# ERAI Reports, Processes and Methodologies



Mark A. Snider President, ERAI, Inc.

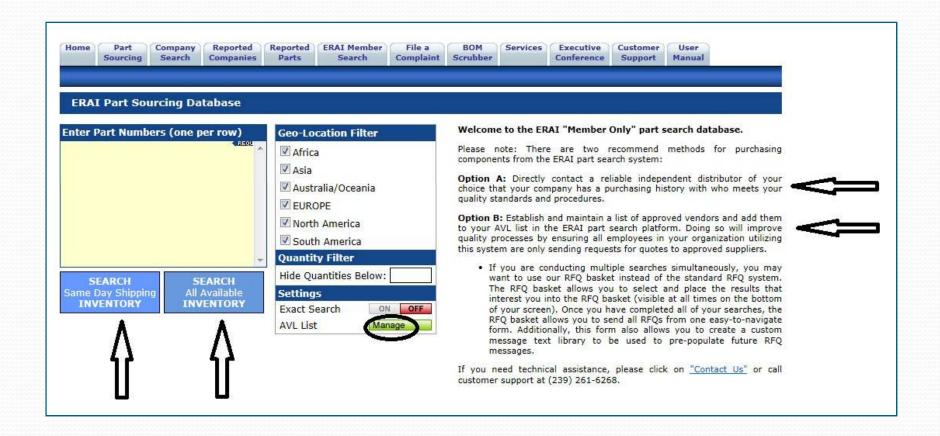
## Integrating ERAI Tools into Component Selection, Part Screening, QA/Test, Material Control and Purchasing Processes





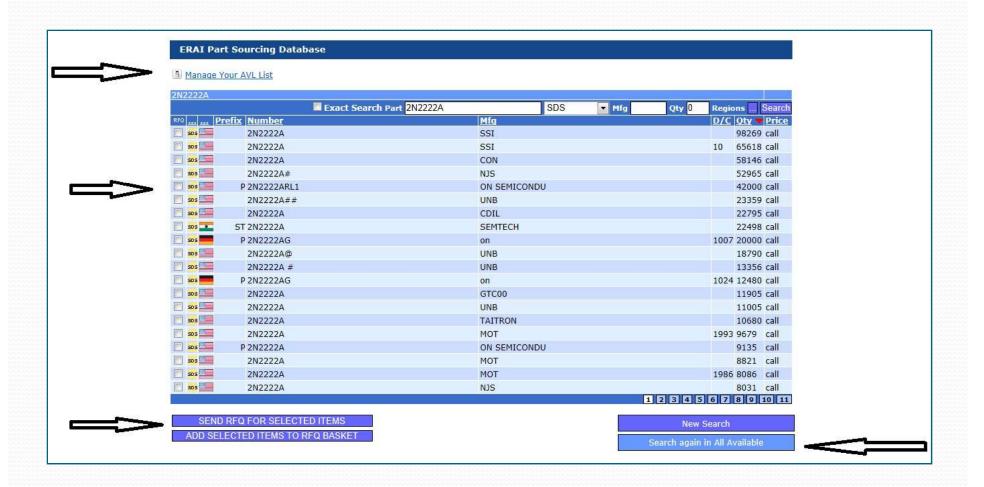
#### Part Sourcing





### Part Sourcing Results





#### Sending a RFQ to an AVL Supplier erai)



érai)										Profile	
Home Part		Reported Companies	Reported Parts	ERAI Membe Search	r File a Complaint	BOM Scrubber	Services	Executive Conference	Customer Support	User Manual	Sign Out
ERAI Part	Sourcing Da	tabase									
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### Maintaining an Approved Vendor List erai)



#### **ERALBIII of Material Scrubber**



							82 <u>—3</u> 2				
Home	Part Sourcing	Company Search	Reported Companies	Reported Parts	ERAI Member Search	File a Complaint	BOM Scrubber	Services	Executive Conference	Customer Support	User Manual
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imail re	port to (se	perate by "	;" if multiple)	: demo@er	ai.com				REQUIRED		
pecifie	d above will	receive an									. The recipients you cipients will receive a



### Assign BOM Data Columns



Please select the appropriate identity of the data in each column you wish to match. The only mandatory selection is the column containing the manufactures part number.

