

Materials Declaration Form

IPC	1752	Version	2
Form Type *	Distribute	1 5151511	
Sectionals *	Material Info	Subsectionals *	A-D
	Manufacturing Info		* : Required Field

Supplier Information						
Company Name *	STMicroelectronics	Response Date *	2017-07-07			
Contact Name *	Refer to " Supplier Comment" section	Contact Title	Refer to " Supplier Comment" section			
Contact Phone *	Refer to " Supplier Comment" section	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	ctronics : http://www.st.com/web/en/	support/online_tech_support.html			

Uncertainty Statement

While STMicroelectronics has endeavored to provide information which is accurate and up to date, this document and its contents are provided on a strict 'as is' and 'as available' basis. STMicroelectronics disclaims all warranties, express or implied related to this document and its contents, including but not limited to implied warranties of completeness, truth, accuracy, merchantability, fitness for a particular purpose and non-infringement. ST shall have no responsibility and assumes no liability for any cost, loss or damage of any kind which could arise, directly or indirectly, from the use or inability to use this document and/or its contents.

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								
STM32F103REY6TR	H0CR*414CCCX	В	9989	2017-07-07				
	Amount	UoM	Unit type	ST ECOPACK Grade				
	33.76	mg	Each	ECOPACK® 2				

Manufacturing information									
J-STD-020 MSL Rating	Classification Temp	Nbr of Reflow Cycles							
1	260	3							
bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	life.augmented					
NAC	Tin/Silver/Copper (Sn/Ag/Cu)	NAC		moradginonica					

Package Designator	Size	Nbr of instances	Shape	
BGA	NAC	64	No lead	
Comment	WLCSP 64L R8X8 0.5 mm pitch			

QueryList: ROHS directive 2011/65/EU _ July 2011							
	Query						
Product(s) meets EU RoHS requirement w	Product(s) meets EU RoHS requirement without any exemptions						
Product(s) meets EU RoHS requirements e	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 b	Product(s) meets EU RoHS requirements by application of the selected exemption(s) false						
Product(s) does not meet EU RoHS require	Product(s) does not meet EU RoHS requirements and is not under exemptions false						
Product(s) is obsolete, no information is a	Product(s) is obsolete, no information is available false						
Product(s) is unknown, no information is a	false						
Exemption Id. Description							

QueryList: REACH-15th June 2015								
Query Res								
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	H0CR*4	14CCCX						
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	17.067	mg	supplier	die	Silicon (Si)	7440-21-3		16.567	mg	970704	490772
Die or Dies				supplier	metallization	Aluminium (AI)	7429-90-5		0.051	mg	2988	1511
Die or Dies				supplier	metallization	Cobalt (Co)	7440-48-4		0.048	mg	2812	1422
Die or Dies				supplier	metallization	Titanium (Ti)	7440-32-6		0.014	mg	820	415
Die or Dies				supplier	metallization	Tungsten (W)	7440-33-7		0.028	mg	1641	829
Die or Dies				supplier	passivation	Silicon Nitride (SiN)	68034-42-4		0.034	mg	1992	1007
Die or Dies				supplier	passivation	Silicon Oxide(SiO2)	7631-86-9		0.325	mg	19043	9628
Coating Chem (HD4100)	Other inorganic materials	9.727	mg	supplier	Polymer	PD-9 Resin	Proprietary		0.282	mg	28991	8354
Coating Chem (HD4100)				supplier	Polymer	Trifluoroacetic Anhydride	407-25-0		4.229	mg	434769	125278
Coating Chem (HD4100)				supplier	Polymer	Tetraethylene Glycol Dimethacrylate	109-17-1		0.705	mg	72479	20885
Coating Chem (HD4100)				supplier	Polymer	4,4'-Oxydiphthalic Anhydride	1823-59-2		4.229	mg	434769	125278
Coating Chem (HD4100)				supplier	Polymer	2-Hydroxyethyl Methacrylate	868-77-9		0.282	mg	28991	8354
Ti End Target	Other inorganic materials	0.008	mg	supplier	Metal	Titanium	7440-32-6		0.008	mg	1000000	237
NiV End Target	Other inorganic materials	0.061	mg	supplier	Metal Alloy	Ni	7440-02-0		0.056	mg	918033	1659
NiV End Target				supplier	Metal Alloy	Vanadium	7440-62-2		0.005	mg	81967	148
Cu End Target	Other inorganic materials	0.122	mg	supplier	Metal	Copper	7440-50-8		0.122	mg	1000000	3614
AlCu End Target	Other inorganic materials	0.074	mg	supplier	Metal Alloy	Aluminum	7429-90-5		0.002	mg	27027	59
AlCu End Target				supplier	Metal Alloy	Copper	7440-50-8		0.072	mg	972973	2133
Solder Balls (SAC405)	Other inorganic materials	6.698	mg	supplier	Metal Alloy	Tin	7440-31-5		6.397	mg	955061	189501
Solder Balls (SAC405)				supplier	Metal Alloy	Silver	7440-22-4		0.268	mg	40012	7939
Solder Balls (SAC405)				supplier	Metal Alloy	Copper	7440-50-8		0.033	mg	4927	978