



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 *	2016-01-12
Contact Name *	Refer to Supplier Comment section		Refer to Supplier Comment section
Authorized Representative *	Laurent TOSI	Representative Title	MMS MD CHAMPION
Representative Phone *	33 442 685 795	Representative Email *	laurent.tosi@st.com
Supplier Comment	Online Technical Support - STMicroelectronics : http://www.st.com/web/en/support/support.html		

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Legal Statement			
Supplier Acceptance *	true	Legal Declaration *	Standard
Legal Statement	<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 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.</p>		

Product				
Mfr Item Number	Mfr Item Name	Version	Mfr Site	Date
STM32F769AIY6TR	T08Z*451XXXA	A	996S	2016-05-30
	Amount	UoM	Unit type	ST ECOPACK Grade
	33.46	mg	each	ECOPACK® 2
	Comment	ECOPACK® 2 is STMicroelectronics trade name for ROHS compliant device without Brominated and Chlorinated compound (900ppm) and without Antimony oxide flame retardant (in each organic material)		

Manufacturing information				
J-STD-020 MSL Rating	Classification Temp	Nbr of Reflow Cycles		 life.augmented
1	260	1		
bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
Tin/Silver/Copper/Nickel (SACN12505)	NAC	NAC		

Package Designator	Size	Nbr of instances	Shape	
WLCSP	NAC	180	No lead	
Comment	Package: A05G WLCSP 180L DIE 451 P 0.4 MM DM00155944			

QueryList : ROHS directive 2011/65/EU _ July 2011	
Query	Response
1 - Product(s) meets EU RoHS requirement without any exemptions	true
2 - Product(s) meets EU RoHS requirements except lead in solder and this usage may qualify under the lead in solder '7b' exemption (other selected exemptions may apply)	false
3 - Product(s) meets EU RoHS requirements by application of the selected exemption(s)	false
4 - Product(s) does not meet EU RoHS requirements and is not under exemptions	false
Exemption Id.	Description

QueryList : REACH-17th December 2015				
Query				Response
1 - Product(s) 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	T082*451XXXA					
note : Substance present with less 0.001mg will not be declared in this document												
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	28.252	mg	supplier	die	Silicon (Si)	7440-21-3		27.096	mg	959083	809774
Die				supplier	metallization	Aluminium (Al)	7429-90-5		0.055	mg	1947	1644
Die				supplier	metallization	Copper (Cu)	7440-50-8		0.490	mg	17344	14644
Die				supplier	metallization	Cobalt (Co)	7440-48-4		0.001	mg	35	30
Die				supplier	metallization	Tantalum (Ta)	7440-25-7		0.159	mg	5628	4752
Die				supplier	metallization	Titanium (Ti)	7440-32-6		0.006	mg	212	179
Die				supplier	metallization	Tungsten (W)	7440-33-7		0.004	mg	142	120
Die				supplier	Passivation	Silicon Nitride	12033-89-5		0.124	mg	4389	3706
Die				supplier	Passivation	Silicon Oxide	7631-86-9		0.317	mg	11220	9474
Sputter 1	Other inorganic materials	0.017	mg	supplier	Alloy	Ti	7440-32-6		0.003	mg	200963	100
Sputter 1				supplier	Alloy	Cu	7440-50-8		0.013	mg	799037	399
PBO HD8820 - 1	Other inorganic materials	0.133	mg	supplier	Polymer	4-Butyrolactone	96-48-0		0.120	mg	900000	3580
PBO HD8820 - 1				supplier	Polymer	1-Methoxy-2-propyl acetate	108-65-6		0.013	mg	100000	398
RDL	Other inorganic materials	0.267	mg	supplier	Alloy	Cu	7440-50-8		0.267	mg	1000000	7972
Sputter 2	Other inorganic materials	0.009	mg	supplier	Alloy	Ti	7440-32-6		0.002	mg	200963	52
Sputter 2				supplier	Alloy	Cu	7440-50-8		0.007	mg	799037	208
PBO HD8820 - 2	Other inorganic materials	0.110	mg	supplier	Polymer	4-Butyrolactone	96-48-0		0.099	mg	900000	2956
PBO HD8820 - 2				supplier	Polymer	1-Methoxy-2-propyl acetate	108-65-6		0.011	mg	100000	328
UBM	Other inorganic materials	0.300	mg	supplier	Alloy	Cu	7440-50-8		0.300	mg	1000000	8957
Solder ball	Other inorganic materials	3.823	mg	supplier	Solder	Sn	7440-31-5		3.756	mg	982500	112257
Solder ball				supplier	Solder	Ag	7440-22-4		0.046	mg	12000	1371
Solder ball				supplier	Solder	Cu	7440-50-8		0.019	mg	5000	571
Solder ball				supplier	Solder	Ni	7440-02-0		0.002	mg	500	57
BSC	Other inorganic materials	0.551	mg	supplier	Polymer	Polybutylene terephthalate (PBT)	25038-59-9		0.358	mg	650000	10706
BSC				supplier	Polymer	Silica	Proprietary		0.107	mg	195000	3212
BSC				supplier	Polymer	Proprietary Material-Other Epoxy resins	Proprietary		0.041	mg	75000	1235
BSC				supplier	Polymer	Proprietary Material-Other Acrylic resins	Proprietary		0.041	mg	75000	1235
BSC				supplier	Polymer	Carbon black	1333-86-4		0.003	mg	5000	82