

		<b>Material Composition Declaration</b> © 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 <a href="http://www.ipc.org/IPC-175x">http://www.ipc.org/IPC-175x</a>		Form Type * Distribute		Declaration Class * Class 6 - RoHS Yes/No, Homogeneous Materials and Mfg Information				
<b>Supplier Information</b>										
Company name* onsemi			Company unique ID		Unique ID Authority			Response Date* 2024-05-20		
Contact Name Product-Env-Stewards			Title - Contact Product Enviro Compliance		Phone - Contact* NA			Email - Contact* Product-Env-Stewards@onsemi.com		
Authorized Representative* Product-Env-Stewards			Title - Representative Product Enviro Compliance		Phone - Representative* NA			Email - Representative* Product-Env-Stewards@onsemi.com		
	Requester Item Number	Mfr Item Number	Mfr Item Name		Effective Date	Version	Manufacturing Site	Weight*	UOM	Unit Type
		NFCS1060L3TT	PFC+3 phase INV combo IPM		2024-05-20		VN5	18475.07	mg	Each
<b>Manufacturing Process Information</b>										
	Terminal Plating / Grid Array Material	Terminal Base Alloy	J-STD-020 MSL Rating		Peak Process Body Temperature		Max Time at Peak Temperature		Number of Reflow Cycles	
	Matte Tin (Sn) - annealed	CU Alloy	NA		0	C	30	seconds	3	
Comments										
For more information regarding material composition 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).		
<p>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, hexavalent chromium, 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 in excess 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 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 suppliers 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 exclusive source 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.</p>			
RoHS Declaration *	4 - Item(s) does not contain RoHS restricted substances per the definition above except for selected exemptions		Supplier Acceptance * Accepted
<b>Exemption: 7c-I Electrical and electronic components containing lead in a glass or ceramic other than dielectric ceramic in capacitors, e.g. piezoelectronic devices, or in a glass or ceramic matrix compound.</b>			
Exemption List Version	EL-2011/534/EU		
Declaration Signature			
<b>Instructions: Complete all of the required fields on all pages of this form. Select the "Accepted" on the Supplier Acceptance drop-down. This will display the signature area. Digitally sign the declaration (if required by the Requester) and click on Submit Form to have the form returned to the Requester.</b>			
Supplier Digital Signature	Rastislav Drska		

**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
Capacitors Ceramic	11.2	mg	Supplier	Titanium Dioxide (TiO2)	13463-67-7		2.2365	mg
			Supplier	Tin (Sn)	7440-31-5		0.3291	mg
			Supplier	Misc.	Proprietary Data		0.879	mg
			Supplier	Barium Monoxide (BaO)	1304-28-5		4.4731	mg
			B	Nickel (Ni)	7440-02-0		2.0791	mg
			Supplier	Copper (Cu)	7440-50-8		1.2033	mg
Die	40.79	mg	Supplier	Silicon (Si)	7440-21-3		40.79	mg
Die Attach	104.65	mg	Supplier	Silver (Ag)	7440-22-4		3.1395	mg
			Supplier	Tin (Sn)	7440-31-5		100.9873	mg
			Supplier	Copper (Cu)	7440-50-8		0.5232	mg
Die SiC	1.49	mg	Supplier	Silicon Carbide	409-21-2		1.49	mg
Heat Sink	1438.13	mg	Supplier	Silver (Ag)	7440-22-4		5.7525	mg
			Supplier	Copper (Cu)	7440-50-8		1432.3774	mg
Lead Frame	988.61	mg	Supplier	Tin (Sn)	7440-31-5		0.3954	mg
			Supplier	Copper (Cu)	7440-50-8		988.2145	mg
Mold Compound-Black	10300.7	mg	Supplier	Phenol, polymer with 1,4-bis(methoxymethyl)benzene	26834-02-6		133.9091	mg
			Supplier	Polymer(phenyl glycidil ether)-co-dicyclopentadiene	119345-05-0		515.035	mg
			B	Brominated Bisphenol A Diglycidyl Ether	40039-93-8		206.014	mg
			B	Antimony Trioxide (Sb2O3)	1309-64-4		206.014	mg
			Supplier	Carbon Black (C)	1333-86-4		51.5035	mg
			Supplier	Fused Silica (SiO2)	60676-86-0		6695.4551	mg
			Supplier	Ortho-Cresol Novolac Resin	29690-82-2		515.035	mg
			B	Antimony Pentoxide (Sb2O5)	1314-60-9		20.6014	mg
			Supplier	Phenolic Resin (Novolac)	9003-35-4		515.035	mg
			Supplier	Silica Crystalline (SiO2)	14808-60-7		1442.098	mg
Plating	26.39	mg	Supplier	Tin (Sn)	7440-31-5		16.2404	mg
			B	Nickel (Ni)	7440-02-0		10.1496	mg
Resistor	26.96	mg		Epoxy resin	proprietary data		0.2189	mg
			Supplier	Silicon Dioxide	7631-86-9		0.595	mg
			Supplier	Glass Frit	65997-18-4	7c	0.1957	mg

