	© Co	terial Compo pyright 2005. IPC, Bannoc aternational and Pan-Ameri	kburn, Illinois	. All rights reserv	tion with lower	r level p	arts, the	declarati	on enco	mpasses	all lower		als for	which th	item is an assembly manufacturer has eclaration.	
1/32-2 1.1	1.1 IPC Web Site for Information on IPC-1752 Standard http://www.ipc.org/IPC-175x								Declaration Class * Class 6 - RoHS Yes/No, Homogeneous Materials and Mfg Information							
Supplier Information																
Company Name * Company Unique ID				Unique ID Authority			Response Date *				se Docur	ment ID				
TTM Technologies				2019-	10-03											
Contact Name *	Title - Contact		Phone - Cor	Email	- Contac	t *			P	2 1 1	Λ (Ι					
Gulsen Gungor		Project Engineer		315-432-8909		gulsen.gungor@ttm.com			om	Di	uplicate	Contact ->	Autho	rizea Ke	presentative	
Authorized Representativ	Title - Representative		Phone - Representative *		Email	Email - Representative *			Supplier Comments or URL for Additional Information							
Gulsen Gungor		Project Engineer		315-432-8909		gulsen.gungor@ttm.com										
Requester Item Number		Mfr Item Number		Mfr Item Name	)	Effectiv	e Date	Version	Version Manuf		Site	Weight *	UO	M	Unit Type	
		BD60120N50100AHF		BALUN	2018-06-25		Α	East Syracu			0.00196383	g		Each		
Alternate Recommenda	ation				Alternat			e Item Co	m Comments					•		
Manufacturing Proces	s In	formation				•										
Terminal Plating / Grid Array Material Terminal B				ase Alloy	ating	ting Peak Process Body Te			rature Ma	ax Time a	t Peak Temper	ature	Number o	f Reflow Cycles		
Nickel/Gold (Ni/Au) - ENIG CU Alloy			,						<b>30</b> seco		onds	3				
Comments					1					'						
Compliant to RoHS 2 Dire	ectiv	e 2011/65/EU of the	Europear	Parliament	and of the Coun	cil of 8	June 201	1 & Cor	nmissio	on Deleg	gated Dir	ective 2015/	863/E	U of 31	March 2015.	

Save the fields in Import fields from a Clear all of the Lock the fields on this **Export Data** Import Data Reset Form Lock Supplier Fields this form to a file file into this form fields on this form form to prevent changes **RoHS Material Composition Declaration Declaration Type \*** Custom Rohs Directive Rohs Definition: Quantity limit of 0.1% by mass (1000 PPM) in homogeneous material for: Lead (Pb), Mercury, Hexavalent Chromium, Polybrominated Biphenvls (PBB). Polybrominated Diphenyl Ethers (PBDE) and quantity limit of 0.01% by mass (100 PPM) of homogeneous material for Cadmium 2002/95/EC RoHS 2 (Directive 2011/65/EU & 2015/863/EU) Definition Addendum: Quantity limit of 0.1% by mass (1000 PPM) in homogeneous material for: Bis(2-ethylhexyl) phthalate (DEHP), Butyl benzyl phthalate (BBP), Dibutyl phthalate (DBP), Diisobutyl phthalate (DIBP). Supplier certifies that it gathered the information it provides in this form concerning RoHS restrictive substances 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 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 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 exclusive source of the Supplier's liability and the Company's remedies for issues that arise regarding information the Supplier provides in this form. Supplier Acceptance \* Accepted 1 - Item(s) does not contain RoHS restricted substances per the definition above **RoHS Declaration \*** Exemptions: 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. **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

## **Homogeneous Material Composition Declaration for Electronic Products**

**Subltem 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).

Line Functions: +I Inserts a New Item /SubItem +M Inserts a new Material +C Inserts a new Substance Category +S Inserts a new Substance - Deletes the element line

			Homogeneous	\A/a:ala4	Unit of			Laval	Substance Cotemany			Cubatanaa	CAS	Evenue	Wainht	Unit of	Tolerance		PPM
		Material	Weight	Measure			Level	Substance Category			Substance	CAS	Exempt		Measure	-	+		
+1 -1	BD60120N50100AH	+M -M	External Copper	0.00005	<b>3</b> g	+C	-C	Supplier	External Copper Plat	+S	-S	Copper (Cu)	7440-50-8		0.000053	g			1,000,0
		+M -M	External Dielectr	0.00021	<b>O</b> g	+C	-C	Supplier	External Dielectric	+S	-S	Tri-allyl-isocyanurate	1025-15-6		0.000025	g			123,00
						+C	-C	Supplier	External Dielectric	+S	-S	Initiator	1068-27-5		0.000001	g			8,600
						+C	-C	Supplier	External Dielectric	+S	-S	Silica Fused (SiO2)	60676-86-0		0.000111	g			530,00
						+C	-C	Supplier	External Dielectric	+S	-S	Elastomer	9003-55-8		0.000010	g			51,900
						+C	-C	Supplier	External Dielectric	+S	-S	Poly-phenylene oxide	92-71-7		0.000060	g			286,50
		+M -M	Internal Copper	0.00021	<b>9</b> g	+C	-C	Supplier	Internal Copper	+\$	-S	Copper (Cu)	7440-50-8		0.000219	g			1,000,0
		+M -M	Internal Dielectri	0.00104	<b>0</b> g	+C	-C	Supplier	Internal Dielectric	+\$	-S	Silica Fused (SiO2)	60676-86-0		0.000513	g			493,00
						+C	-C	Supplier	Internal Dielectric	+S	-S	Polytetrafluoroethylene	9002-84-0		0.000493	g			474,00
						+C	-C	Supplier	Internal Dielectric	+S	-S	Proprietary/Unknown	Proprietary		0.000034	g			33,000
		+M -M	CIC	0.00042	<b>5</b> g	+C	-C	Supplier	CIC	+S	-S	Iron (Fe)	7439-89-6		0.000196	g			462,63
						+C	-C	Supplier	CIC	+S	-S	Magnanese (Mn)	7439-96-5		0.000001	g			3,559
						+C	-C	В	Nickel (external applic	+S	-s	Nickel	7440-02-0		0.000109	g			258,00
						+C	-C	Supplier	CIC	+S	-S	Copper (Cu)	7440-50-8		0.000117	g			275,80
		+M -M	Nickel Plating	0.00001	<b>O</b> g	+C	-C	A	Lead/Lead Compound	+S	-S	Lead	7439-92-1		0.000000	g			499.75
	+C -		-C	В	Nickel (external applic	+S	-S	Nickel	7440-02-0		0.000010	g			999,50				
	•	+М-М	Gold Plating	0.00000	4g	+C	-c	Supplier	Gold Plating	+S	-S	Gold (Au)	7440-57-5		0.000004	g			1,000,0