



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 *	2018-05-15
Contact Name *	Refer to "Supplier Comment" section	Contact Title	Refer to "Supplier Comment" section
Contact Phone *	Refer to "Supplier Comment" section	Contact Email *	Refer to "Supplier Comment" section
Authorized Representative *	Laurent TOSI	Representative Title	MMS MD CHAMPION
Representative Phone *	33 442 685 795	Representative Email *	laurent.tosi@st.com
Supplier Comment	Online Technical Support - STMicroelectronics : http://www.st.com/web/en/support/online_tech_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
STM8AF52A9TAY	UM5W*79AX25T	A	959	2018-05-15
	Amount	UoM	Unit type	ST ECOPACK Grade
	350.000	mg	Each	ECOPACK® 2

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	
NAC	Tin (Sn), matte	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
QFP	10x10x1.4	64	L bend	
Comment	Package: LQFP 64 10x10x1.4			

QueryList : ROHS directive 2011/65/EU _ July 2011	
Query	Response
Product(s) meets EU RoHS requirement without any exemptions	true
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
Product(s) meets EU RoHS requirements by application of the selected exemption(s)	false
Product(s) does not meet EU RoHS requirements and is not under exemptions	false
Product(s) is obsolete, no information is available	false
Product(s) is unknown, no information is available	false
Exemption Id.	Description

QueryList : REACH-16th December 2013				
Query				Response
The product 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

Material Composition Declaration						Mfr Item Name	UM5W*79AX25T					
Homogeneous Material	Material Group	Mass	UoM	Level	Substance Category	Substance	CAS	Exempt	Mass	UoM	Concentration in homogeneous material (ppm)	Concentration in product (ppm)
die (s)	M-011 Other inorganic materials	6.683	mg	supplier	die	Silicon (Si)	7440-21-3		6.465	mg	967380	18471
				supplier	metallization	Aluminium (Al)	7429-90-5		0.018	mg	2693	51
				supplier	metallization	Copper (Cu)	7440-50-8		0.078	mg	11671	223
				supplier	metallization	Tantalum (Ta)	7440-25-7		0.002	mg	299	6
				supplier	metallization	Titanium (Ti)	7440-32-6		0.008	mg	1197	23
				supplier	passivation	Silicon Oxide(SiO2)	7631-86-9		0.016	mg	2394	46
				supplier	passivation	Indium Tin oxide (In2O3.SnO2)	50926-11-9		0.096	mg	14365	274
Lead-frame	M-011 Other inorganic materials	100.125	mg	Supplier	alloy	Copper (Cu)	7440-50-8		96.320	mg	962000	275200
				Supplier	alloy	Nickel (Ni)	7440-02-0		3.004	mg	30000	8582
				Supplier	alloy	Silicium (Si)	7440-21-3		0.651	mg	6500	1859
				Supplier	alloy	Magnesium (Mg)	7439-95-4		0.150	mg	1500	429
Die Attach	M-011 Other inorganic materials	3.625	mg	Supplier	glue or soft solder	Isobornyl Methacrylate	7534-94-3		0.199	mg	55000	570
				Supplier	glue or soft solder	Bismaleimide resin	Proprietary		0.145	mg	40000	414
				Supplier	glue or soft solder	Silver (Ag)	7440-22-4		3.280	mg	905000	9372
Wires	M-011 Other inorganic materials	0.823	mg	Supplier	Bonding wire	Gold (Au)	7440-57-5		0.823	mg	1000000	2350
Encapsulation	M-011 Other inorganic materials	232.549	mg	Supplier	Moulding Compound	Solid Epoxy Resin	Proprietary		17.812	mg	76596	50892
				Supplier	Moulding Compound	Phenol Resin	Proprietary		8.906	mg	38298	25446
				Supplier	Moulding Compound	Silica, vitreous	60676-86-0		203.827	mg	876489	582363
				Supplier	Moulding Compound	Carbon-black	1333-86-4		1.113	mg	4787	3181
				Supplier	Moulding Compound	Bismuth (Bi)	7440-69-9		0.891	mg	3830	2545
Finishing	M-011 Other inorganic materials	6.196	mg	Supplier	connections coating	Tin (Sn)	7440-31-5		6.196	mg	1000000	17703