



Materials Declaration Form

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

Supplier Information			
Company Name *	STMicroelectronics	Response Date *	2012-11-21
Contact Name *	Refer to "Supplier Comment" section	Contact Title	Refer to "Supplier Comment" section
Contact Phone *	Refer to "Supplier Comment" section	Contact Email *	Refer to "Supplier Comment" section
Authorized Representative *	Emilio Castelli	Representative Title	APG MD CHAMPION
Representative Phone *	Refer to "Supplier Comment" section	Representative Email *	Refer to "Supplier Comment" section
Supplier Comment	Online Technical Support - STMicroelectronics : http://www.st.com/internet/com/support/online_tech_support.jsp		

Uncertainty Statement

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Legal Statement

Supplier Acceptance *	true	Legal Declaration *	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
TDA7801	H548*UM61BEV	A	SH1A	2012-11-21
	Amount	UoM	Unit type	ST ECOPACK Grade
	7108.00	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	bright, annealed Tin/Silver/Bismuth	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
CHP	29.23x15.7x1.9	27	flat	
Comment				

Material Composition Declaration						Mfr Item Name	H548*UM61BEV					
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	22.489	mg	supplier	die	Silicon (Si)	7440-21-3		21.713	mg	965494	3055
die (s)				supplier	metallization	Aluminium (Al)	7429-90-5		0.167	mg	7426	23
die (s)				supplier	metallization	Tungsten (W)	7440-33-7		0.132	mg	5870	19
die (s)				supplier	passivation	Silicon Nitride (SiN)	68034-42-4		0.035	mg	1556	5
die (s)				supplier	passivation	Silicon Oxide(SiO2)	7631-86-9		0.285	mg	12673	40
die (s)				supplier	back side metallization	Chromium (Cr)	7440-47-3		0.013	mg	578	2
die (s)				supplier	back side metallization	Gold (Au)	7440-57-5		0.033	mg	1467	5
die (s)				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.111	mg	4936	16
Leadframe	Copper & its alloys	5212.862	mg	supplier	alloy	Copper (Cu)	7440-50-8		5203.064	mg	998120	732001
Leadframe				supplier	alloy	Iron (Fe)	7439-89-6		2.397	mg	460	337
Leadframe				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		4.376	mg	839	616
Leadframe				supplier	metallization	Silver (Ag)	7440-22-4		3.025	mg	580	426
Die attach		13.263	mg	JIG Table A	glue or tape	Lead (Pb)	7439-92-1	7a-Lead in high me	12.931	mg	974968	1819
Die attach				supplier	glue or tape	Silver (Ag)	7440-22-4		0.199	mg	15004	28
Die attach				supplier	glue or tape	Tin (Sn)	7440-31-5		0.133	mg	10028	19
Bonding wire		11.211		supplier	wire	Gold (Au)	7440-57-5		11.211	mg	1000000	1577
encapsulation		1824.097	mg	supplier	mold compound	Amorphous Silica	7631-86-9		1550.481	mg	849999	218132
encapsulation				supplier	mold compound	Epoxy Cresol Novolak	29690-82-2		109.446	mg	60000	15398
encapsulation				supplier	mold compound	epoxy resin	na		72.964	mg	40000	10265
encapsulation				supplier	mold compound	Phenol resin	na		72.964	mg	40000	10265
encapsulation				supplier	mold compound	Carbon black	1333-86-4		12.769	mg	7000	1796
encapsulation				JIG table B	mold compound	Bismuth (Bi)	7440-69-9		5.473	mg	3000	770
connections coating	Solder	24.08	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		24.08	mg	1000000	3388