
DMSMS – A View from the Middle

Component Manufacturer/Arrow Zeus Electronics/Customer

Rick Catoe

Arrow Zeus Electronics



Arrow / Zeus
Electronics

A View from the Middle

- Arrow Zeus Electronics
Supply chain position
- DMSMS Drivers
- Why DMSMS programs deliver mixed results
- Arrow Zeus' approach to DMSMS

Arrow Zeus Electronics

- The only broad-line electronics distributor focused *exclusively* on servicing the Aerospace and Defense customer base
- Maintain 30+% share of the A& D electronics distribution market
- Franchised distributor for over 600 electronics manufacturers worldwide
 - Component manufacturers view franchised distributors as THE source for timely and accurate information
 - Components Distributor vs. Information Provider

DMSMS Drivers in Electronics Commodities

Component life cycles vs. Program life cycles

- Design to production cycle
- Production cycle + Service/Support
- COTS impact

Market economics

- Commercial market drives electronics industry
- Manufacturers exiting the mil-spec market

RoHS

- inconsistent manufacturer strategies
- “silent killer”

The RoHS Impact

Although A& D applications are exempt from the RoHS legislation, the impact is significant

- Will suppliers continue to build parts on both processes making leaded devices available?
- Impact on Supply Chain
 - Part numbering changes
 - Process change
 - Moving from SnPb to Multiple finish types
 - Qualify and test on new process
- Lead free transition will increase the rate of obsolescence for COTS components

DMSMS Management Delivers Mixed Results

- Reactive structure to program
- Decentralized approach
- Minimal clarity of ownership and escalation path
- Solutions are not program centric
- Down stream lack of focus
- Lack of resources
- Limited front end engineering focus
- Lack of funding

The Arrow Zeus Approach to DMSMS

- Continuing Life Programs
 - extending the life of a device once the manufacturer is no longer interested in producing (Cypress and NSC)
- Significant Inventory Investment
 - finished goods available to sell
 - die form ready to build out
- DMS Management Programs
 - outsourcing the proactive management of component availability and PCN's to Arrow Zeus

Product Change Notices – Types of Alerts Reported

Status Changes	Non-Functional Changes	Manufacturing Changes
End Of Life	Shipping / Packing	Assembly Process
EOL Reversal	Labeling & Packaging	Test Site
Removed From Cost Book - NC/NR	Marking	Wafer Process
Removed From Cost Book - NC/NR Reversal	Nomenclature change	Wafer Site
Not For Design	Molding	Test Process
Alert/Recall	Supplier Edit / Update	Assembly Site
		Lead-Free / RoHs

The Benefits of Arrow Zeus' DMS Program

Delivers component intelligence at critical points along the Product Life Cycle

- Reduces liabilities resulting from designing-in parts that are EOL, likely to become EOL, or are NC/NR
- Allows for evaluation and comparison of multiple parts that meet technical and environmental criteria
- Provides ongoing monitoring of parts on the Master List or Projects List
- Delivers cost and time savings through reductions in redesigns and improved obsolescence visibility
- Allows easy identification of procurable second sources in times of supply crisis

DMSMS Summary

- DMSMS is a significant challenge facing the Aerospace and Defense industry
- Continued economic pressures driven by the commercial market coupled with regulations such as RoHS, will fuel obsolescence
- As a major components distributor and an information provider, Arrow Zeus is well positioned to mitigate the risks associated with DMSMS in the electronics industry