Material Composition Declaration © Copyright 2005. IPC, Bannockburn, Illinois. All rights reserved international and Pan-American copyright conventions.					under 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.									
1752-21.1	.1 IPC Web Site for Information on IPC-1752 Standard http://www.ipc.org/IPC-175x				ard	Form Type Distribute	Form Type * Declaration Class * Class 6 - RoHS Yes/No, Homogeneous Mate					rials and Mfg Information			
Supplier	Informa	tion													
Company name*				Company unique ID				Unique ID Authority				Response Date*			
onsemi												2024-05-18			
Contact Name				Title - Contact				Phone - Contact*				Email - Contact*			
Product-E	Env-Steward	ds		Product Enviro Compliance				NA				Product-Env-Stewards@onsemi.com			
Authorized	d Represent	ative*		Title - Representative				Phone - Representative*				Email - Representative*			
Product-Env-Stewards				Product Enviro Compliance				NA				Product-Env-Stewards@onsemi.com			
	Requester Item Number Mfr Item			Number Mfr Item Name				Effective Date	Version	Manı	Manufacturing Site		Weight*	UOM	Unit Type
	FAN312			2TM1X-F085 Dual 4A High-Speed, Low-Side Ga			Gate Drivers	2024-05-18		PH1	PH1		69.85	mg	Each
Manufacturing Process Information															
Terminal Plating / Grid Array Material			Terminal Base Alloy J-STD-020 MSI			L Rating	ing Peak Process Body Temperature Max Time at Pea			k Temperature Number of Reflow Cycles					
Precious metal (e.g. Ag,Au, NiPdAu) (no Sn)			CU Alloy 3		3		<b>260</b> C		3	30 seco		econds 3			
Comments															
ATTENTION: MSL 3 Rated item requires Bake and Dry Pack (after electrical test)															
For more information regarding material composition 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 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 have 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 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).

Homogeneous Material	Weight	Unit of Measure	Level	Substance	CAS	Exempt	Weight	Unit of Measure
Die	1.99	mg	Supplier	Silicon (Si)	7440-21-3		1.99	mg
Die Attach	0.56	mg	Supplier	Epoxized Condensate Of Para- Hydrobenzaldehyde And Alkyl Phenol	129915-35-1		0.112	mg
			Supplier	Silver (Ag)	7440-22-4		0.448	mg
Lead Frame	37.61	mg	Supplier	Zinc (Zn)	7440-66-6		0.0451	mg
			Supplier	Iron (Fe)	7439-89-6		0.8838	mg
			Supplier	Copper (Cu)	7440-50-8		36.6698	mg
			Supplier	Phosphorus (P)	7723-14-0		0.0113	mg
Mold Compound-Black	28.58	mg		Epoxy resin	proprietary data		2.1435	mg
			Supplier	Phenolic Resin	Proprietary Data		0.7145	mg
			Supplier	Silica Amorphous (SiO2)	7631-86-9		2.1435	mg
			Supplier	Carbon Black (C)	1333-86-4		0.1429	mg
			Supplier	Fused Silica (SiO2)	60676-86-0		23.4356	mg
Plating	0.89	mg	Supplier	Palladium (Pd)	7440-05-3		0.0214	mg
			В	Nickel (Ni)	7440-02-0		0.7832	mg
			Supplier	Gold (Au)	7440-57-5		0.0854	mg
Wire Bond - Au	0.22	mg	Supplier	Gold (Au)	7440-57-5		0.22	mg