



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 *	2016-08-24
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
STM32L021G4U6	B2MB*457XXXZ	A	9988	2016-08-24
	Amount	UoM	Unit type	ST ECOPACK Grade
	28.55	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	NiPdAu	Copper		

Package Designator	Size	Nbr of instances	Shape	
QFN	4x4x0.55	28	L bend	
Comment	UFQFPN 4X4X0.55 28L PITCH0.5 COL			

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-20th June 2016				
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	B2MB*457XXZ					
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)	Other inorganic materials	1.731	mg	supplier	die	Silicon (Si)	7440-21-3		1.595	mg	921433	55867
die (s)				supplier	metallization	Aluminium (Al)	7429-90-5		0.011	mg	6355	385
die (s)				supplier	metallization	Copper (Cu)	7440-50-8		0.048	mg	27730	1681
die (s)				supplier	metallization	Tantalum (Ta)	7440-25-7		0.003	mg	1733	105
die (s)				supplier	metallization	Titanium (Ti)	7440-32-6		0.005	mg	2889	175
die (s)				supplier	passivation	Silicon Nitride (SiN)	68034-42-4		0.01	mg	5777	350
die (s)				supplier	passivation	Silicon Oxide(SiO2)	7631-86-9		0.059	mg	34084	2067
Die Attach	Other inorganic materials	0.161	mg	supplier	Epoxy	2-(2-ethoxyethoxy)ethyl acetate	112-15-2		0.055	mg	341615	1926
Die Attach				supplier	Epoxy	Epoxy resin 1	Trade secret		0.03	mg	186335	1051
Die Attach				supplier	Epoxy	Epoxy resin 2	Trade secret		0.015	mg	93168	525
Die Attach				supplier	Epoxy	Aromatic amine	Trade secret		0.006	mg	37267	210
Die Attach				supplier	Epoxy	Aluminium oxide	1344-28-1		0.055	mg	341615	1926
Encapsulation	Other inorganic materials	14.836	mg	supplier	Molding compound	Silica, vitreous	60676-86-0		13.859	mg	934147	485429
Encapsulation				supplier	Molding compound	Phenol resin	Trade secret		0.465	mg	31343	16287
Encapsulation				supplier	Molding compound	Epoxy resin	Trade secret		0.465	mg	31343	16287
Encapsulation				supplier	Molding compound	Carbon Black	1333-86-4		0.047	mg	3168	1646
Bonding Wire	Other inorganic materials	0.283	mg	supplier	Bonding Wire	Gold	7440-57-5		0.283	mg	1000000	9912
Leadframe	Other inorganic materials	11.539	mg	supplier	Alloy	Copper	7440-50-8		10.915	mg	945923	382312
Leadframe				supplier	Alloy	Magnesium	7439-95-4		0.02	mg	1733	701
Leadframe				supplier	Alloy	Silver	7440-22-4		0.002	mg	173	70
Leadframe				supplier	Alloy	Gold	7440-57-5		0.003	mg	260	105
Leadframe				supplier	Alloy	Palladium	7440-05-3		0.006	mg	520	210
Leadframe				supplier	Alloy	Silicon	7440-21-3		0.082	mg	7106	2872
Leadframe				supplier	Alloy	Nickel	7440-02-0		0.511	mg	44285	17898