Materials Declaration Form

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

Supplier Information			
Company Name *	STMicroelectronics	Response Date *	2017-07-26
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 *	Patrick Crudo	Representative Title	MMS MD CHAMPION
Representative Phone *	(+33) 442 688 339	Representative Email *	patrick.crudo@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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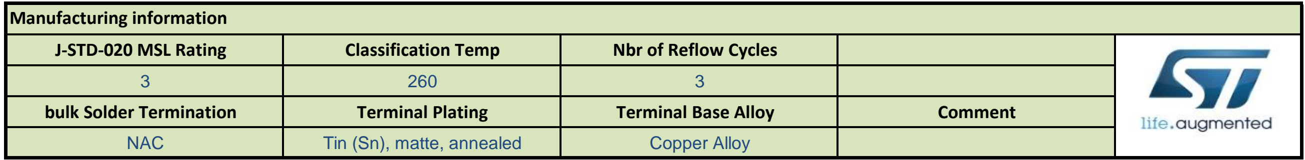
Legal Statement

Supplier Acceptance *	true	Legal Declaration *	Standard

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 omprehensive 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
STM32F103R8T7 STM32F103R8T7TR	JD5W*410XXXX	A	959	2017-07-26
	Amount	UoM	Unit type	ST ECOPACK Grade
	350.00	mg	Each	ECOPACK® 2

Manufacturing information				
J-STD-020 MSL Rating	Classification Temp	Nbr of Reflow Cycles		
3	260	3		
bulk Solder Termination	Terminal Plating	Terminal Base Alloy	Comment	
NAC	Tin (Sn), matte, annealed	Copper Alloy		

Package Designator	Size	Nbr of instances	Shape	
QFP	10x10x1.4	64	L bend	
Comment	LQFP 64 10x10x1.1 1			

QueryList : RoHS Directive 2011/65/EU-July 2011 – Annex II amended by Directive 2015/863-April 2015	
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-12th January 2017				
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**	**JD5W*410XXXX**					
Homogeneous Material	**Material Group**	Mass	**UoM**	**Level**	**Substance Category**	**Substance**	**CAS**	**Exempt**	**Mass**	**UoM**	**Concentration in homogeneous material (ppm)**	**Concentration in product (ppm)**
Die or Dies	Other inorganic materials	10.142	mg	supplier	die	Silicon (Si)	7440-21-3		9.860	mg	972195	28171
Die or Dies				supplier	metallization	Aluminium (Al)	7429-90-5		0.029	mg	2859	83
Die or Dies				supplier	metallization	Cobalt (Co)	7440-48-4		0.027	mg	2662	77
Die or Dies				supplier	metallization	Titanium (Ti)	7440-32-6		0.008	mg	789	23
Die or Dies				supplier	metallization	Tungsten (W)	7440-33-7		0.016	mg	1578	46
Die or Dies				supplier	passivation	Silicon Nitride (SiN)	68034-42-4		0.019	mg	1873	54
Die or Dies				supplier	passivation	Silicon Oxide(SiO2)	7631-86-9		0.183	mg	18044	523
Lead-frame	Other inorganic materials	66.420	mg	supplier	alloy	Copper (Cu)	7440-50-8		63.896	mg	962001	182560
Lead-frame				supplier	alloy	Nickel (Ni)	7440-02-0		1.993	mg	30000	5693
Lead-frame				supplier	alloy	Silicium (Si)	7440-21-3		0.432	mg	6500	1233
Lead-frame				supplier	alloy	Magnesium (Mg)	7439-95-4		0.100	mg	1500	285
Die Attach	Other inorganic materials	3.703	mg	supplier	glue or soft solder	Silver (Ag)	7440-22-4		2.984	mg	806000	8527
Die Attach				supplier	glue or soft solder	acrylate	65983-31-5		0.222	mg	60000	635
Die Attach				supplier	glue or soft solder	Epoxy Cresol Novolak	29690-82-2		0.111	mg	30000	317
Die Attach				supplier	glue or soft solder	Butadiene copolymer	68891-50-9		0.037	mg	10000	106
Die Attach				supplier	glue or soft solder	poly butadiene derivative	Proprietary		0.222	mg	60000	635
Die Attach				supplier	glue or soft solder	[3-(2,3-epoxypropoxy)propyl] trimethoxysilane	2530-83-8		0.074	mg	20000	212
Die Attach				supplier	glue or soft solder	peroxyde de cyclohexylidènebis [tert-butyle]	3006-86-8		0.037	mg	10000	106
Die Attach				supplier	glue or soft solder	1-isopropyl-2,2-dimethyltrimethylene diisobut	6846-50-0		0.015	mg	4000	42
Wires	Other inorganic materials	1.076	mg	supplier	Bonding wire	Gold (Au)	7440-57-5		1.065	mg	990000	3042
Wires				supplier	Bonding wire	Palladium (Pd)	7440-05-3		0.011	mg	10000	31
Encapsulation	Other inorganic materials	262.464	mg	supplier	Moulding Compound	Epoxy Resin	Proprietary		17.025	mg	64866	48643
Encapsulation				supplier	Moulding Compound	Phenol Resin	Proprietary		11.350	mg	43244	32429
Encapsulation				supplier	Moulding Compound	Silica, vitreous	60676-86-0		231.592	mg	882376	661691
Encapsulation				supplier	Moulding Compound	Quartz	14808-60-7		0.681	mg	2595	1946
Encapsulation				supplier	Moulding Compound	3-Mercaptopropyl trimethoxysilane	4420-74-0		1.135	mg	4324	3243
Encapsulation				supplier	Moulding Compound	Carbon black	1333-86-4		0.681	mg	2595	1946
Finishing	Other inorganic materials	6.196	mg	supplier	connections coating	Tin (Sn)	7440-31-5		6.196	mg	1000000	17703