Material Composition Dec © Copyright 2005. IPC, Bannockb international and Pan-American co				burn, Illinois. All rights reserved 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	IPC Web Site for Information on IPC 1752 Standard				lard	Form Type Distribute	Form Type * Declaration Class * Class 6 - RoHS Yes/No, Homogeneous			, Homogeneous Mate	laterials and Mfg Information						
Supplier	r Informa	tion															
Company name*			Company uni	Company unique ID			Unique ID Authority					Response Date*					
onsemi												2024-05	2024-05-20				
Contact Na	ame			Title - Contac	Title - Contact				Phone - Contact*					Email - Contact*			
Product-E	Product-Env-Stewards				Product Enviro Compliance			NA				Product-Env-Stewards@onsemi.com					
Authorized	Authorized Representative*			Title - Representative				Phone - Representative*				Email - Representative*					
Product-E	Product-Env-Stewards			Product Enviro Compliance				NA				Product-Env-Stewards@onsemi.com					
	Requester Item Number Mfr Item			Number Mfr Item Name			·	Effective Date	e Versio	n	Manufacturing Site		Weight*	UOM	Unit Type		
	NCV301			DTBR2G PWM CONTROLLER				2024-05-20			PH1		45.24	mg	Each		
Manufacturing Process Information																	
	Terminal Plating / Grid Array Material T			Cerminal Base Alloy J-STD-020 M		J-STD-020 MS	L Rating	Peak Process Body Temperat		ure Max Time at Peak Tempera		rature Number of Reflow Cycles					
	Precious metal (e.g. Ag,Au, NiPdAu) (no Sn)			CU Alloy 3		3		260 C		С	30 seco		onds 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 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, 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 appli											
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	2.0	mg	Supplier	Silicon (Si)	7440-21-3		2	mg
Die Attach	1.44	mg	Supplier	Silver (Ag)	7440-22-4		1.08	mg
			Supplier	Epoxy resins	129915-35-1		0.36	mg
Lead Frame	22.54	mg	Supplier	Zinc (Zn)	7440-66-6		0.027	mg
			Supplier	Iron (Fe)	7439-89-6		0.5297	mg
			Supplier	Copper (Cu)	7440-50-8		21.9765	mg
			Supplier	Phosphorus (P)	7723-14-0		0.0068	mg
Mold Compound-Black	19.0	mg		Epoxy resin	proprietary data		0.95	mg
			Supplier	Phenolic Resin	Proprietary Data		0.95	mg
			Supplier	Ortho Cresol Novolac Resin	29690-82-2		0.38	mg
			Supplier	Carbon Black (C)	1333-86-4		0.095	mg
			Supplier	Fused Silica (SiO2)	60676-86-0		16.625	mg
Plating	0.04	mg	Supplier	Palladium (Pd)	7440-05-3		0.003	mg
			В	Nickel (Ni)	7440-02-0		0.0364	mg
			Supplier	Gold (Au)	7440-57-5		0.0006	mg
Wire Bond - Au	0.22	mg	Supplier	Gold (Au)	7440-57-5		0.22	mg