



Materials Declaration Form

IPC Form Type *	1752 Distribute	Version	2
Sectionals *	Material Info Manufacturing Info	Subsectionals *	A-D <i>* : Required Field</i>

Supplier Information			
Company Name *	STMicroelectronics	Response Date *	2018-10-25
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 *	Rossana Bonaccorso	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

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
	AM5W*FB50BFQ	A	0959	2018-10-25
Amount	UoM	Unit type	ST ECOPACK Grade	
349.70	mg	Each	ECOPACK2	
	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	
NA	Tin (Sn), matte	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
QFP	10-10-1.4	64	gull wing	
Comment	Package: LQFP 64 10x10x1.4 1 - MDF valid for CPs: SPC560B50L1C6E0Y - SPC560B50L1C6E0X - SPC560B50L1B4E0X			

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 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 25th May 2018			
Query			Response
1 - The product does not contain identified substance from California Prop 65 List, no exposure to consumers is foreseen			TRUE
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

QueryList : REACH-27th June 2018				
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

Material Composition Declaration : note : Substance present with less 0.001mg will not be declared in this document						Mfr Item Name	AMSW*FB50BFQ					
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	16.267	mg	supplier	die	Silicon (Si)	7440-21-3		15.661	mg	962747	44784
				supplier	metallization	Aluminium (Al)	7429-90-5		0.029	mg	1783	83
				supplier	metallization	Copper (Cu)	7440-50-8		0.257	mg	15799	735
				supplier	metallization	Cobalt (Co)	7440-48-4		0.001	mg	61	3
				supplier	metallization	Tantalum (Ta)	7440-25-7		0.083	mg	5102	237
				supplier	metallization	Titanium (Ti)	7440-32-6		0.003	mg	184	9
				supplier	metallization	Tungsten (W)	7440-33-7		0.002	mg	123	6
				supplier	Passivation	Silicon Nitride	12033-89-5		0.065	mg	3996	186
				supplier	Passivation	Silicon Oxide	7631-86-9		0.166	mg	10205	475
				supplier								
Leadframe	M-004 Copper and its alloys	102.145	mg	supplier	alloy	Copper (Cu)	7440-50-8		99.546	mg	974556	284661
				supplier	alloy	Iron (Fe)	7439-89-6		0.100	mg	979	286
				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.030	mg	293	85
				supplier	metallization	Silver (Ag)	7440-22-4		2.469	mg	24172	7060
Die attach	M-015 Other organic materials	4.138	mg	supplier	glue	Silver (Ag)	7440-22-4		3.744	mg	904785	10706
				supplier	glue	Isobornyl Methacrylate	7534-94-3		0.228	mg	55099	652
				supplier	glue	Bismaleimide resin	35325-39-4		0.166	mg	40116	475
Encapsulation	M-011 Other inorganic materials	223.585	mg	supplier	mold compound	Silica, vitreous	60676-86-0		193.177	mg	863998	552408
				supplier	mold compound	Epoxy Resin	25068-38-6		16.769	mg	75001	47953
				supplier	mold compound	Phenol Resin	29690-82-2		11.179	mg	49999	31967
				supplier	mold compound	3-Mercaptopropyl trimethoxysilane	4420-74-0		1.118	mg	5000	3197
				supplier	mold compound	Quartz	14808-60-7		0.671	mg	3001	1919
				supplier	mold compound	Carbon black	1333-86-4		0.671	mg	3001	1919
Connections coating	Solder	3.565	mg	supplier	solder alloy	Tin (Sn)	7440-31-5		3.565	mg	1000000	10194