



Materials Declaration Form

IPC Form Type *	1752 Distribute	Version	2
Sectionals *	Material Info Distribute	Subsectionals *	A-D

*: Required Field

Supplier Information			
Company Name *	STMicroelectronics	Response Date *	2012-09-27
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 Material Declaration 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

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
TDA7802	H548*UI09BC1	A	Shenzhen	2012-09-27
	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 o	Tin (Sn), bright, reflowed	Copper Alloy		

Material Composition Declaration						Mfr Item Name	H548*U09BC1					
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	26.835	mg	supplier	die	Silicon (Si)	7440-21-3		26.092	mg	972312	3671
die (s)				supplier	metallization	Aluminium (Al)	7429-90-5		0.2	mg	7453	28
die (s)				supplier	metallization	Copper (Cu)	7440-50-8		0	mg		
die (s)				supplier	metallization	Tantalum (Ta)	7440-25-7		0	mg		
die (s)				supplier	metallization	Cobalt (Co)	7440-48-4		0	mg		
die (s)				supplier	metallization	Titanium (Ti)	7440-32-6		0	mg		
die (s)				supplier	metallization	Tungsten (W)	7440-33-7		0.159	mg	5925	22
die (s)				supplier	metallization	Palladium (Pd)	7440-05-3		0	mg		
die (s)				supplier	metallization	Nickel (Ni)	7440-02-0		0	mg		
die (s)				supplier	metallization	Gold (Au)	7440-57-5		0	mg		
die (s)				supplier	metallization	Platinum (Pt)	7440-06-4		0	mg		
die (s)				supplier	passivation	Silver (Ag)	7440-22-4		0	mg		
die (s)				supplier	passivation	Tin (Sn)	7440-31-5		0	mg		
die (s)				supplier	passivation	Silicon Nitride (SiN)	68034-42-4		0.042	mg	1565	6
die (s)				supplier	passivation	Silicon Oxide(SiO2)	7631-86-9		0.342	mg	12745	48
die (s)				supplier	passivation	Indium Tin oxide (In2O3:SnO2)	50926-11-9		0	mg		
die (s)				R	passivation	Lead Oxide (PbO)	1317-36-8		0	mg		
die (s)				supplier	back side metallization	Aluminium (Al)	7429-90-5		0	mg		
die (s)				supplier	back side metallization	Copper (Cu)	7440-50-8		0	mg		
die (s)				supplier	back side metallization	Titanium (Ti)	7440-32-6		0	mg		
die (s)				supplier	back side metallization	Chromium (Cr)	7440-47-3		0	mg		
die (s)				supplier	back side metallization	Gold (Au)	7440-57-5		0	mg		
die (s)				supplier	back side metallization	Nickel (Ni)	7440-02-0		0	mg		
die (s)				supplier	back side metallization	Vanadium (V)	7440-62-2		0	mg		
die (s)				supplier	back side metallization	Silver (Ag)	7440-22-4		0	mg		
die (s)				supplier	glass coating	Glass : Aluminium Oxide (Al2O3)	1344-28-1		0	mg		
die (s)				supplier	glass coating	Glass : Boron Trioxide (B2O3)	1303-86-2		0	mg		
die (s)				supplier	glass coating	Glass : Potassium Oxide (K2O)	12136-45-7		0	mg		
die (s)				supplier	glass coating	Glass : Sodium Oxide (Na2O)	1313-59-3		0	mg		
die (s)				supplier	glass coating	Glass: Silicon Dioxide (SiO2)	7631-86-9		0	mg		
die (s)				supplier	polymer die coating	Benzocyclobutene (BCB)	694-87-1		0	mg		
die (s)				supplier	polymer die coating	Polymer resist - ASAH	NA		0	mg		
die (s)				supplier	polymer die coating	Polymer resist (Black resist)	NA		0	mg		
die (s)				supplier	polymer die coating	Polymer resist (color, planar,µlens)	NA		0	mg		
die (s)				supplier	polymer die coating	Polymer resist (Glue)	NA		0	mg		
UBM		0	mg	supplier	UBM	Aluminium (Al)	7429-90-5		0	mg		
UBM				supplier	UBM	Copper (Cu)	7440-50-8		0	mg		
UBM				supplier	UBM	Titanium (Ti)	7440-32-6		0	mg		
UBM				supplier	UBM	Chromium (Cr)	7440-47-3		0	mg		
UBM				supplier	UBM	Gold (Au)	7440-57-5		0	mg		
UBM				supplier	UBM	Nickel (Ni)	7440-02-0		0	mg		
UBM				supplier	UBM	Vanadium (V)	7440-62-2		0	mg		
UBM				supplier	UBM	Silver (Ag)	7440-22-4		0	mg		
BUMPS		0	mg	supplier	bump	Tin (Sn)	7440-31-5		0	mg		
BUMPS				supplier	bump	Silver (Ag)	7440-22-4		0	mg		
BUMPS				supplier	bump	Copper (Cu)	7440-50-8		0	mg		
BUMPS				supplier	bump	Nickel (Ni)	7440-02-0		0	mg		
BUMPS				supplier	bump	Antimony (Sb)	7440-36-0		0	mg		
BUMPS				R	bump	Lead (Pb)	7439-92-1	15-Lead in solders	0	mg		
Leadframe	Copper & its alloys	5212.077	mg	JIG Table A	alloy	Copper (Cu)	7440-50-8		5205.301	mg	998700	732316
Leadframe				supplier	alloy	Iron (Fe)	7439-89-6		2.398	mg	460	337
Leadframe				supplier	alloy	Phosphorus (P)	12185-10-3		0	mg		
Leadframe				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		4.378	mg	840	616
Leadframe				supplier	alloy	Nickel (Ni)	7440-02-0		0	mg		
Leadframe				supplier	alloy	Zinc (Zn)	7440-66-6		0	mg		
Leadframe				supplier	alloy	Magnesium (Mg)	7439-95-4		0	mg		
Leadframe				supplier	alloy	Silicon (Si)	7440-21-3		0	mg		
Leadframe				supplier	alloy	CopperPosphorous (CuP)	12517-41-8		0	mg		
Leadframe				supplier	alloy	Tin (Sn)	7440-31-5		0	mg		

