



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 *	2014-09-15
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/web/en/support/support.html		

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
TDA7851L	H94W*UK20AE6	A	SH1A	2014-09-15
Amount	UoM	Unit type	ST ECOPACK Grade	
7099.40	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	
NAC	Tin (Sn), matte, annealed	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
SMD	29.23x15.7x4.5	25	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	H94W*UK20AE6					
Homogeneous Material	Material Group	Mass	UoM	Level	Substance Category	Substance	CAS	Exempt	Mass	UoM	Concentration in homogeneous material (ppm)	Concentration in product (ppm)
Die or Dies	Other inorganic materials	21.816	mg	supplier	die	Silicon (Si)	7440-21-3		20.496	mg	939494	2887
Die or Dies				supplier	metallization	Aluminium (Al)	7429-90-5		0.135	mg	6188	19
Die or Dies				supplier	metallization	Tungsten (W)	7440-33-7		0.214	mg	9809	30
Die or Dies				supplier	passivation	Silicon Nitride (SiN)	68034-42-4		0.033	mg	1513	5
Die or Dies				supplier	passivation	Silicon Oxide(SiO2)	7631-86-9		0.316	mg	14485	45
Die or Dies				supplier	back side metallization	Chromium (Cr)	7440-47-3		0.012	mg	550	2
Die or Dies				supplier	back side metallization	Gold (Au)	7440-57-5		0.031	mg	1421	4
Die or Dies				supplier	back side metallization	Nickel (Ni)	7440-02-0		0.104	mg	4767	15
Die or Dies				supplier	glass coating	Glass: Silicon Dioxide (SiO2)	7631-86-9		0.316	mg	14485	45
Die or Dies				supplier	polymer die coating	PIXI Gamma-butyrolactone	96-48-0		0.159	mg	7288	22
Leadframe	Copper & its alloys	5239.410	mg	supplier	alloy	Copper (Cu)	7440-50-8		5214.391	mg	995225	734483
Leadframe				supplier	alloy	Iron (Fe)	7439-89-6		2.402	mg	458	338
Leadframe				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		4.386	mg	837	618
Leadframe				supplier	metallization	Nickel (Ni)	7440-02-0		16.900	mg	3226	2380
Leadframe				supplier	metallization	Silver (Ag)	7440-22-4		1.331	mg	254	187
Die attach		12.423	mg	JIG - R	glue or tape	Lead (Pb)	7439-92-1	7a-Lead in high mel	12.113	mg	975046	1706
Die attach				supplier	glue or tape	Silver (Ag)	7440-22-4		0.186	mg	14972	26
Die attach				supplier	glue or tape	Tin (Sn)	7440-31-5		0.124	mg	9981	17
Bonding wire				supplier	wire	Copper (Cu)	7440-50-8		4.493	mg	1000000	633
encapsulation		1780.764	mg	supplier	mold compound	Amorphous Silica	7631-86-9		1513.649	mg	850000	213208
encapsulation				supplier	mold compound	Epoxy Cresol Novolak	29690-82-2		106.845	mg	60000	15050
encapsulation				#N/A	mold compound	epoxy resin	na		71.231	mg	40000	10033
encapsulation				#N/A	mold compound	Phenol resin	na		71.231	mg	40000	10033
encapsulation				supplier	mold compound	Carbon black	1333-86-4		12.465	mg	7000	1756
encapsulation				supplier	mold compound	Bismuth (Bi)	7440-69-9		5.343	mg	3000	753
connections coating	Solder	40.493	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		40.493	mg	1000000	5704