consemi Contact Name Title - Contact Product-Env-Stewards Product-Enviro Compliance Authorized Representative* Title - Representative Title - Representative Phone - Contact* Email - Contact* Product-Env-Stewards@onsemi.com Product-Env-Stewards@onsemi.com Phone - Representative* Email - Representative*	IPC ASSOCIATION CONNECTIN	Material Composition Declaration © Copyright 2005. IPC, Bannockburn, Illinois. All rights reserved under both international and Pan-American copyright conventions.				der both	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.								
Company name* Company unique ID Unique ID Authority Response Date* 2024-05-10 Contact Name Title - Contact Product Envise Compliance NA Product Envise See antalive* Product Envise Compliance NA Product Envise See antalive* Product Envise Compliance NA Product Envise See antalive* Nanufacturing Site Weight* UOM Wanufacturing Proccess Information Vanufacturing Proccess Information Terminal Plating / Grid Array Material	752-21.1										als and Mf	g Informa	tion		
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Title - Contact Name Product-Env-Stewards Product Enviro Compliance NA Product-Env-Stewards Product-Env-Stewa	Company name*			Company unique ID			τ	Unique ID Authority				Response Date*			
Product-Env-Stewards Authorized Representative* Product-Env-Stewards Product Enviro Compliance Title - Representative Product-Env-Stewards Product-Env-Stewa	nsemi											2024-05-10			
Authorized Representative* Title - Representative Product-Env-Stewards Product Enviro Compliance Requester Item Number Requester It	Contact Name			Title - Contact			P	Phone - Contact*				Email - Contact*			
Product-Env-Stewards Requester Item Number Mfr Item Number Mfr Item Name Effective Date Version Manufacturing Site Weight* UOM Manufacturing Process Information Terminal Plating / Grid Array Material Terminal Base Alloy Terminal Plating / Grid Array Material Terminal Base Alloy Terminal Plating / Grid Array Material Terminal Base Alloy Terminal Plating / Grid Array Material Terminal Plating / Grid Array Material Terminal Base Alloy Terminal Plating / Grid Array Material Terminal Base Alloy Terminal Plating / Grid Array Material Terminal Base Alloy Terminal Plating / Grid Array Material Terminal Base Alloy T	Product-Env-Stewa	ards		Product Enviro Compliance			1	NA				Product-Env-Stewards@onsemi.com			
Requester Item Number	uthorized Represe	entative*	Title - Representative			P	Phone - Representative*				Email - Representative*				
BAT54CXV3T1G SC-89 DUAL COMMON CATHODE 2024-05-10 CN1 2.74 mg	Product-Env-Stewa	ards	Product Enviro Compliance			1	NA				Product-Env-Stewards@onsemi.com				
Manufacturing Proccess Information Terminal Plating / Grid Array Material Terminal Base Alloy J-STD-020 MSL Rating Peak Process Body Temperature Max Time at Peak Temperature Number of Reflow Cycles Matte Tin (Sn) - annealed CU Alloy 1 260 C 30 seconds 3	Requeste	Requester Item Number Mfr Ite		em Number Mfr Item Name				Effective Date	Version	on Manufacturing Site		V	Veight*	UOM	Unit Type
Terminal Plating / Grid Array Material Terminal Base Alloy J-STD-020 MSL Rating Peak Process Body Temperature Max Time at Peak Temperature Number of Reflow Cycles Matte Tin (Sn) - annealed CU Alloy 1 260 C 30 seconds 3			BAT54CXV3T1G SC-89 DU		SC-89 DUAL CON	AL COMMON CATHODE		2024-05-10		C	CN1		.74	mg	Each
Matte Tin (Sn) - annealed CU Alloy 1 260 C 30 seconds 3				Jamain al Daga	Aller	CTD 020 MCL	Dating	Dools Droop	aga Dady Ta		Mov Time at Deals	Tamanagata	wo Niver	har of Doflaw Cur	los
				•		S1D-020 MSL 1	Rating						ber of Reflow Cyc	ies	
omments	•	n (Sn) - annealed	C	U Anoy	1			200		<u> </u> C	30	second	18 3		
vol 1. maximum time at neak tamparatura during caldaring is 10.20 seconds		time at neak towns-st-	no dunina sel	doring is 10.	20 sacands										
vel 1 - maximum time at peak temperature during soldering is 10-30 seconds or more information regarding material composition 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 cornect 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 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	0.04		Supplier	Silicon (Si)	7440-21-3		0.04	mg
Lead Frame	0.97	mg	В	Nickel (Ni)	7440-02-0		0.3715	mg
			Supplier	Iron (Fe)	7439-89-6		0.5131	mg
			Supplier	Copper (Cu)	7440-50-8		0.0854	mg
Mold Compound-Black	1.63	mg	Supplier	Ortho Cresol Novolac Resin	29690-82-2		0.163	mg
			Supplier	Carbon Black (C)	1333-86-4		0.0082	mg
			Supplier	Aluminum Hydroxide (Al(OH)3)	21645-51-2		0.2363	mg
			Supplier	Fused Silica (SiO2)	60676-86-0		1.0595	mg
			Supplier	Phenolic Resin (Novolac)	9003-35-4		0.163	mg
Plating	0.09	mg	Supplier	Tin (Sn)	7440-31-5		0.09	mg
Wire Bond - Cu	0.01	mg	Supplier	Copper (Cu)	7440-50-8		0.01	mg