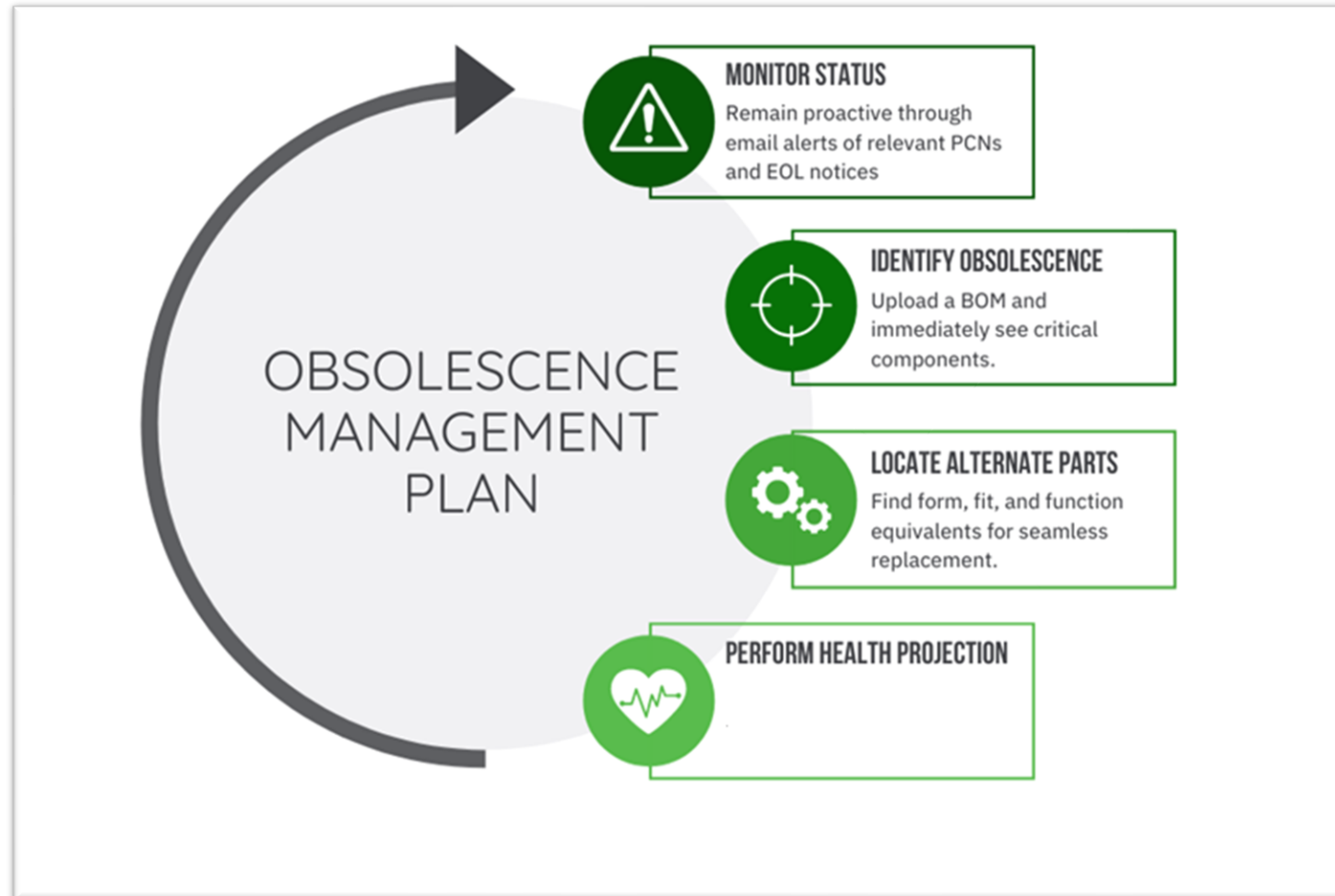


<https://spare-place.com/blog/en/programmed-obsolence-the-black-beast-of-products/>

