



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 *	2018-06-27
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 *	Floriana SAN BIAGIO	Representative Title	AMS 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
	A5D7*U740DA6	A	MU1A	2018-06-27
	Amount	UoM	Unit type	ST ECOPACK Grade
	1498	mg	Each	ECOPACK® 1
Comment	ECOPACK® or ECOPACK® 1 is STMicroelectronics trade name for ROHS compliant devices			

Manufacturing information				
J-STD-020 MSL Rating	Classification Temp	Nbr of Reflow Cycles		 life.augmented
Not Applicable	Not Applicable	3		
Bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
Not Applicable	Tin (Sn), immersion	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
DIP	24.38x6.35x3.3	18	pin	
Comment	D7 PDIP 18 .3 Cu 0.4; MDF valid for L4973V3.3			

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	FALSE
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)	TRUE
4 - Product(s) does not meet EU RoHS requirements and is not under exemptions	FALSE
Exemption Id.	Description
7a	Lead in high melting temperature type solders (i.e. lead- based alloys containing 85 % by weight or more lead)

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
-				0
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	ASD7*U7400A6				4999999.0	999999.0
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	24.699	mg	supplier	die	Silicon (Si)	7440-21-3		11.355	mg	459735	7579
				supplier	metallization	Aluminium (Al)	7429-90-5		0.065	mg	2632	43
				supplier	metallization	Copper (Cu)	7440-50-8		0.001	mg	40	1
				supplier	Passivation	Silicon Nitride	12033-89-5		0.036	mg	1458	24
				supplier	Passivation	Silicon Oxide	7631-86-9		0.153	mg	6195	102
				supplier	back side metallization	Titanium (Ti)	7440-32-6		0.361	mg	14616	241
				supplier	back side metallization	Silver (Ag)	7440-22-4		12.635	mg	511559	8433
				supplier	polymer die coating	PIX1 Gamma-butyrolactone	96-48-0		0.093	mg	3765	62
Leadframe	M-004 Copper and its alloys	697.861	mg	supplier	alloy	Copper (Cu)	7440-50-8		696.629	mg	998235	464959
				supplier	alloy	Iron (Fe)	7439-89-6		0.698	mg	1000	466
				supplier	alloy	Iron Phosphide (FeP)	26508-33-8		0.209	mg	299	139
				supplier	metallization	Silver (Ag)	7440-22-4		0.325	mg	466	217
Soft solder	Solder	7.342	mg	JIG - R	solder	Lead (Pb)	7439-92-1	7a-Lead in high me	7.159	mg	975075	4778
				supplier	solder	Silver (Ag)	7440-22-4		0.110	mg	14982	73
				supplier	solder	Tin (Sn)	7440-31-5		0.073	mg	9943	49
Bonding wires	M-008 Precious metals	1.610	mg	supplier	wire	Gold (Au)	7440-57-5		1.610	mg	1000000	1075
Encapsulation	M-011 Other inorganic materials	766.748	mg	supplier	mold compound	Silica, vitreous	60676-86-0		552.058	mg	719999	368466
				supplier	mold compound	Epoxy Cresol Novolak	29690-82-2		103.511	mg	135000	69087
				supplier	mold compound	Phenol resin	9003-35-4		42.171	mg	55000	28147
				supplier	mold compound	Tetrabromobisphenol	79-94-7		19.169	mg	25000	12794
				supplier	mold compound	Acrylic resin	9003-01-4		15.335	mg	20000	10235
				supplier	mold compound	Antimony pentoxide	1314-60-9		9.201	mg	12000	6141
				supplier	mold compound	Antimony Trioxide	1309-64-4		2.300	mg	3000	1535
				supplier	mold compound	Mixed siloxanes	Proprietary		11.501	mg	15000	7676
				supplier	mold compound	Silica Cristobalite	14464-46-1		3.834	mg	5000	2559
				supplier	mold compound	Quartz	14808-60-7		3.834	mg	5000	2559
supplier	mold compound	carbon black	1333-86-4		3.834	mg	5000	2559				