



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 *	2016-11-15
Contact Name *	Refer to Supplier Comment section		Refer to Supplier Comment section
Authorized Representative *	Patrick Crudo	Representative Title	MMS MD CHAMPION
Representative Phone *	(+33) 442 688 339	Representative Email *	patrick.crudo@st.com
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
STM32F745VEH6	P4DY*449XXXZ	A	9996	2016-11-15
	Amount	UoM	Unit type	ST ECOPACK Grade
	141.21	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
3	260	3		
bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
Tin/Silver/Copper (SAC105)	NAC	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
BGA	8x8	100	No lead	
Comment	Package: A08Q TFBGA 8X8 100L F10X10 0.8 MM P DM00254729			

QueryList : RoHS Directive 2011/65/EU-July 2011 – Annex II amended by Directive 2015/863-April 2015	
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-20th June 2016				
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 : note : Substance present with less 0.001mg will not be declared in this document						Mfr Item Name	P4DY*449XXXZ					
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 (choose)	Other inorganic materials	11.986	mg	supplier	die	Silicon (Si)	7440-21-3		10.738	mg	895879	76042
				supplier	metallization	Aluminium (Al)	7429-90-5		0.087	mg	7258	616
				supplier	metallization	Copper (Cu)	7440-50-8		0.567	mg	47305	4015
				supplier	metallization	Cobalt (Co)	7440-48-4		0.002	mg	167	14
				supplier	metallization	Tantalum (Ta)	7440-25-7		0.079	mg	6591	559
				supplier	metallization	Tungsten (W)	7440-33-7		0.255	mg	21275	1806
				supplier	Passivation	Silicon Nitride	12033-89-5		0.066	mg	5506	467
				supplier	Passivation	Silicon Oxide	7631-86-9		0.192	mg	16019	1360
				supplier	CORE	Epoxy resin	61788-97-4		6.035	mg	137227	42739
SUBSTRATE (DS-7409HGB)	Other inorganic materials	43.980	mg	supplier	CORE	Other inorganic filler	7631-86-9		6.822	mg	155126	48313
				supplier	CORE	Glass fiber	65997-17-3		13.382	mg	304287	94768
				supplier	CU FOIL	Copper (Cu)	7440-50-8		7.388	mg	167989	52319
				supplier	SOLDERMASK	Organic resin	proprietary		4.163	mg	94662	29482
				supplier	SOLDERMASK	Inorganic filler	7631-86-9		2.242	mg	50972	15875
				supplier	NI PLATING	Nickel (Ni)	7440-02-0		3.435	mg	78104	24325
				supplier	AU PLATING	Gold (Au)	7440-57-5		0.512	mg	11633	3623
DIE ATTACH (2300)	Other inorganic materials	1.724	mg	supplier	GLUE	Epoxy resin	proprietary		0.172	mg	100000	1221
				supplier	GLUE	Silver (Ag)	7440-22-4		1.552	mg	900000	10988
BONDING WIRE (MKE 4N)	Other inorganic materials	1.274	mg	supplier	BONDING WIRE	Gold (Au)	7440-57-5		1.274	mg	1000000	9022
SOLDERBALL (Sn0.985Ag0.01Cu0.005)	Other inorganic materials	16.480	mg	supplier	SOLDERBALL	Tin (Sn)	7440-31-5		16.233	mg	985012	114955
				supplier	SOLDERBALL	Silver (Ag)	7440-22-4		0.165	mg	10012	1168
				supplier	SOLDERBALL	Copper (Cu)	7740-50-8		0.082	mg	4976	581
ENCAPSULATION (GE-100LFCS)	Other inorganic materials	65.768	mg	supplier	MOLDING COMPOUND	Silica fused (SiO2)	60676-86-0		59.191	mg	900000	419167
				supplier	MOLDING COMPOUND	Epoxy resin	proprietary		2.960	mg	45000	20958
				supplier	MOLDING COMPOUND	Phenol resin	proprietary		2.631	mg	40000	18630
				supplier	MOLDING COMPOUND	Metal Hydroxide	proprietary		0.658	mg	10000	4657
				supplier	MOLDING COMPOUND	Carbon black	1333-86-4		0.329	mg	5000	2329