

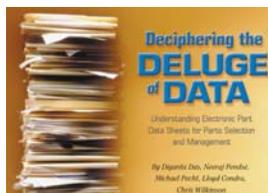
Keeping Up with the Component Information that you need to Manage Them through the Supply Chain

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IPC		Material Composition Declaration	
1752 2 1.1		IPC has been notified by the manufacturer of the information within the declaration sheet for this part. The manufacturer has agreed to provide the information within the declaration sheet for this part. The manufacturer has agreed to provide the information within the declaration sheet for this part.	
Customer Information		Manufacturer Information	
Company Name	Company Logo	Company Name	Company Logo
Part Name	Part Number	Part Name	Part Number
Part Description	Part Drawing	Part Description	Part Drawing
Part Material	Part Material	Part Material	Part Material
Part Process	Part Process	Part Process	Part Process
Part Test	Part Test	Part Test	Part Test
Part Approval	Part Approval	Part Approval	Part Approval
Part Change	Part Change	Part Change	Part Change
Part Obsolete	Part Obsolete	Part Obsolete	Part Obsolete
Part Recall	Part Recall	Part Recall	Part Recall
Part Disposal	Part Disposal	Part Disposal	Part Disposal
Part Recycling	Part Recycling	Part Recycling	Part Recycling
Part Reuse	Part Reuse	Part Reuse	Part Reuse
Part Repair	Part Repair	Part Repair	Part Repair
Part Upgrade	Part Upgrade	Part Upgrade	Part Upgrade
Part Downgrade	Part Downgrade	Part Downgrade	Part Downgrade
Part Replacement	Part Replacement	Part Replacement	Part Replacement
Part Interchangeability	Part Interchangeability	Part Interchangeability	Part Interchangeability
Part Compatibility	Part Compatibility	Part Compatibility	Part Compatibility
Part Interference	Part Interference	Part Interference	Part Interference
Part Obsolescence	Part Obsolescence	Part Obsolescence	Part Obsolescence
Part Counterfeit	Part Counterfeit	Part Counterfeit	Part Counterfeit
Part Fraud	Part Fraud	Part Fraud	Part Fraud
Part Theft	Part Theft	Part Theft	Part Theft
Part Loss	Part Loss	Part Loss	Part Loss
Part Damage	Part Damage	Part Damage	Part Damage
Part Contamination	Part Contamination	Part Contamination	Part Contamination
Part Degradation	Part Degradation	Part Degradation	Part Degradation
Part Failure	Part Failure	Part Failure	Part Failure
Part Defect	Part Defect	Part Defect	Part Defect
Part Nonconformance	Part Nonconformance	Part Nonconformance	Part Nonconformance
Part Rejection	Part Rejection	Part Rejection	Part Rejection
Part Scrap	Part Scrap	Part Scrap	Part Scrap
Part Waste	Part Waste	Part Waste	Part Waste
Part Pollution	Part Pollution	Part Pollution	Part Pollution
Part Safety	Part Safety	Part Safety	Part Safety
Part Security	Part Security	Part Security	Part Security
Part Privacy	Part Privacy	Part Privacy	Part Privacy
Part Intellectual Property	Part Intellectual Property	Part Intellectual Property	Part Intellectual Property
Part Compliance	Part Compliance	Part Compliance	Part Compliance
Part Regulatory	Part Regulatory	Part Regulatory	Part Regulatory
Part Environmental	Part Environmental	Part Environmental	Part Environmental
Part Social	Part Social	Part Social	Part Social
Part Ethical	Part Ethical	Part Ethical	Part Ethical
Part Moral	Part Moral	Part Moral	Part Moral
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Abstract:

More than 15 years back, we wrote the article on problem of gathering and utilizing electronic component data. We find that the concerns still remain and in addition to “deluge” – the issue of getting the right kind of information is a worrisome condition. Many specific aspects of the part selection and management process rely on part information collection. Completing these processes is currently challenging due to the problem of finding and obtaining component information. The additional risks that make the issues more challenging today include faster product release cycle and obsolescence, counterfeit materials and products, changes in product and processes that may or may not be publicly released, changes in the ratings of electronic parts and many others.

This form presentation will walk you through the information that you need to ensuring that you perform all the steps in component management in an informed manner including reliability assessment, uprating assessment, planning for counterfeit avoidance. We will also show the sources of information from the part manufacturers and other sources and how they can be used for making the engineering decisions and where the information available today is not useful or even misleading for the purpose of part management and what kind of common information format will be useful for the industry.

Presenter: Dr. Diganta Das (Ph.D., Mechanical Engineering, University of Maryland, College Park, B.Tech, Manufacturing Science and Engineering, Indian Institute of Technology) is an Associate Research Scientist. He had been the technical editor for two IEEE standards and is currently vice chair of the standards group of IEEE Reliability Society. He is a sub group leader for the SAE G-19 counterfeit detection standards group. Dr. Das leads the Educational Outreach of CALCE with responsibility to develop inter-organizational agreements on joint educational programs, training and internship program, and professional development. He is an Associate Editor of the journal Microelectronics Reliability. He is a Six Sigma Black Belt and a member of IEEE, IMAPS and SMTA.