



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 *					
Authorized Representative * GIUSEPPE VITALI PALMA	Title - Representative APM 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
	TL072BCD	FDO7*0082BF6	2011-06-16	A	BO2A	76.9	mg	Each
Alternate Recommendation	PACKAGE:SO 08 .15 JEDEC			Alternate Item Comments	ECOPACK1/ROHS; BSA: CD17678718			

Manufacturing Process Information

Terminal Plating / Grid Array Material Nickel/Palladium/Gold (Ni/Pd/Au)	Terminal Base Alloy CU Alloy	J-STD-020 MSL Rating 1	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"

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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 *

1 - Item(s) does not contain RoHS restricted substances per the definition above

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.

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
											-	+	
FDO7*0082BF6	Silicon Die	1.333	mg	Supplier	Silicon die	Silicon	7440-21-3		1.332	mg			999,25
				Supplier	die metallization	Aluminium(Al)	7429-90-5		0.001	mg			750
	Leadframe	29.708	mg	Supplier	alloy	Copper (Cu)	7440-50-8		29.669	mg			998,68
						Iron (Fe)	7439-89-6		0.014	mg			471
						Iron Phosphide (FeP)	26508-33-8		0.025	mg			842
	Leadframe coating	0.144	mg	Supplier	coating	Nickel (Ni)	7440-02-0		0.134	mg	0		930,55
						Palladium (Pd)	7440-05-3		0.005	mg			34,722
						Gold (Au)	7440-57-5		0.005	mg			34,722
	Die Attach	0.29	mg	Supplier	glue	Silver (Ag)	7440-22-4		0.217	mg			748,27
						Epoxy Cresol Novolak	29690-82-2		0.072	mg			248,27
				Supplier	Phthalates	Dibutyl Phthalate	84-74-2		0.001	mg			3,448
	Bonding wire	0.092	mg	Supplier	Bonding wire	Gold (Au)	7440-57-5		0.092	mg			1,000,0
	Encapsulation	45.333	mg	Supplier	Moulding Compound	Epoxy Cresol Novolak	29690-82-2		4.533	mg			99,993
						phenol resin	9003-35-4		2.267	mg			50,008
						Carbon Black	1333-86-4		0.453	mg			9,993
						Silica, vitreous	60676-86-0		36.266	mg			799,99
				Supplier	Antimony/Antimony C	Antimony Trioxide	1309-64-4		0.907	mg			20,008
				JIG I	Brominated Flame Ret	Brominated epoxy resin	68928-70-1		0.907	mg			20,008