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 *	2018-03-05
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 *	MDG MD CHAMPION	Representative Title	MDG 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		

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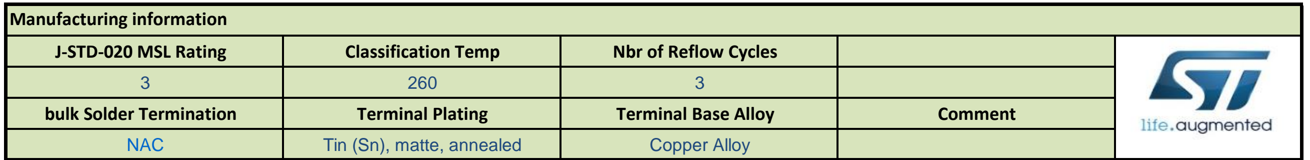
Legal Statement

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**
STM32F103RCT6 STM32F103RCT6TR	J25W*414XXXX	A	959	2018-03-05
	Amount	UoM	**Unit type**	**ST ECOPACK Grade**
	350.00	mg	Each	ECOPACK® 2
,	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**		
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	Package : 5W LQFP 64 10x10x1.4 1 0051434			

QueryList : RoHS Directive 2011/65/EU-July 2011 – Annex II amended by Directive 2015/863-April 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 : REACH-12th January 2017	
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

Material Composition Declaration : note : Substance present with less 0.001mg will not be declared in this document						**Mfr Item Name**	**J25W*414XXXX**				6000000.0	1000006.0
Homogeneous Material	**Material Group**	**Mass**	**UoM**	**Level**	**Substance Category**	**Substance**	**CAS**	**Exempt**	**Mass**	**UoM**	**Concentration in homogeneous material (ppm)**	**Concentration in product (ppm)**
Die or dies	M-011 Other inorganic materials	18.001	mg	supplier	die	Silicon (Si)	7440-21-3		17.244	mg	957947	49269
				supplier	metallization	Aluminium (Al)	7429-90-5		0.051	mg	2833	146
				supplier	metallization	Copper (Cu)	7440-50-8		0.257	mg	14277	734
				supplier	metallization	Cobalt (Co)	7440-48-4		0.048	mg	2667	137
				supplier	metallization	Titanium (Ti)	7440-32-6		0.014	mg	778	40
				supplier	metallization	Tungsten (W)	7440-33-7		0.028	mg	1555	80
				supplier	Passivation	Silicon Nitride	12033-89-5		0.034	mg	1889	97
				supplier	Passivation	Silicon Oxide	7631-86-9		0.325	mg	18055	929
Lead-frame	M-011 Other inorganic materials	94.886	mg	supplier	alloy	Copper (Cu)	7440-50-8		91.280	mg	962000	260800
				supplier	alloy	Nickel (Ni)	7440-02-0		2.847	mg	30000	8133
				supplier	alloy	Silicium (Si)	7440-21-3		0.617	mg	6500	1762
				supplier	alloy	Magnesium (Mg)	7439-95-4		0.142	mg	1500	407
Die Attach	M-011 Other inorganic materials	3.703	mg	supplier	glue or soft solder	Silver (Ag)	7440-22-4		2.984	mg	806000	8527
				supplier	glue or soft solder	acrylate	65983-31-5		0.222	mg	60000	635
				supplier	glue or soft solder	Epoxy Cresol Novolak	29690-82-2		0.111	mg	30000	317
				supplier	glue or soft solder	Butadiene copolymer	68891-50-9		0.037	mg	10000	106
				supplier	glue or soft solder	poly butadiene derivative	Proprietary		0.222	mg	60000	635
				supplier	glue or soft solder	[3-(2,3-epoxypropoxy)propyl] trimethoxysilane	Proprietary		0.074	mg	20000	212
				supplier	glue or soft solder	peroxyde de cyclohexylidènebis [tert-butyle]	3006-86-8		0.037	mg	10000	106
				supplier	glue or soft solder	1-isopropyl-2,2-dimethyltrimethylene diisobut	6846-50-0		0.015	mg	4000	42
Wires	M-011 Other inorganic materials	1.076	mg	supplier	Bonding wire	Gold (Au)	7440-57-5		1.065	mg	990000	3042
				supplier	Bonding wire	Palladium (Pd)	7440-05-3		0.011	mg	10000	31
Encapsulation	M-011 Other inorganic materials	226.140	mg	supplier	Moulding Compound	Epoxy Resin	Proprietary		17.025	mg	75285	48643
				supplier	Moulding Compound	Phenol Resin	Proprietary		11.350	mg	50190	32429
				supplier	Moulding Compound	Silica, vitreous	60676-86-0		195.268	mg	863483	557909
				supplier	Moulding Compound	Quartz	14808-60-7		0.681	mg	3011	1946
				supplier	Moulding Compound	3-Mercaptopropyl trimethoxysilane	4420-74-0		1.135	mg	5019	3243
				supplier	Moulding Compound	Carbon black	1333-86-4		0.681	mg	3011	1946
Finishing	M-011 Other inorganic materials	6.196	mg	supplier	connections coating	Tin (Sn)	7440-31-5		6.196	mg	1000000	17703