#### File 1: Scrub Data2.xls

Select	Select	Select	Select
ADS7832BN	Burr Brown	98	536235
BUV48C	ST Micro	07	526894
DAC1231LCJ	National	9048	7548984
EF6809	ST Micro	0017	798235
HM628128LP-10	Hitachi	0539	5554124
HM628512ALFP-8	Hitachi	0203	236548

Submit Back

#### BOM Scrub Results



Report Type:	User Initiated Scrub R	eport							
Company Name:	ERAI Affiliate Demo	A3300014							
Date Processed	2/28/2011								
Please Note: TYPE (Co	olumn D) <b>HR</b> - High Risk Pa	arts (Parts that have been re	ported to	ERAI as being fa	aulty, substandard or nonco	nforming to the original manufacture	er's specification	ns.); SC - Suspect (	Counterfeit Parts.
Your Internal Part	Your Manufacturer	Manufacturer Part		% Match		Manufacturer	D/C	Lot #	Description of
Number	Part Number	<b>Number Risk Parts</b>	Type	Confidence	Your Manufacturer	Risk Part	Risk Part	Risk Part	Non-Conformance
Scrub Data1.xls	N. B	3V.	V	W.	517) 510	W)	300 915	177	5.
7548984	DAC1231LCJ	DAC1231LCJ	SC	100%		NATIONAL SEMI	8632	B8632	Parts have been remarked. Marking permanency revealed a topical covering which was removable. When this substance was removed a different part number was revealed.
7548984	DAC1231LCJ	DAC1231LCJ	sc	100%	5	NATIONAL SEMI	9048	B9048A	Parts have been resurfaced. The top and bottom of the parts have a different textur
7548984	DAC1231LCJ	DAC1231LCJ	sc	100%	s	NATIONAL SEMI	8620	B8620	Parts failed marking permanency testing. Part markings are easily removed. These parts have been resurfaced and remarked
536235	ADS7832BN	ADS7832BN	sc	100%	i i	BURR BROWN/TI		21Z35XW	Evidence of sanding, scratching, and blacktopping.
536235	ADS7832BN	ADS7832BN	HR	100%		BURR BROWN/TI	239		Parts rejected visually because they foun different date codes, different countries of origin and soldered leads.
536235	ADS7832BN	ADS7832BN	HR	100%	6	BURR BROWN/TI			Parts failed electrically.
526894	BUV48C	BUV48C	sc	100%		ST Microelectronics	==	W321	Parts have been resurfaced.
5554124	HM628128LP-10	HM628128LP-10	sc	100%		Hitachi Semiconductor, Inc.	438	1002330	Parts failed marking permanency and lead are clearly refirbished. See photos.
236548	HM628512ALFP-8	<b>HM628512ALFP-</b> 7	SC	92%		Hitachi Semiconductor, Inc.	203	01002MMD SL	Product shows evidence of over coating and some external damage so product is deemed not in new and unused condition. Product has poor electrical yield when testing and shows evidence or remarking. Product rejected at anomaly analysis.
									These parts became obsolete in 2001; the suspect devices are marked with a 0539 date code. Furthermore, die analysis revealed the parts had a Sony die from