Leadframe				supplier	alloy	Cobalt (Co)	7440-48-4		0		mg		
Leadframe				supplier	alloy	Zirconium (Zr)	7440-67-7		0		mg		
Leadframe				supplier	alloy	Chromium (Cr)	7440-47-3		0		mg		
Leadframe				supplier	alloy	Silver (Ag)	7440-22-4		0		mg		
Leadframe				0	alloy	Sulfur (S)	7783-06-4		0		mg		
Leadframe					alloy	Manganese (Mn)	7439-96-5		0		mg		
Leadframe				0	alloy	Carbon Ⓞ	7440-44-0		0		mg		
Leadframe				0	tape						mg		
Leadframe				0	tape						mg		
Leadframe				0	tape						mg		
Leadframe				0	tape						mg		
Leadframe				supplier	metallization	Nickel (Ni)	7440-02-0		0		mg		
Leadframe				supplier	metallization	Palladium (Pd)	7439-89-6				mg		
Leadframe				supplier	metallization	Gold (Au)	12185-10-3				mg		
Leadframe				supplier	metallization	Silver (Ag)	7440-22-4		0		mg		
Leadframe				supplier	metallization	Phosphorus (P)	12185-10-3		0		mg		
xxx		0	mg	supplier					0		mg		
xxx				supplier					0		mg		
xxx				supplier					0		mg		
xxx				supplier					0		mg		
xxx				supplier					0		mg		
xxx				supplier					0		mg		
xxx				supplier					0		mg		
xxx				supplier		0	0		0		mg		
xxx				supplier		0	0		0		mg		
Die attach1		20.497	mg	JIG Table A	glue or tape	Lead (Pb)	7439-92-1		19.985		mg	975021	2812
Die attach1				supplier	glue or tape	Silver (Ag)	7440-22-4		0.307		mg	14978	43
Die attach1				supplier	glue or tape	Tin (Sn)	7440-31-5		0.205		mg	10001	29
Die attach1				supplier	glue or tape	0	0		0		mg		
Die attach1				supplier	glue or tape	0	0		0		mg		
Die attach1				supplier	glue or tape	0	0		0		mg		
Die attach1				supplier	glue or tape	0	0		0		mg		
Die attach1				supplier	glue or tape	0	0		0		mg		
Die attach1				supplier	glue or tape	0	0		0		mg		
Die attach1				supplier	glue or tape	0	0		0		mg		
Die attach1				supplier	glue or tape	0	0		0		mg		
Die attach1				supplier	glue or tape	0	0		0		mg		
Die attach1				supplier	glue or tape	0	0		0		mg		
Die attach1				0	glue or tape	0	0		0		mg		
Die attach 2		0	mg	supplier	glue or tape						mg		
Die attach 2				supplier	glue or tape						mg		
Die attach 2				supplier	glue or tape						mg		
Die attach 2				supplier	glue or tape						mg		
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Die attach 2				supplier	glue or tape						mg		
Die attach 2				supplier	glue or tape						mg		
Die attach 2				supplier	glue or tape						mg		
Die attach 2				0	glue or tape						mg		
Bonding wire		8.775	mg	supplier	wire	Gold (Au)	7440-57-5		8.775		mg	1000000	1235
Bonding wire				supplier	wire	Copper (Cu)	7440-50-8		0		mg		
Bonding wire				supplier	wire	Palladium (Pd)	7440-05-3		0		mg		

