ASSOCIATION CONNE	Material Comp © Copyright 2005. I international and Par	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.									
752-21.1		IPC Web Site for Information on IPC-1752 Standard Form Type http://www.ipc.org/IPC-175x Distribute				* Declaration Class * Class 6 - RoHS Yes/No, Homogeneous Mater					terials and	ials and Mfg Information			
Supplier Info	ormation														
Company name*			Company unique ID			ī	Unique ID Authority					Response Date*			
onsemi											2025-0	2025-07-04			
Contact Name		Title - Contact]	Phone - Contact*				Email	Email - Contact*				
Product-Env-St	tewards		Product Enviro Compliance				NA				Produ	Product-Env-Stewards@onsemi.com			
uthorized Rep	oresentative*	Title - Representative]	Phone - Representative*				Email	Email - Representative*				
Product-Env-St	tewards	Product Enviro Compliance				NA				Produ	Product-Env-Stewards@onsemi.com				
Requ	Requester Item Number		Number	Mfr Item Name			Effective Dat	e Vers	sion	Manufacturing Site		Weight*	UOM	Unit Type	
		MC1453	4538BDG LOG CMOS MLTIV		TIVIBRT DU	AL	2025-07-04		PH1			142.68	mg	Each	
Ianufacturi	ing Proccess Informa	tion													
Terminal Plating / Grid Array Material		Terminal Base Alloy J-STD-020 MS		SL Rating	Peak Process Body Tempera		re Max Time at P	eak Temper	ature Numb	per of Reflow Cyc	cles				
Matte Tin (Sn) - annealed			CU Alloy 1				260 C 30		seco	seconds 3					
omments															
vel 1 - maximu	um time at peak temperati	ure during sol	dering is 10-3	30 seconds											
or more inforn	mation regarding material	composition	please 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 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 has not or written agreement with respect to the identified part, the terms and conditions of that agreement, including any warranty rights and/or remedies provided in the 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	2.73	mg	Supplier	Silicon (Si)	7440-21-3		2.73	mg
Die Attach	4.85	mg	Supplier	Silver (Ag)	7440-22-4		3.6375	mg
			Supplier	Epoxy resins	129915-35-1		1.2125	mg
Lead Frame	75.92	mg	Supplier	Silver (Ag)	7440-22-4		0.7592	mg
			Supplier	Zinc (Zn)	7440-66-6		0.1518	mg
			Supplier	Iron (Fe)	7439-89-6		1.9739	mg
			Supplier	Copper (Cu)	7440-50-8		73.035	mg
Mold Compound-Black	55.11	mg		Epoxy resin	proprietary data		2.7555	mg
			Supplier	Phenolic Resin	Proprietary Data		2.7555	mg
			Supplier	Ortho Cresol Novolac Resin	29690-82-2		1.1022	mg
			Supplier	Carbon Black (C)	1333-86-4		0.2756	mg
			Supplier	Fused Silica (SiO2)	60676-86-0		48.2213	mg
Plating	3.73	mg	Supplier	Tin (Sn)	7440-31-5		3.73	mg
Wire Bond - Cu	0.34	mg	Supplier	Copper (Cu)	7440-50-8		0.34	mg