



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 * ST MICROELECTRONICS	Company Unique ID	Unique ID Authority	Response Date * N/A	Response Document ID				
Contact Name *	Title - Contact	Phone - Contact *	Email - Contact *	<input type="button" value="Duplicate Contact -> Authorized Representative"/>				
Authorized Representative * GIUSEPPE VITALI PALMA	Title - Representative AMS & IPD MD CHAMPION	Phone - Representative * N/A	Email - Representative * N/A	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
	STB36NM60N	R1D2*M26LA62	2012-06-26	A	SH1A	1,550	mg	Each
Alternate Recommendation	PACKAGE: D2PAK			Alternate Item Comments	ECOPACK1/ROHS; BSA: CD00263672			

Manufacturing Process Information

Terminal Plating / Grid Array Material	Terminal Base Alloy	J-STD-020 MSL Rating	Peak Process Body Temperature	Max Time at Peak Temperature	Number of Reflow Cycles
Matte Tin (Sn) - annealed	CU Alloy	1	245 C	30 seconds	3

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"

Save the fields in this form to a file

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Lock Supplier Fields

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

+ - 7a. Lead in high melting temperature type solders (i.e. lead based solder alloys containing 85% by weight or more lead).

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

+I	-I	Item/SubItem Name	+M	-M	Homogeneous Material	Weight	Unit of Measure	+C	-C	Level	Substance Category	+S	-S	Substance	CAS	Exempt	Weight	Unit of Measure	Tolerance		PPM
																			-	+	
		R1D2*M26LA62			Silicon Die	22.946	mg			Supplier	Silicon die			Silicon	7440-21-3		22.535	mg			982,08
										Supplier	die metallization			Aluminium(Al)	7429-90-5		0.213	mg			9,283
										Supplier	die back side metalliz			Titanium (Ti)	7440-32-6		0.011	mg			479
														Nickel (Ni)	7440-02-0		0.154	mg			6,711
														(Gold (Au))	7440-57-5		0.033	mg			1,438
					Leadframe	867.804	mg			Supplier	alloy			Copper (Cu)	7440-50-8		866.676	mg			998,70
														Iron (Fe)	7439-89-6		0.868	mg			1,000
														Iron Phosphide (FeP)	26508-33-8		0.26	mg			300
					Leadframe coating	2.63	mg			Supplier	coating			Nickel (Ni)	7440-02-0		2.457	mg			934,22
														Phosphorus (P)	12185-10-3		0.173	mg			65,779
					Die Attach	6.865	mg			JIG R	Lead/Lead Compound			Lead (Pb)	7439-92-1	7a. Lead	6.556	mg			954,98
										Supplier	soft solder			Silver (Ag)	7440-22-4		0.172	mg			25,055
														Tin (Sn)	7440-31-5		0.137	mg			19,956
					Bonding wire	3.139	mg			Supplier	Bonding wire			Aluminium (Al)	7429-90-5		3.138	mg			999,68
														Magnesium (Mg)	7439-95-4		0.001	mg			319
					Encapsulation	643.06	mg			Supplier	Moulding Compound			Silica, vitreous	60676-86-0		514.448	mg			800,00
														Epoxy Cresol Novolak	29690-82-2		45.014	mg			70,000
														Phenol resin	9003-35-4		25.722	mg			39,999
														Biphenyl epoxy resin	85954-11-6		38.584	mg			60,001
										Supplier	Antimony/Antimony C			Antimony Trioxide	1309-64-4		7.717	mg			12,000
										JIG I	Brominated Flame Ret			Brominated Epoxy Resin	40039-93-8		9.646	mg			15,000
										Supplier	Moulding Compound			Carbon Black	1333-86-4		1.929	mg			3,000
					Finishing	3.556	mg			Supplier	connection coating			Tin (Sn)	7440-31-5		3.556	mg			1,000,0