ASSOCIATION CONNECTING ELECTRONICS INDUSTRIES®	© Co	terial Compo pyright 2005. IPC, Bannoo nternational and Pan-Ameri	kburn, Illinois	. All rights reserve	tion with lower	level p	arts, the	declaratio	n encom	passes	all lower	level mate	erials for	which th	e item is an assembly ne manufacturer has leclaration.		
1752-2 1.1	_	Web Site for Informat	-1752 Standa							Declaration Class * Class 6 - RoHS Yes/No, Homogeneous Materials and Mfg Informa							
Supplier Information																	
Company Name *	Company Unique ID		Unique ID Au	Response Date *			F	Response Document ID									
Semtech Corporation		SEMTECH CORPO	RATION		2017-02-03												
Contact Name *		Title - Contact		Phone - Con	Email - Contact *				C :		0	A tl	-:ID-				
Elvia Finkel		Specialist, Documen	t Control/C	805-498-2111		efinkel@semtech.com				DU	uplicate	Contact -	·> Autno	rizea Re	epresentative		
Authorized Representative *		Title - Representativ	е	Phone - Representative *		Email - Representative *			* 5	Supplier	r Commer	nts or URL	for Add	ditional Ir	nformation		
Elvia Finkel		Specialist, Documer	nt Control/C	805-498-211	efinkel@semtech.com												
Requester Item Number		Mfr Item Number		Mfr Item Name	Effective Date V		Version	ersion Manufac		Site	Weight *	UC	DM	Unit Type			
		GS12141-INE3		12G UHD-SD	,			Malaysia		(0.06866	g		Each			
Alternate Recommend	ation				Alternate			Item Cor	tem Comments					•			
Manufacturing Proces	ss In	formation				•											
Terminal Plating / Grid Array Material Terminal E			Terminal Ba	ase Alloy	ting Peak Process Body Temp			Tempera	erature Max Time at Peak Tem			perature Number of Reflow Cycles					
Nickel/Palladium/Gold (Ni/Pd/Au) CU Allo			CU Alloy				2	260 C		30 se		conds	3				
Comments GS12141-INE3 is REACH	l-com	npliant product, per	EU Regula	ation EC1907	//2006 to include	recent	addition	of SVHC	candic	late list	t of subs	tances in	June 2	016.			

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	Exempt	Weight	Oint oi	Tolerance		PPM
	Name		Material	Weight	Measure		Levei	Substance Category			Substance	CAS	Lxempt	veignt	Measure	-	+	
+1 -1	Die	+M -M	Silicon Chip	0.00201	g	+C -C	Supplier		+S	-S	Si	7440-21-3		0.00201	g		2	29,274
+1 -1	Lead Frame	+M -M	Copper Alloy Cu	0.03312	g	+C	Supplier		+S	-S	Cu	7440-50-8		0.03187	g		۵	464,14
		_							+S	-s	Zinc	7440-66-6		0.00003	g		4	482.38
									+S	-s	Iron	7439-89-6		0.00076	g		·	11,094
									+S	-s	Phosphorous	7723-14-0		0.00002	g		;	337.66
						+C -C	A		+S	-s	Lead	7439-92-1		0	g			48.24
						+C -C	В		+S	-s	Nickel	7440-02-0		0.0004	g		ļ	5,788.5
						+C -C	Supplier		+S	-S	Gold	7440-57-5		0.00001	g		1	144.71
									+S	-S	Silver	7440-22-4		0.00001	g		!	96.48
									+S	-S	Palladium	7440-05-3		0.00002	g			241.19
+1 -1	Die attach material	+M -M	Screen Print 800	0.00082	g	+C	Supplier		+S	-S	Aluminium oxide	1344-28-1		0.00025	g		3	3,582.8
	-		-						+S	-S	Diethylene glycol mono	112-15-2		0.00033	g			4,777.1
									+S	-S	Epoxy resin	25068-38-6		0.00006	g		1	836
									+S	-S	Epoxy resin	Proprietary		0.00016	g		7	2,388.5
									+S	-S	Aromatic amine	Proprietary		0.00002	g		;	358.29
+1 -1	Wire	+M -M	Gold	0.00072	g	+C -C	Supplier		+S	-S	Au	7440-57-5		0.00072	g		1	10,485
	-		-						+S	-S	Others	N/A		0.000000	g		•	1.05
+1 -1	Encapsulation	+M -M	EME-G770HCD	0.03199	g	+C -C	Supplier		+S	-S	Silica Fused	60676-86-0		0.02997	g		۵	436,56
									+S	-s	Epoxy Resin	Trade Secre		0.00096	g		·	13,977
									+S	-s	Phenol Resin	Trade Secre		0.00096	g		1	13,977
									+S	-s	Carbon Black	1333-86-4		0.0001	g			1,397.7