ASSOCIATION CONNECTING ELECTRONICS INDUSTRIES®	© Co	terial Compo pyright 2005. IPC, Bannoc aternational and Pan-Ameri	kburn, Illinois	. All rights reserv	tion with lower	level pa	rts, the	declaration	n encor		er level mater	ials for	which th	item is an assembly e manufacturer has eclaration.
1752-2 1.1	IPC Web Site for Information on IPC-1752 Standard http://www.ipc.org/IPC-175x						Form Type * Declaration Class * Distribute Class 6 - RoHS Yes/No, Homogeneous Mate						/laterials	and Mfg Informa
Supplier Information														
Company Name *	Unique ID Au	uthority	Response Date *			Response Document ID								
SEMTECH CORPORATION		2011-12-20												
Contact Name * Title - Contact				Phone - Contact *			Email - Contact *			D !: (0 1 1	A 11		
ROYA READER Quality Custom		Quality Customer Se	ervice Spec 805-389-2742			Rreader@semtech.com			Duplicate Contact -> Authorized Representative					
Authorized Representative * Title - Representa			9	Phone - Representative *			Email - Representative *			Supplier Comments or URL for Additional Information				
ROYA READER Quality Customer Service Spec				805-389-274	Rreader@semtech.com									
Requester Item Number		Mfr Item Number		Mfr Item Name		Effective Date V		Version	Manufa	cturing Site	Weight *	UC	M	Unit Type
	SX8650ICSTRT			4-Wire Resist		Korea			3.50686696		6 mg	3	Each	
Alternate Recommend	ation							Alternate	Item Co	mments	•	•		•
Manufacturing Proces	ss In	formation												
Terminal Plating / Grid Array Material Terminal B			ase Alloy J-STD-020 MSL Ra		ating Peak Process Body		Temperature Max		ax Time at Peak Temperature		Number of Reflow Cycles			
Nickel/Palladium/Gold (Ni/Pd/Au) Comments CU Alloy				1		260		260 C		30 sec	30 seconds			
is REACH-compliant pro	oduct	, per EU Regulation	EC1907/2	2006 to includ	de recent addition	n of SVH	IC cand	idate list	of sul	stances in Ju	ine 2011			

Save the fields in Import fields from a Clear all of the Lock the fields on this **Export Data** Import Data Reset Form Lock Supplier Fields this form to a file file into this form fields on this form form to prevent changes **RoHS Material Composition Declaration Declaration Type *** Detailed Rohs Directive Rohs Definition: Quantity limit of 0.1% by mass (1000 PPM) in homogeneous material for: Lead (Pb), Mercury, Hexavalent Chromium, Polybrominated Biphenvls (PBB). Polybrominated Diphenyl Ethers (PBDE) and quantity limit of 0.01% by mass (100 PPM) of homogeneous material for Cadmium 2002/95/EC Please indicate whether any homogeneous material (as defined by the RoHS Directive, EU 2002/95/EC and implemented by the laws of the European Union member states) of the part identified on this form contains lead, mercury, cadmium, hexavalent chromium, polybrominated biphenyls and/or polybrominated diphenyl ethers (each a ?RoHS restricted substance?) in excess of the applicable quantity limit identified above. If a homogeneous material within the part contains a RoHS restricted substance in excess of an applicable quantity limit, please indicate below which, if any, RoHS exemption you believe may apply. If the part is an assembly with lower level components, the declaration shall encompass all such components. Supplier certifies that it gathered the information it provides in this form using appropriate methods to ensure its accuracy and that such information is true and correct to the best of its knowledge and belief, as of the date that Supplier completes this form. Supplier acknowledges that Company will rely on this certification in determining the compliance of its products with European Union member state laws that implement the RoHS Directive. Company acknowledges that Supplier may have relied on information provided by others in completing this form, and that Supplier may not have independently verified such information. However, in situations where Supplier has not independently verified information provided by others, Supplier agrees that, at a minimum, its suppliers have provided certifications regarding their contributions to the part, and those certifications are at least as comprehensive as the certification in this paragraph. If the Company and the Supplier enter into a written agreement with respect to the identified part, the terms and conditions of that agreement, including any warranty rights and/or remedies provided as part of that agreement, will be the sole and exclusive source of the Supplier?s liability and the Company?s remedies for issues that arise regarding information the Supplier provides in this form. In the absence of such written agreement, the warranty rights and/or remedies of Supplier's Standard Terms and Conditions of Sale applicable to such part shall apply. 1 - Item(s) does not contain RoHS restricted substances per the definition above Supplier Acceptance * Accepted **RoHS Declaration *** Exemptions: If the declared item does not contain RoHS restricted substances per the definition above except for defined RoHS exemptions, then select the corresponding response in the RoHS Declaration above and choose all applicable exemptions. **Declaration Signature**

Instructions: Complete all of the required fields on all pages of this form. Select the "Accepted" on the Supplier Acceptance drop-down. This will display the signature area. Digitally sign the declaration (if required by the Requester) and click on Submit Form to have the form returned to the Requester.

