Contact Name  Title - Contact  Product Env-Stewards  Product Enviro Compliance  NA  Product Env-Stewards  Product Env-Stewards  Product Enviro Compliance  NA  Product Env-Stewards  Pro	ASSOCIATION CONNECTING ELECTRONICS INDUSTRIES	Material Composition Declaration © Copyright 2005. IPC, Bannockburn, Illinois. All rights reserved under both international and Pan-American copyright conventions.				der both The lev	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*  2024-04-23  Contact Name  Product Env-Stewards  If tile - Contact*  Product Env-Stewards  Title - Representative  Title - Representative  Product Env-Stewards  Product Env-	752-21.1											als and Mf	g Informati	ion	
Internate Name   Title - Contact   Phone - Contact*   Phone - Contact*   Product-Env-Stewards   Product Enviro Compliance   NA   Product-Env-Stewards@onsemi.com    Internate Representative*   Product Enviro Compliance   Product Enviro Compliance   NA   Product-Env-Stewards@onsemi.com    Requester Item Number   Mrf Item Number   Mrf Item Name   Effective Date   Version   Manufacturing Site   Weight*   UOM   Unit    Manufacturing Proccess Information   Products Information   Prod	Supplier Informa	ation													
Title - Contact Name Product Enviro Compliance NA Product Envisewards Uthorized Representative* Title - Representative Product Enviro Compliance NA Product Enviro Stewards Onsemi.com Verifue Nanufacturing Site Ve	Company name* Company unique II				ique ID	ue ID Unique		nique ID Authority			Response Date*				
Product-Env-Stewards Product Enviro Compliance Product-Env-Stewards Prod	nsemi											2024-04-23			
Title - Representative Product-Env-Stewards Product Enviro Compliance NA Product-Env-Stewards	Contact Name			Title - Contact			P	Phone - Contact*				Email - Contact*			
Product Enviro Compliance Requester Item Number Mfr Item Numbe	Product-Env-Stewar	rds		Product Enviro Compliance			N	NA				Product-Env-Stewards@onsemi.com			
Requester Item Number	uthorized Represen	Title - Representative			P	Phone - Representative*			Email - Representative*						
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 and Matte Tin (Sn) - annealed CU Alloy 1 260 C 30 seconds  Matter Tin (Sn) - annealed Seconds 3 Seconds	Product-Env-Stewar	rds		Product Enviro Compliance			N	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  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 260 C 30 seconds	Requester	Requester Item Number Mfr Ite		m Number Mfr Item Name			]	Effective Date	Version	N	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  260  Comments  Evel 1 - maximum time at peak temperature during soldering is 10-30 seconds			NCP1216	5AD100R2G	PWM CURRENT-	MODE CONTRO	DLL 2	2024-04-23		P	H1	7	1.85	mg	Each
Matte Tin (Sn) - annealed CU Alloy 1 260 C 30 seconds 3 comments evel 1 - maximum time at peak temperature during soldering is 10-30 seconds				orminal Paga	Alloy	STD 020 MSL D	ating	Dook Proof	oss Pody To	maratur	May Time at Peak	Tamparati	ura Numb	par of Poflaw Cyc	alac
comments evel 1 - maximum time at peak temperature during soldering is 10-30 seconds				·		atting						bei of Kellow Cyc	nes		
vel 1 - maximum time at peak temperature during soldering is 10-30 seconds	•	i (Sii) • aimeaieu		O Alluy	1			1200		IC	30	Second	15 3		
1 1 0 0		me at neak temperature	during cal	doring is 10.2	A 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 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 uppliers 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 neter into a written agreement with respect to the identified part, the terms and conditions 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 provi											
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	Silver (Ag)	7440-22-4		1.92	mg
			Supplier	Formaldehyde Polymer	9003-36-5		0.24	mg
Lead Frame	37.61		Supplier	Silver (Ag)	7440-22-4		0.2257	mg
			Supplier	Zinc (Zn)	7440-66-6		0.0451	mg
			Supplier	Iron (Fe)	7439-89-6		0.8838	mg
			Supplier	Copper (Cu)	7440-50-8		36.4441	mg
			Supplier	Phosphorus (P)	7723-14-0		0.0113	mg
Mold Compound-Black	28.58			Epoxy resin	proprietary data		1.429	mg
			Supplier	Phenolic Resin	Proprietary Data		1.429	mg
			Supplier	Ortho Cresol Novolac Resin	29690-82-2		0.5716	mg
			Supplier	Carbon Black (C)	1333-86-4		0.1429	mg
			Supplier	Fused Silica (SiO2)	60676-86-0		25.0075	mg
Plating	1.89	mg	Supplier	Tin (Sn)	7440-31-5		1.89	mg
Wire Bond - Cu	0.04	mg	Supplier	Copper (Cu)	7440-50-8		0.04	mg