



# 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 <a href="http://www.ipc.org/IPC-175x">http://www.ipc.org/IPC-175x</a>	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 * N/A	Response Document ID				
Contact Name *	Title - Contact	Phone - Contact *	Email - Contact *	<input type="button" value="Duplicate Contact -&gt; Authorized Representative"/>				
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
	STPS30H100DJF-TR	7SER*ZA0P15V	2011-09-02	A	SH1A	95	mg	Each
Alternate Recommendation	PACKAGE: QFN POWER FLAT			Alternate Item Comments	ECOPACK2/ROHS; BSA: CD00297150			

## Manufacturing Process Information

Terminal Plating / Grid Array Material Matte Tin (Sn) - annealed	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' 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

+ - 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

	Item/SubItem Name		Homogeneous Material	Weight	Unit of Measure		Level	Substance Category		Substance	CAS	Exempt	Weight	Unit of Measure	Tolerance		PPM										
															-	+											
+I	-I		7SER*ZA0P15V	+M	-M			Silicon die	6.172	mg	+C	-C	Supplier	Silicon die	+S	-S	Silicon (Si)	7440-21-3		5.965	mg			966,46			
								die metallization			+C	-C	Supplier	die metallization	+S	-S	Aluminium (Al)	7429-90-5		0.061	mg			9,884			
															+S	-S	Titanium (Ti)	7440-32-6		0.004	mg			648			
															+S	-S	Gold (Au)	7440-57-5		0.012	mg			1,944			
															+S	-S	Nickel (Ni)	7440-02-0		0.057	mg			9,235			
								Die coating			+C	-C	Supplier	Die coating	+S	-S	Gamma-butyrolactone	96-48-0		0.049	mg			7,940			
															+S	-S	Polyhydroxyamide	55295-98-2		0.022	mg			3,564			
															+S	-S	Alcoxysilane	Proprietary		0.001	mg			162			
															+S	-S	Aryl Silicilic Acid	Proprietary		0.001	mg			162			
		+M	-M					Leadframe	45.658	mg	+C	-C	Supplier	frame alloy	+S	-S	Copper (Cu)	7440-50-8		44.439	mg			973,30			
															+S	-S	Iron (Fe)	7439-89-6		1.045	mg			22,887			
															+S	-S	Zinc (Zn)	7440-66-6		0.055	mg			1,205			
															+S	-S	Iron Phosphide (Fe2P)	1310-43-6		0.063	mg			1,380			
								frame coating			+C	-C	Supplier	frame coating	+S	-S	Nickel (Ni)	7440-02-0		0.052	mg			1,139			
															+S	-S	Phosphorus (P)	12185-10-3		0.004	mg			88			
		+M	-M					Die Attach	2.409	mg	+C	-C	JIG R	soft solder	+S	-S	Lead (Pb)	7439-92-1		2.301	mg			955,16			
															+C	-C	supplier	soft solder	+S	-S	Silver (Ag)	7440-22-4		0.06	mg		24,907
															+S	-S	Tin (Sn)	7440-31-5		0.048	mg			19,925			
		+M	-M					Encapsulation	40.548	mg	+C	-C	supplier	Moulding Compound	+S	-S	Silica, vitreous	60676-86-0		37.548	mg			926,01			
															+S	-S	epoxy resin	85954-11-6		1.622	mg			40,002			
															+S	-S	phenol resin	26834-02-6		1.216	mg			29,989			
															+S	-S	carbon black	1333-86-4		0.162	mg			3,995			
		+M	-M					Finishing	0.213	mg	+C	-C	supplier	connection coating	+S	-S	Tin (Sn)	7440-31-5		0.213	mg			1,000,0			