	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.

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
		STK554U394A-E	3phase inverter HIC	2023-06-08		VN2	16700.0	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: 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.

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
Ceramic Substrate	4758.1	mg	Supplier	Bisphenol A_Epichlorohydrin Polymer	25068-38-6		59.4763	mg
			Supplier	Aluminum Trioxide (Al2O3)	1344-28-1		234.5743	mg
			B	Nickel (Ni)	7440-02-0		8.0888	mg
			Supplier	Acrylic resins	Proprietary Data		3.3307	mg
			Supplier	Copper (Cu)	7440-50-8		319.7443	mg
			Supplier	Barium Sulfate (BaSO4)	7727-43-7		2.3791	mg
			Supplier	Aluminum (Al)	7429-90-5		4130.5068	mg
Chip Parts	41.39	mg	Supplier	Titanium Dioxide (TiO2)	13463-67-7		0.0083	mg
			Supplier	Silver (Ag)	7440-22-4		1.6639	mg
			Supplier	Epoxy resins	129915-35-1		0.4429	mg
			Supplier	Bisphenol A, Epichlorohydrin polymer	25036-25-3, 25068-38-6		0.0248	mg
			Supplier	Tin (Sn)	7440-31-5		1.3162	mg
			Supplier	Silica Amorphous (SiO2)	7631-86-9		1.0637	mg
			Supplier	Ceramic	12013-47-7, 12047-27-7		8.5801	mg
			Supplier	Phenolic resins	Proprietary Data		0.1159	mg
			Supplier	Palladium (Pd)	7440-05-3		0.0083	mg
			Supplier	Aluminum Trioxide (Al2O3)	1344-28-1		25.0451	mg
			B	Nickel (Ni)	7440-02-0		1.5977	mg
			A	Lead Oxide (PbO)	1317-36-8	7c	0.0911	mg
			Supplier	Chromium Trioxide (Cr2O3)	1308-38-9		0.0041	mg
			Supplier	Copper (Cu)	7440-50-8		1.428	mg
Die	36.37	mg	Supplier	Silicon (Si)	7440-21-3		36.37	mg
Die Attach	1.8	mg	Supplier	Silver (Ag)	7440-22-4		1.2249	mg
			Supplier	Other Epoxy resins	Proprietary Data		0.2702	mg
			Supplier	Tin (Sn)	7440-31-5		0.1919	mg
			Supplier	Other Metal Oxide	Proprietary Data		0.0682	mg
			B	Antimony (Sb)	7440-36-0		0.0178	mg
			B	Antimony Pentoxide (Sb2O5)	1314-60-9		0.027	mg
Heat Sink	1325.05	mg	Supplier	Silver (Ag)	7440-22-4		12.9855	mg
			Supplier	Copper (Cu)	7440-50-8		1312.0646	mg

Lead Frame	849.54	mg	Supplier	Tin (Sn)	7440-31-5		0.5097	mg
			Supplier	Copper (Cu)	7440-50-8		849.0303	mg
Mold Compound-Black	9584.52	mg		Brominated epoxy resin	proprietary data		191.6904	mg
			Supplier	Phenolic Resin	Proprietary Data		575.0712	mg
			Supplier	Epoxy Phenol Resin	Proprietary Data		191.6904	mg
			B	Antimony Trioxide (Sb2O3)	1309-64-4		287.5356	mg
			Supplier	Fused Silica (SiO2)	60676-86-0		958.452	mg
			Supplier	Ortho-Cresol Novolac Resin	29690-82-2		670.9164	mg
			Supplier	Silica Crystalline (SiO2)	14808-60-7		6709.1636	mg
Plating	11.88	mg	Supplier	Tin (Sn)	7440-31-5		5.94	mg
			B	Nickel (Ni)	7440-02-0		5.94	mg
Solder Ball	44.57	mg	Supplier	Silver (Ag)	7440-22-4		1.3817	mg
			Supplier	Tin (Sn)	7440-31-5		42.8585	mg
			B	Antimony (Sb)	7440-36-0		0.0045	mg
			Supplier	Copper (Cu)	7440-50-8		0.3254	mg
Wire Bond - Al	46.78	mg	Supplier	Aluminum (Al)	7429-90-5		46.78	mg