



Materials Declaration Form

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

** : Required Field*

Supplier Information			
Company Name *	STMicroelectronics	Response Date *	2021-02-12
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 *	marianna grasso	Representative Title	ADG MD 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
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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
SPC582B50E1AD00X	BM9I*FC60BBQ	A	959	2021-02-12
	Amount	UoM	Unit type	ST ECOPACK Grade
	260	mg	Each	ECOPACK 2
Comment	ECOPACK® 2 is STMicroelectronics trade name for ROHS compliant device without Brominated and Chlorinated compound (900ppm) and without Antimony oxide flame retardant (in each organic material)			

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	
Not Applicable	Nickel/Palladium/Gold (Ni/Pd/Au)	Copper Alloy	DM00668507	

Package Designator	Size	Nbr of instances	Shape	
QFP	10.00,10.00,1.00	64	gull wing	
Comment	TQFP 64 10x10x1.0 1.0 ExPad Down. MDF valid for CPs: SPC582B50E1AD00X,SPC582B50E1CG00X,SPC582B54E1BD00X,SPC582B54E1CG00X,SPC582B60E1CD00X,SPC582B60E1MH00X,SPC582B60E1MH00Y			

QueryList : RoHS Directive 2011/65/EU-July 2011 Annex II amended by Delegated 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 2020/363_ March 2020	
Query	Response
1 - Product(s) meets EU ELV requirements without any exemptions	TRUE
2 - Product(s) meets EU RoHS 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			TRUE
Substance	amount in product (mg)	Application	ppm in product
Nickel	0.06	die	219

QueryList : REACH-19th January 2021				
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 Embedded article nor Homogeneous Material above the limits per the definition within REACH				TRUE
CategoryLevel_Name	CategoryLevel_Threshold	Amount in Embedded Article / Homogeneous Material (mg)	Application - Article / Homogeneous Material	ppm in Article /Homogeneous Material

Responsible metals sourcing	
Query	Response
The component is containing at least one of the following metals : Cobalt , Gold , Tantalum , Tin , Tungsten.	true
The following metals are present is the component :	Tantalum,
This product is in the scope of the responsible metals sourcing, its compliance is covered by our company processes .	

Material Composition Declaration :						Mfr Item Name	BM91*FC60BBQ					
note : Substance present with less 0.001mg will not be declared in this document												
Homogeneous Material	Material Group	Mass	UoM	Level	Substance Category	Substance	CAS	Exempt	Mass	UoM	Concentration in homogeneous material (ppm)	Concentration in product (ppm)
Die	M-011 Other inorganic materials	21.005	mg	supplier	die	Silicon(Si)	7440-21-3		20.639	mg	982575	79380
				supplier	metallisation	Aluminium(Al)	7429-90-5		0.043	mg	2047	165
				supplier	metallisation	Copper(Cu)	7440-50-8		0.136	mg	6475	523
				supplier	metallisation	Nickel(Ni)	7440-02-0		0.001	mg	48	4
				supplier	metallisation	Tantalum(Ta)	7440-25-7		0.022	mg	1047	85
				supplier	metallisation	Titanium(Ti)	7440-32-6		0.004	mg	190	15
				supplier	metallisation	Tungsten(W)	7440-33-7		0.001	mg	48	4
				supplier	passivation	Silicon oxide	7631-86-9		0.159	mg	7570	612
Leadframe	M-004 Copper and its alloys	84.623	mg	supplier	alloy & coating	Copper(Cu)	7440-50-8		82.407	mg	973812	316950
				supplier	alloy & coating	Nickel(Ni)	7440-02-0		0.056	mg	662	215
				supplier	alloy & coating	Iron(Fe)	7439-89-6		1.938	mg	22902	7454
				supplier	alloy & coating	Iron Phosphide(FeP)	26508-33-8		0.117	mg	1383	450
				supplier	alloy & coating	Zinc(Zn)	7440-66-6		0.102	mg	1205	392
				supplier	alloy & coating	Silver (Ag)	7440-22-4		0.001	mg	12	4
				supplier	alloy & coating	Palladium(Pd)	7440-05-3		0.001	mg	12	4
				supplier	alloy & coating	Gold(Au)	7440-57-5		0.001	mg	12	4
Die attach		1.774	mg	supplier	glue	Silver(Ag)	7440-22-4		1.583	mg	892333	6088
				supplier	glue	Isobornyl Methacrylate	7534-94-3		0.124	mg	69899	477
				supplier	glue	Bismaleimide resin	proprietary		0.053	mg	29876	204
				supplier	glue	Epoxy cyclohexylethyltrimethoxysilane	3388-04-3		0.014	mg	7892	54
Bonding wires	M-004 Copper and its alloys	0.489	mg	supplier	wire	Copper(Cu)	7440-50-8		0.487	mg	995910	1873
				supplier	wire	Palladium(Pd)	7440-05-3		0.002	mg	4090	8
Encapsulation	M-011 Other inorganic materials	152.109	mg	supplier	mold compound	Silica vitreous	60676-86-0		112.485	mg	739502	432635
				supplier	mold compound	Amorphous silica	7631-86-9		22.816	mg	149998	87754
				supplier	mold compound	Epoxy type resin	proprietary		11.408	mg	74999	43877
				supplier	mold compound	Phenol type resin	proprietary		4.563	mg	29998	17550
				supplier	mold compound	Carbon black	1333-86-4		0.837	mg	5503	3219