



Materials Declaration Form

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

* : Required Field

Supplier Information			
Company Name *	STMicroelectronics	Response Date *	2020-02-18
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 *	Antonella Lanzafame	Representative Title	AMS Material Declaration Champion
Representative Phone *	Refer to Supplier Comment section	Representative Email *	Refer to Supplier Comment section
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
STULPI01BTBR	1CHR*TULIBFG	B	MU1A	2020-02-18
Amount	UoM	Unit type	ST ECOPACK Grade	
29.0	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	
Not Applicable	Tin (Sn), immersion	Copper Alloy	0	



Package Designator	Size	Nbr of instances	Shape	
bga	3.6 x 3.6	36	bulk solder	
Comment	HR TFBGA 36 3,6x3,6 PITCH 0,5			

QueryList : RoHS Directive 2011/65/EU-July 2011 – Annex II amended by Directive 2015/863-March 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 : ELV directive : 2000/53/EC amended 2017/2096 _November 2017	
Query	Response
1 - Product(s) meets EU ELV requirement without any exemptions	TRUE
2 - Product(s) meets EU ELV requirements by application of the selected exemption(s)	FALSE
Exemption Id.	Description

QueryList : California Prop65 list, dated 3rd January 2020			
Query			Response
1 - The product does not contain identified substance from California Prop 65 List, no exposure to consumers is foreseen			FALSE
2 - The product is containing below substance(s) from California Prop 65 List, no exposure to consumers is foreseen			FALSE
Substance	amount in product (mg)	Application	ppm in product
Nickel	0.099	alloy	3414

QueryList : REACH-16th January 2020				
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
2 - Product(s) does not contain REACH Substances Of Very High Concern in any Homogeneous Material above the limits per the definition within REACH				TRUE
CategoryLevel_Name	CategoryLevel_Threshold	Amount in Homogeneous Material (mg)	Application - Homogeneous Material	ppm in Homogeneous Material

Material Composition Declaration						Mfr Item Name	1CHR*TULIBFG		29.0000		7000001.0	999997.0				
Homogeneous Material	Material Group	Mass	UoM	Level	Substance Category	Substance	CAS	Exempt	Mass	UoM	Concentration in homogeneous material (ppm)	Concentration in product (ppm)				
Dies	M-011 Other inorganic materials	1.462	mg	supplier	die	Silicon(Si)	7440-21-3		1.305	mg	892613	45000				
				supplier	metallisation	Aluminium(Al)	7429-90-5		0.019	mg	12996	655				
				supplier	metallisation	Copper(Cu)	7440-50-8		0.041	mg	28044	1414				
				supplier	metallisation	Tantalum(Ta)	7440-25-7		0.007	mg	4788	241				
				supplier	metallisation	Titanium(Ti)	7440-32-6		0.002	mg	1368	69				
				supplier	metallisation	Tungsten(W)	7440-33-7		0.010	mg	6840	345				
				supplier	Passivation	Silicon Nitride (SiN)	12033-89-5		0.011	mg	7524	379				
				supplier	passivation	Silicon Oxide	7631-86-9		0.055	mg	37620	1897				
				supplier	polymer coating	polyimide	proprietary		0.012	mg	8208	414				
				Substrate	M-015 Other organic materials	6.935	mg	supplier	lamine	Fiber glass	65997-17-3		1.048	mg	151118	36138
supplier	lamine	Bismaleimide polymer	105391-33-1						0.351	mg	50613	12103				
supplier	lamine	Triazine (T)	25722-66-1						0.351	mg	50613	12103				
supplier	lamine	Thermosetting resin	54208-63-8						0.589	mg	84932	20310				
supplier	lamine	Aluminium hydroxide	21645-51-2						0.024	mg	3461	828				
supplier	lamine	Calcium sulfate	7778-18-9						0.012	mg	1730	414				
supplier	lamine	Zinc hydroxide	20427-58-1						0.007	mg	1009	241				
supplier	lamine	Barium sulfate	7727-43-7						0.396	mg	57102	13655				
supplier	lamine	Bisphenol F type epoxy resin	9003-36-5						0.383	mg	55227	13207				
supplier	lamine	polymerized Biphenyl resin	85954-11-6						0.156	mg	22495	5379				
supplier	lamine	Talc containing no asbestiform fibers	14807-96-6						0.096	mg	13843	3310				
supplier	lamine	Methoxymethylethoxy propanol	34590-94-8						0.095	mg	13699	3276				
supplier	lamine	Amorphous silica	7631-86-9						0.072	mg	10382	2483				
	M-004 Copper and its alloys							supplier	metallisation	Copper(Cu)	7440-50-8		3.240	mg	467195	111724
	M-006 Nickel and its alloys							supplier	metallisation	Nickel(Ni)	7440-02-0		0.098	mg	14131	3379
								supplier	metallisation	Gold(Au)	7440-57-5		0.017	mg	2451	586
Die attach	M-015 Other organic materials	0.162	mg	supplier	glue	Silica vitreous	60676-86-0		0.098	mg	604938	3379				
				supplier	glue	Epoxy type resin	proprietary		0.020	mg	123457	690				
				supplier	glue	Neopentyl glycol dimethacrylate	1985-51-9		0.016	mg	98765	552				
				supplier	glue	Diglycidyl phenyl allyl ether	EC 417-470-1		0.016	mg	98765	552				
				supplier	glue	Ditrimethylolpropane tetraacrylate	94108-97-1		0.011	mg	67901	379				
				supplier	glue	Epoxyde bisphenol A resin	25068-38-6		0.001	mg	6173	34				
Die attach 2		0.053	mg	supplier	tape	Epoxy resin	25068-38-6		0.033	mg	622642	1138				
				supplier	tape	Polypropylene	9003-07-0		0.001	mg	18868	34				
				supplier	tape	epoxy resin	29690-82-2		0.005	mg	94340	172				
				supplier	tape	Propenoate polymer	538311-13-6		0.011	mg	207547	379				
				supplier	tape	Bisphenol A diglycidyl ether	1675-54-3		0.003	mg	56604	103				
Bonding wire	M-008 Precious metals	1.395	mg	supplier	wire	Gold(Au)	7440-57-5		1.395	mg	1000000	48103				
encapsulation	M-015 Other organic materials	15.262	mg	supplier	mold compound	Silica vitreous	60676-86-0		13.125	mg	859979	452586				
				supplier	mold compound	Biphenyl epoxy resin	85954-11-6		1.023	mg	67029	35276				
				supplier	mold compound	Phenol resin	9003-35-4		0.687	mg	45014	23690				
				supplier	mold compound	Epoxy Cresol Novolac	29690-82-2		0.153	mg	10025	5276				
				supplier	mold compound	Aluminium hydroxide	21645-51-2		0.198	mg	12973	6828				
				supplier	mold compound	Carbon black	1333-86-4		0.076	mg	4980	2621				
solder balls	Solder	3.731	mg	supplier	solder alloy	Tin(Sn)	7440-31-5		3.666	mg	982578	126414				
				supplier	solder alloy	Silver(Ag)	7440-22-4		0.045	mg	12061	1552				
				supplier	solder alloy	Copper(Cu)	7440-50-8		0.019	mg	5092	655				
				supplier	solder alloy	Nickel(Ni)	7440-02-0		0.001	mg	268	34				