IPC ASSOCIATION CONNECTION ELECTRONICS INDUSTRIE	Material Compo © Copyright 2005. IPG 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 lowelevel 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 Type http://www.ipc.org/IPC-175x Distribute				e * Declaration Class * Class 6 - RoHS Yes/No, Homogeneous Mater					ials and Mfg Information					
Supplier Inform	nation															
Company name* Company unique ID				que ID	U		Unique ID Authority					Response Date*				
nsemi												2023-06-08				
Contact Name	Title - Contac	Title - Contact			Phone - Contact*					Email - Contact*						
Product-Env-Stew	ards	Product Enviro Compliance			1	NA				Product-Env-Stewards@onsemi.com						
Authorized Representative* Tit				Title - Representative			Phone - Representative*				Email - Representative*					
Product-Env-Stewards			Product Enviro Compliance			]	NA				Product-Env-Stewards@onsemi.com					
Request	ester Item Number Mfr Iter		em Number Mfr Item Name				Effective Date		rsion	Manufacturing Site		V	eight*	t U	OM	Unit Type
		NCV8160BMX180TB XDFN4 HZ 1.8 G Noise and High		XDFN4 HZ 1.8V Noise and High P		Iltra-Low 2023-06-08			,	ТНВ		1.434		n	ng	Each
<b>Ianufacturing</b>	<b>Process Informati</b>	on														
Terminal	Plating / Grid Array Material		Terminal Base Alloy		J-STD-020 MSL Rating		Peak Process Body Tem		ody Temperatu	rature Max Time at Peak		Temperatu	Γemperature Number of Re		Reflow Cycl	es
Precious metal (e.g. Ag,Au, NiPdAu) (no Sn)			CU Alloy 1		1		260		С	30 seco		second	s <b>3</b>			
Comments																
vel 1 - maximum	time at peak temperatur	e during so	ldering is 10-3	0 seconds												
or more informat	ion 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  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 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 knowledges 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 informationprovided 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 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	0.09	mg	Supplier	Silicon (Si)	7440-21-3		0.09	mg
Die Attach	0.13	mg	Supplier	Epoxized Condensate Of Para- Hydrobenzaldehyde And Alkyl Phenol	129915-35-1		0.0416	mg
			Supplier	Aluminum Trioxide (Al2O3)	1344-28-1		0.0884	mg
Lead Frame	0.58		Supplier	Tin (Sn)	7440-31-5		0.0014	mg
			Supplier	Zinc (Zn)	7440-66-6		0.0013	mg
			Supplier	Chromium (Cr)	7440-47-3		0.0014	mg
			Supplier	Copper (Cu)	7440-50-8		0.5758	mg
Mold Compound-Black	0.6		Supplier	Epoxy and Phenolic Resin	40216-08-8		0.048	mg
			Supplier	Carbon Black (C)	1333-86-4		0.003	mg
			Supplier	Aluminum Hydroxide (Al(OH)3)	21645-51-2		0.012	mg
			Supplier	Fused Silica (SiO2)	60676-86-0		0.519	mg
			Supplier	Phenolic Resin (Novolac)	9003-35-4		0.018	mg
Plating	0.004		Supplier	Palladium (Pd)	7440-05-3		0.0001	mg
			В	Nickel (Ni)	7440-02-0		0.0035	mg
			Supplier	Gold (Au)	7440-57-5		0.0004	mg
Wire Bond - Au	0.03	mg	Supplier	Gold (Au)	7440-57-5		0.03	mg