	© Co	terial Compo pyright 2005. IPC, Bannoc nternational and Pan-Ameri	kburn, Illinois	. All rights reserv	tion with lower	level p	arts, the	declaration	encomp	asses all lo		terials for	r which th	e item is an assembly ne manufacturer has leclaration.				
	IPC Web Site for Information on IPC-1752 Standard <a href="http://www.ipc.org/IPC-175x">http://www.ipc.org/IPC-175x</a>							, , , , , , , , , , , , , , , , , , ,			claration Class * ss 6 - RoHS Yes/No, Homogeneous Materials and Mfg Informa							
Supplier Information																		
Company Name * Company Unique				Unique ID Au	uthority Res		Response Date *			esponse D								
Semtech Corporation	SEMTECH CORPOR	RATION		2017-03-30														
Contact Name *		Title - Contact		Phone - Cor	Email - Contact *				D 1:		Δ (1							
Jeffrey Gabrielson		QA Customer Suppo	rt Speciali	805-498-211	jgabrielson@semtech.com			om	Duplica	ate Contact	-> Auth	orizea Re	epresentative					
Authorized Representative * Title - Represent			e Phone - Representative *			Email - Representative *				Supplier Comments or URL for Additional Information								
Jeffrey Gabrielson		QA Customer Suppo	rt Speciali	<b>\$805-498-211</b>	1	jgabri	elson@s	emtech.c	om									
Requester Item Number		Mfr Item Number		Mfr Item Name	Effectiv	e Date	Version	Manufact	uring Site	Weight *	U	OM	Unit Type					
		SX8645I05AWLTRT		ULTRA LOW				Malaysia		0.05645	m	g	Each					
Alternate Recommenda	ndation					Alterna		Alternate I	Item Comments		<u> </u>	<u> </u>	-					
Manufacturing Proces	ss In	formation																
Terminal Plating / Grid Array Material Terminal			Terminal B	Base Alloy J-STD-020 MSL Ra		ting Peak Process Body T		Temperat	ure Max Tir	Max Time at Peak Temp		Number	of Reflow Cycles					
Tin (Sn)			CU Alloy	,	2			2	<b>260</b> C		<b>30</b> se		3					
Comments					1					I			L					
SX8645I05AWLTRT is RE	EACH	l-compliant product	, per EU R	Regulation EC	C1907/2006 to inc	lude re	cent add	lition of S	SVHC ca	ndidate lis	st of substan	ces in F	ebruary	2017.				

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		Unit of		Level	Substance Category			Substance	CAS	Exempt	Weight	Oint Oi	Tolerance		PPM
	Name		Material	Weight	Measure		Levei	Substance Category			Substance	UA3	Lxempt	Weigill	Measure	-	+	
+1 -1	Die	+M -M	Silicon Chip	0.0019	mg	+C -C	Supplier		+S	-S	Si	7440-21-3		0.0019	mg		;	33,660
+1 -1	Lead Frame	+M -M	Ag Plated Cu C1	0.03312	mg	+C -C	Supplier		+S	-s	Cu	7440-50-8		0.03199	mg			13,237
									+S	-S	Fe	7439-89-6		0.00075	mg			17.6
						+C -C	A		+S	-S	Lead	7439-92-1		0	mg			140.82
						+C -C	Supplier		+S	-S	P	7723-14-0		0.00001	mg			745.18
									+S	-s	Zn	7440-66-6		0.00004	mg			5,867.5
									+S	-S	Ag	7440-22-4		0.00033	mg			33,660
+1 -1	Die attach material	+M -M	Conductive epox	0.00082	mg	+C -C	Supplier		+S	-s	Silver	7440-22-4		0.00066	mg			11,694
				•					+S	-S	Carbocycllic Acrylate	Proprietary		0.00008	mg			1,452.7
									+S	-S	Bismaleimide resin	Proprietary		0.00002	mg			435.81
									+S	-S	2-preponoic acid, 2-met	68586-19-6		0.00002	mg			435.81
									+S	-s	Additive	Proprietary		0.00002	mg			435.81
									+S	-s	Dicumlyl peroxide	80-43-3		0.000004	mg			72.64
+1 -1	Wire	+M -M	Gold	0.00072	mg	+C -C	Supplier		+S	-s	Au	7440-57-5		0.000719	mg			12,754
				•					+S	-s	Others	N/A		0.000000	mg			1.28
+1 -1	Lead Finsish	+M -M	Alloy	0.000336	mg	+C -C	Supplier		+S	-S	Sn	7440-31-5		0.000336	mg			5,952
				•					+S	-S	Others	N/A		0.000000	mg			0.6
+1 -1	Encapsulation	+M -M	EME-G770HCD	0.01955	mg	+C -C	Supplier		+S	-S	Silica Fused	60676-86-0		0.018318	mg			324,52
									+S	-S	Epoxy Resin	Proprietary		0.000587	mg			10,390
									+S	-S	Phenol Resin	Proprietary		0.03905	mg			10,390
									+S	-s	Carbon Black	1333-86-4		0.000059	mg			1,039.0