

Materials Declaration Form

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

Supplier Information								
Company Name *	STMicroelectronics	Response Date *	27-11-2017					
Company Unique ID	NL 008751171B01							
Contact Name *	Refer to Supplier Comment section		Refer to Supplier Comment section					
Contact Phone *	Refer to Supplier Comment section	Contact Email *	Refer to Supplier Comment section					
Authorized Representative *	MDG MD CHAMPION	Representative Title	MDG MD CHAMPION					
Representative Phone *	Refer to Supplier Comment section	Representative Email *	Refer to Supplier Comment section					
Supplier Comment	Refer to Supplier Comment section Representative Email * Refer to Supplier Comment section Inline Technical Support - STMicroelectronics: ttp://www.st.com/web/en/support/support.html							

Uncertainty Statement

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Legal Statemei	nt
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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				
STM32F437IIH6 STM32F437IIH6TR	P3MR*419XXX3	А	A 9996					
	Amount	UoM	Unit type	ST ECOPACK Grade				
	111.00	mg	Each	ECOPACK® 2				
·		ECOPACK® 2 is STMicroelectronics trade name for ROHS compliant device without Brominated and Chlorinated compound (900ppm) and without Antimony oxide flame retard (in each organic material)						

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			
NAC	Tin/Silver	Copper Alloy					

Package Designator	Size	Nbr of instances	Shape			
BGA	10x10x0.6	176+25	No lead			
Comment	Package: A0E7 UFBGA 10X10X0.6 176	+25 P0.65 8249558				

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							
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							
Exemption Id.	Exemption Id. Description						

QueryList: REACH-12th January 2017						
Query Response						
1 - Product(s) does not contain REACH Substances Of Very High Concern above the limits per the definition within REACH						
CategoryLevel_Name	ppm in product					

Material Composition Declaration: note: Substance present with less 0.001mg will not be declared in this document			Mfr Item Name	P3MR*	119XXX3			5000000.0	999992.0			
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	M-011 Other inorganic materials	9.292	mg	supplier	die	Silicon (Si)	7440-21-3		8.112	mg	873009	73081
				supplier	metallization	Aluminium (AI)	7429-90-5		0.082	mg	8825	739
				supplier	metallization	Copper (Cu)	7440-50-8		0.536	mg	57684	4829
				supplier	metallization	Cobalt (Co)	7440-48-4		0.002	mg	215	18
				supplier	metallization	Tantalum (Ta)	7440-25-7		0.075	mg	8071	676
				supplier	metallization	Tungsten (W)	7440-33-7		0.241	mg	25936	2171
				supplier	Passivation	Silicon Nitride	12033-89-5		0.063	mg	6780	568
				supplier	Passivation	Silicon Oxide	7631-86-9		0.181	mg	19479	1631
Encapsulation	M-011 Other inorganic materials	54.607	mg	supplier	Mold compound	Silica, vitreous [Fused Silica]	60676-86-0		47.868	mg	876591	431244
				supplier	Mold compound	Epoxy resins	Proprietary		2.344	mg	42925	21117
				supplier	Mold compound	Phenolic resins	Proprietary		1.758	mg	32194	15838
				supplier	Mold compound	Carbon black	1333-86-4		0.293	mg	5366	2640
				supplier	Mold compound	Metal Hydroxide	Proprietary		1.758	mg	32194	15838
				supplier	Mold compound	Other miscellaneous substances	Proprietary		0.586	mg	10731	5279
Substrate	M-011 Other inorganic materials	40.200	mg	supplier	Core	organic resin	Proprietary		2.829	mg	70373	25486
				supplier	Core	Silicon dioxide	7631-86-9		1.599	mg	39776	14405
				supplier	Core	Other inorganic filler	Proprietary		1.599	mg	39776	14405
				supplier	Core	Glass fiber	65997-17-3		6.273	mg	156045	56514
				supplier	Solder mask	Organic resin	Proprietary		3.705	mg	92164	33378
				supplier	Solder mask	Inorganic filler	Proprietary		1.995	mg	49627	17973
				supplier	Cu Coil	Copper	7440-50-8		15.100	mg	375622	136036
				supplier	Ni Plating	Nickel	7440-02-0		5.800	mg	144279	52252
				supplier	Au Plating	Gold	7440-57-5		1.300	mg	32338	11712
Bonding wire	M-011 Other inorganic materials	0.700	mg	supplier	Bonding wire	Gold	7440-57-5		0.700	mg	1000000	6306
Solderball	M-011 Other inorganic materials	6.200	mg	supplier	Solder	Tin	7440-31-5		5.983	mg	965000	53901
				supplier	Solder	Silver	7440-22-4		0.217	mg	35000	1955