### Individual Part Screening



Recently Reported Alerts (last 14 days)						
Search High Risk Parts Submit High Risk Parts  Search High Risk Parts Submit High Risk Parts  Search High Risk Parts Database  Welcome to the ERAI High Risk Parts database. In order to search for a part, please enter at least the first three characters of the part you require any assistance or have questions, please call Membership Services at 239-261-6268.  Part Number  Manufacturer  N/A  Search  Welcome to the ERAI High Risk Parts database. In order to search for a part, please enter at least the first three characters of the part you require any assistance or have questions, please call Membership Services at 239-261-6268.  Part Number  Manufacturer  N/A  Search  Welcome to the ERAI High Risk Parts database. In order to search for a part, please enter at least the first three characters of the part you require any assistance or have questions, please call Membership Services at 239-261-6268.  Part Number  Manufacturer  N/A  Search  Manufacturer  Manufacturer  N/A  Search  Manufacturer  Manufacturer  N/A  Search  Manufacturer  N/A  Search  Manufacturer  Manufacturer  N/A  Search  Manufacturer  Manufacturer  Manufacturer  N/A  Search  Manufacturer  Ma						
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Welcome to the ERAI High Risk Parts database. In order to search for a part, please enter at least the first three characters of the part you for. If you require any assistance or have questions, please call Membership Services at 239-261-6268.  Part Number  Manufacturer  N/A  Search  Recently Reported Alerts (last 14 days)  Part Number  Manufacturer  Manufacturer  Manufacturer  Manufacturer  Manufacturer  MC2V1500-5F6676I  XILINX  MC0929  D2189123A  MC1046SZ  ANALOG DEVICES  MO99  CY62128BLL-70ZRI  CYPRESS SEMICONDUCTOR  MCNSM5416283-60GS-K  OKI SEMI  MCNSM5416283-60GS-K  OKI SEMI  MC1046E  MC2V1020CS  ELANTEC SEMI  MC4013E-3PQ208I  XILINX  MC4013E-3PQ208I  XILINX  MC9032E-120FI  ADVANCED MICRO DEVICES, INC  MC90102824  MC4013E-3PQ208I  XILINX  MC9032E-120FI  ADVANCED MICRO DEVICES, INC  MC90102824  MC90102824  MC767BD  ANALOG DEVICES  MC9020/6009	Search High Risk Par	ts Database				
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Part Number    Manufacturer   N/A   ▼					aracters of the part yo	u are searchi
Manufacturer         Date Code         Lot Code           Code         Lot Code           Eart Number         Manufacturer         Date Code         Lot Code           XC2V1500-5FG676I         XILINX         \$1 0929         D2189123A           PC16550DVEF         NATIONAL SEMI         \$1 0218         NJ218AC           MLT04GSZ         ANALOG DEVICES         \$1 09         CV62128BLL-70ZRI         CYPRESS SEMICONDUCTOR         \$1 0413         H04649056           XCR5064C-10VQ44C         XILINX         \$1 0117         A11179525A           MSM5416283-60GS-K         OKI SEMI         \$1 2372302         LLM3225-220J           LLM3225-220J         TOKO AMERICA INC         \$1 1046         EL2070CS         ELANTEC SEMI         \$1 0524         XC4013E-3PQ208I         XILINX         \$1 0524         XC4013E-3PQ208I         XILINX         \$1 031         AM29F032B-120FI         ADVANCED MICRO DEVICES, INC         \$1 0818         SDED5-001G-NAT         SANDISK         \$1 0803         CP0102824           IXFH21N50         IXYS CORPORATION         IXE 0111         AD846SQ         ANALOG DEVICES         \$1 0620/0609         HE 0620/0609	or. If you require any assist	tance or have questions, please call N	1embership Services at 239	-261-6268.		
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XILINX   10 0929   D2189123A     PC16550DVEF   NATIONAL SEMI   10 0218   NJ218AC     MLT04GSZ   ANALOG DEVICES   10 09     CY62128BLL-70ZRI   CYPRESS SEMICONDUCTOR   10 0413   H04649056     XCR5064C-10VQ44C   XILINX   10 0117   A11179525A     MSM5416283-60GS-K   OKI SEMI   10 2372302     LLM3225-220J   TOKO AMERICA INC   11 046     EL2070CS   ELANTEC SEMI   11 0524     XC4013E-3PQ208I   XILINX   HR 1031     AM29F032B-120FI   ADVANCED MICRO DEVICES, INC   11 0818     SDED5-001G-NAT   SANDISK   11 0803   CP0102824     IXFH21N50   IXYS CORPORATION   HR 1011     AD846SQ   ANALOG DEVICES   HR 0536     AD767BD   ANALOG DEVICES   HR 0620/0609     AN	Part Number	Manufacturer		Date Code	Lot Code	
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#### Example HRP Data





