



## Materials Declaration Form

<b>IPC Form Type *</b>	1752 Distribute	<b>Version</b>	2
<b>Sectionals *</b>	Material Info Manufacturing Info	<b>Subsectionals *</b>	A-D
<i>* : Required Field</i>			

Supplier Information			
<b>Company Name *</b>	STMicroelectronics	<b>Response Date *</b>	2015-07-21
<b>Contact Name *</b>	Refer to "Supplier Comment" section	<b>Contact Title</b>	Refer to "Supplier Comment" section
<b>Contact Phone *</b>	Refer to "Supplier Comment" section	<b>Contact Email *</b>	Refer to "Supplier Comment" section
<b>Authorized Representative *</b>	Emilio Castelli	<b>Representative Title</b>	APG MD CHAMPION
<b>Representative Phone *</b>	Refer to "Supplier Comment" section	<b>Representative Email *</b>	Refer to "Supplier Comment" section
<b>Supplier Comment</b>	Online Technical Support - STMicroelectronics : <a href="http://www.st.com/web/en/support/online_tech_support.html">http://www.st.com/web/en/support/online_tech_support.html</a>		

**Uncertainty Statement**

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**Legal Statement**

<b>Supplier Acceptance *</b>	true	<b>Legal Declaration *</b>	Standard
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**Legal Statement**

Supplier certifies that it gathered the provided information and 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. 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(s), 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(s), 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.

Product				
Mfr Item Number	Mfr Item Name	Version	Mfr Site	Date
TDA7391LV	N8V1*L009DA6	A	64BA	2015-07-21
	Amount	UoM	Unit type	ST ECOPACK Grade
	5500.00	mg	Each	ECOPACK® 1

Manufacturing information				
J-STD-020 MSL Rating	Classification Temp	Nbr of Reflow Cycles		 life.augmented
NAC	NAC	NAC		
bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
NAC	Tin (Sn), matte, annealed	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
CHP	10.7x20x4.5	11	flat	
Comment				

QueryList : ROHS directive 2011/65/EU _ July 2011	
Query	Response
Product(s) meets EU RoHS requirement without any exemptions	false
Product(s) meets EU RoHS requirements except lead in solder and this usage may qualify under the lead in solder '7a' exemption (other selected exemptions may apply)	true
Product(s) meets EU RoHS requirements by application of the selected exemption(s)	false
Product(s) does not meet EU RoHS requirements and is not under exemptions	false
Product(s) is obsolete, no information is available	false
Product(s) is unknown, no information is available	false
Exemption Id.	Description

QueryList : REACH-16th June 2014				
Query				Response
The product does not contain REACH Substances Of Very High Concern above the limits per the definition within REACH				true
CategoryLevel_Name	CategoryLevel_Threshold	amount in product (mg)	Application	ppm in product

Material Composition Declaration						Mfr Item Name	NBV1*L009DA6					
Homogeneous Material	Material Group	Mass	UoM	Level	Substance Category	Substance	CAS	Exempt	Mass	UoM	Concentration in homogeneous material (ppm)	Concentration in product (ppm)
Die	Other inorganic materials	12.224	mg	supplier	die	Silicon (Si)	7440-21-3		11.822	mg	967114	2149
Die				supplier	metallization	Aluminium (Al)	7429-90-5		0.135	mg	11044	25
Die				supplier	passivation	Silicon Nitride (SiN)	68034-42-4		0.038	mg	3109	7
Die				supplier	passivation	Silicon Oxide(SiO2)	7631-86-9		0.072	mg	5890	13
Die				supplier	back side metallization	Chromium (Cr)	7440-47-3		0.007	mg	573	1
Die				supplier	back side metallization	Gold (Au)	7440-57-5		0.018	mg	1473	3
Die				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.060	mg	4908	11
Die				supplier	glass coating	Glass: Silicon Dioxide (SiO2)	7631-86-9		0.072	mg	5890	13
Leadframe	Copper & its alloys	4325.117	mg	supplier	alloy	Copper (Cu)	7440-50-8		4315.161	mg	997698	784575
Leadframe				supplier	alloy	Iron (Fe)	7439-89-6		1.988	mg	460	361
Leadframe				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		3.629	mg	839	660
Leadframe				supplier	metallization	Silver (Ag)	7440-22-4		4.339	mg	1003	789
Die attach		7.983	mg	JIG - R	Soft Solder	Lead (Pb)	7439-92-1	7a-Lead in high me	7.783	mg	974947	1415
Die attach				supplier	Soft Solder	Silver (Ag)	7440-22-4		0.120	mg	15032	22
Die attach				supplier	Soft Solder	Tin (Sn)	7440-31-5		0.080	mg	10021	15
Bonding wire				supplier	wire	Copper (Cu)	7440-50-8		0.818	mg	1000000	149
encapsulation		1128.468	mg	supplier	mold compound	Silica, vitreous	60676-86-0		809.112	mg	717000	147111
encapsulation				supplier	mold compound	Epoxy Cresol Novolak	29690-82-2		191.839	mg	170000	34880
encapsulation				supplier	mold compound	Phenol resin	9003-35-4		81.250	mg	72000	14773
encapsulation				supplier	mold compound	Brominated epoxy resin	40039-93-8		16.927	mg	15000	3078
encapsulation				supplier	mold compound	Bismuth	7440-69-9		3.385	mg	3000	615
encapsulation				supplier	mold compound	Carbon black	1333-86-4		3.385	mg	3000	615
encapsulation				supplier	mold compound	Antimony Trioxide	1309-64-4		22.570	mg	20001	4104
connections coating	Solder	25.389	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		25.389	mg	1000000	4616