



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 *	2021-01-26
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
SPC560C50L1B4E0X	CM5W*FB50BFQ	A	959	2021-01-26
	Amount	UoM	Unit type	ST ECOPACK Grade
	350	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	Tin (Sn), matte, annealed	Copper Alloy	DM00482391	

Package Designator	Size	Nbr of instances	Shape	
QFP	10.00,10.00,1.40	64	gull wing	
Comment	LQFP 64 10x10x1.4 1			

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	3.32	leadframe	9480

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, Tin, Tungsten,
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	CMSW*FB50BFQ					
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	32.973	mg	supplier	die	Silicon(Si)	7440-21-3		32.367	mg	981621	92556
				supplier	metallisation	Aluminium(Al)	7429-90-5		0.029	mg	880	83
				supplier	metallisation	Copper(Cu)	7440-50-8		0.257	mg	7794	735
				supplier	metallisation	Cobalt(Co)	7440-48-4		0.001	mg	30	3
				supplier	metallisation	Tantalum(Ta)	7440-25-7		0.083	mg	2518	237
				supplier	metallisation	Titanium(Ti)	7440-32-6		0.003	mg	91	9
				supplier	metallisation	Tungsten(W)	7440-33-7		0.002	mg	61	6
				supplier	Passivation	Silicon nitride(SiN)	12033-89-5		0.065	mg	1971	186
				supplier	passivation	Silicon oxide	7631-86-9		0.166	mg	5034	475
				Leadframe	M-004 Copper and its alloys	110.732	mg	supplier	alloy & coating	Copper(Cu)	7440-50-8	
supplier	alloy & coating	Nickel(Ni)	7440-02-0						3.315	mg	29937	9480
supplier	alloy & coating	Magnesium(Mg)	7439-95-4						0.166	mg	1499	475
supplier	alloy & coating	Silicon(Si)	7440-21-3						0.718	mg	6485	2053
supplier	alloy & coating	Silver (Ag)	7440-22-4						0.235	mg	2122	672
Die attach	M-011 Other inorganic materials	2.671	mg	supplier	glue	Silver(Ag)	7440-22-4		2.383	mg	892175	6814
				supplier	glue	Isobornyl Methacrylate	7534-94-3		0.187	mg	70011	535
				supplier	glue	Bismaleimide resin	proprietary		0.080	mg	29951	229
				supplier	glue	Epoxy cyclohexylethyltrimethoxysilane	3388-04-3		0.021	mg	7863	60
Bonding wires	M-004 Copper and its alloys	0.464	mg	supplier	wire	Copper(Cu)	7440-50-8		0.450	mg	969828	1287
				supplier	wire	Palladium(Pd)	7440-05-3		0.014	mg	30172	40
Encapsulation	M-011 Other inorganic materials	199.295	mg	supplier	mold compound	Silica vitreous	60676-86-0		162.326	mg	814501	464186
				supplier	mold compound	Silicon oxide	7631-86-9		14.947	mg	74999	42742
				supplier	mold compound	Epoxy type resin	proprietary		14.947	mg	75000	42742
				supplier	mold compound	Phenol type resin	proprietary		5.979	mg	30001	17098
connections coating	Solder	3.565	mg	supplier	mold compound	Carbon black	1333-86-4		1.096	mg	5499	3134
				supplier	solder alloy	Tin (Sn)	7440-31-5		3.565	mg	1000000	10194