IPC ASSOCIATION CONNECT: ELECTRONICS INDUSTRI	© Copyright 2005. I	Material Composition Declaration © Copyright 2005. IPC, Bannockburn, Illinois. All rights reserved under both international and Pan-American copyright conventions.			der both	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 Typ http://www.ipc.org/IPC-175x Distribute				Declaration Class * Class 6 - RoHS Yes/No, Homogeneous Materi					ials and Mfg Information				
upplier Infori	mation								,						
Company name*			Company unique ID			J	Unique ID Authority					Response Date*			
nsemi											2023-06-08				
Contact Name			Title - Contact			I	Phone - Contact*				Email - Contact*				
Product-Env-Stew	vards		Product Enviro Compliance			1	NA				Product-Env-Stewards@onsemi.com				
uthorized Repres	sentative*	Title - Representative			I	Phone - Representative*			Email - Representative*						
Product-Env-Stewards			Product Enviro Compliance]	NA				Product-Env-Stewards@onsemi.com				
Reques	ster Item Number	Mfr Item	Number	Mfr Item Name			Effective Date	Version	N	Manufacturing Site		Veight*	UOM	Unit Type	
	FPF1048BUCX Advanced Load S		Advanced Load Sw	ritch		2023-06-08 TW6		TW6	1	.59887	mg	Each			
lanufacturing	g Proccess Informa	tion								_			·		
Terminal Plating / Grid Array Material Terminal Base Alloy J-STD-020 MS				STD-020 MSL	Rating Peak Process Body Temperature Max Time at Peak Temperature Number of Reflow Cycles										
SnAgCu			CU Alloy 1			260 C 30		30	second	ls 3					
omments															
vel 1 - maximum	time at peak temperat	ure during sol	dering is 10-3	30 seconds											
or more informat	tion 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).											
cadmium, hexavalentchromium, polybromin contains a RoHS restricted substance inexce encompass all such components. Supplier cet as of the date that Supplier completes this Company acknowledges that Supplier may hindependently verified information provided certification in this paragraph. If the Compan	nated biphenyls and/or polybrominated diphess of an applicable quantity limit, please indriffes that it gathered the information it provom. Supplier acknowledges that Company wave relied on informationprovided by others of the supplier agrees that, at a minimusy and the Supplier enter into a written agree yesource of the Supplier's liability and the C	enyl ethers (each a "RoHS restricted substan licate below which, if any, RoHS exemption vides in this form using appropriate methods vill rely on this certification in determining the s in completing this form, and that Supplier um, itssuppliers have provided certifications ement with respect to the identified part, the tompany's remedies for issues that arise rega	s of the European Union member states) of the ce") in excess of the applicable quantity limit is you believe may apply. If the part is an assemb to ensure its accuracy and that such informatio e compliance of its products with European Ur may not have independently verified such infor regarding their contributions to the part, and the erms and conditions of that agreement, including information the Supplier provides in this	dentified above. If a ally with lower level in is true and correct tion member state la mation. However, in ose certifications are ag any warranty righ	homogeneous material within the part components, the declaration shall to the best of its knowledge and belief, was that implement the RoHS Directive. In situations where Supplier has not the at least as comprehensive as the lats and/or remedies provided as part of						
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).

omogeneous Material Weight Unit of Measu		Unit of Measure	Level	Substance	CAS	Exempt	Weight	Unit of Measure
Backside Protection Film	0.0561	mg	Supplier	Ortho Cresol Novolac Resin	29690-82-2		0.0117	mg
			Supplier	Carbon Black (C)	1333-86-4		0.001	mg
			Supplier	Silica (SiO2)	14464-46-1		0.0316	mg
			Supplier	2,4,6-Tris[Bis(Methoxymethyl)Amino]-1,3,5-Triazine	3089-11-0		0.0117	mg
Die	0.978067	mg	Supplier	Silicon (Si)	7440-21-3		0.972	mg
			Supplier	Aluminum (Al)	7429-90-5		0.006	mg
Protection coat	0.016542	mg		Polyimide	proprietary data		0.0165	mg
Solder Ball	0.547544	mg	Supplier	Silver (Ag)	7440-22-4		0.0309	mg
			Supplier	Tin (Sn)	7440-31-5		0.5133	mg
			Supplier	Copper (Cu)	7440-50-8		0.0033	mg
Under Bump Metal	6.17E-4	mg	Supplier	Titanium (Ti)	7440-32-6		0.0002	mg
			Supplier	Copper (Cu)	7440-50-8		0.0005	mg