IPC ASSOCIATION CONNECT ELECTRONICS INDUSTR	Material Compo © Copyright 2005. IP international and Pan-	Material Composition Declaration © Copyright 2005. IPC, Bannockburn, Illinois. All rights reserved under both international and Pan-American copyright conventions.				This document is a declaration of the substances within the manufacturer listed item. Note: if the item is an assembly with lower level parts, the declaration encompasses all lower level materials for which the manufacturer has engineering responsibility.										
752-21.1		IPC Web Site for Information on IPC-1752 Standard Form Typ http://www.ipc.org/IPC-175x Form Typ Distribute									Materials and I	ials and Mfg Information				
Supplier Infor	mation															
Company name*			Company un	Company unique ID			Unique ID Authority					Response Date*				
nsemi													2024-05-08			
Contact Name		Title - Contact			1	Phone - Contact*				Email	Email - Contact*					
Product-Env-Stev	wards	Product Enviro Compliance				NA				Produ	Product-Env-Stewards@onsemi.com					
uthorized Repre	sentative*	Title - Representative			1	Phone - Representative*				Email	Email - Representative*					
Product-Env-Stewards			Product Enviro Compliance				NA					Product-Env-Stewards@onsemi.com				
Reques	ster Item Number			Item Number Mfr Item Name			Effective Da	ate Versi	ion 1	Manufacturing S	ite	Weight*		UOM	Unit Type	
				4SO HI-T TR	O HI-T TR		2024-05-08	B LITEONFG			74.267		mg	Each		
	g Proccess Informati	on													,	
Termina	l Plating / Grid Array Material		Terminal Base Alloy		J-STD-020 M	SL Rating	Peak Pr	Peak Process Body Temperature		re Max Time at Peak Tempera		ature	re Number of Reflow Cycles			
Precious metal (e.g. Ag,Au, NiPdAu) (no Sn)			CU Alloy		1		245		C	30	seco	conds 3				
Comments																
vel 1 - maximum	ı time at peak temperatuı	e during so	oldering is 10-3	30 seconds	·						·			·		
or more informa	tion regarding material c	omposition	please refer to	page 3												

RoHS Material Composition Declaration			Declaration Type *	Detail	ed				
Directive 2015/863/EU amending RoHS Directive 2011/65/EU		ium (Cr6+), Polybrominated Biphenyls (PB)	erial for Cadmium and quantity limit of 0.1% b B), Polybrominated Diphenyl Ethers (PBDE), a						
cadmium, hexavalentchromium, polybromin contains a RoHS restricted substance inexce encompass all such components. Supplier cet as of the date that Supplier completes this Company acknowledges that Supplier may hindependently verified information provided certification in this paragraph. If the Compan	nated biphenyls and/or polybrominated diphess of an applicable quantity limit, please indriffes that it gathered the information it provom. Supplier acknowledges that Company wave relied on informationprovided by others of the supplier agrees that, at a minimusy and the Supplier enter into a written agree yesource of the Supplier's liability and the C	enyl ethers (each a "RoHS restricted substan licate below which, if any, RoHS exemption vides in this form using appropriate methods vill rely on this certification in determining the s in completing this form, and that Supplier um, itssuppliers have provided certifications ement with respect to the identified part, the tompany's remedies for issues that arise rega	s of the European Union member states) of the ce") in excess of the applicable quantity limit is you believe may apply. If the part is an assemb to ensure its accuracy and that such informatio e compliance of its products with European Ur may not have independently verified such infor regarding their contributions to the part, and the erms and conditions of that agreement, including information the Supplier provides in this	dentified above. If a ally with lower level in is true and correct at it in member state la mation. However, in ose certifications are ag any warranty righ	homogeneous material within the part components, the declaration shall to the best of its knowledge and belief, was that implement the RoHS Directive. In situations where Supplier has not the at least as comprehensive as the lats and/or remedies provided as part of				
RoHS Declaration * 1 - Item	(s) does not contain RoHS restricted substar	nces per the definition above	Supplier A	cceptance *	Accepted				
Exemption: 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.									
Exemption List Version	EL-2011/534/EU								
Declaration Signature									
		e "Accepted" on the Supplier Acceptance	drop-down. This will display the signature a	rea. Digitally sign t	the declaration (if required by the				

Homogeneous Material Composition Declaration for Electronic Products

SubItem 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).

Homogeneous Material	Weight	Unit of Measure	Level	Substance	CAS	Exempt	Weight	Unit of Measure
Die	0.267	mg	В	Gallium Arsenide (AsGa)	1303-00-0		0.0864	mg
			Supplier	Silicon (Si)	7440-21-3		0.1754	mg
			Supplier	Aluminum (Al)	7429-90-5		0.0052	mg
Die Attach	0.25	mg	Supplier	Silver (Ag)	7440-22-4		0.205	mg
			Supplier	Dicyandiamine	461-58-5		0.0025	mg
			Supplier	Phenolic Resin (Novolac)	9003-35-4		0.0425	mg
Lead Frame	24.951	mg	Supplier	Silver (Ag)	7440-22-4		1.28	mg
			Supplier	Zinc (Zn)	7440-66-6		0.0449	mg
			Supplier	Iron (Fe)	7439-89-6		0.6138	mg
			Supplier	Copper (Cu)	7440-50-8		22.9774	mg
			Supplier	Phosphorus (P)	7723-14-0		0.0349	mg
Mold Compound-White	45.0	mg	Supplier	Titanium Dioxide (TiO2)	13463-67-7		11.25	mg
			В	Brominated Bisphenol A Diglycidyl Ether	40039-93-8		1.35	mg
			Supplier	Ortho Cresol Novolac Resin	29690-82-2		6.075	mg
			В	Antimony Trioxide (Sb2O3)	1309-64-4		1.35	mg
			Supplier	Fused Silica (SiO2)	60676-86-0		22.5	mg
			Supplier	Phenolic Resin (Novolac)	9003-35-4		2.475	mg
Plating	0.239	mg	Supplier	Palladium (Pd)	7440-05-3		0.0095	mg
			В	Nickel (Ni)	7440-02-0		0.2238	mg
			Supplier	Gold (Au)	7440-57-5		0.0057	mg
Protective Coating	3.4	mg	Supplier	Poly(dimethylsiloxane), hydroxy terminated	70131-67-8		1.7	mg
			Supplier	Ethylbenzene	100-41-4		0.34	mg
			Supplier	Filler (SiO2)	68909-20-6		0.646	mg
			Supplier	Misc.	Proprietary Data		0.034	mg
			Supplier	Xylene	1330-20-7		0.68	mg
Wire Bond - Au	0.16	mg	Supplier	Gold (Au)	7440-57-5		0.16	mg