



# Material Composition Declaration

© Copyright 2005. IPC, Bannockburn, Illinois. All rights reserved under both international and Pan-American copyright conventions.

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
------------	--	---------------------------	--

## Supplier Information

Company Name * <b>ST MICROELECTRONICS</b>	Company Unique ID	Unique ID Authority	Response Date * N/A	Response Document ID				
Contact Name *	Title - Contact	Phone - Contact *	Email - Contact *					
Authorized Representative * <b>GIUSEPPE VITALI PALMA</b>	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
	L7805ABV	MZ80*L765AA6	2012-03-21	A	SH1A	1,900	mg	Each
Alternate Recommendation	PACKAGE: TO 220 CU Wire on			Alternate Item Comments	ECOPACK1/ROHS; BSA: CD00238497			

## Manufacturing Process Information

Terminal Plating / Grid Array Material <b>Matte Tin (Sn) - annealed</b>	Terminal Base Alloy <b>CU Alloy</b>	J-STD-020 MSL Rating <b>Not Applicable</b>	Peak Process Body Temperature C	Max Time at Peak Temperature seconds	Number of Reflow Cycles
--	--	---	------------------------------------	---	-------------------------

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

Export Data

Import fields from a file into this form

Import Data

Locked

## 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	
											-	+		
MZ80*L765AA6	Silicon Die	2.097	mg	Supplier	Silicon die	Silicon	7440-21-3		1.867	mg			890,32	
					die metallization	Aluminium(Al)	7429-90-5		0.212	mg			101,09	
						Chromium (Cr)	7440-47-3		0.001	mg			477	
						Nickel (Ni)	7440-02-0		0.013	mg			6,199	
						(Gold (Au)	7440-57-5		0.004	mg			1,907	
Leadframe	1,256.34	mg	Supplier	alloy	Copper (Cu)	7440-50-8		1,254.709	mg			998,70		
					Iron (Fe)	7439-89-6		0.578	mg			460		
					Iron Phosphide (FeP)	26508-33-8		1.055	mg			840		
Die Attach	1.162	mg	JIG R	Lead/Lead Compound	Lead (Pb)	7439-92-1	7a. Lead	1.11	mg			955,25		
					Supplier	soft solder	Silver (Ag)	7440-22-4		0.029	mg		24,957	
							Tin (Sn)	7440-31-5		0.023	mg		19,793	
Bonding wire	0.229	mg	Supplier	Bonding wire	Copper (Cu)	7440-50-8		0.229	mg			1,000,0		
Encapsulation	631.082	mg	Supplier	Antimony/Antimony C	Antimony Trioxide	1309-64-4		12.622	mg				20,001	
					Supplier	Moulding Compound	Silica, vitreous	60676-86-0		476.467	mg			755,00
							Quartz	14808-60-7		3.155	mg			5,000
							Phenol resin	9003-35-4		34.71	mg			55,001
							Carbon Black	1333-86-4		3.155	mg			4,999
		Epoxy Cresol Novolak	29690-82-2		97.818	mg			155,00					
		JIG I	Brominated Flame Ret	Brominated Epoxy Resin	68928-70-1		3.155	mg				4,999		
Finishing	9.088	mg	Supplier	connection coating	Tin (Sn)	7440-31-5		9.088	mg				1,000,0	