



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 *	2018-11-28
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
	DM5W*FP40ACQ	A	0959	2018-11-28
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: SPC560P40L1CEFBR - SPC560P40L1CEFAR - SPC560P40L1B2FBR			

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			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
Cobalt	0.001	Die	3

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	DMSW*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	23.365	mg	supplier	die	Silicon (Si)	7440-21-3		23.013	mg	984935	65811				
				supplier	metallization	Aluminium (Al)	7429-90-5		0.041	mg	1755	117				
				supplier	metallization	Copper (Cu)	7440-50-8		0.141	mg	6034	403				
				supplier	metallization	Cobalt (Co)	7440-48-4		0.001	mg	43	3				
				supplier	metallization	Tantalum (Ta)	7440-25-7		0.049	mg	2097	140				
				supplier	metallization	Tungsten (W)	7440-33-7		0.001	mg	43	3				
				supplier	Passivation	Silicon Nitride	12033-89-5		0.028	mg	1198	80				
				supplier	Passivation	Silicon Oxide	7631-86-9		0.091	mg	3895	260				
				Leadframe	M-004 Copper and its alloys	102.144	mg	supplier	alloy	Copper (Cu)	7440-50-8		99.545	mg	974556	284658
								supplier	alloy	Iron (Fe)	7439-89-6		0.100	mg	978	286
supplier	alloy	Iron Phosphide (FeP)	26508-33-8						0.030	mg	294	86				
supplier	metallization	Silver (Ag)	7440-22-4						2.469	mg	24172	7060				
Die attach		3.293	mg	supplier	glue	Silver (Ag)	7440-22-4		2.980	mg	904950	8522				
				supplier	glue	isobornyl Methacrylate	7534-94-3		0.181	mg	54965	518				
				supplier	glue	Bismaleimide resin	35325-39-4		0.132	mg	40085	374				
Bonding wires	M-011 Other inorganic materials	0.429	mg	supplier	wire	Copper (Cu)	7440-50-8		0.420	mg	979021	1201				
				supplier	wire	Palladium (Pd)	7440-05-3		0.008	mg	18648	23				
				supplier	wire	Silver (Ag)	7440-22-4		0.001	mg	2331	3				
				Encapsulation	M-011 Other inorganic materials	216.904	mg	supplier	mold compound	Silica, vitreous	60676-86-0		187.404	mg	863995	535899
supplier	mold compound	Epoxy Resin	25068-38-6						16.268	mg	75001	46520				
supplier	mold compound	Phenol Resin	29690-82-2						10.845	mg	49999	31012				
supplier	mold compound	3-Mercaptopropyl trimethoxysilane	4420-74-0						1.085	mg	5003	3103				
supplier	mold compound	Quartz	14808-60-7						0.651	mg	3001	1862				
Connections coating	Solder	3.565	mg	supplier	mold compound	Carbon black	1333-86-4		0.651	mg	3001	1862				
				supplier	solder alloy	Tin (Sn)	7440-31-5		3.565	mg	1000000	10194				