




## 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>	2013-09-03
<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>	Andrea Casali	<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/internet/com/support/online_tech_support.jsp">http://www.st.com/internet/com/support/online_tech_support.jsp</a>		

Uncertainty Statement				
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Legal Statement				
<b>Supplier Acceptance *</b>	<table style="width: 100%; border: none;"> <tr> <td style="width: 33%; text-align: center;">true</td> <td style="width: 33%; text-align: center;"><b>Legal Declaration *</b></td> <td style="width: 33%; text-align: center;">Standard</td> </tr> </table>	true	<b>Legal Declaration *</b>	Standard
true	<b>Legal Declaration *</b>	Standard		
<b>Legal Statement</b>	<p>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 omprehensive 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.</p>			

Product				
Mfr Item Number	Mfr Item Name	Version	Mfr Site	Date
TDA7577BLV	H848*UK78BB6	A	SH1A	2013-09-03
Amount	UoM	Unit type	ST ECOPACK Grade	
7800.00	mg	Each	ECOPACK® 2	

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	
Not Applicable ; if coating is used	Tin (Sn), matte, annealed	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
CHP	28.9x15.5x4.5	27	Through-hole	
Comment				

Material Composition Declaration						Mfr Item Name	H848*UK788B6					
Homogeneous Material	Material Group	Mass	UoM	Level	Substance Category	Substance	CAS	Exempt	Mass	UoM	Concentration in homogeneous material (ppm)	Concentration in product (ppm)
die (s)	Other inorganic materials	19.53	mg	supplier	die	Silicon (Si)	7440-21-3		18.671	mg	956016	2394
die (s)				supplier	metallization	Aluminium (Al)	7429-90-5		0.123	mg	6298	16
die (s)				supplier	metallization	Copper (Cu)	7440-50-8		0.123	mg	6298	16
die (s)				supplier	metallization	Tungsten (W)	7440-33-7		0.149	mg	7629	19
die (s)				supplier	passivation	Silicon Oxide(SiO2)	7631-86-9		0.03	mg	1536	4
die (s)				supplier	passivation	Indium Tin oxide ( In2O3.SnO2 )	50926-11-9		0.288	mg	14747	37
die (s)				supplier	back side metallization	Chromium (Cr)	7440-47-3		0.011	mg	563	1
die (s)				supplier	back side metallization	Gold (Au)	7440-57-5		0.028	mg	1434	4
die (s)				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.095	mg	4864	12
die (s)				supplier	polymer die coating	O	Glass: Silicon Dioxide		0.012	mg	614	2
Leadframe	Copper & its alloys	5213.066	mg	supplier	alloy	Copper (Cu)	7440-50-8		5203.268	mg	998120	667086
Leadframe				supplier	alloy	Iron (Fe)	7439-89-6		2.397	mg	460	307
Leadframe				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		4.376	mg	839	561
Leadframe				supplier	metallization	Silver (Ag)	7440-22-4		3.025	mg	580	388
Die attach		11.491	mg	JIG R	glue or tape	Lead (Pb)	7439-92-1	7a-Lead in high mel	11.204	mg	975024	1436
Die attach				supplier	glue or tape	Silver (Ag)	7440-22-4		0.172	mg	14968	22
Die attach				supplier	glue or tape	Tin (Sn)	7440-31-5		0.115	mg	10008	15
Bonding wire				supplier	wire	Copper (Cu)	7440-50-8		3.125	mg	1000000	401
encapsulation		2528.708	mg	supplier	mold compound	Amorphous Silica	7631-86-9		2149.402	mg	850000	275564
encapsulation				supplier	mold compound	Epoxy Cresol Novolak	29690-82-2		151.723	mg	60000	19452
encapsulation				supplier	mold compound	epoxy resin	Proprietary		101.148	mg	40000	12968
encapsulation				supplier	mold compound	Phenol resin	Proprietary		101.148	mg	40000	12968
encapsulation				supplier	mold compound	Carbon black	1333-86-4		17.701	mg	7000	2269
encapsulation				supplier	mold compound	Bismuth (Bi)	7440-69-9		7.586	mg	3000	973
connections coating	Solder	24.08	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		24.08	mg	1000000	3087