52-21.1		TT	aterial Composition Declaration Copyright 2005. IPC, Bannockburn, Illinois. All rights reserved under both ernational 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 lowel level parts, the declaration encompasses all lower level materials for which the manufacturer has engineering responsibility.								
	IPC Web Site for Information on IPC-1752 Standard Form Typ http://www.ipc.org/IPC-175x Distribute				Form Type * Distribute	* Declaration Class * Class 6 - RoHS Yes/No, Homogeneous Materi				Materials an	ials and Mfg Information			
upplier Inforn	nation													
Company name*			Company unique ID			U	Unique ID Authority				Response Date*			
onsemi											2024-05-18			
Contact Name			Title - Contact			P	Phone - Contact*			Ema	Email - Contact*			
Product-Env-Stewards			Product Enviro Compliance			N	NA			Pro	Product-Env-Stewards@onsemi.com			
Authorized Representative*			Title - Representative			P	Phone - Representative*			Ema	Email - Representative*			
Product-Env-Stewards			Product Enviro Compliance			N	NA			Pro	Product-Env-Stewards@onsemi.com			
Requesto	er Item Number	Mfr Item Number		Mfr Item Name]	Effective Date	Version	Manufacturing	Site	Weight*	UOM	Unit Type	
	15GN0.		MA-TL-E BIP NPN 70mA 10V fT=		V fT=1.5G	2	2024-05-18		CNG		6.07	mg	Each	
	Process Informati		:1 D	A11	CTD 020 MCL D	2-4:	De els Deserv	no De des Transce	Mar Time	-4 De als Terror	No. 1	an of Deflect Co	-1	
1			Terminal Base Alloy J-STD- CU Alloy 1		STD-020 MSL R	cating	Peak Process Body Tempera 260 C			at Peak Temp		er of Reflow Cy	cies	
	ы	C	U Alloy	1			200	IC	30	Se	econds 3			
omments	·		J	20 1-										
	ime at peak temperatur on regarding material c													

RoHS Material Composition Declaration			Declaration Type *	Detail	led					
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, polybromir contains a RoHS restricted substance inexce encompass all such components. Supplier ce as of the date that Supplier completes this fo Company acknowledges that Supplier may l independently verified information provided certification in this paragraph. If the Compan	nated biphenyls and/or polybrominated dipless of an applicable quantity limit, please intifies that it gathered the information it prome. Supplier acknowledges that Company have relied on information provided by other by others, Supplier agrees that, at a mining and the Supplier enter into a written agree esource of the Supplier's liability and the	henyl ethers (each a "RoHS restricted substational substance below which, if any, RoHS exemption by desired in this form using appropriate method will rely on this certification in determining ters in completing this form, and that Supplies have provided certification between the will respect to the identified part, the Company's remedies for issues that arise respects to the identified part, the company's remedies for issues that arise respects to the identified part, the company's remedies for issues that arise respects to the identified part, the company's remedies for issues that arise respects to the identified part, the company's remedies for issues that arise respects to the identified part, the company's remedies for issues that arise respects to the identified part, the company's remedies for issues that arise respects to the identified part, the company's remedies for issues that arise respects the company is the company that the company tha	ws of the European Union member states) of the pnce") in excess of the applicable quantity limit iden you believe may apply. If the part is an assemble is to ensure its accuracy and that such information the compliance of its products with European Union may not have independently verified such informs regarding their contributions to the part, and tho terms and conditions of that agreement, including the provides in this formation information the Supplier provides in this formation.	entified above. If a y with lower level is true and correct on member state la nation. However, in se certifications are any warranty rigl	n homogeneous material within the part components, the declaration shall t to the best of its knowledge and belief, aws that implement the RoHS Directive. In situations where Supplier has not the at least as comprehensive as the this and/or remedies provided as part of					
RoHS Declaration * 1 - Item	(s) does not contain RoHS restricted substa	ances per the definition above	Supplier Ac	ceptance *	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										
Instructional Complete all of the required	fields on all neggs of this form. Calcut th		a duan dawn. This will display the signature on	a Digitally sign	the declaration (if recurined by the					
Instructions: Complete all of the required Requester) and click on Submit Form to			e drop-down. This will display the signature ar	ea. Digitally sign	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	0.03	mg	Supplier	Silicon (Si)	7440-21-3		0.03	mg
Lead Frame	2.41	mg	Supplier	Silver (Ag)	7440-22-4		0.053	mg
			Supplier	Tin (Sn)	7440-31-5		0.0034	mg
			Supplier	Zinc (Zn)	7440-66-6		0.0046	mg
			Supplier	Iron (Fe)	7439-89-6		0.0612	mg
			Supplier	Copper (Cu)	7440-50-8		2.2878	mg
Mold Compound-Black	3.47	mg		Brominated epoxy resin	proprietary data		0.0868	mg
			Supplier	Epoxy Phenol Resin	Proprietary Data		0.0729	mg
			В	Antimony Trioxide (Sb2O3)	1309-64-4		0.0416	mg
			Supplier	Carbon Black (C)	1333-86-4		0.0347	mg
			Supplier	Fused Silica (SiO2)	60676-86-0		2.429	mg
			Supplier	Ortho-Cresol Novolac Resin	29690-82-2		0.7981	mg
			Supplier	Silica Crystalline (SiO2)	14808-60-7		0.0069	mg
Plating	0.15	mg	В	Bismuth (Bi)	7440-69-9		0.0009	mg
			Supplier	Tin (Sn)	7440-31-5		0.1491	mg
Wire Bond - Au	0.01	mg	Supplier	Gold (Au)	7440-57-5		0.01	mg