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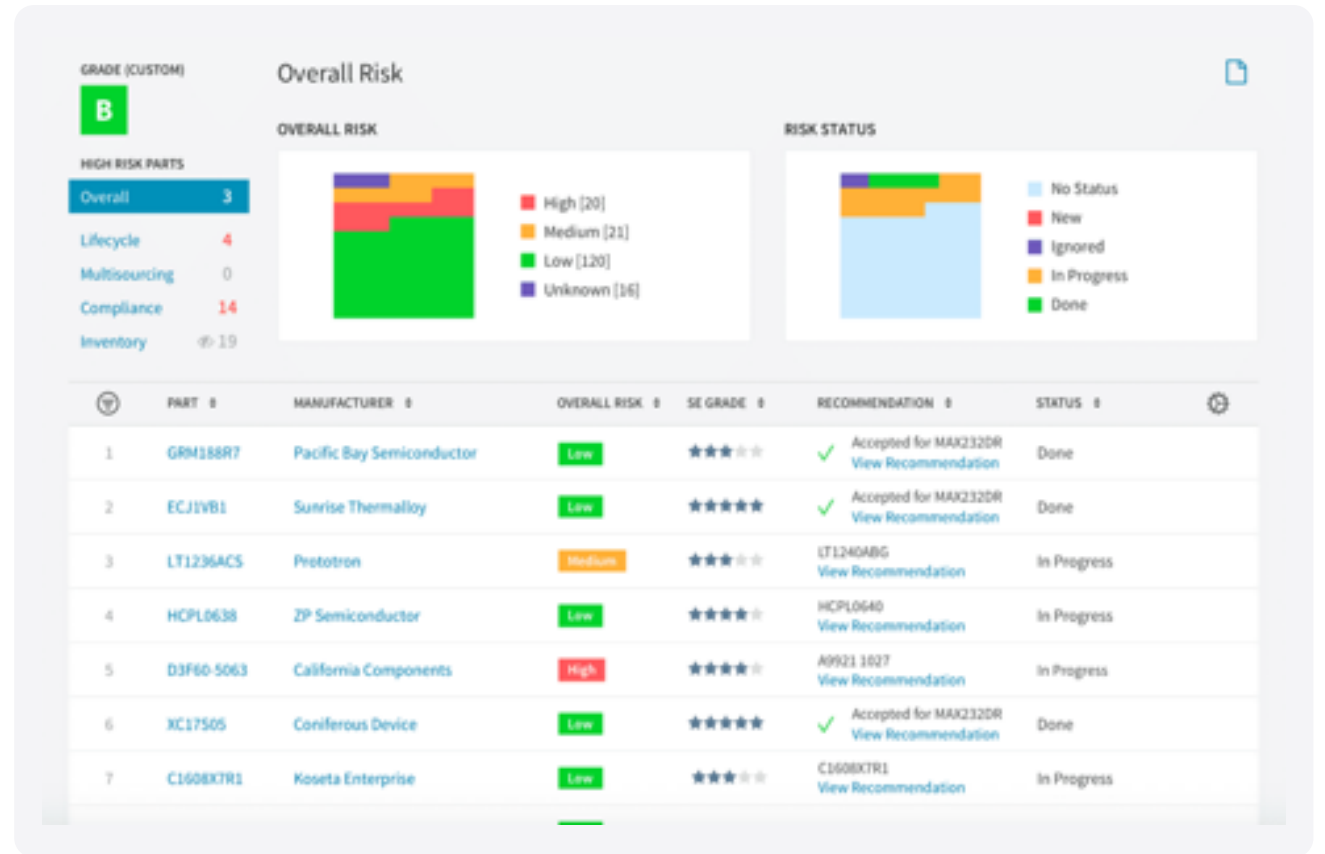

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Obsolescence Management Plan



Identify Obsolescence

With an obsolescence management tool in place, one is easily able to identify potential risks across one's entire BOM (bill-of-materials).



Monitor Status - PCNs/EOL

Manufacturer: All | Alert Type: Lifecycle Change | Setting On: All | Alert Created By: All

Assignee: All | Status: | Priority: | Date From: | Match Type: All

<input type="checkbox"/>		Lifecycle Change Old: Obsolete New: Active	NL17SZ125DFT2G onsemi Exact Match	Sep 5, 2023 Critical Supply Chain Alerts (BOM)	Open High
<input type="checkbox"/>		Lifecycle Change Old: Obsolete New: Active	NL17SZ125DFT2G onsemi Exact Match	Sep 5, 2023 Supply Chain and PCN Alerts for...	Open Medium

PCNs - 1 update

PCN Number	Notification	Type of Change	Description	Source
-	Nov 29, 2009	Labeling, Shipping	Allegro MicroSystems, Inc. is moving to a standardized labeling format for our inner and outer box shipping labels. Additionally, Allegro is offering the added value of 2D barcode as a feature benefit to our customers. Additional Data	Download PDF

- PCN: All
 - PCN: Lifecycle Changes
 - Alert/Recall
 - Not Recommended For New Design
 - Recall
 - PCN: Non-Functional Change Notifications
 - Alert
 - Errata
 - Packing
 - Product Code
 - Removed from Cost Book-NC/NR
 - Shipping
 - PCN: Documentation Updates
 - Datasheet Specifications
 - Reactivation Notices
 - PCN: Product Manufacturing Changes
 - Assembly Process
 - Characteristics Change
 - Form
 - Lead Free
 - Marking Molding
 - Software Change
 - Test Site
 - Wafer Process
- New Production
- Obsolescence Notices
- Cavity Ids
- Labeling
- Part Numbering
- Product Families
- Removed from Cost Book-NC/NR Reversal
- PCN Cancelled
- Assembly Site
- Fit
- Function
- MANUFACTURING REQUEST
- Materials
- Test Process
- Vendor Acquisition
- Wafer Site
- Lifecycle Changes
- Datasheet Changes
- RoHS Changes
- REACH Changes
- Manufacturer Acquisition Changes
- GIDEP
 - Engineering Summary
 - Metrology Summary
 - R&M Summary
 - Failure Summary
 - Product Information Summary
 - Suspect Counterfeit Summary