			Supplier	Silver (Ag)	7440-22-4		0.5338	mg
			Supplier	Tin (Sn)	7440-31-5		0.9538	mg
			Supplier	Chromium (Cr)	7440-47-3		0.0474	mg
			Supplier	Other Metal Oxide	Proprietary Data		0.4265	mg
			Supplier	Aluminum Trioxide (Al2O3)	1344-28-1		22.8508	mg
			B	Nickel (Ni)	7440-02-0		1.138	mg
Resistor 1	5.13	mg		Epoxy resin	proprietary data		0.1015	mg
			Supplier	Silicon Dioxide	7631-86-9		0.1134	mg
			Supplier	Glass Frit	65997-18-4		0.0409	mg
			Supplier	Silver (Ag)	7440-22-4		0.4818	mg
			Supplier	Tin (Sn)	7440-31-5		0.1249	mg
			Supplier	Misc.	Proprietary Data		0.0092	mg
			Supplier	Other Metal Oxide	Proprietary Data		0.1113	mg
			Supplier	Aluminum Trioxide (Al2O3)	1344-28-1		3.9971	mg
			B	Nickel (Ni)	7440-02-0		0.1499	mg
Solder Wire	16.69	mg	Supplier	Tin (Sn)	7440-31-5		15.2714	mg
			B	Antimony (Sb)	7440-36-0		1.4187	mg
Substrate	5458.18	mg		Epoxy resin	proprietary data		54.5818	mg
			Supplier	Aluminum Trioxide (Al2O3)	1344-28-1		327.4908	mg
			Supplier	Copper (Cu)	7440-50-8		382.0726	mg
			Supplier	Aluminum (Al)	7429-90-5		4694.0347	mg
Thermistor	1.15	mg	Supplier	Silver (Ag)	7440-22-4		0.0915	mg
			Supplier	Tin (Sn)	7440-31-5		0.03	mg
			Supplier	Nickel Oxide (NiO)	1313-99-1		0.1979	mg
			Supplier	Misc.	Proprietary Data		0.1034	mg
			Supplier	Other Metal Oxide	Proprietary Data		0.0057	mg
			Supplier	Palladium (Pd)	7440-05-3		0.0154	mg
			B	Nickel (Ni)	7440-02-0		0.0133	mg
			Supplier	Manganese Tetraoxide (Mn3O4)	1317-35-7		0.6927	mg
Wire Bond	14.6	mg	Supplier	Silicon (Si)	7440-21-3		0.146	mg
			Supplier	Aluminum (Al)	7429-90-5		14.454	mg
Wire Bond - Al	40.4	mg	Supplier	Aluminum (Al)	7429-90-5		40.4	mg