



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 *	2019-03-21
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
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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
	AM5W*FP40ACQ	A	0959	2019-03-21
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: SPC560P34L1BEABY - SPC560P34L1CEFAR - SPC560P34L1CEFAY		

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 23rd November 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-15th January 2019				
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*FP40ACQ					
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	11.725	mg	supplier	die	Silicon (Si)	7440-21-3		11.136	mg	949765	31844
				supplier	metallization	Aluminium (Al)	7429-90-5		0.041	mg	3497	117
				supplier	metallization	Copper (Cu)	7440-50-8		0.268	mg	22857	766
				supplier	metallization	Tantalum (Ta)	7440-25-7		0.037	mg	3156	106
				supplier	metallization	Tungsten (W)	7440-33-7		0.121	mg	10320	346
				supplier	Passivation	Silicon Nitride	12033-89-5		0.031	mg	2644	89
				supplier	Passivation	Silicon Oxide	7631-86-9		0.091	mg	7761	260
				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	87
Die attach		2.997	mg	supplier	metallization	Silver (Ag)	7440-22-4		2.469	mg	24172	7060
				supplier	glue	Silver (Ag)	7440-22-4		2.712	mg	904905	7755
				supplier	glue	Isobornyl Methacrylate	7534-94-3		0.165	mg	55055	472
				supplier	glue	Bismaleimide resin	35325-39-4		0.120	mg	40040	343
Bonding wires	M-011 Other inorganic materials	0.615	mg	supplier	wire	Copper (Cu)	7440-50-8		0.603	mg	980488	1724
				supplier	wire	Palladium (Pd)	7440-05-3		0.011	mg	17886	31
				supplier	wire	Silver (Ag)	7440-22-4		0.001	mg	1626	3
				supplier	mold compound	Silica, vitreous	60676-86-0		197.556	mg	863999	564930
Encapsulation	M-011 Other inorganic materials	228.653	mg	supplier	mold compound	Epoxy Resin	25068-38-6		17.149	mg	75000	49039
				supplier	mold compound	Phenol Resin	29690-82-2		11.433	mg	50002	32694
				supplier	mold compound	3-Mercaptopropyl trimethoxysilane	4420-74-0		1.143	mg	4999	3269
				supplier	mold compound	Quartz	14808-60-7		0.686	mg	3000	1962
				supplier	mold compound	Carbon black	1333-86-4		0.686	mg	3000	1962
				supplier	solder alloy	Tin (Sn)	7440-31-5		3.565	mg	1000000	10194