Supplier Digital Signature

Homogeneous Material Composition Declaration for Electronic Products

Subltem Instructions: The presence of any JIG Level A or B substances must be declared. [1] indicate the subpart in which the substance is located, [2] provide a description of the homogeneous material [3], enter the weight of the homogeneous material.

Substance Instructions: [A] select the Level (JIG A, JIG B, Requester or Supplier) [B] select the substance category (JIG or Requester) or enter a value (Supplier). [C] select the substance (JIG) or enter the substance and CAS (Other). [D] select a RoHS exemption, if applicable [E] enter the weight of the substance or the PPM concentration [F] Optionally enter the positive (+) and negative (-) tolerance in percent (Note: percent tolerance values are expected to cover a 3 sigma range of distribution unless otherwise noted).

Line Functions: +I Inserts a New Item /SubItem +M Inserts a new Material +C Inserts a new Substance Category +S Inserts a new Substance - Deletes the element line

	Item/SubItem Name		Homogeneous Material	Weight	Unit of Measure		Level	Substance Category			Substance	CAS	Exempt	Weight	Unit of Measure	Toleran	nce +	PPM
+1 -1	Die	+M -M	Doped Silicon	1.86024	mg	+C -C	Supplier		+S	-S	Si	7440-21-3		1.86024	mg			530,45
+1 -1	BSP	+M -M	LC2850	0.24681	3mg	+C -C	Supplier		+S	-S	Polyethylene terephtha	25038-59-9		0.122387	mg		;	34,899
				•					+S	-s	Silica	Proprietary		0.069352	mg			19,776
									+S	-s	Epoxy resin	Proprietary		0.026517	mg			7,561
									+S	-s	Acrylic resin	Proprietary		0.026517	mg			7,561
									+S	-s	Carbon black	Proprietary		0.00204	mg			582
+1 -1	PSV	+M -M	HD4110	0.82541	9mg	+C -C	Supplier		+S	-S	Methanol	67-56-1		0.000439	mg			125
						,	-		+S	-S	N-Methyl-2-Prollidone	872-50-4		0.006003	mg			1,712
									+S	-s	Methacrylate Monomer	Proprietary		0.001025	mg			292
									+S	-s	Photosensitive Polyimic	Proprietary		0.00615	mg			1,754
									+S	-s	Proprietary Ingredient	Proprietary		0.001025	mg			292
+1 -1	RCF	+M -M	HD4100	0.00800	7 mg	+C -C	Supplier		+S	-S	Methanol	67-56-1		0.00024	mg			68
									+S	-S	N-Methyl-2-Prollidone	872-50-4		0.003283	mg			936
									+S	-S	Methacrylate Monomer	Proprietary		0.00056	mg			160
									+S	-S	Photosensitive Polyimic	Proprietary		0.003363	mg			959
									+S	-s	Proprietary Ingredient	Proprietary		0.00056	mg			160
+1 -1	RDL	+M -M	Cu	0.02762	4mg	+C -C	Supplier		+S	Ş	Cu	7440-50-8		0.027624	mg			7,877
+1 -1	RDL (Seed Metal)	+M -M	Wti	0.054842	2mg	+C -C	Supplier		+S	Ş	w	7440-33-7		0.053442	mg			15,239
									+S	-S	Ti	7440-32-6		0.0014	mg			399
+1 -1	Solder Bump (Seed	+M -M	Wti	0.00218	amg	+C -C	Supplier		+S	-S	w	7440-33-7		0.001062	mg			303
									+S	-s	Cu	7440-50-8		0.001098	mg			313
									+S	-S	Ti	7440-32-6		0.000000	mg			8
+1 -1	Solder Bump (Sold	+M -M	Solder Ball SAC	21.25420	mg	+C -C	Supplier		+S	-S	Sn	7440-31-5		1.198787	mg		,	341,84

+S -S Cu	7440-50-8	0.00912 m	ng		2,601				
+S -S Ag	7440-22-4	0.0463 m	ng		13,203				
+I -I Solder Bump (UBM +M -M Cu Plating 0.038303mg	+C -C Supplier		+8 -8 0	Cu		7440-50-8	0.0274561	mg	7,829
	+C -C B	Nickel (external ap	pplic +S -S	Nickel		7440-02-0	0.010847	mg	3,093