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 lowe 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 Typ				Form Type Distribute												
Supplier	Informa	tion																
Company name* Comp				Company un	Company unique ID			Unique ID Authority					Response	Response Date*				
onsemi														2025-07-06				
Contact Na	ame			Title - Contact				Phone - Contact*					Email - 0	Email - Contact*				
Product-E	Env-Steward	ls		Product Enviro Compliance				NA					Product-Env-Stewards@onsemi.com					
Authorized Representative*				Title - Representative				Phone - Representative*					Email - Representative*					
Product-Env-Stewards				Product Enviro Compliance				NA					Product-Env-Stewards@onsemi.com					
	Requester I	Requester Item Number Mfr Item			n Number Mfr Item Name			Effective Date Version Manufa		Manufac	anufacturing Site We		Veight	<u>t</u> *	UOM	Unit Type		
			SN012KB- XGS12MP, 24port, Mono 0D				2025-07-06	.025-07-06		TWU		2819.45		5	mg	Each		
Aanufa	cturing Pı	roccess Information	n															
	Terminal Pla	Plating / Grid Array Material		Terminal Base Alloy J-		J-STD-020 MS	STD-020 MSL Rating		Peak Process Body Tempera		ture Max Time at Peak		k Temperatı	Temperature Numb		umber of Reflow Cycles		
	Precious metal (e.g. Ag,Au, NiPdAu) (no Sn)		u) (no	CU Alloy 4		4		245		С	30		secono	ls 3	3			
Comments								_			_							
or more i	nformation	regarding material con	nposition	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 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 applicable exemptions.	contain RoHS restricted substances per t	he definition above except for defined Rol	IS exemptions, then select the corresponding	response in the R	oHS Declaration above and choose all							
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
Ceramic Substrate	1947.74	mg	Supplier	Cobalt (Co)	7440-48-4		0.1948	mg
			Supplier	Molybdenum (Mo)	7439-98-7		0.1948	mg
			Supplier	Tungsten (W)	7440-33-7		23.3729	mg
			Supplier	Silica Amorphous (SiO2)	7631-86-9		122.7076	mg
			Supplier	Aluminum Trioxide (Al2O3)	1344-28-1		1725.6976	mg
			В	Nickel (Ni)	7440-02-0		5.4537	mg
			Supplier	Gold (Au)	7440-57-5		3.8955	mg
			Supplier	Chromium Trioxide (Cr2O3)	1308-38-9		66.2232	mg
Die	198.5	mg	Supplier	Silicon (Si)	7440-21-3		198.5	mg
Die Attach	20.25	mg	Supplier	Bisphenol A_Epichlorohydrin Polymer	25068-38-6		1.0125	mg
			Supplier	Formaldehyde Polymer	9003-36-5		7.0875	mg
			Supplier	Silica Crystalline (SiO2)	14808-60-7		12.15	mg
Glass Attach Epoxy	9.99	mg	Supplier	2,3-epoxypropyl-trimethoxysilan	2530-83-8		0.8591	mg
			Supplier	N-[3- (Trimethoxysilyl)propyl]ethylenediamine	1760-24-3		0.6893	mg
			Supplier	Bisphenol A_Epichlorohydrin Polymer	25068-38-6		4.1558	mg
			Supplier	4,4'-Diaminodiphenyl Sulfone (DDS-4,4')	80-08-0		0.03	mg
			Supplier	Filler (SiO2?C2H6Cl2Si)	68611-44-9		3.996	mg
			Supplier	Carbon Black (C)	1333-86-4		0.2597	mg
Glass Lid /Cap	642.73	mg	Supplier	Boron Trioxide (B2O3)	1303-86-2		53.9893	mg
			Supplier	Silica Amorphous (SiO2)	7631-86-9		382.2958	mg
			Supplier	Barium Monoxide (BaO)	1304-28-5		52.7039	mg
			Supplier	Aluminum Trioxide (Al2O3)	1344-28-1		50.9042	mg
			Supplier	Calcium Monoxide (CaO)	1305-78-8		102.8368	mg
Wire Bond - Al	0.24	mg	Supplier	Aluminum (Al)	7429-90-5		0.24	mg