Part Number: XC2V1500-5FG676I

Manufacturer: XILINX Date Code: 0929 Lot Code: D2189123A Taiwan Country of Origin: Suspect Counterfeit: Yes

Date Reported: 05/08/2012

#### Description of Nonconformance:

Parts were represented as new and unused, however the following nonconformities were observed during visual inspection resulting in the rejection of the entire lot:

- 1. Scratches are present around the COO marking along with blacktop residue.
- 2. Debris is present on substrate, encased in what appears to be flux.
- 3. Scratches are present on the device substrate within the BGA ball field.
- 4. Parts failed RTS screening; ghost markings visible on the device surface.

#### Available Images and Test/Nonconformance Reports:









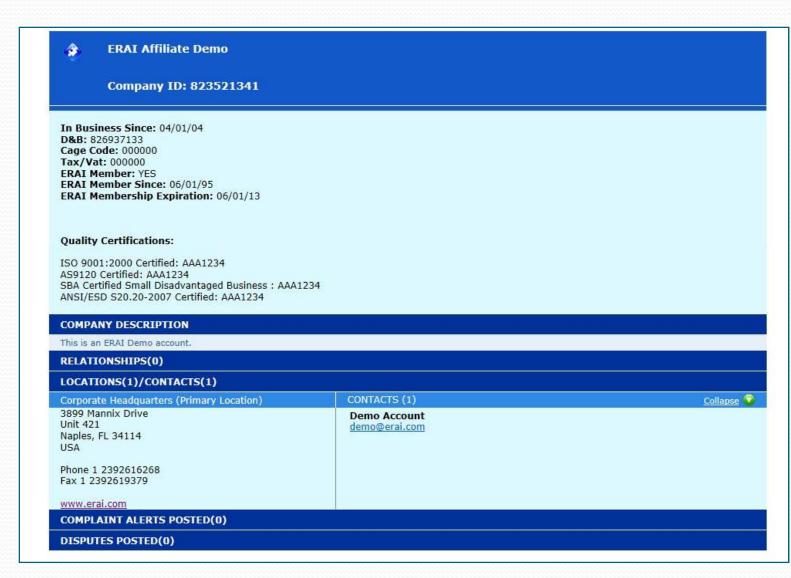




New Search

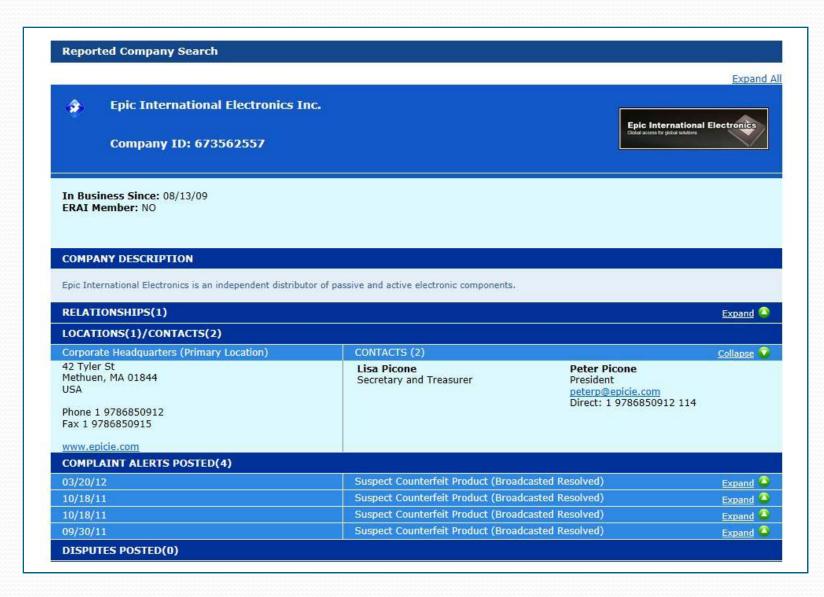
#### Company / Vendor Search





#### Reported Company Search





#### Thank You



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F. 239-261-9379

www.erai.com

