ASSOCIATION CONNECT	© Copyright 2005. II	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 low 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				e * Declaration Class * Class 6 - RoHS Yes/No, Homogeneous Mater						Mfg Ir	formatio	n		
Supplier Infor	mation															
Company name*			Company unique ID			τ	Unique ID Authority					Response Date*				
nsemi													2024-04-20			
Contact Name		Title - Contact			1	Phone - Contact*				Emai	Email - Contact*					
Product-Env-Ste	wards	Product Enviro Compliance				NA				Prod	Product-Env-Stewards@onsemi.com					
Authorized Repre	esentative*	Title - Representative			1	Phone - Representative*				Emai	Email - Representative*					
Product-Env-Stewards			Product Enviro Compliance				NA				Prod	Product-Env-Stewards@onsemi.com				
Reque	ster Item Number			Mfr Item Name			Effective Dat	e Versio	on N	Manufacturing Site		Weig	Weight* UOM		Unit Type	
				Half bridge gate	Half bridge gate driver		2024-04-20 TH2			137.765 mg		mg	Each			
Ianufacturin	g Proccess Informat	ion														
Termin	l Plating / Grid Array Material		Terminal Base Alloy		J-STD-020 MS	STD-020 MSL Rating		Peak Process Body Temperature		re Max Time at Peak Temper		erature	ure Number of Reflow Cycles		eles	
Precious metal (e.g. Ag,Au, NiPdAu) (no Sn)		dAu) (no	CU Alloy 1		1		260		С	30	sec	conds	3			
Comments																
vel 1 - maximun	n time at peak temperatu	re during so	oldering is 10-3	30 seconds	<u> </u>		<u> </u>	<u> </u>						<u> </u>		
or more informa	ation regarding material	composition	please refer to	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 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 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 has not orditions of that agreement, including any warranty rights and/or remedies 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 ri											
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	0.28	mg	Supplier	Silicon (Si)	7440-21-3		0.28	mg
Die Attach	0.13	mg	Supplier	Ethylene glycol dicyclopentenyl ether methacrylate	68586-19-6		0.0045	mg
			Supplier	Bis(a,a-dimethylbenzyl) Peroxide	80-43-3		0.0008	mg
			Supplier	Silver (Ag)	7440-22-4		0.1246	mg
Lead Frame	68.695	mg	Supplier	Zinc (Zn)	7440-66-6		0.0893	mg
			Supplier	Iron (Fe)	7439-89-6		1.6143	mg
			Supplier	Copper (Cu)	7440-50-8		66.9364	mg
			Supplier	Phosphorus (P)	7723-14-0		0.055	mg
Mold Compound-Black	67.22	mg		Epoxy resin	proprietary data		4.0332	mg
			Supplier	Phenolic Resin	Proprietary Data		4.0332	mg
			Supplier	Carbon Black (C)	1333-86-4		0.3361	mg
			Supplier	Fused Silica (SiO2)	60676-86-0		57.137	mg
			Supplier	Silica Crystalline (SiO2)	14808-60-7		1.6805	mg
Plating	1.21	mg	Supplier	Silver (Ag)	7440-22-4		0.015	mg
			Supplier	Palladium (Pd)	7440-05-3		0.034	mg
			В	Nickel (Ni)	7440-02-0		0.891	mg
			Supplier	Gold (Au)	7440-57-5		0.27	mg
Wire Bond - Au	0.23	mg	Supplier	Gold (Au)	7440-57-5		0.23	mg