IPC ASSOCIATION ELECTRONICS	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.									
1752-21.1	IPC Web Site for Information on IPC-1752 Standard Form				Form Type Distribute					ials and Mfg Information				
Supplier	Information													
Company name*				ompany unique ID			Unique ID Authority				Response Date*			
onsemi											2024-04-19			
Contact Na	ame	Title - Conta	Title - Contact			Phone - Contact*				Email - Contact*				
Product-E	inv-Stewards	Product Envi	Product Enviro Compliance			NA				Product-Env-Stewards@onsemi.com				
Authorized	l Representative*	Title - Repre	Title - Representative			Phone - Representative*				Email - Representative*				
Product-E	inv-Stewards	Product Envi	Product Enviro Compliance			NA				Product-Env-Stewards@onsemi.com				
	Requester Item Number Mfr Item		Item Number	Number Mfr Item Name			Effective Da	Pate Version Manufacturing Site			We	eight*	UOM	Unit Type
		1N54	104				2024-04-19				133	34.62	mg	Each
Manufac	cturing Process Info	ormation												
ı	Terminal Plating / Grid Ar	ray Material	Terminal Base	Alloy	J-STD-020 MS	L Rating	Peak Pr	ocess Boo	dy Temperat	ture Max Time at Peak	Temperature	Numbe	er of Reflow Cyc	les
	CU Alloy						C 30			seconds 3				
Comments														
For more i	nformation regarding ma	terial composit	ion please refer to	page 3										

RoHS Material Composition Declaration			Declaration Type *	Detailed						
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 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 paragraph. If the Company and the Supplier 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 * 4 - Item(s	) does not contain RoHS restricted substance	s per the definition above except for selected exemp	tions Supplier Acceptance	* Accepted						
Exemption: 7a: Lead in high melting temperature type solders (i.e. lead based solder alloys containing 85% by weight or more lead).										
Exemption List Version	EL-2011/534/EU									
Declaration Signature										
Instructions: Complete all of the required f Requester) and click on Submit Form to ha		Accepted" on the Supplier Acceptance drop-dow	n. This will display the signature area. Digita	lly sign the declaration (if required by the						
Supplier Digital Signature Ra	astislav Drska	-En								

## **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).

<b>Homogeneous Material</b>	Weight	Unit of Measure	Level	Substance	CAS	Exempt	Weight	Unit of Measure
Die	6.67	mg	Supplier	Silicon (Si)	7440-21-3		6.67	mg
Die Attach Solder	46.69	mg	Supplier	Silver (Ag)	7440-22-4		1.1673	mg
			A	Lead (Pb)	7439-92-1	7a	43.1882	mg
			Supplier	Tin (Sn)	7440-31-5		2.3345	mg
Lead Frame	731.48	mg	Supplier	Copper (Cu)	7440-50-8		731.48	mg
Mold Compound-Black	543.33	mg		Metal Hydroxide	proprietary data		27.1665	mg
			Supplier	Carbon Black (C)	1333-86-4		5.4333	mg
			Supplier	Fused Silica (SiO2)	60676-86-0		407.4975	mg
			Supplier	Ortho-Cresol Novolac Resin	29690-82-2		54.333	mg
			Supplier	Phenolic Resin (Novolac)	9003-35-4		48.8997	mg
Plating	6.45	mg	Supplier	Tin (Sn)	7440-31-5		6.45	mg