



Materials Declaration Form

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

Supplier Information			
Company Name *	STMicroelectronics	Response Date *	2015-12-23
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 *	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/online_tech_support.html		


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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
STM32F098RCH6	P12I*442XXXXA	A	9996	2015-12-23
Amount	UoM	Unit type	ST ECOPACK Grade	
36,10	mg	Each	ECOPACK® 2	

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	
Solderball (Sn96.5Ag3.5)	Tin (Sn), matte	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
BGA	5x5x0.6	64	No lead	
Comment	UFBGA 5x5x0.6 64L P 0.5 MM			

QueryList : ROHS directive 2011/65/EU _ July 2011	
Query	Response
Product(s) meets EU RoHS requirement without any exemptions	true
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
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-15th June 2015				
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	P121*442XXXX						
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	2,445	mg	supplier	die	Silicon (Si)	7440-21-3		2,139	mg	874847	59252	
Die or Dies				supplier	metallization	Aluminum (Al)	7429-90-5		0,031	mg	12679	859	
Die or Dies				supplier	metallization	Cobalt (Co)	7440-48-4		0,029	mg	11861	803	
Die or Dies				supplier	metallization	Titanium (Ti)	7440-32-6		0,009	mg	3681	249	
Die or Dies				supplier	metallization	Tungsten (W)	7440-33-7		0,017	mg	6953	471	
Die or Dies				supplier	passivation	Silicon Nitride (SiN)	68034-42-4		0,021	mg	8589	582	
Die or Dies				supplier	passivation	Silicon Oxide(SiO2)	7631-86-9		0,199	mg	81391	5512	
SUBSTRATE (MCL-E679FGB) Core	Other inorganic materials	13,140	mg	supplier	CORE	Organic resin	Trade secret		2,204	mg	167713	61046	
SUBSTRATE (MCL-E679FGB) Core				supplier	CORE	Other inorganic filler	Trade secret		2,921	mg	222317	80921	
SUBSTRATE (MCL-E679FGB) Core				supplier	CORE	Glass fiber	65997-17-3		5,125	mg	390030	141967	
SUBSTRATE (MCL-E679FGB) Core				supplier	CU FOIL	Copper (Cu)	7440-50-8		2,889	mg	219829	80015	
SUBSTRATE (MCL-E679FGB) Core				supplier	CU FOIL	Arsenic	7440-38-2		0,001	mg	110	40	
SUBSTRATE (MCL-E679FGB) Solder M	Other inorganic materials	2,500	mg	supplier	SOLDERMASK	Organic resin	Trade secret		1,625	mg	650000	45014	
SUBSTRATE (MCL-E679FGB) Solder M				supplier	SOLDERMASK	Inorganic filler	Trade secret		0,875	mg	350000	24238	
SUBSTRATE (MCL-E679FGB) Ni	Other inorganic materials	1,680	mg	supplier	NI PLATING	Nickel (Ni)	7440-02-0		1,680	mg	1000000	46537	
SUBSTRATE (MCL-E679FGB) Au	Other inorganic materials	0,230	mg	supplier	AU PLATING	Gold (Au)	7440-56-7		0,230	mg	1000000	6371	
DIE ATTACH (ATB-130U)	Other inorganic materials	0,422	mg	supplier	GLUE	Epoxy resin	Trade secret		0,413	mg	980081	11449	
DIE ATTACH (ATB-130U)				supplier	GLUE	Filler	Trade secret		0,008	mg	19919	233	
BONDING WIRE (MKE 4N)	Other inorganic materials	0,400	mg	supplier	BONDING WIRE	Gold (Au)	7440-57-5		0,400	mg	1000000	11080	
SOLDERBALL (Sr96.5Ag3.5)	Other inorganic materials	2,000	mg	supplier	SOLDERBALL	Tin (Sn)	7440-31-5		1,900	mg	950000	52632	
SOLDERBALL (Sr96.5Ag3.5)				supplier	SOLDERBALL	Silver (Ag)	7440-22-4		0,100	mg	50000	2770	
ENCAPSULATION (GE-100LFCS)	Other inorganic materials	13,283	mg	supplier	MOLDING COMPOUND	Silica fused (SiO2)	60676-86-0		11,623	mg	875028	321967	
ENCAPSULATION (GE-100LFCS)				supplier	MOLDING COMPOUND	Epoxy resin	Trade secret		1,660	mg	124972	45983	