ASSOCIATION CONNECTING ELECTRONICS INDUSTRIES ®	© Co	terial Compo pyright 2005. IPC, Bannoo nternational and Pan-Ameri	kburn, Illinois	. All rights reserve	tion with lowe	r level p	oarts, the	declaratio	n encor	mpasses	all lower		erials for	which th	e item is an assembly ne manufacturer has leclaration.
1752-2 1.1		Web Site for Informat		m Type * ribute			nration Class * s 6 - RoHS Yes/No, Homogeneous Materials and Mfg Informat								
Supplier Information															
Company Name * Company Unique ID				Unique ID Authority			Response Date *				Response Document ID				
SEMTECH CORPORATION		00-847-9941		DUNS		2013-11-08									
Contact Name * Roya Motamedi		Title - Contact  QA Customer Service	e Specialis				Email - Contact * rmotamedi@semtech.com			Duplicate Contact -> Authorized Representative					
Authorized Representative *		Title - Representative Phone - Representative			resentative *	Email - Representative *			Supplier Comments or URL for Additional Information						
Roya Motamedi QA Customer Service		e Specialis	805-389-274	2	rmota	medi@s	emtech.c	om							
Requester Item Number		Mfr Item Number		Mfr Item Name		Effective Date		Version Manuf		ufacturing Site		Weight *	UC	DM	Unit Type
													mg	3	Each
Alternate Recommendation							Alternate	Item Co	mments					•	
Manufacturing Proces	ss In	formation				•		•							
Terminal Plating / Grid Array Material		Terminal Base Alloy		J-STD-020 MSL Rating		Peak Process Body Tempe		Temper	nperature Max Time		at Peak Temperature		Number	of Reflow Cycles	
Nickel/Palladium/Gold (Ni/Pd/Au)		CU Alloy	CU Alloy 1						С		seconds		3		
Comments  RClamp8512N.TGT is R	EACH	H-compliant produc	t, per EU F	Regulation E0	C1907/2006 to in	clude r	ecent add	dition of	SVHC	candida	ate list o	f substanc	es in J	une 201:	3

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	Evemnt	Weight	Unit of	Tolerance		PPM
	Name		Material	weight	Measure		Level	Substance Category			Substance	CAS	Exempt	weight	Measure	-	+	FFIVI
+1 -1	Die	+M -M	Doped silicon	0.7538	mg	+C -C	Supplier		+S	-S	Si	7440-21-3		0.7538	mg			77,722
+1 -1	SGP4017N13 Subst	+M -M	CCL-HL832NX C	2.66338	4mg	+C -C	Supplier		+S	-S	Bismaleimide Triazine r	105391-33-1		0.5327	mg			54,919
	_						-		+S	-s	Inorganic Filler	21645-51-2		0.2663	mg			27,460
									+S	-s	Continuous Filament Fi	65997-17-3		0.5327	mg			54,919
									+S	-s	Copper	7440-50-8		1.3317	mg			137,29
		+M -M	PSR-4000 Solder	0.97670	5mg	+C -C	Supplier		+S	-s	Acrylic Esters	26376-86-3		0.3091	mg			31,870
						-			+S	-s	Organic black dye	Proprietary		0.0052	mg			534
									+S	-s	Barium Sulfate	7727-43-7		0.3121	mg			32,178
									+S	-s	Talc	14807-96-6		0.0261	mg			2,693
									+S	-s	Silica crystalline	7631-86-9		0.0268	mg			2,762
									+S	-s	Activator	Proprietary		0.0541	mg			5,579
									+S	-s	Amine compound	Proprietary		0.0032	mg			332
									+S	-s	Defoamer	Proprietary		0.0233	mg			2,402
									+S	-s	Dipropyl glycol dinitrate	112-15-2		0.1039	mg			10,714
									+S	-s	Heavy aromatic solvent	64742-94-5		0.1067	mg			10,996
									+S	-s	Naphthalene	91-20-3		0.0062	mg			638
		+M -M	Ni/Pd/Au plating	0.28242	1mg	+C -C	В		+S	-s	Nickel	7440-02-0		0.0235	mg			2,426
			•	•		+C -C	Supplier	middle plating	+8	-s	Pd	7440-05-3		0.2314	mg			23,860
						+C -C	Supplier	outer plating	+S	-s	Au	7440-57-5		0.0275	mg			2,831
+1 -1	Bonding wire	+M -M	Cu/Pd(coating)/A	0.28242	1mg	+C -C	Supplier	1.0 mil	+S	-s	Cu	7440-50-8		0.0377	mg			3,888
						+C -C	Supplier	Pd coating	+8	-s	Pd	7440-05-3		0.001	mg			100
						+C -C	Supplier	1.0 mil	+8	-s	Au	7440-57-5		0.0417	mg			4,295
+1 -1	Molding compound	+M -M	EME-G760L	4.61815	3mg	+C -C	Supplier		+S	-S	Silica (Amorphous) A	60676-86-0		3.5791	mg			369,00

+S -S Silica (Amorphous) B	7631-86-9	0.2005		Τ		20 004				
+3 -3 Sinca (Amorphous) B	7031-00-9	0.3695	mg			38,091				
+S -S Epoxy resin	Proprietary	0.3695	mg			38,091				
+S -S Phenol resin	Proprietary	0.1385	mg			14,284				
+S -S Metal Hydroxide	Proprietary	0.1385	mg			14,284				
+S -S Carbon Black	1333-86-4	0.0231	mg			2,381				
+I -I Die attached Epoxy +M -M 8006NS 0.188188mg +	C -C Supplier		+S	-s	Alumin	um oxide	1344-28-4	0.064	mg	6,597
			+5	-S	Diethy	lene glycol mono	112-15-2	0.064	mg	6,597
			+8	-S	Ероху	resins	Proprietary	0.0527	mg	5,433
			+8	-S	Amine		Proprietary	0.0075	mg	776
+M -M QMI519LB (SDA10.136274mg +	C -C Supplier		+S	-s	Silver		7440-22-4	0.1029	mg	10,608
			+5	-S	вмі		Proprietary	0.0041	mg	421
			+8	-S	Acryla	te	68586-19-6	0.0041	mg	421
			+8	-s	Polybu	ıtadiene	25655-35-0	0.0041	mg	421
			+8	-S	Carboo	cyclic Acrylate	Proprietary	0.0204	mg	2,107
			+8	-s	Additiv	/e	Proprietary	0.0007	mg	70