ASSOCIATION CONNECTING ELECTRONICS INDUSTRIES	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 lowe 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					* Declaration Class * Class 6 - RoHS Yes/No, Homogeneous Mater					ials and Mfg Information				
Supplier Inform	ation														
Company name* Company un				unique ID U:			Unique ID Authority					Response Date*			
nsemi												2023-06-08			
Contact Name	Title - Contact			1	Phone - Contact*					Email - Contact*					
Product-Env-Stewa	rds		Product Enviro Compliance				NA					Product-Env-Stewards@onsemi.com			
uthorized Represe	ntative*	Title - Representative			1	Phone - Representative*				Email - Representative*					
Product-Env-Stewa	rds	Product Enviro Compliance				NA				Product-Env-Stewards@onsemi.com					
Requeste	r Item Number			Mfr Item Name			Effective Date	e Vers	Version Manufacturing Site		V	Weight*	UOM	Unit Type	
				LOG CMOS COU	OUNTER 4BIT		2023-06-08	PH1			422.01		mg	Each	
Ianufacturing l	Proccess Information	n													
Terminal Plating / Grid Array Material		ial Te	Terminal Base Alloy J-STD-020		-STD-020 M	SL Rating			ture Max Time at Peak Tempera		Temperat	ure Numb	er of Reflow Cyc	eles	
Matte Tin (Sn) - annealed		C	CU Alloy 3				260 C 30				seconds 3				
omments															
TTENTION: MSL	3 Rated item requires B	ake and Dr	ry Pack (afte	r electrical test)											
or more informatio	on regarding material cor	nposition p	olease refer t	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 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 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 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 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	5.84	mg	Supplier	Silicon (Si)	7440-21-3		5.84	mg
Die Attach	16.72	mg	Supplier	Silver (Ag)	7440-22-4		12.54	mg
			Supplier	Epoxy resins	129915-35-1		4.18	mg
Lead Frame	261.87	mg	Supplier	Silver (Ag)	7440-22-4		2.8806	mg
			Supplier	Zinc (Zn)	7440-66-6		0.5237	mg
			Supplier	Iron (Fe)	7439-89-6		6.8086	mg
			Supplier	Copper (Cu)	7440-50-8		251.6571	mg
Mold Compound-Black	133.38	mg		Epoxy resin	proprietary data		6.669	mg
			Supplier	Phenolic Resin	Proprietary Data		6.669	mg
			Supplier	Ortho Cresol Novolac Resin	29690-82-2		2.6676	mg
			Supplier	Carbon Black (C)	1333-86-4		0.6669	mg
			Supplier	Fused Silica (SiO2)	60676-86-0		116.7075	mg
Plating	3.83	mg	Supplier	Tin (Sn)	7440-31-5		3.83	mg
Wire Bond - Cu	0.37	mg	Supplier	Copper (Cu)	7440-50-8		0.37	mg