Alerts SEE ALL

- US3200003 by ZP Semiconductor
Labeling, Vendor Acquisition
- BAT685-V by California Components
Lifecycle Change
- LTSV-022110 by Xylome
Assembly Process
- UCD3138128PFC by Protosonic
Wafer Process



Proactive & Reactive Alerts!

ve × × Crosses A × A/Downgrade × B/Upgrade × B ×

Manufacturer		Lifecycle		Y-to-EOL	Cross	Differer	Overall Risk
TDK Qualified	pF 50V C0G 0.25pF Pad SMD ESR T/R	LTB	Una	1.4 Year(s)	--	--	Medium
Murata Manufacturing Preferred	pF 50V C0G 0.25pF Pad SMD	Active	Una	7.3 Year(s)	A cross	--	Low
Murata Manufacturing Preferred	pF 50V C0G 0.25pF Pad SMD Automotive AEC-Q200	Active	Una	11.3 Year(s)	B/Upgrade cross	AEC_Q	Low
Walsin Technology Qualified	pF 50V C0G 0.25pF Pad SMD	Active	Una	8.5 Year(s)	B cross	Lead Finish	Low
KEMET Corporation	pF 50V C0G 0.25pF Pad SMD cal T/R	Active	Una	8.5 Year(s)	B cross	Lead Finish	Low
Samsung Electro- Mechanics Avoid	pF 50V C0G 0.25pF Pad SMD Automotive AEC-Q200	Active	Una	7.3 Year(s)	B cross	AEC_Q Lead Finish, Microv	Low
Murata Manufacturing Preferred	pF 50V C0G 0.25pF Pad SMD Automotive AEC-Q200	Active	Una	8.5 Year(s)	B cross	AEC_Q Microv	Low

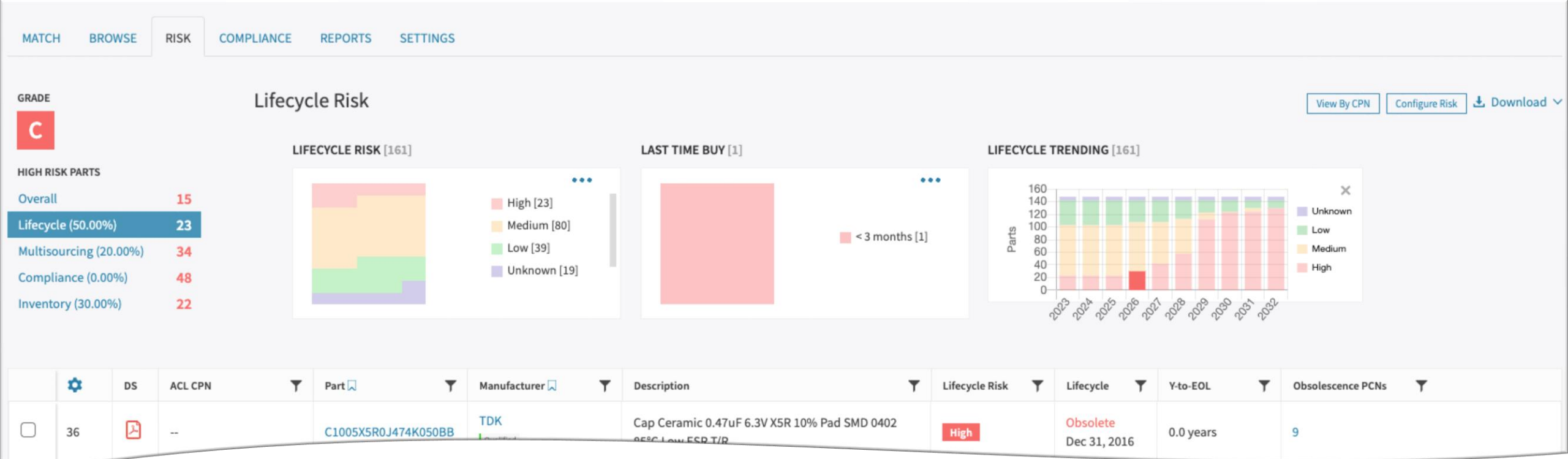
Locate alternate parts

When faced with obsolescence issues and/or last minute PCNs, insights into alternate parts (with a pin-to-pin compatibility) might prove to be the way forward.

Harness the power of data intelligence to keep your production running.

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Perform Health Checks

Part of your strategy for managing obsolescence should be routine health checks across your entire BOM & proper reaction to PCNs.

Using a components database ensures a higher level of data accuracy, as well as an aggregated overview.

Machine-learning algorithms predicting YTEOL could help in ensuring that you have sufficient insight into the future.

Design for resilience

Deliver on business goals starts with a solid plan

Risk mitigation tools and services protects your bottom line by maximizing profitability

Optimize technology investments to help keep your organization efficient, innovative, and profitable.



Prepare for unexpected disruption

Access to the information you need to get ahead of issues before they present themselves

Q&A

THAT'S A GOOD QUESTION!



Thank you!

7 C0745 – Antonio Cruz

