ASSOCIATION CONNECTING ELECTRONICS INDUSTRIES®	© Co	terial Compo pyright 2005. IPC, Bannoc aternational and Pan-Ameri	kburn, Illinois	. All rights reserv	tion with lower	level p	arts, the	declaration	n encon		er level mate	erials 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						n Type * ribute			tion Class * - RoHS Yes/No	/No, Homogeneous Materials and Mfg Informat					
Supplier Information																
Company Name *		Company Unique ID		Unique ID Au	Response Date *				Response Document ID							
SEMTECH CORPORATION		SEMTECH CORPOR	RATION		2012-04-23											
Contact Name *		Title - Contact		Phone - Con	Email - Contact *				5 "	2	A 11		1			
ROYA READER		Quality Customer Se	rvice Spec	805-389-2742		rreader@semtech.com				Duplicate	Contact	-> Autho	rizea Ke	presentative		
Authorized Representative *		Title - Representative	<del></del>	Phone - Rep	Email - Representative *			*	Supplier Comments or URL for Additional Information							
ROYA READER		Quality Customer Se	rvice Spec	805-389-274	rreader@semtech.com											
Requester Item Number		Mfr Item Number		Mfr Item Name	Effective Date		Version Manufa		cturing Site	Weight *	UC	M	Unit Type			
		RClamp0521PATCT		Ultra-Low Ca				China		0.905	mg	l	Each			
Alternate Recommenda	ation				Alternate Item Co			Item Co	comments							
Manufacturing Proces	ss In	formation														
Terminal Plating / Grid Array Material			Terminal Ba	ase Alloy	J-STD-020 MSL Ra	ating	ng Peak Proce		Tempera	ature Max Time at Peak Ter		perature Number of Reflow		of Reflow Cycles		
Nickel/Palladium/Gold (Ni/Pd/Au)		/Au)	CU Alloy		1			<b>260</b> C		<b>30</b> so		econds	3			
Comments  RClamp0521PATCT is R	EAC	H-compliant produc	t, per EU	Regulation E	C1907/2006 to in	clude r	ecent ad	dition of	SVHC	candidate list	of substan	ices in F	ebruary	2012.		

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			Homogeneous	Weight	Unit of			Level	Substance Category			Substance	CAS	Evennt	Weight	Unit of Measure	Tolerance		PPM
	Name			Material	weight	Measure			Levei	Substance Category			Substance	CAS	Exempl			-	+	PFIVI
+1 -1	Die	+M	-M	Doped Silicon	0.0403	mg	+C	-C	Supplier		+S	-S	Si	7440-21-3		0.0403	mg			44,567
+1 -1	Leadframe	+M	-М	C7025	0.35859	9mg	+C	٠	Supplier		+S	-S	Cu	7440-50-8		0.3439	mg		;	380,12
		_		•	•						+S	-s	Si	7440-21-3		0.0026	mg			2,874
							+C	-C	В	Nickel (external applic	+S	-s	Nickel	7440-02-0		0.0115	mg			12,684
							+C	٠	Supplier		+S	-S	Mg	7439-95-4		0.0006	mg			694
		+M	-М	Ni/Pd/Au Plating	0.00919	5mg	+C	-C	В		+S	-s	Nickel	7440-02-0		0.0083	mg			9,164
				•	•		+C	-C	Supplier	Middle plating	+S	-S	Pd	7440-03-5		0.0008	mg		-	833
							+C	-C	Supplier	Outer plating	+S	-S	Au	7440-57-5		0.0001	mg			166
+1 -1	Bonding wire	+M	-М	Gold	0.015	mg	+C	-C	Supplier		+S	-S	Au	7440-57-5		0.015	mg			16,612
+1 -1	Molding compound	+M	-М	EME-G770HCD	0.47364	2mg	+C	-C	Supplier		+S	-S	Silica fused	60676-86-0		0.4429	mg			489,50
				-							+S	-S	Epoxy resin	Proprietary		0.0142	mg			15,706
											+S	-S	Phenol resin	Proprietary		0.0142	mg			15,706
											+S	-S	Carbon Black	1333-86-4		0.0024	mg			2,618
+1 -1	Die attached epoxy	+M	-М	8006NS	0.00791	9mg	+C	<b>-</b> C	Supplier		+S	-S	Treated silica	Proprietary		0.0006	mg		-	700
				-							+S	-s	Glycol ethers	Proprietary		0.0016	mg			1,751
											+S	-s	Metal oxide	Proprietary		0.0022	mg			2,451
											+S	-s	Curing agent & hardene	Proprietary		0.0006	mg			700
											+S	-s	epoxy resins	Proprietary		0.0029	mg			3,151