

## **Materials Declaration Form**

IPC	1752	Version	2
Form Type *	Distribute	Version	2
Sectionals *	Material Info	Subsectionals *	A-D
	Manufacturing Info		* : Required Field

Supplier Information								
Company Name *	STMicroelectronics	Response Date *	2015-12-24					
Contact Name *	Refer to " Supplier Comment" section	"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	442 685 795 Representative Email * laurent.tosi@st.com						
Supplier Comment	Online Technical Support - STMicroele	ectronics : http://www.st.com/web/en/	support/online_tech_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 omprehensive 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									
STM32L072RZI6	P12I*447ESXB	А	9996	2015-12-24					
	Amount		Unit type	ST ECOPACK Grade					
	36,10	mg	Each	ECOPACK® 2					

Manufacturing information								
J-STD-020 MSL Rating	Classification Temp	Nbr of Reflow Cycles						
3	260	3						
bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	life.augmented				
Solderball (Sn96.5Ag3.5)	Tin (Sn), matte	Copper Alloy		me.aagmemea				

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

QueryList: ROHS directive 2011/65/EU _ July 2011								
	Response							
Product(s) meets EU RoHS requirement w	ithout 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)								
Product(s) meets EU RoHS requirements by application of the selected exemption(s)								
Product(s) does not meet EU RoHS requirements and is not under exemptions								
Product(s) is obsolete, no information is available								
Product(s) is unknown, no information is a	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								
CategoryLevel_Name CategoryLevel_Threshold amount in product (mg) Application								

Material Composition Declaration			Mfr Item Name	P12I*4	47ESXB							
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	2,291	mg	supplier	die	Silicon (Si)	7440-21-3		1,916	mg	836316	53075
Die or Dies				supplier	metallization	Aluminium (Al)	7429-90-5		0,027	mg	11785	748
Die or Dies				supplier	metallization	Copper (Cu)	7440-50-8		0,088	mg	38411	2438
Die or Dies				supplier	metallization	Tantalum (Ta)	7440-25-7		0,081	mg	35356	2244
Die or Dies				supplier	metallization	Titanium (Ti)	7440-32-6		0,013	mg	5674	360
Die or Dies				supplier	metallization	Tungsten (W)	7440-33-7		0,001	mg	436	28
Die or Dies				supplier	passivation	Silicon Nitride (SiN)	68034-42-4		0,023	mg	10039	637
Die or Dies				supplier	passivation	Silicon Oxide(SiO2)	7631-86-9		0,142	mg	61982	3934
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 Ma	Other inorganic materials	2,500	mg	supplier	SOLDERMASK	Organic resin	Trade secret		1,625	mg	650000	45014
SUBSTRATE (MCL-E679FGB) Solder Ma				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 (Sn96.5Ag3.5)	Other inorganic materials	2,000	mg	supplier	SOLDERBALL	Tin (Sn)	7440-31-5		1,900	mg	950000	52632
SOLDERBALL (Sn96.5Ag3.5)				supplier	SOLDERBALL	Silver (Ag)	7440-22-4		0,100	mg	50000	2770
ENCAPSULATION (GE-100LFCS)	Other inorganic materials	13,437	mg	supplier	MOLDING COMPOUND	Silica fused (SiO2)	60676-86-0		11,777	mg	876461	326233
ENCAPSULATION (GE-100LFCS)				supplier	MOLDING COMPOUND	Epoxy resin	Trade secret		1,660	mg	123539	45983