



Material Composition Declaration

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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.

Adobe Reader version 7.0.5 is required to complete this declaration.

1752-2 1.1	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 Informat
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Supplier Information

Company Name * STMicroelectronics	Company Unique ID	Unique ID Authority	Response Date * NA	Response Document ID				
Contact Name *	Title - Contact	Phone - Contact *	Email - Contact *	Duplicate Contact -> Authorized Representative				
Authorized Representative * GIUSEPPE VITALI PALMA	Title - Representative AMS & IPD MD CHAMPION	Phone - Representative * NA	Email - Representative * NA	Supplier Comments or URL for Additional Information				
Requester Item Number	Mfr Item Number	Mfr Item Name	Effective Date	Version	Manufacturing Site	Weight *	UOM	Unit Type
	LIS3DSHTR	D53N*MT28ADB	2012-06-25	A	MA1A	20	mg	Each
Alternate Recommendation	Package: LLGA 3X3X1.0 16L			Alternate Item Comments	ECOPACK2/ROHS BSA REF: CD00330235			

Manufacturing Process Information

Terminal Plating / Grid Array Material Nickel/Palladium/Gold (Ni/Pd/Au)	Terminal Base Alloy CU Alloy	J-STD-020 MSL Rating 3	Peak Process Body Temperature 260 C	Max Time at Peak Temperature 30 seconds	Number of Reflow Cycles 3
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Comments

Disclaimer: While STMicroelectronics has endeavored to provide information which is accurate and up to date, this document and its contents are provided on a strict 'as is' and

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RoHS Material Composition Declaration

Declaration Type *

Simplified

RoHS Directive 2002/95/EC **RoHS Definition:** Quantity limit of 0.1% by mass (1000 PPM) in homogeneous material for: Lead (Pb), Mercury, Hexavalent Chromium, Polybrominated Biphenyls (PBB), Polybrominated Diphenyl Ethers (PBDE) and quantity limit of 0.01% by mass (100 PPM) of homogeneous material for Cadmium

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.

RoHS Declaration * 4 - Item(s) does not contain RoHS restricted substances per the definition above except for selected exemptions

Supplier Acceptance * Accepted

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.

Exemption List Version EL-2006/690/EC

+ - 5. Lead in glass of cathode ray tubes, electronic components and fluorescent tubes.

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

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).

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

		Item/SubItem Name			Homogeneous Material	Weight	Unit of Measure			Level	Substance Category			Substance	CAS	Exempt	Weight	Unit of Measure	Tolerance		PPM
+I	-I		+M	-M				+C	-C			+S	-S						-	+	
+I	-I	D53N*MT28ADB	+M	-M	Silicon Die	9.895	mg	+C	-C	Supplier	Silicon die	+S	-S	Silicon	7440-21-3		9.814	mg			991,81
								+C	-C	Supplier	Die metallization	+S	-S	Aluminium (Al)	7429-90-5		0.004	mg			404
												+S	-S	Copper (Cu)	7440-50-8		0.003	mg			303
												+S	-S	Titanium (Ti)	7440-32-6		0.001	mg			101
								+C	-C	JIG- R	Lead/Lead Compound	+S	-S	Lead Oxide	1317-36-8	5. Lead in	0.054	mg			5,457
								+C	-C	Supplier	Die Passivation	+S	-S	Boron Trioxide	1303-86-2		0.007	mg			707
												+S	-S	Silicon Oxide	7631-86-9		0.007	mg			707
												+S	-S	Aluminium oxide	1344-28-1		0.004	mg			404
												+S	-S	Aliphatic organic solve	Proprietary		0.001	mg			101
			+M	-M	Substrate	4.992	mg	+C	-C	Supplier	Core+ fiber glass/Sol	+S	-S	Bismaleimide (B)	105391-33-1		0.531	mg			106,37
												+S	-S	Triazine (T)	25722-66-1		0.531	mg			106,37
												+S	-S	Fiber glass	65997-17-3		1.584	mg			317,30
												+S	-S	metal hydroxide	21645-51-2		0.036	mg			7,212
												+S	-S	Zinc hydroxide	20427-58-1		0.011	mg			2,204
												+S	-S	Thermosetting resin	Proprietary		0.889	mg			178,08
												+S	-S	Calcium sulfate	7778-18-9		0.018	mg			3,606
												+S	-S	Baryum sulfate	7727-43-7		0.092	mg			18,429
												+S	-S	(2-methoxymethylethox	34590-94-8		0.015	mg			3,005
												+S	-S	Talc containing no asbe	14807-96-6		0.051	mg			10,216
												+S	-S	Quartz	14808-60-7		0.051	mg			10,216
												+S	-S	Acrylates derivative	407-47-6		0.211	mg			42,268
												+S	-S	aromatic hydrocarbon	Proprietary		0.02	mg			4,006
												+S	-S	epoxy resin	Proprietary		0.069	mg			13,822

		+S	-S	Copper (Cu)	7440-50-8			0.85	mg					170,27						
		+S	-S	Nickel (Ni)	7440-02-0			0.026	mg					5,208						
		+S	-S	Gold (Au)	7440-57-5			0.007	mg					1,402						
+M	-M			Die Attach	0.814	mg	+C	-C	Supplier	Tape	+S	-S	Acrylic resin	Proprietary		0.257	mg			315,72
											+S	-S	epoxy resin	Proprietary		0.516	mg			633,90
											+S	-S	Diphenol Propane Digly	1675-54-3		0.041	mg			50,369
+M	-M			Bonding wire	0.185	mg	+C	-C	Supplier	Bonding wire	+S	-S	Gold (Au)	7440-57-5		0.185	mg			1,000,0
+M	-M			Encapsulation	4.114	mg	+C	-C	Supplier	Moulding Compound	+S	-S	Silica, vitreous	60676-86-0		3.598	mg			874,57
											+S	-S	Epoxy Resin	85954-11-6		0.165	mg			40,107
											+S	-S	Epoxy resin	Proprietary		0.165	mg			40,107
											+S	-S	Phenol Resin	26834-02-6		0.165	mg			40,107
											+S	-S	Carbon black	1333-86-4		0.021	mg			5,105