Material Composition Declaration

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 **http://www.ipc.org/IPC-175x**	Form Type * Distribute	Declaration Class * Class 6 - RoHS Yes/No, Homogeneous Materials and Mfg Information

Supplier Information

Company name* **onsemi**	Company unique ID	Unique ID Authority	**Response Date*** **2023-06-08**
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
		FNF51560TD1	SPM55_V2 600V 15A	2023-06-08		CPA	7213.295	mg	Each

Manufacturing Proccess Information

	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).		
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 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 informationprovided 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, itssuppliers 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 andConditions of Sale applicable to such part shall apply.			
RoHS Declaration *	4 - Item(s) does not contain RoHS restricted substances per the definition above except for selected exemptions	**Supplier Acceptance ***	**Accepted**
Exemption: 7a: Lead in high melting temperature type solders (i.e. lead based solder alloys containing 85% by weight or more lead).			
Exemption List Version	EL-2011/534/EU		
Declaration Signature			
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.			
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**
Die	23.0	mg	Supplier	Silicon (Si)	7440-21-3		23	mg
Die Attach Solder	13.0	mg	Supplier	Silver (Ag)	7440-22-4		0.325	mg
			A	Lead (Pb)	7439-92-1	7a	12.025	mg
			Supplier	Tin (Sn)	7440-31-5		0.65	mg
Lead Frame	2883.0	mg	Supplier	Silver (Ag)	7440-22-4		0.9802	mg
			Supplier	Iron (Fe)	7439-89-6		2.883	mg
			Supplier	Copper (Cu)	7440-50-8		2871.468	mg
			Supplier	Phosphorus (P)	7723-14-0		7.6688	mg
Mold Compound-Black	4187.0	mg	Supplier	2,6-dibromo-4-[1-(3-bromo-4-hydroxyphenyl)-1-methylethyl]phenol	6386-73-8		20.935	mg
			Supplier	Ortho Cresol Novolac Resin	29690-82-2		167.48	mg
			B	Antimony Trioxide (Sb2O3)	1309-64-4		209.35	mg
			Supplier	Carbon Black (C)	1333-86-4		20.935	mg
			Supplier	Silica (SiO2)	14464-46-1		3558.9502	mg
			Supplier	Phenolic Resin (Novolac)	9003-35-4		209.35	mg
Plating	53.2947	mg	Supplier	Tin (Sn)	7440-31-5		53.2947	mg
Potting	36.0	mg	Supplier	Bisphenol A_Epichlorohydrin Polymer	25068-38-6		30.6	mg
			Supplier	Inorganic Filler of Solder Mask_Talc (Mg3Si4O10(OH)2)	14807-96-6		1.8	mg
			Supplier	Calcium Carbonate (CCaO3)	471-34-1		3.6	mg
Wire Bond - Al	13.0	mg	Supplier	Aluminum (Al)	7429-90-5		13	mg
Wire Bond - Cu	5.0	mg	Supplier	Palladium (Pd)	7440-05-3		0.1	mg
			Supplier	Copper (Cu)	7440-50-8		4.9	mg