IPC ASSOCIATION CONN	Material Comp © Copyright 2005. I international and Pa	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 Distribute					* Declaration Class * Class 6 - RoHS Yes/No, Homogeneous Mater					ials and Mfg Information				
Supplier Info	formation															
Company name* Company unique ID				nique ID	.D Unique			nique ID Authority					Response Date*			
nsemi												2023-06-08				
Contact Name		Title - Conta	Title - Contact			Phone - Contact*					Email - Contact*					
Product-Env-S	Stewards	Product Enviro Compliance				NA					Product-Env-Stewards@onsemi.com					
uthorized Rep	presentative*	Title - Representative				Phone - Representative*				Email - Representative*						
Product-Env-S	Stewards	Product Enviro Compliance				NA				Product-Env-Stewards@onsemi.com						
Req	quester Item Number	Mfr Iten	n Number	Mfr Item Name			Effective Date	te Version Manufacturing Site		ring Site	V	Veight*	UOM	Unit Type		
		NCV846	8460ADR2G High Side Driver with Ten Shutdown and Current Lin		with Tempera	iture	2023-06-08					7	2.0	mg	Each	
Ianufacturi	ring Proccess Informa	ition														
Terminal Plating / Grid Array Material			Ferminal Base Alloy J-STD-020 MS		SL Rating	Peak Process Body Temperature Max Time at		ime at Peak	Temperatu	ıre Nun	nber of Reflow Cy	cles				
Matte Tin (Sn) - annealed		CU Alloy 3		3		260		C	30		seconds 3					
omments																
TTENTION:	MSL 3 Rated item require	es Bake and D	Ory Pack (afte	er electrical test)												
or more infori	mation regarding material	composition	please refer t	o page 3												

RoHS Material Composition Declaration			Declaration Type *	Detail	ed						
Directive 2015/863/EU amending RoHS Directive 2011/65/EU  RoHS Definition: Quantity limit of 0.01% by mass (100 PPM) in homogeneous material for Cadmium and quantity limit of 0.1% by mass (1000 PPM) in homogeneous material for: Lead (Pb), Mercury (Hg), Hexavalent Chromium (Cr6+), Polybrominated Biphenyls (PBB), Polybrominated Diphenyl Ethers (PBDE), and Bis(2-ethylhexyl) phthalate (DEHP), Benzyl-butyl phthalate (BBP), Dibutyl phthalate (DBP), Diisobutyl phthalate (DIBP).											
Please indicate whether any homogeneous material (as defined by the RoHS Directive, EU 2011/65/EU and implemented by the laws of the European Union member states) of the part identified on this form contains lead, mercury, cadmium, hexavalentchromium, 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 inexcess 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 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 have provided as part of that agreement, will be the sole and exclusivesource 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.											
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	1.33	mg	Supplier	Silicon (Si)	7440-21-3		1.33	mg
Die Attach	2.4	mg		Epoxy resin	proprietary data		0.24	mg
			Supplier	Ethylene dimethacrylate	97-90-5		0.12	mg
			Supplier	Silver (Ag)	7440-22-4		1.92	mg
			Supplier	Formaldehyde Polymer	9003-36-5		0.12	mg
Lead Frame	37.61	mg	Supplier	Silver (Ag)	7440-22-4		0.7898	mg
			Supplier	Zinc (Zn)	7440-66-6		0.0752	mg
			Supplier	Iron (Fe)	7439-89-6		0.9403	mg
			Supplier	Copper (Cu)	7440-50-8		35.8047	mg
Mold Compound-Black	28.58	mg		Epoxy resin	proprietary data		1.429	mg
			Supplier	Phenolic Resin	Proprietary Data		0.5716	mg
			Supplier	Ortho Cresol Novolac Resin	29690-82-2		0.7145	mg
			Supplier	Carbon Black (C)	1333-86-4		0.1429	mg
			Supplier	Fused Silica (SiO2)	60676-86-0		25.722	mg
Plating	1.89	mg	Supplier	Tin (Sn)	7440-31-5		1.89	mg
Wire Bond - Au	0.19	mg	Supplier	Gold (Au)	7440-57-5		0.19	mg